



CAPITAL IMPROVEMENT PROJECTS 2026-2031

Individual Project Drivers

Projects included in this document address one or more of the four major drivers for implementing capital improvement projects: 1) Aging Infrastructure; 2) Regulatory; 3) Capacity; and 4) Resiliency. Most project scopes include several project elements that address a range of drivers. Each project is described on the following pages. Each project summary includes the project name, description, prioritization, purpose, operating department impact, funding source, location, budgetary information, and driver(s) (i.e., the main impetus for the project).

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

The main driver(s) for each project are identified with a green background. Driver(s) that are less significant or not relevant are displayed with a gray background. Below is a description for each of the four major drivers:

- **Aging Infrastructure:** This project driver describes projects required to maintain the performance and reliability of existing assets to ensure reliable conveyance and treatment of wastewater.

Ironhouse operates and maintains several million dollars of assets, and several projects in each program have been initiated or are in progress to meet replacement or rehabilitation infrastructure needs. Most existing treatment plant facilities were constructed in late 2011, and some collection system facilities and piping were constructed as early as the 1940s or earlier. Ironhouse recognizes the need to address aging infrastructure and has developed an Asset Management System.

- **Regulatory:** This project driver describes projects required to reliably comply with regulatory requirements that are designed to protect human health and the environment, and includes planning needed to anticipate potential future regulatory requirements. Regulatory drivers that may trigger capital improvement projects include potential changes in future state and/or federal water, air, and solids regulations; changes to air emission limits, and solids handling/management and disposal regulations; recycled water, including potential coordinated projects with water agencies on Title 22, Direct Potable Reuse (DPR) opportunities; and collection system regulatory requirements such as the reduction of sewer system spills. Occasionally, improvements are required to enhance the reliability of existing facilities, ensuring 100% compliance with regulatory permits and protecting human health and the environment.
- **Capacity:** This project driver describes projects required to increase the capacity of existing facilities.

Capacity drivers that may trigger capital improvement projects include potential upgrades to mitigate hydraulic bottlenecks and increase the capacity of existing facilities to accommodate wastewater flows and loads, as well as projects required to accommodate planned growth.

- **Resiliency:** This project driver describes projects to minimize life cycle costs, maximize benefits, and achieve economic stability through optimization, resiliency, resource recovery, and energy projects. Sustainability drivers that may trigger capital projects for upgrades to improve the resiliency of Ironhouse facilities. Improvements to strive towards energy self-sufficiency include energy efficiency measures, such as installing more energy-efficient equipment or treatment processes, and renewable energy projects, such as solar.

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Project No. CS26-01 - Parallel 14-Inch Force Main

Purpose: Improve system reliability, redundancy, and operational flexibility within Ironhouse's wastewater conveyance system. Key drivers include accommodating ongoing growth, integrating previously constructed infrastructure, addressing aging and failure-prone pipeline components, and enhancing Ironhouse's ability to manage flows under varying operating conditions. The project also supports long-term asset management objectives by incorporating infrastructure designed for a 50-to-70-year service life.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: The project consists of the design and construction of approximately 10,000 linear feet of new 14-inch redundant force main to complete a critical conveyance corridor within Ironhouse's wastewater system. Portions of the force main have already been constructed as part of adjacent development projects along the E. Cypress Corridor. The remaining segments will connect these existing improvements, provide a continuous transmission pipeline to the Wastewater Reclamation Facility, address deficiencies at the Marsh Creek Bridge crossing, and evaluate operational enhancements between the Cypress Grove and Emerson Ranch pump stations.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Capacity Fees (Restricted Reserves - Capacity and Trunkline Capacity).

Current Phase: Design/Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	\$350,000	\$1,200,000	-	-	-	-	\$1,550,000
Construction	-	\$2,300,000	\$6,000,000	\$4,000,000	-	-	\$12,300,000
FY Total	\$350,000	\$3,500,000	\$6,000,000	\$4,000,000	\$0	\$0	\$13,850,000



Project Location.

Project No. CS26-02 - Collection System

Reimbursement Program

Purpose: The purpose of this program is to equitably allocate the cost of capacity-enhancing infrastructure by reimbursing parties who construct improvements that benefit the broader wastewater system. The program is driven by the need to equitably allocate the cost of capacity-enhancing infrastructure, support planned growth, and ensure the timely delivery of backbone facilities. It also promotes cost efficiency by leveraging developer and city-led construction while maintaining Ironhouse's long-term system planning, reliability, and capacity objectives.

Description: This project establishes a reimbursement program to compensate developers who have paid for constructing oversized or additional sewer main improvements required by Ironhouse to support future capacity and connections, and to reimburse the City of Oakley for installation of a new 14-inch force main along E. Cypress Road.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



Sewer construction project.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Capacity Fees (Restricted Reserves - Capacity and Trunkline Capacity).

Current Phase: Construction

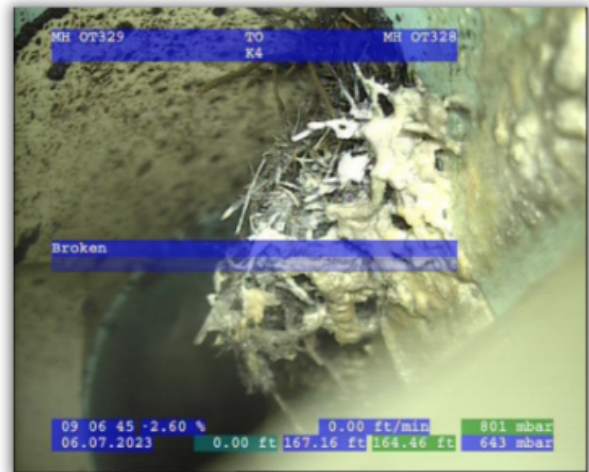
Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	\$0
Construction	\$2,869,596	\$1,020,000	\$175,000	-	-	-	\$4,064,596
FY Total	\$2,869,596	\$1,020,000	\$175,000	\$0	\$0	\$0	\$4,064,596

