

# Saddle Creek Retention Treatment Basin

Construction Public Meeting

May 7, 2019

# Meeting Agenda

- Welcome
- Background on Sewer Systems
- CSO Program Summary
- Saddle Creek RTB Project Overview
- What to Expect during Construction
- Q&A

# Introductions and Roles

City of Omaha

Program Management Team (PMT)

Wade Trim Team

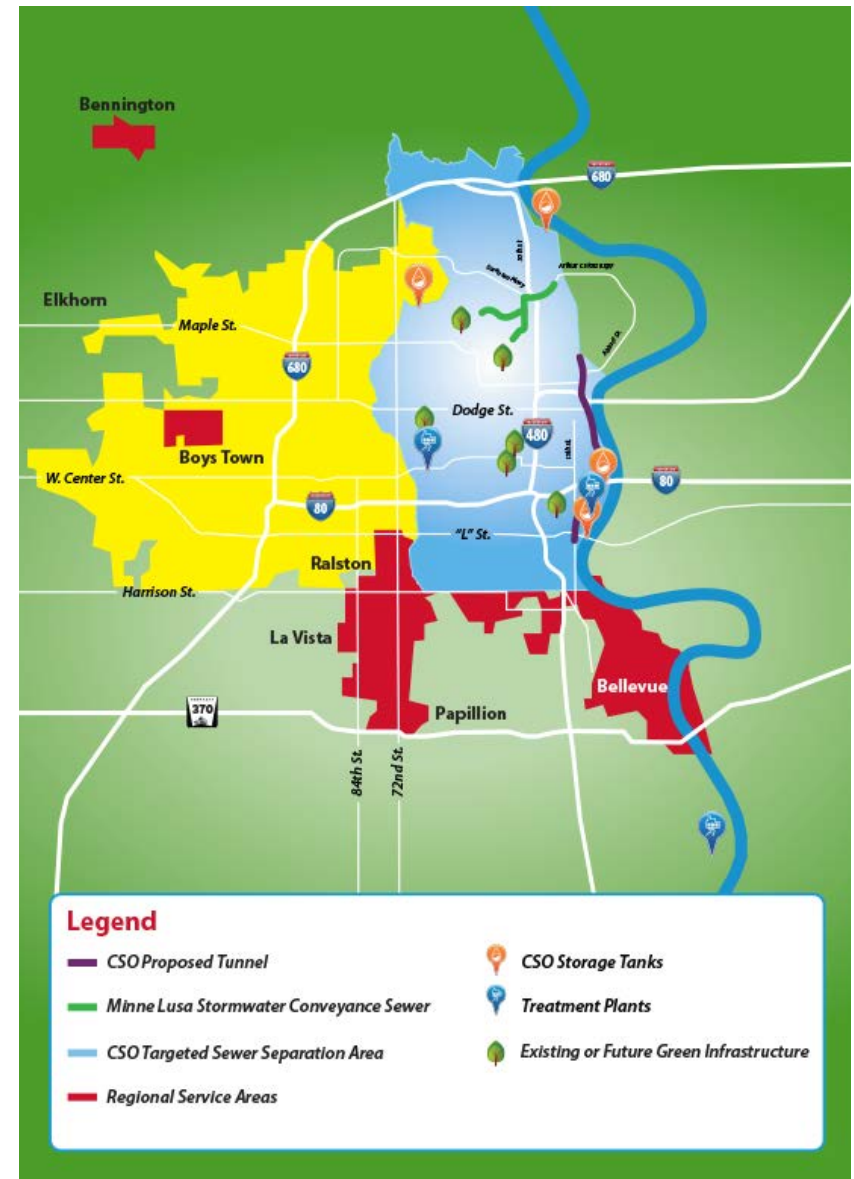
Hawkins Construction Co.

# Omaha's Sewer System



# Regional Service Area

- Two regional treatment plants
- 10 wholesale users
- 275 sq. mile drainage area
- 600,000 service population



# Omaha Sewer System

- 1,950 miles of sewers
- 43 sq. mile combined sewer area
  - 6,200 sq. blocks
- 28 CSO outfalls
  - 9 to Papillion Creek
  - 19 to Missouri River
  - 4 deactivated



