



TRANSPORTATION, INFRASTRUCTURE & OPERATIONS COMMITTEE

APRIL 20, 2022



ORDINANCE NO. 220314

Smart Sewer Program Management Services, Renewal No. 1

Authorizing a \$12,000,000.00 design professional services contract with Burns & McDonnell Engineering Company, Inc., for the Smart Sewer Program Management Services, Renewal No. 1 project; and establishing an effective date.

ORDINANCE NO. 220314

SMART SEWER PROGRAM TOPIC OUTLINE

- Presented program highlights in March 31 Business Session
- FY23 Major Planned Emphasis Areas
 - Enhanced hydraulic modeling
 - Green Infrastructure
 - Adaptive Management
 - Keep Out the Rain



ORDINANCE NO. 220314

PROJECT DELIVERY QUICK FACTS

FY23

42

TOTAL ACTIVE
CONTRACTS

249

MILLION DOLLAR
VALUE

23

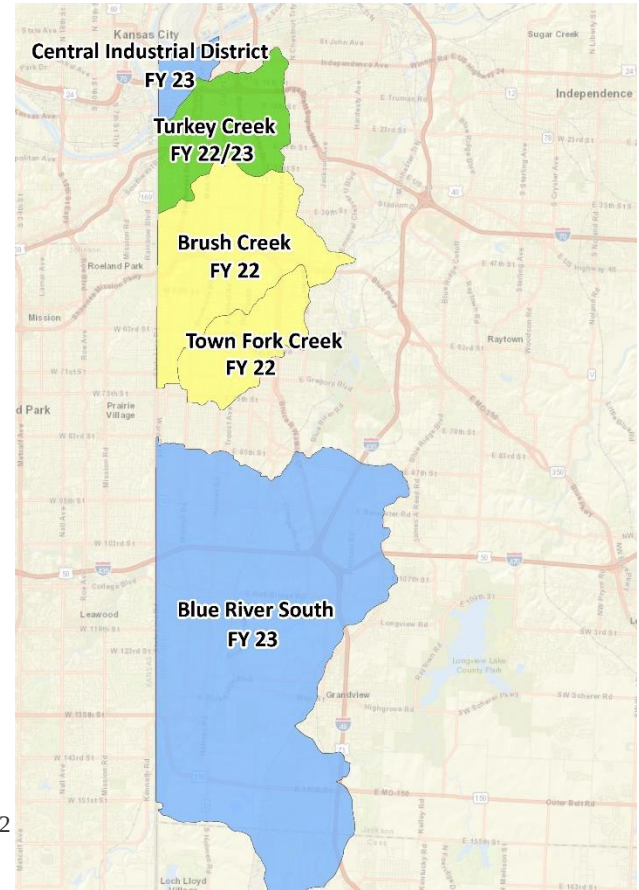
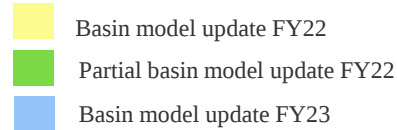
TOTAL DESIGN AND
CONSTRUCTION CONTRACTS



ORDINANCE NO. 220314

COLLECTION SYSTEM MODEL UPDATES

- Utilization of hydraulic modeling to:
 - Demonstrate Consent Decree compliance
 - Confirm performance of completed projects
 - Validate existing system performance
 - Optimize selection and design of future projects



ORDINANCE NO. 220314

FY23 PROJECTS INTEGRATING GREEN INFRASTRUCTURE (GI) CONCEPTS



Design and stakeholder engagement underway
for Mill Creek Park Green Infrastructure project

Image from kcparks.org

- Design:
 - Daniel Morgan Boone Park GI (NTP June 2022)
 - 37th and Norton GI (NTP January 2023)
- Construction:
 - Blenheim Park GI, Part of Baseline Improvements: Town Fork Creek Sewer Separation (NTP April 2022)
 - Outfall 054 Sewer Separation (NTP October 2022)
 - 40th and Monroe Sewer Separation (NTP November 2022)
 - Mill Creek Park GI (NTP March 2023)
- Ongoing Structural Projects with Minor GI Included:
 - 31st and Broadway Sewer Separation (NTP April 2021)
 - 15th St Pump Station and Sewer Separation (NTP September 2021)

ORDINANCE NO. 220314

GREEN INFRASTRUCTURE:

UPDATES TO 2018 ADAPTIVE MANAGEMENT PLAN

- **Align with Third Amended Consent Decree requirements.**
- Incorporate technical assessment of green infrastructure performance.
- Prioritize locations based on maximizing overflow reduction.
- Utilize programmatic approach for collaborative, multi-department effort.

GREEN STORMWATER INFRASTRUCTURE OPPORTUNITIES WATERSHED SUMMARIES

KANSAS CITY SMART SEWER ADAPTIVE MANAGEMENT PLAN

VERSION 1.0 (JULY 2018)

TABLE OF CONTENTS

EXECUTIVE SUMMARY - 1

WATERSHED PROCESS SUMMARY - 5

GUIDING PRINCIPLES FOR REGENERATIVE SYSTEM - 8

EXISTING CONDITIONS ANALYSIS - 20

URBAN DESIGN FRAMEWORK - 24

GSI WATERSHED PLANS - 26

TOWN FORK CREEK WATERSHED SUMMARY - 31

BRUSH CREEK WATERSHED SUMMARY - 43

GOOSENECK CREEK WATERSHED SUMMARY - 59

LOWER BLUE RIVER WATERSHED SUMMARY - 67

TURKEY CREEK WATERSHED SUMMARY - 77



ORDINANCE NO. 220314

ENHANCED ADAPTIVE MANAGEMENT IMPLEMENTATION

- Process for evaluating alternative cost-effective solutions
- Optimize overflow control measure performance
- Maintain affordability of Consent Decree compliance



ORDINANCE NO. 220314

KEEP OUT THE RAIN FY23 ACTIVITIES

- Full operations resuming in May
- 5,500+ parcels planned for evaluation in FY23
- Anticipate ~800 disconnections of prohibited private inflow sources



KEEP OUT *the* RAIN





THANK YOU