Project No. CS26-03 - Collection System Renovations Program

Purpose: The purpose of this project is to ensure the long-term reliability and functionality of Ironhouse's wastewater collection system through systematic reinvestment in aging infrastructure. Key drivers include aging pipelines and appurtenances, the need to reduce the risk of sanitary sewer overflows and emergency repairs, regulatory expectations for asset maintenance, and Ironhouse's commitment to a proactive asset management program. The program also supports financial stability by distributing renewal costs through consistent annual funding rather than reactive capital spending.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: This project provides ongoing annual funding for the rehabilitation and replacement of wastewater collection system infrastructure. Work includes pipeline repair, rehabilitation, and replacement activities to address deteriorating assets and maintain system performance, reliability, and capacity over time. Multiple projects will be delivered each year under this program, and any individual project exceeding \$100,000 will be established as a separate project for tracking and reporting purposes.



Closed Circuit TV video of root intrusion in sewer.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Design/Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	\$80,000	\$120,000	\$120,000	\$120,000	\$120,000	\$150,000	\$710,000
Construction	\$320,000	\$480,000	\$480,000	\$480,000	\$480,000	\$600,000	\$2,840,000
FY Total	\$400,000	\$600,000	\$600,000	\$600,000	\$600,000	\$750,000	\$3,550,000

Project No. CS26-04 - Pump Station Improvements

Purpose: The purpose of this project is to maintain and enhance the reliability, capacity, and operational efficiency of Ironhouse's pump station facilities. Key drivers include aging equipment, increased maintenance needs, system growth, and the need to reduce the risk of equipment failure and service disruptions. The project also supports regulatory compliance and Ironhouse's commitment to proactive asset management and long-term capital planning.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: This project provides funding for improvements to Ironhouse's 32 wastewater pump stations. Work may include rehabilitation or replacement of mechanical, electrical, SCADA and control system components, as well as structural upgrades to maintain safe and reliable operation. Multiple improvement projects may be implemented under this program, and any individual project exceeding \$100,000 will be established as a separate project for tracking and reporting purposes.



Pump replacement and drywell rehabilitation.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Design/Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	\$32,000	\$68,000	\$16,000	\$17,000	-	-	\$133,000
Construction	\$440,000	\$600,000	\$150,000	\$170,000	\$81,000	\$92,000	\$1,533,000
FY Total	\$472,000	\$668,000	\$166,000	\$187,000	\$81,000	\$92,000	\$1,666,000

Project No. CS26-05 - Manhole Rehabilitation and Linear Assets Spot Repair Program

Purpose: The purpose of this project is to preserve the integrity and extend the service life of Ironhouse’s wastewater collection system through targeted, cost-effective repairs. Key drivers include protection of hydrogen sulfide-related corrosion of manholes, aging infrastructure, infiltration and inflow reduction, prevention of system failures and sanitary sewer overflows, regulatory compliance requirements, and Ironhouse’s commitment to proactive asset management and efficient use of capital resources.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: This project provides ongoing funding for the rehabilitation of wastewater manholes and spot repair of linear collection system assets. Work includes manhole rehabilitation (e.g., coating, sealing, and structural repairs) and targeted pipeline repairs to address localized defects, infiltration and inflow, and deterioration. Due to elevated hydrogen sulfide levels within the collection system, manhole rehabilitation is a critical component of this program to prevent corrosion and extend asset life.



Manhole cover and frame.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	\$0
Construction	\$75,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$375,000
FY Total	\$75,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$375,000

Project No. CS26-06 - Collection Equipment Replacement Program

Purpose: The purpose of this project is to maintain a reliable and effective fleet of equipment necessary to support collection system operations and maintenance activities. Key drivers include aging and obsolete equipment, increasing maintenance costs, risk of equipment failure, and the need to support efficient response to system issues and emergencies. The program also supports proactive asset management and long-term financial planning through planned, periodic replacement of critical equipment.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: This project provides ongoing funding for the replacement of collection system equipment used in the operation and maintenance of Ironhouse's wastewater system. Equipment may include, but is not limited to, vehicles, Vactor trucks, and specialized maintenance/construction equipment.

Replacements are based on condition, age, and operational needs to ensure reliable and efficient system performance. Planned purchases currently include a dump truck and traffic control equipment in FY 2025–26, a vacuum truck in FY 2027–28, and a boom truck in FY 2030–31.



Collections staff prepare to utilize a sewer jet/vacuum truck.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Acquisition

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	\$0
Construction	\$225,000	-	\$850,000	-	-	\$225,000	\$1,300,000
FY Total	\$225,000	\$0	\$850,000	\$0	\$0	\$225,000	\$1,300,000

Project No. CS27-01 - Collections SCADA and PLC Upgrades

Purpose: The purpose of this project is to ensure reliable, secure, and efficient monitoring and control of Ironhouse's wastewater facilities. Key drivers include aging and obsolete SCADA and PLC components, increasing maintenance challenges, cybersecurity considerations, evolving technology standards, and the need to support system growth and operational efficiency. The program supports proactive asset management and long-term capital planning through consistent system modernization.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: This project provides ongoing funding for upgrades and replacement of Ironhouse's Supervisory Control and Data Acquisition (SCADA) system and Programmable Logic Controllers (PLCs) used to monitor and control wastewater system operations. Work may include hardware and software upgrades, communication systems, instrumentation integration, and replacement of obsolete components to maintain system functionality and reliability.

