2016 Summary Report
Capital Improvement Projects
The City Commission adopted the Water and Wastewater 2013-2017 Capital Improvement Program (CIP) on March 12, 2013. The CIP identifies water and wastewater projects needed for functional integrity, regulatory compliance and capacity. Key factors include ongoing structural assessments, changing community needs and future growth. The current CIP includes large-scale, multiyear capital projects such as a new wastewater treatment plant, a citywide inflow/infiltration removal program in the sewer collection system, and taste and odor process improvements at the water treatment plants, as well as a range of other projects addressing capacity, reliability and/or structural integrity.

The 2016 Summary Report provides a year-end CIP status update, organized broadly within the following categories:

1. Capacity and Large Capital Projects
2. Reliability Projects Other Than Watermain Replacement
3. Watermain Replacement Projects
4. Other Utilities Projects

1. **Capacity and Large Capital Projects**

   **UT1304 Wakarusa Wastewater Treatment Plant and Conveyance Corridor**

   - Project Description – Design and construction of the new Wakarusa River Wastewater Treatment Plant (Wakarusa WWTP), the new Pump Station 10, related force mains, and improvements to the existing Kansas River Wastewater Treatment Plant (Kansas River WWTP). This project provides a second wastewater treatment plant and enhanced operational flexibility, with pump station functionality to divert flows between treatment plants as needed to meet changing operational needs. The project provides for future community growth, meets the regulatory requirements for wet weather treatment and nutrient removal, and increases system reliability and resiliency in transporting and treating wastewater without negatively impacting the community or the environment.
• Project Details – In 2014, after eight years of planning, design and preliminary improvements, the project moved into the construction phase beginning with site fill placement and installation of force mains. In addition to the contractors identified below, qualified department staff is performing various inspection services; designing the automation, integration and programming systems; installing pipeline; and acquiring various equipment both as cost-saving measures and for enhanced in-house operational knowledge of new infrastructure functionality. Recent progress is illustrated in the following timeline.

*Kansas River WWTP Improvements* – Laboratory expansion started in late 2015 and completed in August 2016. Facility improvements also included final clarifier equipment replacement.

*Wakarusa WWTP* – Site construction began in June 2015 with structure excavation, placement of below-grade slabs and walls, and installation of site process piping. In 2016, construction surpassed 60 percent completion and remains within budget and on-schedule to be completed in early 2018. Below-grade concrete slabs and walls for the Biological Nutrient Removal (BNR) Basin are complete and work began on the BNR deck slabs. All of the Peak Flow Storage Basin concrete slabs were placed. Structural masonry and roof structures are finished on four of the six buildings, and brick veneer is complete on two buildings. A majority of the yard piping and conduit has been installed. Construction of the outfall structure and installation of 42” outfall piping is underway.
Pump Station 10 - Construction began with excavation in late 2015 on the pump station located at the northwest corner of 31st and Louisiana Streets. The below-grade slabs and walls are complete on the station and flow diversion structure. Force mains have been connected to the station and installation continues on the large 48” and 54” interceptor piping across the site.
• Design Engineer – Black & Veatch/PEC/Bartlett & West
• Construction – Garney Construction (Wakarusa WWTP, Pump Station 10, Kansas River WWTP Improvements), Kings Construction (Site Fill) and BRB (Force Mains)
• Status – Completion 2018
• Project Budget - $74.1 million ($11.2 million Design and Construction Phase Services; $13.6 million Site Fill and Force Main Contracts; $45.2 million for Wakarusa WWTP, Pump Station 10, and Kansas River WWTP Improvements; $600,000 Property Acquisition; $1.5 million Power/Gas Utility Infrastructure, and $2 million City-Provided Work and Materials)