# CSO Program Summary

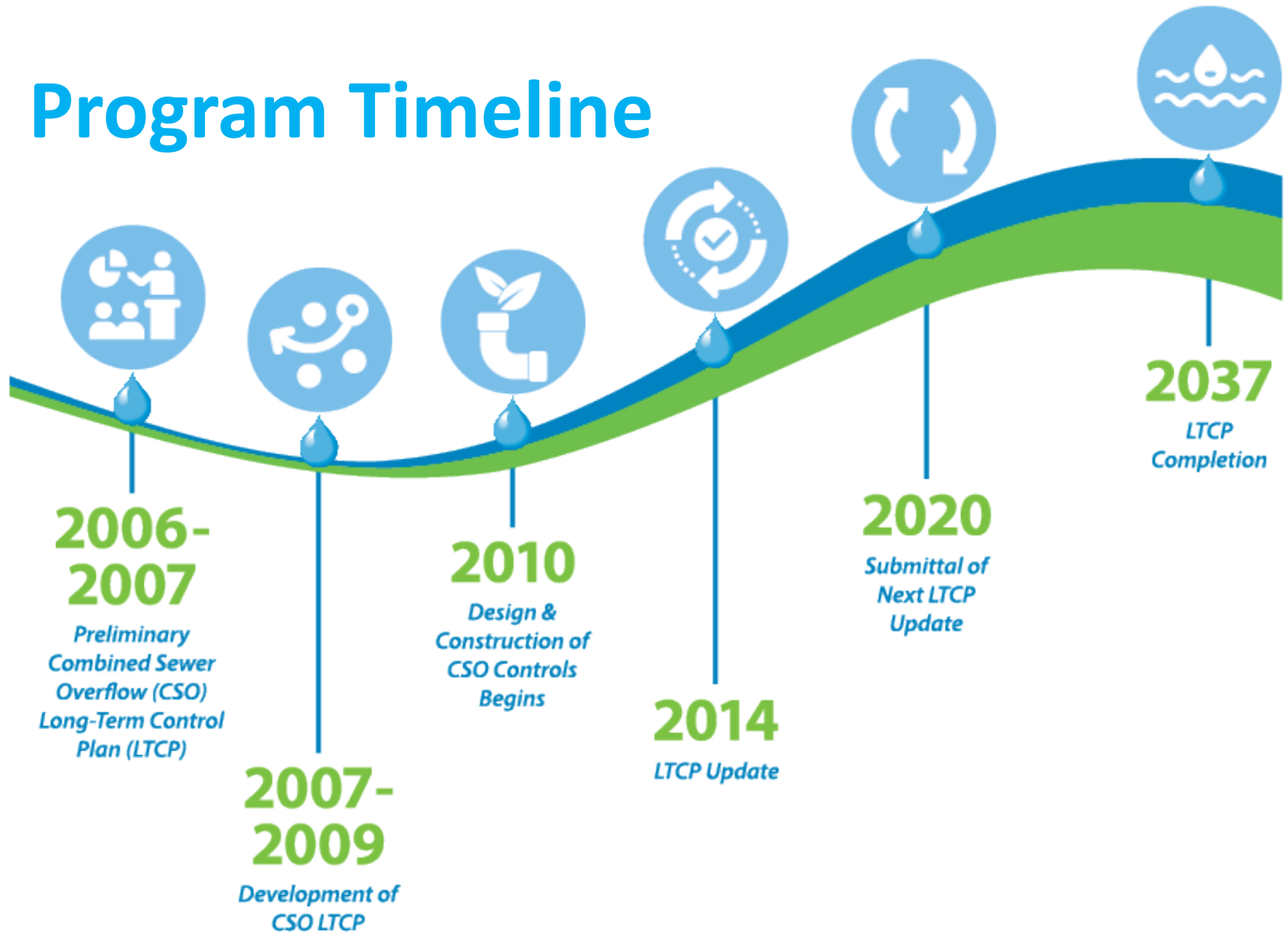
# CSO Program Goals

The Omaha CSO Program is responsible for improving water quality in area rivers and streams by reducing combined sewage overflows. This is an unfunded federal mandate with three elements—**regulatory compliance**, **economic affordability**, and **community acceptance**.





# Program Timeline



# Funding the Program



*Financed with 30-year bonds*

*Funded with sewer fees*



# CSO Projects

# Long Term Control Plan (LTCP)

- Approved in 2010; updated in 2015
- Five major elements:
  - Green Solutions
  - Targeted Sewer Separation
  - Deep Conveyance Tunnel
  - Underground Storage Tanks
  - High Rate Treatment Plants



**A total of 59 projects,** including five system reliability projects, are outlined in the Long Term Control Plan and recent updates to the Program.



# Major Completed Projects

- Aksarben Village Neighborhood Sewer Separation
- Leavenworth Lift Station Replacement
- Missouri River Water Resource Recovery Facility Improvements (Schedule A & B1)
- Missouri Avenue Sewer Separation Phase 1/Spring Lake Park
- South Omaha Industrial Area Force Main & Gravity Sewer Project
- South Omaha Industrial Area Lift Station
- South Omaha Industrial Area Sewer Separation



# Projects Underway

- Burt-Izard Lift Station Improvements
- Cole Creek Sewer Separation (CSO 202, 203 & 204)
- Hanscom Park Green Infrastructure
- Lake James to Fontenelle Lagoon Improvements
- Lake James to Fontenelle Sewer Separation
- Missouri River Water Resource Recovery Facility Improvements (Schedule B2)
- Saddle Creek Retention Treatment Basin
- South Interceptor Force Main



# Completed Green Infrastructure Sites



Elmwood Park

Bohemian Cemetery



Spring Lake Park



Adams Park



Fontenelle Lagoon



# Project Overview

## Saddle Creek RTB

# Purpose of the Project

Treat and reduce the volume of combined stormwater and sewage entering the Little Papillion Creek



# Project Goals

- Improve water quality and meet EPA requirements
- Reduce odors
- Minimize disruption to businesses and residents



# Project Overview

- Overflows occur on average between 50 and 60 days in most years
- As little as 0.10<sup>th</sup> inch of rain can cause an overflow



# Project History

- Original Design: 2011-2015
  - Aug. 2015 – One Bid over 30% over budget
- Early Soils Removal: Jan. – June, 2016
- Value Engineering: 2015-2017
  - Reduced Basin Volume
  - Extended Schedule
  - Procurement Adjustments

# Project History (Cont.)

- Re-Design: 2017-2018
- Outreach
  - Contractor Outreach
  - Prequalifications
  - DBE Outreach
- Bid: Dec. 2018
  - Bid Cost \$39M less than 2015 bid
- Construction: May 2019 – June 2023

# Saddle Creek RTB Funding

Funds for the Project will come from EPA Water Infrastructure Finance and Innovation Act (WIFIA) and Clean Water State Revolving Funds (SRF), as well as City of Omaha Sewer Revenue Fund.