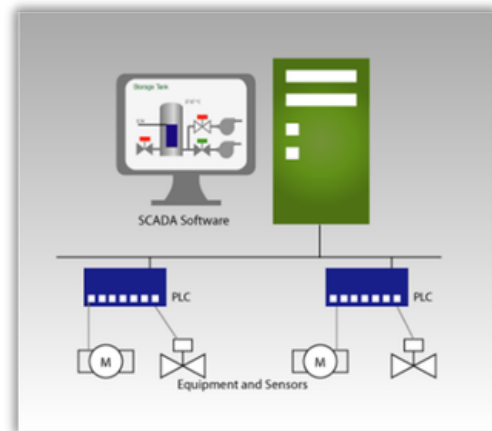


Diagram illustrating SCADA software and PLC operations.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	\$0
Construction	\$25,000	\$1,850,000	-	-	-	-	\$1,875,000
FY Total	\$25,000	\$1,850,000	\$0	\$0	\$0	\$0	\$1,875,000

Project No. CS27-02 - Portable Generators and Pumps Replacement Program

Purpose: The purpose of this project is to maintain reliable and deployable backup equipment necessary to support uninterrupted wastewater service and emergency operations. Key drivers include aging and deteriorating equipment, increased risk of failure during critical events, regulatory expectations for system reliability and overflow prevention, and the need to respond effectively to power outages and wet weather conditions. The program supports proactive asset management and long-term capital planning through scheduled equipment replacement.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: This project provides ongoing funding for the replacement of portable generators and pumps used to support wastewater collection system operations, maintenance, and emergency response. Equipment replacements are based on age, condition, and operational reliability to ensure readiness during power outages, peak flow events, and system failures.



Generator used for emergency power outages.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Acquisition

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	\$0
Construction	-	\$75,000	\$75,000	-	-	\$75,000	\$225,000
FY Total	\$0	\$75,000	\$75,000	\$0	\$0	\$75,000	\$225,000

Project No. CS31-01 - Force Main Inspection

Purpose: Improve system reliability, redundancy, and operational flexibility within Ironhouse's wastewater conveyance system.

Key drivers include, addressing aging and failure-prone force main pipeline components, and enhancing Ironhouse's ability to manage flows under varying operating conditions. The project also supports long-term asset management objectives by incorporating infrastructure designed for a 50- to 70-year service life.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: The project consists of establishing a force main of inspecting program to evaluate the condition the 18.6 miles of force main pipelines which is a critical conveyance asset of Ironhouse's wastewater system. Force main connects Ironhouse's 33 lift station to the gravity system so the wastewater can be safely transported to the WRF for treatment.



Closed Circuit Television operating station.

Operating Department Impact and Funding Source:

This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Planning

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	\$0
Construction	-	-	-	-	-	\$25,000	\$25,000
FY Total	\$0	\$0	\$0	\$0	\$0	\$25,000	\$25,000

Project No. GI26-01 - Ironhouse Campus Building Improvements

Purpose: Improve the functionality, resiliency, safety, and long-term usability of District facilities through coordinated campus and operational building upgrades that support efficient operations and long-term workforce needs.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: This project combines multiple previously planned facility improvement projects into a single coordinated capital project to achieve greater economies of scale, improve construction efficiency, and create a more cohesive architectural and operational aesthetic across the Ironhouse campus and Wastewater Recycling Facility (WRF). Planned campus improvements include expansion of the Collection System garage to support operational needs; installation of backup generator systems for the Administrative and Collection System buildings to improve emergency resiliency; renovation of the Collection System locker rooms to add showers and address underground plumbing deficiencies affecting restroom facilities in both the Collection System and Administrative buildings; and Administrative Building renovations to secure and enclose the public lobby area and add office space to accommodate operational needs. The project also includes the construction of a new WRF maintenance building to provide equipment storage and dedicated shop space. The building will include administrative space designed to create a more functional open office area, a conference room, and properly equipped locker room and shower facilities for both men and women. These functions were included in the original 2010 WRF design but were removed during value engineering with the expectation that they would be constructed later. These facilities are now critically needed to support current operations and provide appropriate washroom accommodations for all staff.



District main campus.

Operating Department Impact and Funding Source: This project will add to O&M costs for the new WRF administrative facility, with costs not currently known. All project expenditures will be funded through Capacity Fees (Restricted Reserves - Capacity).

Current Phase: Design/Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	\$100,000	\$180,000	-	-	-	-	\$280,000
Construction	-	\$850,000	\$2,300,000	\$50,000	-	-	\$3,200,000
FY Total	\$100,000	\$1,030,000	\$2,300,000	\$50,000	\$0	\$0	\$3,480,000

Project No. GI26-02 - IT and Security Equipment

Purpose: The purpose of this project is to maintain secure, reliable, and efficient technology systems that support District operations and protect critical infrastructure and data assets. Key drivers include aging and obsolete equipment, increasing cybersecurity risks, evolving technology standards, regulatory and security compliance requirements, and the need to support operational continuity and system resiliency. The project supports proactive asset management and long-term capital planning through planned technology modernization and replacement.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: This project provides ongoing funding for the replacement, upgrade, and acquisition of information technology and security equipment across District facilities. Work may include servers, network infrastructure, workstations, storage systems, cybersecurity hardware and software, surveillance systems, access control equipment, and related technology improvements necessary to support secure and reliable operations. Equipment replacements and upgrades are based on age, condition, performance, and evolving operational requirements.



Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Acquisition

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	-
Construction	\$10,000	\$12,500	\$12,500	\$12,500	\$12,500	\$12,500	\$72,500
FY Total	\$10,000	\$12,500	\$12,500	\$12,500	\$12,500	\$12,500	\$72,500

Project No. GI26-03 - Fleet and Vehicle Replacement

Purpose: Maintain a reliable, safe, and efficient fleet to support District operations through planned vehicle replacement and long-term asset management.

Description: This project provides ongoing funding for the scheduled replacement and life cycle management of standard District fleet vehicles based on age, condition, maintenance history, and operational needs. Vehicle replacements may include administrative, supervisory, and light-duty field service vehicles necessary to support daily District operations and emergency response activities. This project is separate from CS26-06 Collection Equipment Replacement, which funds specialty collection system trucks and heavy equipment such as vacuum trucks, boom trucks, and other large operational equipment.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



Manhole frame and cover replacement.