UT1307 Oread Water Storage Tanks & Booster Pump Station Replacement
• Project Description - Replacement of two aging water storage tanks and the booster pump station in the 1200 block of Oread Avenue proximate to University of Kansas (KU) main campus. The 1931 tank located to the south stores 1,000,000 gallons; the 1954 tank located to the north end stores 1,300,000 gallons (Oread Tanks). The 1.8 million gallon per day (mgd) booster pump station transports water from the Oread Tanks to the West Hills service area.
• Project Details - Structurally, the Oread Tanks exhibit severe corrosion, loss of structural members, exterior holes, deteriorated foundations and failing interior/exterior coatings. They also fail to meet current safety and American Water Works Association standards. The pump station has several electrical equipment, valving, maintenance and operational issues. Following preliminary design activities and extended staff consideration of alternate siting/storage strategies in consultation with KU, the City Commission approved an engineering services agreement with HDR, Inc. on March 27, 2015 for design services to replace all three structures at the existing site.
• Design Engineer – HDR Inc., Lee’s Summit, MO
• Construction – To Be Determined
• Status – Project Bidding February 2017; Project Completion Summer 2018
• Project Budget - $5,276,500
Project Description - Comprehensive, multiyear, multiphase, “find and fix” program to investigate and reduce rainwater entering the City’s sanitary sewer system from public and private sources. EcoFlow targets discrete geographic areas inside City limits, with five Phase areas identified to date and phasing of the future areas based on data from ongoing flow monitoring. The map below shows 2016 activities and progress. Participant feedback continues to be overwhelmingly positive.
Project Details –

- Public source 2016 activities included 390 manhole inspections, approximately 87,000 linear feet of sanitary sewer smoke testing, and approximately 12,000 linear feet of closed-circuit television (CCTV) sewer inspections. Completed public sector sewer repairs included 36 sanitary sewer point repairs, and approximately 25,000 linear feet of cured-in-place pipe (CIPP) rehabilitation. Over 16,000 linear feet of sanitary sewer were identified for 2017 repair. Public sector repairs identified in this project are included into larger citywide repair projects. In 2016, this larger project was UT1508.
- Private source 2016 activities included over 1,200 private property evaluations. Of the approximately 600 defects identified in 2016, department staff repaired approximately 70 minor defects and an EcoFlow plumbing contractor repaired 350 defects.
- An ongoing flow-monitoring component identifies sanitary sewer system areas needing repair to minimize the impact of wet weather flows. Data following 2015 repairs of targeted high-volume areas show an approximate 10% decrease in peak wet weather flow rates from 2014 to 2015, notwithstanding the significantly higher rainfall totals in 2015. For comparison purposes, the overall change in ground conditions between 2014 and 2015 resulted in peak wet weather flow rates increasing approximately 20% on average for areas not yet targeted for repair. This results in an approximate 30% estimated peak inflow reduction. The size of the flow monitoring basins targeted in 2016 is significantly larger. Several years will be required to complete repairs in these flow monitoring basins.

- Design Engineer – TREKK Design Group
- Construction – Nine Pre-qualified Plumbing Contractors & City Staff
- Status – Initial Program scope to complete 2020, with ongoing evaluation/correction of to-be-identified future areas.
- Project Budget - $19,400,000 (over the life of the project)

UT1209 - Water Process Improvements - Phase I (previously, Taste & Odor Improvements - Phase 1)

- Project Description – Phase I improvements to the Clinton Reservoir Water Treatment Plant are based on recommendations in the 2013 Taste & Odor Study and other improvements requested by the City. These improvements will increase effectiveness of existing processes, streamline operation and maintenance activities, reduce chemical costs, and improve taste and odor removal. These improvements will also provide the groundwork for additional taste and odor removal processes if needed in the future.
- Project Details – Improvements include the addition of a new rapid mix system, carbon dioxide system, ferric system and liquid lime system; tube settlers in the primary basins; coating of the South Train basins equipment, operator training, and post-construction process testing and optimization.
- Design Engineer – Burns & McDonnell, Kansas City, MO
- Construction – Crossland Heavy Contractors
- Status – Completion May 2017
- Project Budget – $5,955,000
2. **Reliability Projects**

**UT1310 19th & Kasold Booster Pump Station Improvements**
- **Project Description** – Evaluation of and improvements to booster pumping facilities to meet current conditions and future demands.
- **Project Details** – Replacement of the booster pumping facility at the water tower, located at 1800 Kasold Drive. Project will bid with the Oread Tank Replacement Project UT1307.
- **Design Engineer** – HDR Inc., Lee's Summit, MO
- **Contractor** – To Be Determined
- **Status** – Bid Construction February 2017; Project Completion Fall 2017
- **Project Budget** - $1,035,000