# Site Map





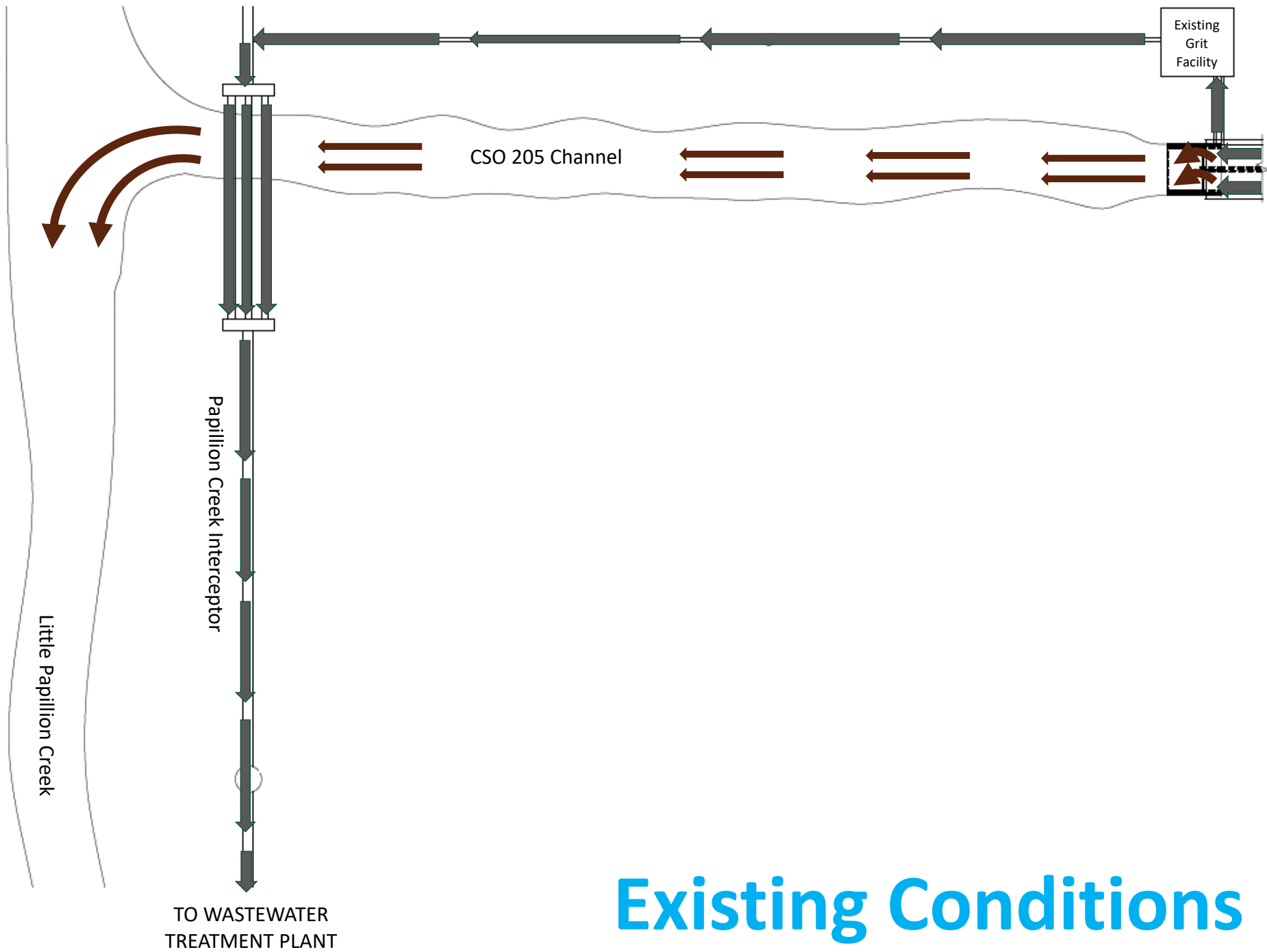






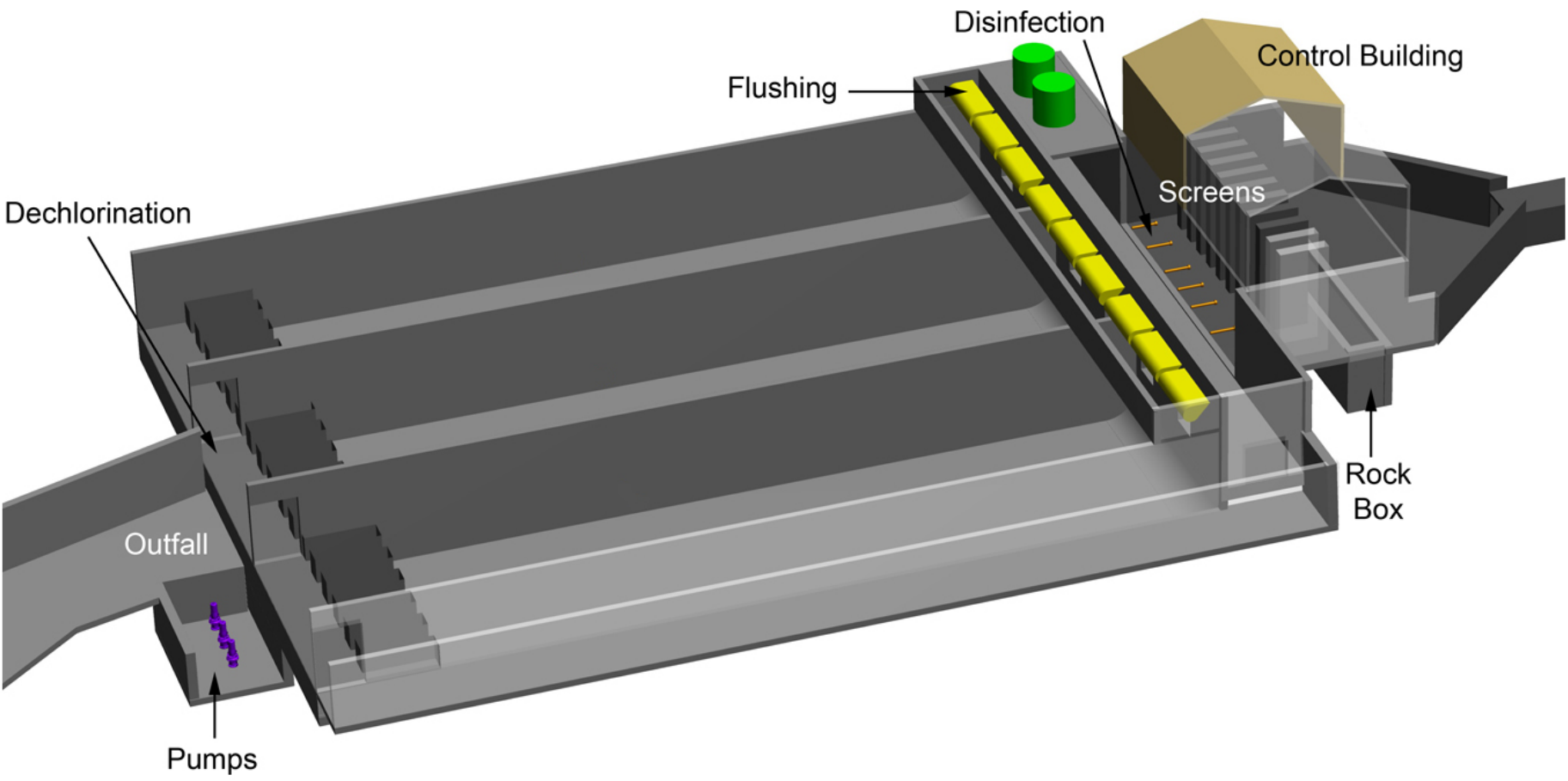
# Proposed Site Plan





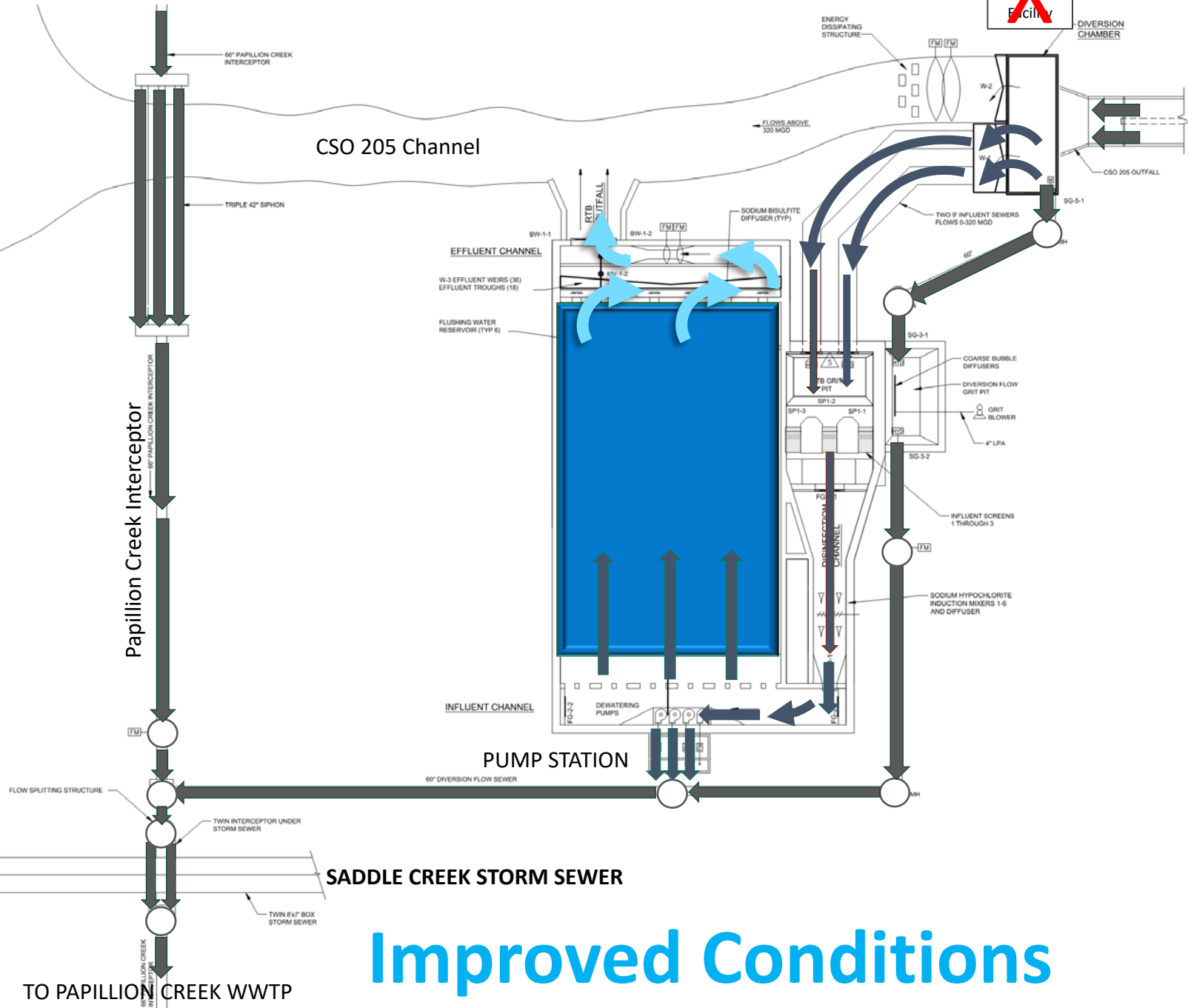