In April 2026, Ironhouse entered into a five-year master equity lease agreement with Enterprise Fleet Management for six District vehicles. The annual lease payment of \$40,000 will be funded through this project. Future vehicle replacement needs will be evaluated to determine whether direct purchase or expansion of the Enterprise lease program provides the most cost-effective and operationally efficient solution. The program supports proactive asset management and long-term financial planning by replacing vehicles on a planned life cycle basis rather than through reactive replacement following equipment failure.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Acquisition

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	\$0
Construction	\$160,000	\$40,000	\$49,000	\$58,000	\$76,000	\$85,000	\$468,000
FY Total	\$160,000	\$40,000	\$49,000	\$58,000	\$76,000	\$85,000	\$468,000

Project No. GI27-01 - Administrative Building EV Charging Stations

Purpose: Support Ironhouse's sustainability goals and future operational needs by preparing the Administrative Building for electric vehicle charging infrastructure.

Description: This project provides funding for installation of conduits and supporting electrical infrastructure necessary to accommodate future electric vehicle charging stations at Ironhouse's Administrative Building. This work will be coordinated with Project RW27-03, the Recycled Water Demonstration Gardens project, to minimize construction costs and site disruption by completing underground infrastructure improvements concurrently.

Because the Demonstration Gardens project is funded through an EPA grant and electric vehicle charging infrastructure is not an eligible grant expense, this project separately funds the EV-related improvements. Initial work will focus on conduit and supporting infrastructure installation, with charger equipment installation to occur later as operational needs and funding priorities warrant. The project supports long-term facility planning, future fleet electrification, and evolving sustainability initiatives.

Operating Department Impact and Funding Source: Energy costs may increase as a result of adding these chargers. Public Access to chargers would be mitigated by service provider. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Design

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	\$0
Construction	-	\$15,000	-	-	-	-	\$15,000
FY Total	\$0	\$15,000	\$0	\$0	\$0	\$0	\$15,000

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



Examples of EV charging stations.

Project No. GI27-02 - Paving, Sidewalks, and Exterior Lighting

Purpose: Maintain and improve the safety, accessibility, and long-term functionality of Ironhouse's Collections and Administrative facilities through planned site infrastructure upgrades.

Description: This project provides ongoing funding for paving, sidewalk, and exterior lighting improvements at Ironhouse's Collections and Administrative buildings. Work may include pavement rehabilitation and replacement, slurry seals, striping, sidewalk repairs and ADA accessibility upgrades, exterior lighting replacement or enhancement, and related site improvements necessary to maintain safe access, visibility, and reliable facility operations.

Improvements are identified based on asset conditions, safety needs, accessibility requirements, and long-term facility planning objectives. The program supports proactive maintenance of critical site infrastructure, reduces the risk of deferred maintenance issues, and extends the useful life of facility assets. Multiple projects may be implemented each year under this program, and any individual project exceeding \$100,000 will be established as a separate project for tracking and reporting purposes.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



Asphalt being applied after gravity pipeline replacement.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	-
Construction	\$0	\$38,000	\$0	\$25,000	\$3,000	\$0	\$66,000
FY Total	\$0	\$38,000	\$0	\$25,000	\$3,000	\$0	\$66,000

Project No. GI28-01 - Furniture and Fixtures

Purpose: The purpose of this project is to replace aging office equipment, furniture and fixtures that support District operations. Key drivers include aging and obsolete equipment, ergonomic design, regulatory and security compliance requirements, and the need to support operational continuity. The project supports proactive asset management and long-term capital planning through planned office furniture, fixture modernization and replacement.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: This project provides ongoing funding for the replacement, upgrade, and acquisition of office equipment, furniture, and fixtures for all the departments across District facilities. Office furniture and equipment replacements and upgrades are based on age, condition, performance, and evolving operational requirements.



Conceptual photo of furniture replacement.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Acquisition

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	-
Construction	-	-	\$30,000	\$20,000	\$20,000	\$20,000	\$90,000
FY Total	\$0	\$0	\$30,000	\$20,000	\$20,000	\$20,000	\$90,000

Project No. RW27-01 - Residential Fill Stations Rehabilitation

Purpose: The purpose of this project is to maintain safe, reliable, and compliant operation of Ironhouse's recycled water fill station while extending the service life of the facility. Key drivers include aging infrastructure, wear from regular use, regulatory requirements related to backflow prevention and water quality protection, and the need to ensure continued availability of recycled water service. The project supports proactive asset management and long-term system reliability.

Description: This project provides funding for the rehabilitation and improvement of Ironhouse's recycled water fill station located at the Ironhouse campus. Work may include structural repairs, replacement of valves, piping, meters, and backflow prevention devices, as well as site and accessibility improvements to maintain safe and reliable operation. In accordance with Ironhouse's capitalization policy, equipment and improvements with a unit cost of \$5,000 or greater will be capitalized.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	\$0
Construction	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$30,000
FY Total	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$30,000

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



Recycled Water Fill Station.

Project No. RW27-02 - Recycled Water Pumping Improvements

Purpose: Improve the reliability, redundancy, and operational efficiency of Ironhouse's recycled water pumping system. Key drivers include increasing recycled water demand, limitations of the existing pumping configuration, the need for operational redundancy, and improving pressure stability and system independence from effluent pumping operations. The project supports long-term recycled water system reliability, operational flexibility, and proactive asset management objectives.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: This project provides funding for improvements to Ironhouse's recycled water pumping facilities for the recycled water fill station and to provide sufficient irrigation water for the new landscape project. The project includes replacement of the existing 7.5 horsepower recycled water booster pump with a new 20 horsepower pump designed to meet maximum recycled water demand. The new pump will operate on variable frequency drives and utilize the existing dual 90 gallon hydropneumatic tanks to maintain system pressure. The project also includes construction of a new connection to the effluent wet well to supply the recycled water system, replacing the existing connection to the effluent pump discharge header. This improvement will isolate recycled water system operations from fluctuations associated with effluent pump operations and improve overall system reliability and performance.



Installation of a recycled water pump station.