**UT1417 Clinton Water Treatment Plant Raw Water Pump Station Electrical Improvements**
- **Project Description** – Originally constructed by the US Corps of Engineers in conjunction with Clinton Dam, the existing building does not protect the electrical and control equipment from the elements in a climate-controlled environment. Equipment is located in the main pump room and ventilated by fans using outside air, creating ongoing operational and maintenance issues due to fluctuating temperatures and the dirty environment. Construction of climate-controlled and secure environment for sensitive electrical and control equipment in the Clinton Water Treatment Plant Raw Water Pump Station, with improvements to existing pumps and variable frequency drives.
- **Project Details** – The existing building will be expanded to include a climate-controlled addition isolated from the existing unconditioned space to provide an optimal operational environment for this sensitive equipment. Existing pump #2 will be upgraded from 5-MGD to 10-MGD pump/motor/variable frequency drive (VFD), thereby bringing the Clinton Raw Water Pump Station to its design, firm capacity of 25 MGD. Other improvements include VFD replacements on pumps #1 & #3; bypass addition on the existing VFD for pump #4, with reinstallation in the new space; replacement of existing incoming electrical service transformers to meet increased pumping capacity.
load requirements; replacement of existing 36-inch-diameter steel pump discharge piping; and fencing and re-roofing of the existing building.

- Design Engineer – Black & Veatch, Kansas City, MO
- General Contractor – Crossland Heavy Contractors
- Status – Substantially Complete October 2016; Final Completion Spring 2017
- Project Budget - $2,200,000

**UT1418 Kaw Water Treatment Plant Motor Control Center Replacement**

- Project Description – Electrical Motor Control Centers (MCCs) receive incoming electrical feed and distribute 480 Volt AC power to the major treatment plant components, including pumping, control valves, treatment basin equipment, chemical feeds, and plant control systems. Existing MCCs were installed in 1988, with replacement parts no longer readily available.
- Project Details – Replace aging electrical MCCs at the Kaw Water Treatment Plant.
- Design Engineer – Black & Veatch, Kansas City, MO
- Contractor – P1 Group
- Status – Completed 2016
- Project Budget - $545,479

**UT1503 Kaw Water Treatment Plant Structural Maintenance Analysis**

- Project Description - Structural condition assessment of the Kaw Water Treatment Plant, including overall condition and potential liabilities, through visual review and non-destructive materials testing. Design of the repairs identified in the report are installation of a new slab in the carbon contact basin, installing topping slabs on the primary and
secondary basins, crack injection on the basin walls, coating structural concrete, replacing guardrail in areas, and replacing the weirs on the primary basins.

- **Project Details** – Assessed areas include carbon contact basin, presedimentation basin, primary treatment basins, secondary treatment basins, weir troughs and the surrounding walkways. Identified needed improvements to the carbon contact basin may be included in future Water Treatment Plant Process Improvements projects.
- **Design Engineer** – Walter P Moore
- **Construction** – To Be Determined
- **Project Budget** - $1,100,000

**UT1508 CIPP Sewer Rehabilitation**
- **Project Description** – Sewers are identified for rehabilitation through various assessment programs, including EcoFlow and tv inspection by city crews, based on such factors as existing defects, pipe age, pipe material, depth, and ground conditions. The CIPP rehabilitation method lines the inside of old, vitrified clay pipe sanitary sewer mains – a more cost-effective rehabilitation method than open-trench excavation and replacement.
- **Project Details** – CIPP rehabilitation of approximately 42,000 linear feet of sanitary sewer in identified locations citywide.
- **Design Engineer** – City Staff
- **Construction** – SAK Construction, LLC
- **Status** – Completion April 2017
- **Project Cost** - $1,604,500

**UT1512 & UT1610 Treatment Plant VFD Replacements**
- **Project Description** – Replacement of VFDs installed on critical treatment process equipment helps ensure system reliability and functionality.
- **Project Detail** – Replacement of five aging VFDs, four at Kansas River WWTP and one at Kaw Water Treatment Plant.
- **Design Engineer** – City Staff
- **Construction** – City Staff
- **Status** – Completed three in 2016; remaining two completing in early 2017
- **Project Budget (combined)** - $196,735
UT1513 Sanitary Sewer Replacement (Naismith Drive & Crescent Road)
- Project Description - Sewers in the project area have required significant maintenance efforts. Based on efforts to perform video inspection of the existing sewer running through the yard of 1501 Crescent Road, these sanitary sewer lines are in a deteriorated state and require replacement. The existing sewer lines near the intersections of Naismith Drive and Crescent Road and Spencer Drive and Crescent Rd are 6-inch diameter vitrified clay pipe in service for over 60 years. They do not meet the current minimum 8-inch diameter criteria and are not suitable for rehabilitation using a CIPP liner system.
- Project Details - Rehabilitation or replacement of up to 900 linear feet of sanitary sewer mains generally located south of Crescent Road and north of the University of Kansas’s Learned Hall. Public Works will also be completing street replacement and traffic calming improvements at the intersection of Crescent Road and Naismith Drive.
- Design Engineer - BG Consultants
- Contractor - To be determined
- Status - Under Design
- Project Construction Cost - $264,000