# Existing Conditions

# What is an RTB?





Little Papillion Creek



~~Existing  
Get  
Facility~~

CSO 205 Channel

Papillion Creek Interceptor

PUMP STATION

SADDLE CREEK STORM SEWER

TO PAPILLION CREEK WWTP

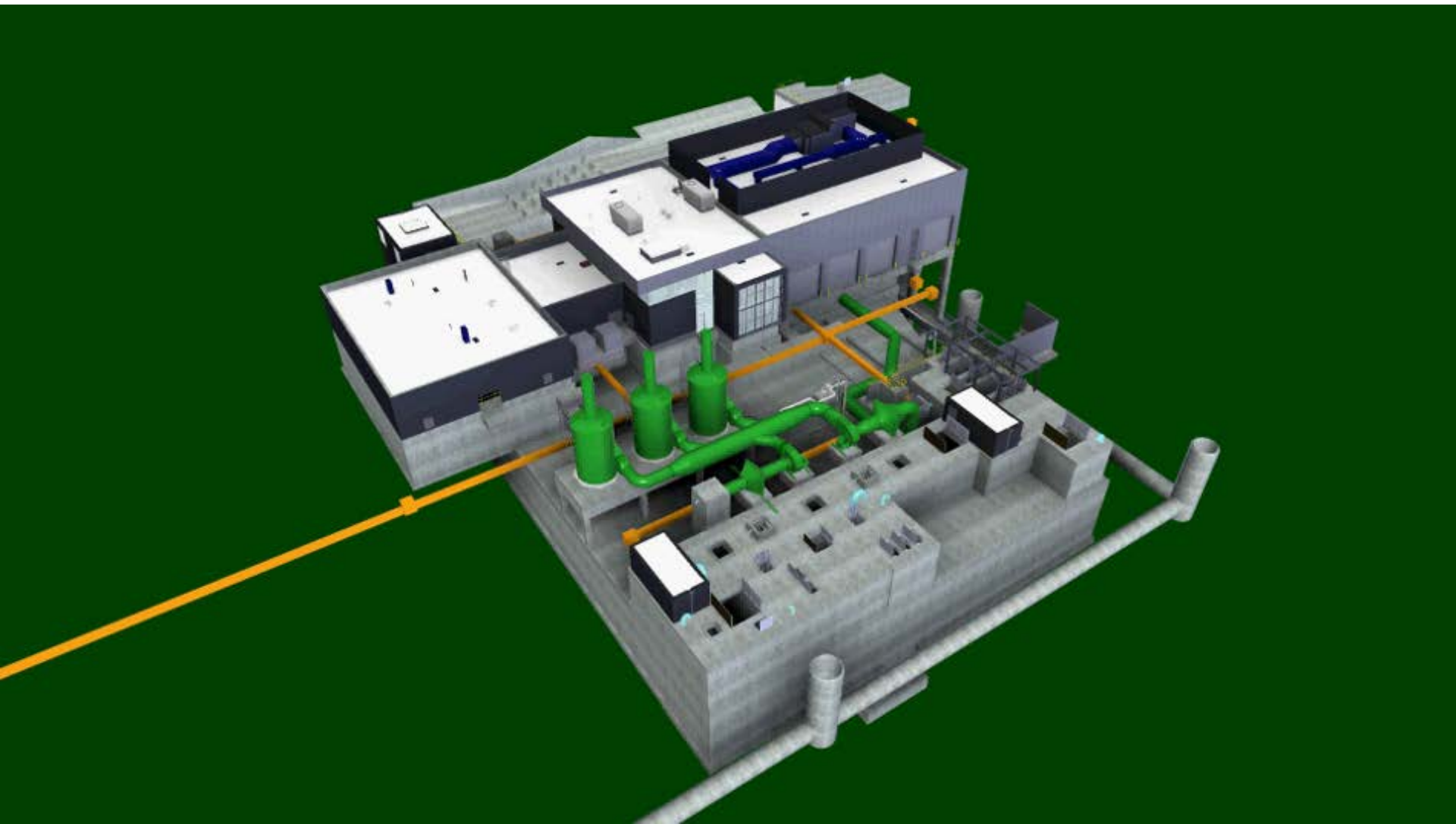
# Improved Conditions

# Facility Fly Over

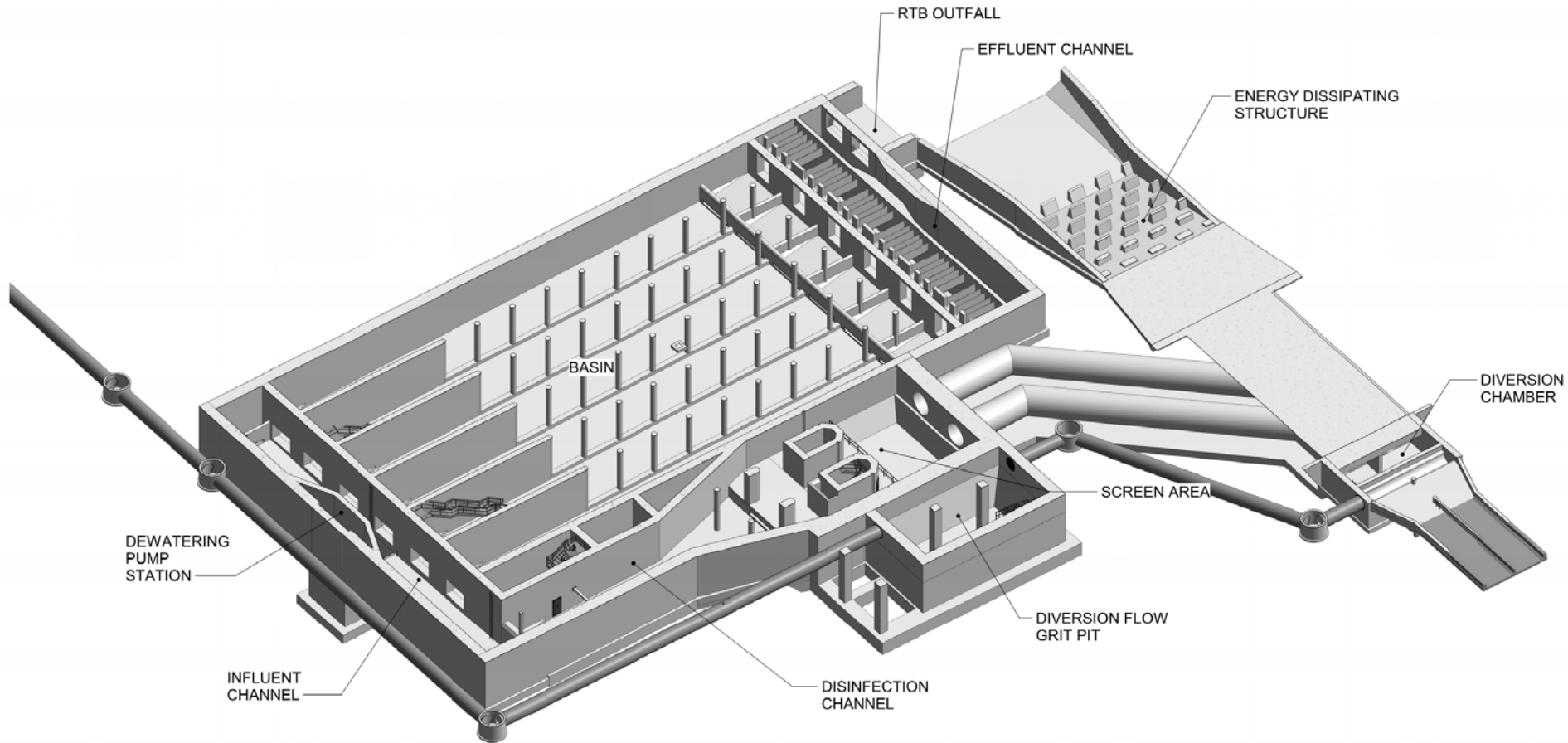




# Facility Walk Through

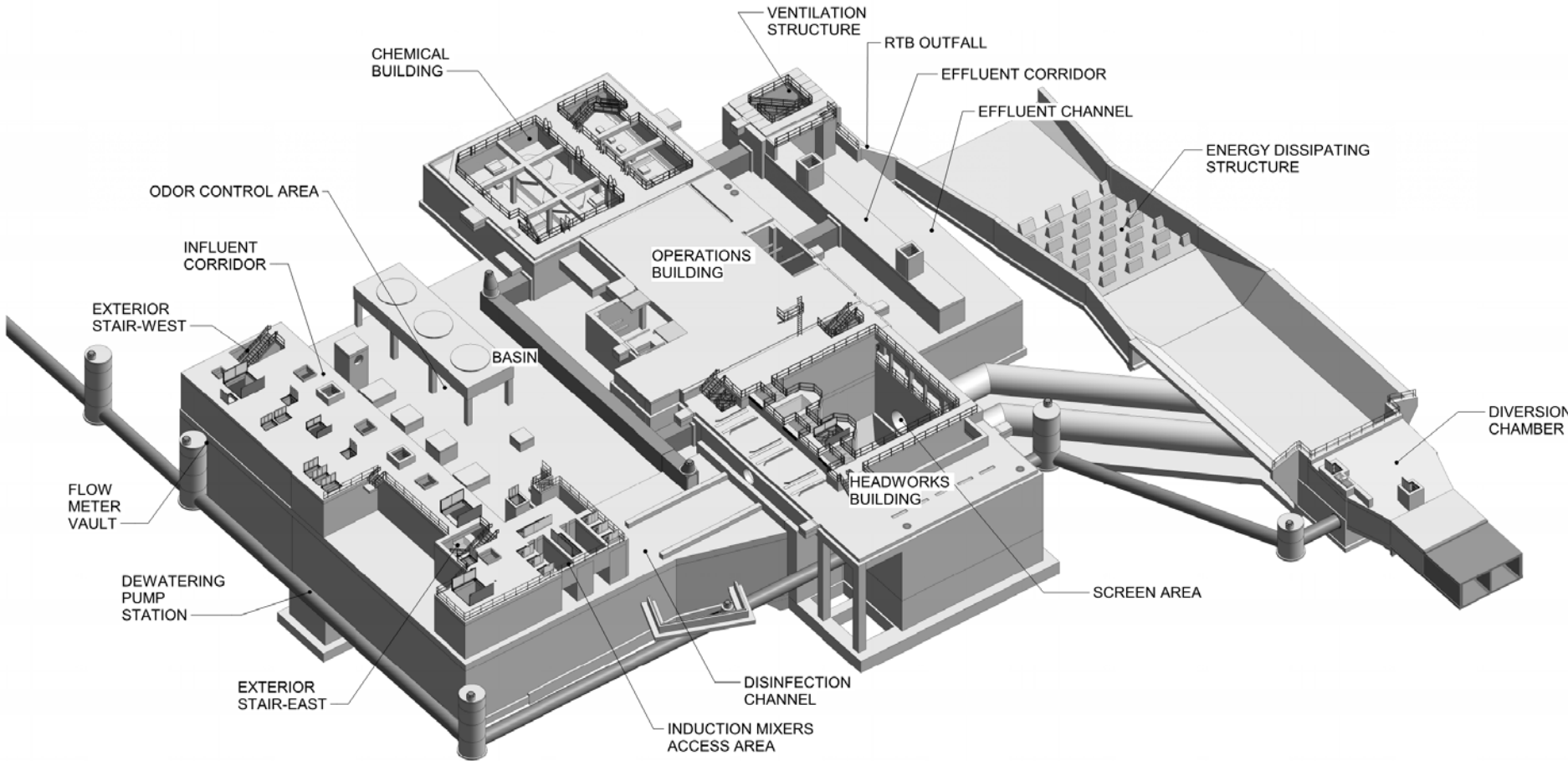