Operating Department Impact and Funding Source: This project will not impact the operating budget. This project is funded with \$400,000 of EPA Grant money and a required 20% match or \$100,000, funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Design

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	\$50,000	-	-	-	-	\$50,000
Construction District Funded	-	\$100,000	-	-	-	-	\$100,000
Construction EPA Funded	-	\$400,000	-	-	-	-	\$400,000
FY Total	\$0	\$550,000	\$0	\$0	\$0	\$0	\$550,000

Project No. RW27-03 - Demonstration Gardens (EPA Grant)

Purpose: The purpose of this project is to demonstrate and promote the safe and effective use of recycled water through visible, publicly accessible landscaping improvements at Ironhouse's facilities. Key drivers include water conservation objectives, ADA accessibility improvements, public education and outreach, sustainability initiatives, and maximizing the benefits of available EPA grant funding. The project also supports Ironhouse's long-term recycled water program goals and commitment to responsible water resource management.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: This project consists of the installation of demonstration landscaping improvements along Ironhouse entrance, driveway, and surrounding the Administrative Office Building to showcase the beneficial use of recycled water for irrigation. Improvements may include irrigation system installation, landscape enhancements, signage, sidewalk replacement, and accessibility upgrades to address ADA requirements, and related site improvements designed to promote public awareness and education regarding recycled water use and water conservation practices. Project funding will be provided through an EPA grant.



Example of landscape signage.

Operating Department Impact and Funding Source: This project will not impact the operating budget. This project is funded with \$720,000 of EPA Grant money and a required 20% match or \$180,000, funded through Sewer Service Fees (Board Designated Capital Expenditures). Design services for the project have been funded through prior-year operating budgets, dating back to FY 2023-24.

Current Phase: Design/Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	\$175,000	-	-	-	-	-	\$175,000
Construction District Funded	-	\$250,000	-	-	-	-	\$250,000
Construction EPA Funded	-	\$350,000	\$370,000	-	-	-	\$720,000
FY Total	\$175,000	\$600,000	\$370,000	\$0	\$0	\$0	\$1,145,000

Project No. WT26-01 - Chemical Feed Room and Equipment Improvements

Purpose: Repairing deteriorated infrastructure in the Chemical Feed Room will improve reliability, safety, and operability of chemical feed systems. Implementation of this project will optimize chemical pumping and piping arrangements, repair structural damage, and reduce leaks, corrosion, and maintenance challenges.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: The project includes evaluation and repair for the damaged shared wall between the Chemical and Aeration Blower rooms, redesigning chemical pump skids and piping configurations, improved drainage and containment, enhanced system cleanout accessibility, upgrades to protective coatings, and plumbing layouts to maintain separation between citric acid and sodium hypochlorite systems. After evaluation of the damage, the project may require additional funding when the scope of the project is fully determined.



Chemical pumps and feed lines.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Design/Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	\$50,000	-	-	-	-	-	\$50,000
Construction	\$200,000	\$122,000	-	-	-	-	\$322,000
FY Total	\$250,000	\$122,000	\$0	\$0	\$0	\$0	\$372,000

Project No. WT26-02 - Drum Screen Improvements

Purpose: The purpose of this project is to rehabilitate and improve the reliability, ventilation, and corrosion resistance of the Wastewater Recycling Facility (WRF) drum screen system to ensure continued operational performance, expand capacity, maintain redundancy, and extend the service life of critical headworks equipment.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: Drum Screens #1–3 are experiencing significant corrosion of concrete, stainless steel, and mechanical components due to hydrogen sulfide levels and inadequate ventilation within the screen housings. Work will include modifications to the drum screen enclosures to provide dedicated air intake ventilation, replacement of corroded drive and utility spray water components, and temporary removal of screen units using a crane to allow concrete repairs and the application of chemical-resistant coatings around the screen bases. The project also includes installing a fourth drum screen with a dedicated washer-compactor to improve operational redundancy, expand capacity, and enhance reliability. The placement location for drum screen 4 currently exists.



Water Recycling Facility Drum Screens.

Currently, Drum Screens 1 and 2 share a washer-compactor, creating a potential operational vulnerability. The additional drum screen and washer-compactor will allow rehabilitation of Drum Screens 2 and 3 under a future project while maintaining the required screening capacity.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Capacity Fees (Restricted Reserves - Capacity).

Current Phase: Design/Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	\$250,000	-	-	-	-	-	\$250,000
Construction	-	\$1,700,000	-	-	-	-	\$1,700,000
FY Total	\$250,000	\$1,700,000	\$0	\$0	\$0	\$0	\$1,950,000

Project No. WT26-03 - MBR Process Rehabilitation

Purpose: The purpose of this project is to improve the reliability, operational efficiency, and long-term treatment capacity of Ironhouse's Membrane Bioreactor (MBR) system through membrane replacement, equipment upgrades, and process control modifications.

Description: This project includes replacement of MBR membranes and related system improvements to support future treatment demands and improve performance. Ironhouse pre-purchased replacement membranes valued at \$2,327,563.20 as part of the original 2010 construction. The purchase was reaffirmed by the current manufacturer in 2021 following ownership changes. Based on a 10 to 15 year service life, one-half of the membranes will be installed in FY 2026-27, with the remaining half installed in FY 2028-29.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



Membrane Bioreactor area.

The new membranes provide greater surface area, allowing operation with fewer cassettes while preserving capacity for future expansion. The project also includes replacement of existing 10 horsepower air compressors with 15 horsepower units and piping modifications to improve permeate flow measurement accuracy, flow stability, and reduce valve cycling. This project will also require the addition of an MBR Air Scour Blower (see WT-27-07).



Membrane Bioreactor filters.

Operating Department Impact and Funding Source:

This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	\$0
Construction	\$130,000	\$250,000	\$50,000	\$300,000	\$100,000	\$50,000	\$880,000
FY Total	\$130,000	\$250,000	\$50,000	\$300,000	\$100,000	\$50,000	\$880,000

Project No. WT26-04 - WRF Piping Rehabilitation

Purpose: Maintain the integrity, reliability, and long-term performance of Ironhouse's Wastewater Reclamation Facility (WRF) and effluent conveyance system by addressing corrosion, protecting critical infrastructure, and extending asset service life.