UT1603 Pump Station 5 Electrical and Mechanical Improvements
- Project Description - Evaluation and improvements to major electrical equipment as needed to ensure critical infrastructure is fully functional to meet operational needs.
- Project Detail - Replacement of obsolete and damaged electrical switchgear and motor control centers; installation of variable frequency drives for pump operation; installation of a backup generator connection and transfer switch; installation of dual electrical transformers; new HVAC equipment and emergency bypass pumping connection.
- Design Engineer - Black & Veatch
- Construction - Crossland Heavy
- Status - Completion April 2017
- Project Budget - $900,000

UT1604 Clinton WTP Sludge Building Improvements
- Project Description - The Clinton Water Treatment Plant Sludge Building shows signs of structural concrete deterioration, necessitating structural condition assessment of the
structural concrete between the sludge building and the clarifiers through visual review and non-destructive materials testing.

- Project Details – The assessment of structural concrete and recommendations for rehabilitation. Other improvements include failing interior coatings and replacing the deteriorating access hatch.
- Design Engineer – Walter P. Moore
- Contractor – To Be Determined
- Status – Under Design
- Project Budget - $550,000 (estimated)

**UT1605 Wastewater Flow Optimization**

- Project Description – Develop a real time decision support system (RT-DSS) to optimize flow distribution through the current wastewater collection system, with specific focus on the operations of existing Pump Station 9, Pump Station 5, and the Kansas Wastewater Treatment Plant (KWWTP) as well as currently under construction Wakarusa WWWTP and Pump Station 10.
- Project Details – EmNet will develop an RT-DSS that uses real time data collected by sensors located throughout the collection system that will be input into the RT-DSS to predict flow conditions and recommend how to operate the collection system and wastewater treatment facilities to maximize efficiency.
- Design Engineer – EmNet
- Contractor – City Staff
- Status – Under Design
- Project Budget - $207,770 (estimated)

**UT1606 Clinton WTP Zebra Mussel Mitigation**

- Project Description – Evaluation of alternatives, procurement and installation of equipment to mitigate zebra mussel infestation in the Clinton Reservoir Water Treatment Plant Raw Water Pump Station and 36” diameter transmission main.
- Project Details – Black & Veatch completed a Basis of Design Report evaluating 11 different alternatives for the control of zebra mussels within the pump station and 36” diameter transmission main. The evaluation considered effectiveness, ease of installation and operation, life cycle costs and impact on existing water treatment processes. The selected alternative, copper ion generation, eradicates existing zebra mussels and prevents further infestations by the introduction of low doses of copper ions into the raw
water. The project plans are currently with the Kansas Department of Health and Environment for permitting. Once approved the required equipment will be bid and purchased, and installation performed by Department Maintenance and Operations staff with support by specialty plumbing and electrical contractors as required.

- Design Engineer – Black & Veatch
- Contractor – City Staff
- Status – Equipment bid February 2017, installation Spring 2017
- Project Budget - $177,000 (estimated)

**UT1608 Lower Naismith Valley Interceptor**

- Project Description – The Lower Naismith Valley Interceptor was planned for replacement with the Pump Station 8 abandonment project in 2018 – 2019. However, development plan submittals providing for residential construction where this portion of the Lower Naismith Valley Interceptor is located places the interceptor in future residential backyards. Constructing this portion of the interceptor prior to residential construction of the homes will be easier and likely cheaper to install with less residential disruption.
- Project Details – The Lower Naismith Valley Interceptor will replace approximately 1,400 linear feet of 24” and 36” Interceptor sewer into Pump Station 10 with 36” and 48” Interceptor. The existing 24” and 36” pipes that parallel each other for 650 linear feet will be replaced by one 48” pipe. The pipes are designed to have sufficient capacity for the future Lower Naismith Valley Interceptor that will be installed when Pump Station 8 is taken out of service.
- Design Engineer – PEC
- Contractor – To Be Determined
- Status – Under design; anticipated construction completion August 2017
- Project Budget - $1,000,000 (estimated)