# Underground Tank Compartments



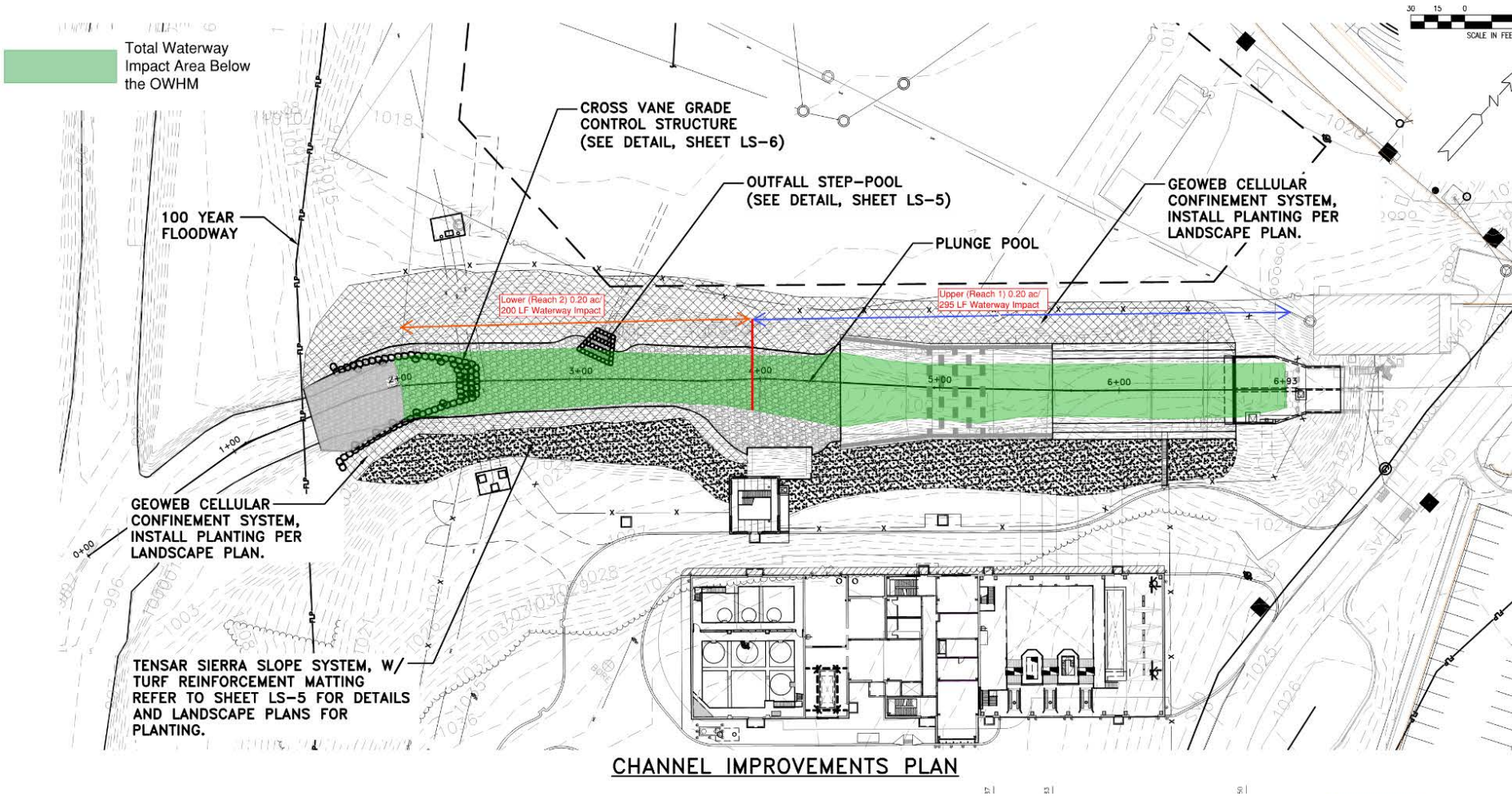
STRUCTURAL BASIN CUT

# Above Ground Facility Compartments



STRUCTURAL AERIAL

# Outfall & Channel Improvements



# RTB Construction Elements

- Site Preparation
- Erosion/Dust Control
- Excavation, Hauling, and Disposal
- Deep Foundation
- Concrete Placement
- Building Construction
- Channel Improvements
- Final Restoration