Description: This project provides ongoing funding for the rehabilitation and protection of process piping at the WRF and Ironhouse's effluent conveyance pipeline. Work includes protective coating and painting of piping systems within the treatment plant to address corrosive conditions, inspection of the effluent pipeline (including external condition assessments and cathodic protection testing), and rehabilitation of approximately six miles of effluent line as needed based on condition and performance.

Improvements are identified through routine inspections, asset condition assessments, and operational risk evaluation. The program is intended to reduce corrosion-related failures, improve system reliability, and extend the service life of critical treatment and effluent infrastructure. Multiple projects may be implemented each year under this program, and any individual project exceeding \$100,000 will be established as a separate project for tracking and reporting purposes.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



Influent pump station discharge piping.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	\$0
Construction	\$250,000	\$25,000	\$55,000	\$75,000	\$175,000	\$55,000	\$635,000
FY Total	\$250,000	\$25,000	\$55,000	\$75,000	\$175,000	\$55,000	\$635,000

Project No. WT26-05 - Aeration Basin Structural Repair

Purpose: The purpose of this project is to rehabilitate and preserve the structural integrity and operational reliability of the aeration basin system through crack repairs, protective coating restoration, and condition assessment of critical process equipment. Operating three aeration basins in conjunction with the aerobic digester is projected to provide adequate treatment capacity for the planned residential buildout population.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: This project includes repair of a structural crack located at a control joint that appears to extend through all four aeration basins. The anticipated repair method is epoxy injection. As each aeration basin is taken offline individually for repairs, the exposed Return Activated Sludge (RAS) piping will be recoated to address deteriorated protective coatings and prevent further corrosion.

The project also includes inspection of the basin air diffusers during outages to evaluate their condition and determine anticipated replacement timing based on remaining service life. In support of future treatment demands, a third aeration basin is planned to be brought online during the 2026–2027 timeframe, while the existing abbreviated aerobic digester may remain in operation.



Structural crack at aerobic digester.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Design/Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	\$20,000	-	-	-	-	-	\$20,000
Construction	\$80,000	-	-	-	-	-	\$80,000
FY Total	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000

Project No. WT26-06 - Scheduled Equipment Rehab/Replacement

Purpose: Maintain the reliability, efficiency, and long-term performance of Ironhouse's water treatment facilities through planned rehabilitation and replacement of critical treatment equipment.

Description: This project provides ongoing funding for the scheduled rehabilitation, replacement, and upgrade of water treatment equipment based on asset condition, performance history, manufacturer-recommended service intervals, and operational requirements. Work may include replacement or refurbishment of pumps, motors, valves, instrumentation, treatment process equipment, electrical and control components, and other mechanical systems necessary to support reliable treatment operations and regulatory compliance.

Scheduled improvements are intended to address aging infrastructure, reduce the risk of unexpected equipment failures, improve treatment performance and energy efficiency, and extend the useful life of critical assets. The program supports proactive asset management by allowing equipment to be replaced on a planned life cycle basis rather than through reactive emergency repairs. Multiple projects may be implemented each year under this program, and any individual project exceeding \$100,000 will be established as a separate project for tracking and reporting purposes.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Design/Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	\$50,000	\$52,500	\$52,500	\$52,500	\$72,500	\$75,000	\$355,000
Construction	\$450,000	\$472,500	\$472,500	\$472,500	\$652,500	\$675,000	\$3,195,000
FY Total	\$500,000	\$525,000	\$525,000	\$525,000	\$725,000	\$750,000	\$3,550,000

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



Sludge Pump before rehab.



Sludge Pump after rehab.

Project No. WT26-07 - WRF SCADA and PLC Upgrades

Purpose: The purpose of this project is to ensure reliable, secure, and efficient monitoring and control of Ironhouse's wastewater facilities. Key drivers include aging and obsolete SCADA and PLC components, increasing maintenance challenges, cybersecurity considerations, evolving technology standards, and the need to support system growth and operational efficiency. The program supports proactive asset management and long-term capital planning through consistent system modernization.

Description: This project provides ongoing funding for upgrades and replacement of Ironhouse's Supervisory Control and Data Acquisition (SCADA) system and Programmable Logic Controllers (PLCs) used to monitor and control wastewater system operations. Work may include hardware and software upgrades, communication systems, instrumentation integration, and the replacement of obsolete components to maintain system functionality and reliability.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Design/Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	\$0
Construction	\$100,000	\$2,000,000	\$2,500,000	-	-	-	\$4,600,000
FY Total	\$100,000	\$2,000,000	\$2,500,000	\$0	\$0	\$0	\$4,600,000

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



PLC Control Panel.

Project No. WT26-08 - WRF Site Improvements

Purpose: Maintain and enhance the safety, accessibility, and long-term functionality of Ironhouse's Wastewater Reclamation Facility (WRF) through planned site infrastructure improvements.

Description: This project provides ongoing funding for site infrastructure improvements at Ironhouse's Wastewater Reclamation Facility, with a primary focus on concrete and paving rehabilitation and replacement. Work may include roadway and pavement improvements, concrete flatwork replacement, drainage corrections, and other repairs necessary to maintain safe access and reliable site operations.

The project may also include installation of electric vehicle charging stations, access improvements to groundwater monitoring wells, fencing upgrades, and related site enhancements to support operational efficiency, regulatory access requirements, and evolving facility needs. Improvements are identified based on asset condition, operational priorities, and long-term facility planning objectives.

Multiple projects may be implemented each year under this program, and any individual project exceeding \$100,000 will be established as a separate project for tracking and reporting purposes.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	\$0
Construction	\$50,000	-	\$300,000	\$35,000	-	-	\$0
FY Total	\$50,000	\$0	\$300,000	\$35,000	\$0	\$0	\$385,000

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



Biosolids Building.