**UT1611 OSI Software Analytics**

- Project Description – To develop software for compiling/analyzing wastewater and water treatment plant processes and laboratory data. The data will be used with OSIsoft PI software for data analytics, chemical and electrical costs/usage, and performance analysis.
- Project Details – Black & Veatch will deliver the following with the development of the OSI PI software; 1) Data Integration Services – gathering of data from multiple sources
to be analyzed; 2) Software Services Provided – OSIsoft PI System Tools, Asset360 Performance Analyst, Asset360 Activated Sludge Treatment Application; 3) Setup and Training; 4) Reporting – a quarterly report B&V process engineers will review plant data and trends for the purpose of producing a performance report that summarizes overall plant performance and provide any recommendations for improvements or operational changes that may result in energy or chemical savings.

- Design Engineer – Black & Veatch
- Contractor – Black & Veatch
- Status – Wastewater treatment data connections are made, data is being validated and software utilization starts in Spring 2017. The asset framework for the water treatment plants are under development, with expected implementation by the end of 2017.
- Project Budget - $88,000

3. **Watermain Replacement**

Staff continuously evaluates the water distribution system based on main breaks, pipe material and age, capacity and fire protection needs, the criticality of the watermain in the system, the number of services affected, coordination with planned street improvements and other stakeholder needs such as University of Kansas (KU) and USD #497. Ongoing evaluation and replacement increases the City’s water distribution system reliability. The following watermain projects were completed or were under construction or design in 2016.

**UT1427 – Michigan Street to Arkansas Street (2nd Street to 9th Street)**
- Project Description - Replacement of approximately 5,500 feet of 6-inch to 8-inch cast iron watermain from 1959/1922 with 8-inch” PVC in the areas of Michigan Street (2nd – 9th Streets), Arkansas Street (7th – 9th Streets) and Florida Street (3rd – 4th Streets).
- Design Engineer – PEC
- Contractor – Banks Construction
- Status – Completed 2016
- Project Cost - $1,330,104

**UT1502 – Sunnyside Avenue**
- Project Description – Replacement of approximately 850 feet of 8-inch cast iron watermain from 1930 with 12-inch PVC, with cost-sharing participation of stakeholder KU in consideration of KU’s need for a redundant water line, reduced operational and maintenance costs, and improvements in service redundancy.
- Design Engineer – PEC
- Contractor – Banks Construction
- Status – Completed October 2016
- Project Cost - $350,642 (including KU cost-share payment of $154,961)
UT1504 – 23rd Street (Ousdahl Road to Alabama Street)
- Project Description - Replacement of approximately 2,600 feet of 8-inch cast iron watermain from 1956 with 8-inch PVC.
- Design Engineer – PEC
- Contractor – To Be Determined
- Status – Under Design. Advertise for Bid February 2017
- Project Cost - $550,000 (estimated)

UT1505 – 23rd Street and Ousdahl Utility Relocations
- Project Description - Waterline and Sewer main relocations for Public Works project PW1134 and the replacement of approximately 1,850 feet of 8-inch cast iron watermain from 1959 with 8-inch PVC. Project is to be bid with PW1134.
- Design Engineer – BG Consultants
- Contractor – To Be Determined
- Status – Under Design
- Project Cost – $620,000 (estimated)

UT1511 – Iowa Street (25th Street to 27th Street)
- Project Description - Replacement of approximately 2,000 feet of 8-inch cast iron watermain from 1967 with 12-inch PVC
- Design Engineer – PEC
- Contractor – Westland Construction
- Status – Completed 2016
- Project Cost - $543,583

UT1514 – Harper Street (15th Street to East Glenn Drive) & East 15th Street (Cadet to Lindenwood)
- Project Description - Replacement of approximately 4,200 feet of 8-inch cast iron watermain from 1958 with 8-inch PVC
- Design Engineer – PEC
- Contractor - M CON
- Status - Under Construction; Project Completion July 2017
- Project Cost - $650,000

**UT1515 - Harvard Road (Crestline Road to Wellington Road)**
- Project Description - Replacement of approximately 2,040 feet of 8-inch cast iron watermain from 1962 with 8-inch PVC
- Design Engineer - PEC
- Contractor - Nowak Construction
- Status - Completed 2016
- Project Cost - $350,565

![Image of Harvard Road project](image1.png)