# What to Expect During Construction?

- Dust
- Noise
- Vibration
- Workers and Equipment
- Detours



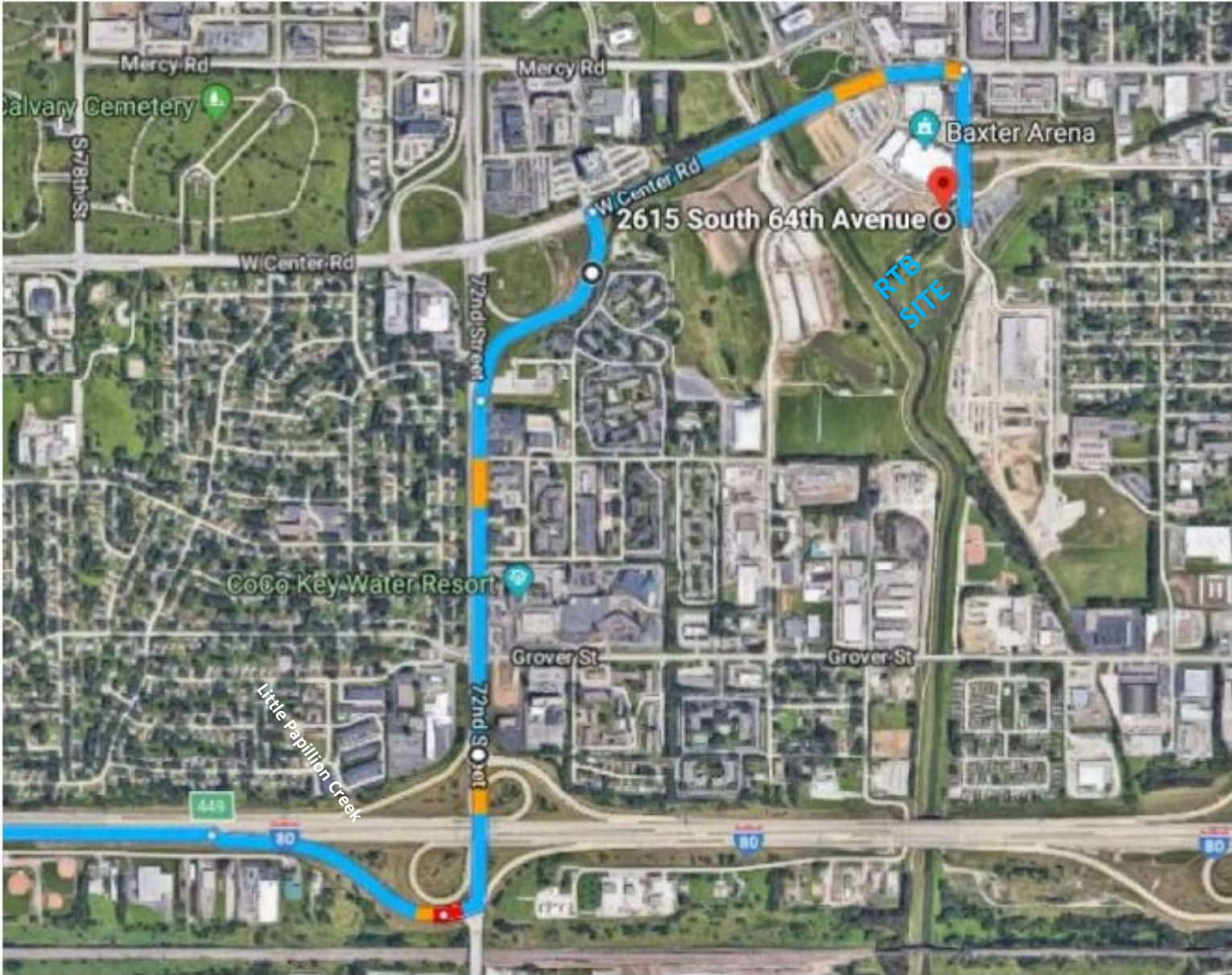
# Site North and South Entrances



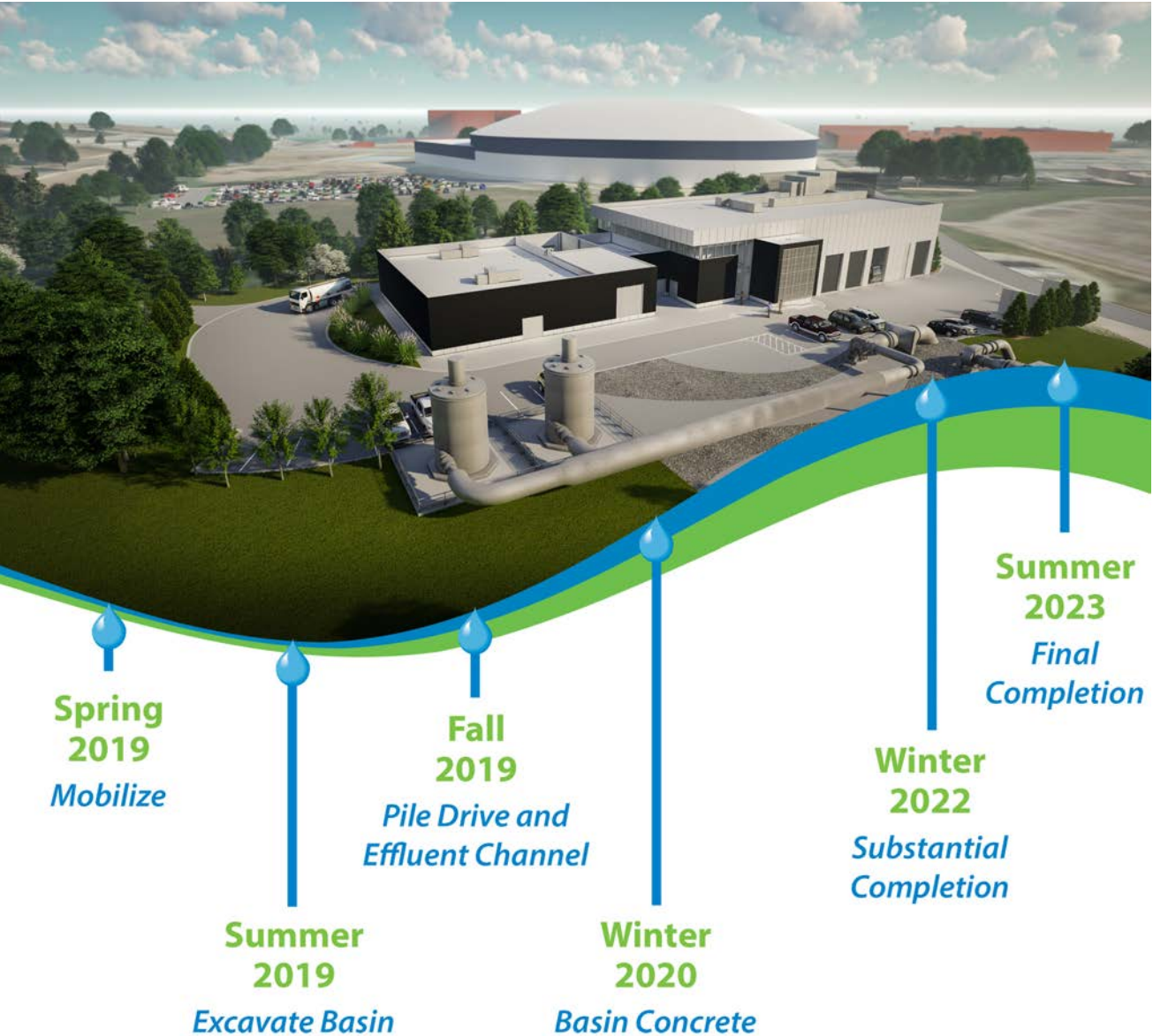




# Haul Route – 72<sup>nd</sup> Street



# RTB Project Schedule



# Overall Facility View



# View from UNO Arena Parking Lot



# Who Do I Call If I Have a Concern?

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313- 948-4278 (C)

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(402) 444-5107 (O)

Chris Grojean (Hawkins Construction) [cgrojean@hawkins1.com](mailto:cgrojean@hawkins1.com)

(402) 231-7811 (O)

# For More Information

## Project Website

<http://www.omahacso.com/projects/saddlecreekrtb/>

## Contact

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Questions?