Project No. WT27-01 - Influent Piping and Screening Improvements

Purpose: The project is intended to improve system redundancy, reduce operational risk during peak flow conditions, and proactively address equipment deterioration in one of the most corrosive areas of the facility.

Description: Current peak wet weather flows can exceed 5 Million Gallons per Day (MGD), and the hydraulic capacity of one of the two existing perforated plate mechanical screens may be exceeded if one screen is out of service. To maintain firm treatment capacity of up to 10 MGD peak wet weather flow with one screening unit offline, the project includes installation of a third mechanical screen, along with an associated washer/compactor and modification of the existing screenings discharge chute. The project also includes replacement of the existing grit classifier, which is severely corroded and nearing the end of its useful life, as well as replacement of the existing influent pump discharge riser piping in the wet wells. The riser piping has experienced coating failure and is beginning to corrode. Because coating maintenance in the hazardous confined-space wet well environment is costly and typically required every 10 years, replacement with 316 stainless steel is recommended to eliminate future coating maintenance needs. Remaining ductile iron piping above the wet well will also be recoated to address ongoing coating degradation. Additional piping, coatings, and related appurtenant improvements may be included as needed to address accelerated corrosion, improve reliability, and support long-term headworks performance.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



Influent pump station headworks.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Capacity Fees (Restricted Reserves-Capacity).

Current Phase: Design/Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	\$165,000	-	-	-	-	\$165,000
Construction	-	\$400,000	\$1,500,000	-	-	-	\$1,900,000
FY Total	\$0	\$565,000	\$1,500,000	\$0	\$0	\$0	\$2,065,000

Project No. WT27-02 - Biosolids Improvement Facility

Purpose: Evaluate and implement long-term biosolids management improvements that enhance operational efficiency, reduce disposal risk, and support sustainable, cost-effective biosolids handling at the WRF.

Description: Currently, Ironhouse dewaterers biosolids using a belt filter press, with resulting solids hauled by Synagro for land application as Class B biosolids. While this process remains functional, increasing transportation and disposal costs, along with evolving regulatory and market constraints associated with Class B biosolids, are making long-term reliance on the existing approach more challenging. A biosolids alternatives analysis has been completed and narrowed to three viable long-term options. One option includes participation in a regional partnership with the city of Brentwood to utilize its planned biosolids processing system, which would require capital participation and development of a biosolids transfer facility. A second option includes construction of an on-site thermal and chemical conditioning facility using Lystek® technology within the existing Solids Building to produce a fertilizer product with expanded beneficial reuse opportunities. A third option includes installation of a thermal drying system DryVac® within the Solids Building to reduce biosolids volume and produce a high-solids Class A EQ product, thereby reducing hauling volumes and associated disposal costs. Ironhouse has allocated \$7 million over the next five years and an additional \$8 million over the following five years, providing sufficient funding capacity to implement any of the identified alternatives. This project will select the preferred option, and complete design and construction of the chosen solution to improve long-term operational reliability, regulatory compliance, and lifecycle cost efficiency for Ironhouse's biosolids program.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



Biosolids belt press.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Capacity Fees (Restricted Reserves-Capacity).

Current Phase: Design

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	\$100,000	\$100,000	\$200,000	-	-	\$400,000
Construction	-	-	-	\$2,600,000	\$4,000,000	-	\$6,600,000
FY Total	\$0	\$100,000	\$100,000	\$2,800,000	\$4,000,000	\$0	\$7,000,000

Project No. WT27-03 - Odor Control Rehabilitation for Solids Building

Purpose: Maintain reliable odor control performance and protect facility operations, equipment, and surrounding areas from odor-related impacts through rehabilitation of the Solids Building odor control system.

Description: This project provides funding for rehabilitation and replacement of odor control equipment serving Ironhouse's Solids Building at the Wastewater Reclamation Facility (WRF). Work may include replacement or rehabilitation of fans, ductwork, chemical treatment systems, media, controls, instrumentation, and related appurtenances necessary to maintain effective odor capture and treatment. Improvements are identified based on equipment condition, operational performance, corrosion, maintenance history, and regulatory or operational requirements. The Solids Building operates in a corrosive environment that accelerates equipment deterioration and increases maintenance demands. Planned rehabilitation is intended to restore reliable odor control performance, reduce the risk of equipment failure, improve operational efficiency, and extend the service life of critical odor control infrastructure.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



Biosolids Building.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	\$50,000	\$125,000	-	-	-	\$175,000
Construction	-	-	\$225,000	\$350,000	-	-	\$575,000
FY Total	\$0	\$50,000	\$350,000	\$350,000	\$0	\$0	\$750,000

Project No. WT27-04 - Stormwater Retention Pond Improvements – Phase 1

Purpose: Improve operational flexibility and treatment reliability at the Wastewater Recycling Facility (WRF) by enabling controlled management of stormwater storage during prolonged wet weather conditions and ensure protection of treatment capacity and regulatory compliance.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: This project provides funding for the installation of a drain return line from the stormwater retention basin to the WRF headworks. The system will include a motor-operated gate valve with an actuator extension and an outdoor-rated actuator to allow automated control of stormwater return flows. An open-channel flow meter will also be installed in a new or modified manhole on the return line to provide measurement of return flow rates. These improvements will allow the return flow to be actively controlled and automatically adjusted or shut off based on influent conditions at the plant. If total influent flow to the facility approaches capacity during peak wet weather events, the system will be capable of automatically reducing or stopping return flows to prevent hydraulic overloading of the headworks. The project also includes rehabilitation of access roads around the North Pond, South Pond, and Stormwater Pond to restore safe and reliable access for operations, maintenance, and inspection activities. The project is intended to enhance system resilience during prolonged wet weather conditions and improve operational control of stormwater storage infrastructure.



Stormwater retention pond (circled in red).