**UT1517 - El Dorado Drive (Bob Billings Parkway West to East)**
- Project Description - Replacement of approximately 1,900 feet of 8-inch ductile iron watermain from 1975 with 8-inch PVC
- Design Engineer - PEC
- Contractor - Banks Construction
- Status - Completed December 2016
- Project Cost - $453,800

![Image of El Dorado Drive project](image2.png)
UT1702 – 10th Street (Arkansas Street to Illinois Street)
- Project Description - Replacement of approximately 1,950 feet of 6-inch and 8-inch cast iron watermain from the 1920's and 1966 with 8-inch PVC
- Design Engineer – PEC
- Contractor – To Be Determined
- Status – Under Design
- Project Cost - $605,000 (estimated)

In-House Watermain Replacement
- Project Description – Identified watermain replacement projects are completed by department staff based on annual watermain condition assessments in consultation with department engineers and others. Project scope is typically watermains 8 inches and smaller located in low traffic neighborhoods.
- Project Detail – The following In-House Projects were completed in 2016.

<table>
<thead>
<tr>
<th>Location</th>
<th>Status</th>
<th>Length (ft.)</th>
<th>Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ousdahl (W. 22nd Street to W. 19th Street)</td>
<td>Complete</td>
<td>1,913</td>
<td>$346,983</td>
</tr>
<tr>
<td>W. 4th Street (Indiana to Louisiana)</td>
<td>Complete</td>
<td>290</td>
<td>$15,964</td>
</tr>
<tr>
<td>Randall Road/Cynthia</td>
<td>Complete</td>
<td>3,031</td>
<td>$403,393</td>
</tr>
<tr>
<td>E.19th Street (Haskell to Miller Dr.)</td>
<td>Complete</td>
<td>1,160</td>
<td>$140,897</td>
</tr>
<tr>
<td>Crossgate Drive and Birdie Way</td>
<td>Complete</td>
<td>834</td>
<td>$39,107</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td></td>
<td><strong>7,228</strong></td>
<td><strong>$946,344</strong></td>
</tr>
</tbody>
</table>
4. Other Utilities Projects

**UT1421 Kaw Water Treatment Plant Field Operations Expansion**
- Project Description – Expansion and consolidation of existing Kaw Water Treatment Plant Field Operations buildings to provide additional space for field operations' needs, with options to accommodate department administration and engineering staff.
- Project Details – Site plan evaluation, design and cost estimates are completed. Identified improvements include climate-controlled vehicle and equipment storage for improved protection and emergency responsiveness, particularly in extreme weather conditions.
- Design Engineer – BG Consultants
- Construction – Pending available funding
- Status – Evaluation completed Fall 2015; construction proposed for 2019-2020
- Project Cost – To Be Determined

**UT1518 19th Street Utilities Replacement & Relocation (Iowa to Alabama Streets)**
- Project Description – Replacement of aging, smaller-sized waterline with PVC pipe from Iowa Street to Alabama Street and replacement of existing sanitary sewer from Naismith Drive to Stewart Avenue to accommodate the reconstruction of 19th Street
- Project Details – Existing waterline is primarily 6-inch and 8-inch cast iron or transite pipe from the late 1940’s to mid-1950. Replacement pipe will be 8-inch and 12-inch PVC. Existing 10-inch and 12-inch clay sanitary sewer from Naismith Drive to Stewart Avenue will be relocated to accommodate project improvements. Agreement with KU provides for cost sharing of identified water main adjacent to the KU Central District Project.
- Design Engineer – Professional Engineering Consultants
- Contractor – To Be Determined
- Status - 19th Street and Ousdahl construction completed 2016. 19th Street and Naismith currently under design; anticipated construction completion in August 2017. 19th Street west of Naismith (excluding Ousdahl) under design in 2017; anticipated construction completion August 2018
- Project Budget - $1,300,000 (estimated)

UT1602 Kansas River WWTP Influent & Biosolids Coatings
- Project Description – Protective coatings applied to mechanical equipment and other structures prevent corrosion, maintain functionality, and extend useful life.
- Project Details – Protective coating applications to the Aeriation Basin Walkway and the interiors of and equipment in the Influent and Biosolids Buildings at the Kansas River WWTP including walls, floors, stairs, pipes, pumps, and other appurtenances, with appropriate preparatory work
- Design Engineer – City Staff
- Construction - Gray & Company
- Status – Anticipated Completion February 2017
- Project Cost - $139,204