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Design/Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	\$75,000	-	-	-	\$75,000
Construction	\$5,000	\$5,000	\$80,000	\$5,000	\$705,000	\$5,000	\$805,000
FY Total	\$5,000	\$5,000	\$155,000	\$5,000	\$705,000	\$5,000	\$880,000

Project No. WT27-05 - UV Effluent Gate Installation

Purpose: Improve operational control and hydraulic isolation of the UV effluent system at the WRF by addressing leakage associated with existing counterweighted gate infrastructure.

Description: This project provides funding for the installation of UV effluent isolation gates to improve control and prevent unintended leakage through existing counterweighted gates. To address this issue, the project includes installation of open-close weir gates downstream of the existing counterweighted gates, which will remain in place. The new gates will operate in a fully open position when the channel is online and fully closed when offline, preventing leakage and improving hydraulic isolation. This approach is preferred over replacing the system with modulating weir gates, as open-close gate operators are less costly and avoid the need for additional level sensing instrumentation and more complex SCADA integration. The project is intended to improve operational reliability, reduce unintended flow bypass, and provide a cost-effective solution for system isolation and maintenance flexibility.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



Ultraviolet light channel.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Design

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	\$75,000	-	-	\$75,000
Construction	-	-	-	\$200,000	-	-	\$200,000
FY Total	\$0	\$0	\$0	\$275,000	\$0	\$0	\$275,000

Project No. WT27-06 - LED Lighting Upgrades

Purpose: The purpose of this project is to improve the reliability, energy efficiency, safety, and resiliency of the WRF through replacement of aging lighting infrastructure with modern Light-Emitting Diode (LED*) technology.

Description: This project includes upgrading existing lighting systems throughout the wastewater treatment plant by replacing aging and inefficient fixtures with high-efficiency LED lighting. Many of the existing lighting components are approaching or exceeding their useful service life, resulting in increased maintenance requirements, reduced reliability, and higher energy consumption. The LED upgrades will improve illumination quality, reduce operational and maintenance costs, and enhance worker safety throughout plant facilities and process areas. The project will also improve overall facility resiliency by installing durable, long-life lighting systems better suited to the demanding wastewater treatment environment. Improvements may include replacement of fixtures, controls, wiring, and associated electrical components as needed to support reliable long-term operation and compatibility with backup power systems and future facility upgrades.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency



Light fixtures at the Water Recycling Facility.

*LED: (a semiconductor diode which glows when a voltage is applied).

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	-	-	\$0
Construction	-	\$50,000	-	-	\$50,000	-	\$100,000
FY Total	\$0	\$50,000	\$0	\$0	\$50,000	\$0	\$100,000

Project No. WT27-07- MBR Air Scour Blower Addition

Purpose: In coordination with Project WT-26-03 MBR Membrane Replacement, the purpose of this project is to improve the reliability, operational efficiency, and long-term treatment capacity of Ironhouse's Membrane Bioreactor (MBR) system through membrane replacement, equipment upgrades, and process control modifications.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: The project includes the addition of a new Air Scour Blower design with the air flow capacity to match the new (lower) air requirement of the new MBR membranes installed under WT26-03.

Operating Department Impact and Funding

Source: This project will help reduce energy costs and positively impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).



Aeration blowers for Membrane Bioreactor.

Current Phase: Design/Construction

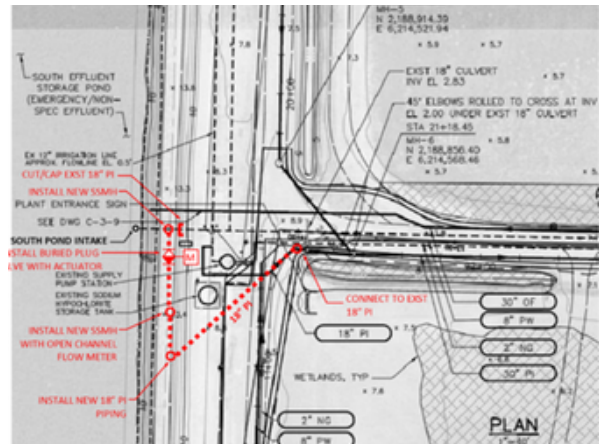
Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	\$0	\$50,000	-	-	-	-	\$50,000
Construction	\$0	\$350,000	100,000	-	-	-	\$450,000
FY Total	\$0	\$400,000	\$100,000	\$0	\$0	\$0	\$500,000

Project No. WT27-04 - Stormwater Retention Pond Improvements - Phase 2

Purpose: Improve operational flexibility and treatment reliability at the Wastewater Recycling Facility (WRF) by enabling controlled management of stormwater storage during prolonged wet weather conditions and ensure protection of treatment capacity and regulatory compliance.

Project Drivers	
Aging Infrastructure	Capacity
Regulatory	Resiliency

Description: As part of the 2011 WRF construction project, a gravity diversion from the suction side of the supply pump station to the 30" primary influent sewer line was added to allow the south pond to be drained back into the WRF headworks. The return flow from the south pond to the headworks is not easily controllable, as it is only initiated by a buried manual plug valve with no means of flow measurement. This project is being considered to address this issue, as uncontrolled south pond flow return to the headworks can overload headworks equipment. The recommended improvement involves reconfiguring the 18" piping connecting the south pond intake to the main 30" primary influent sewer to install a motor actuated plug valve and several manholes, one of which would include an open channel sewer flow meter. PLC programming would be added to allow for the operator to set a desired flow rate, and for automatic control of the plug valve to obtain the specified flow rate set point.



South Pond Return concept.

Operating Department Impact and Funding Source: This project will not impact the operating budget. All project expenditures will be funded through Sewer Service Fees (Board Designated Capital Expenditures).

Current Phase: Design/Construction

Phase	Budget-to-Date	FY 2026-2027	FY 2027-28	FY 2028-29	FY 2029-30	FY 2030-31	Total
Design	-	-	-	-	\$100,000	-	\$100,000
Construction	-	-	-	-	\$650,000	-	\$650,000
FY Total	\$0	\$0	\$0	\$0	\$750,000	\$0	\$750,000



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