

State Line Pump Station Dykes Branch East Pump Station (10/11) 8900 State Line

October 24, 2023

Agenda

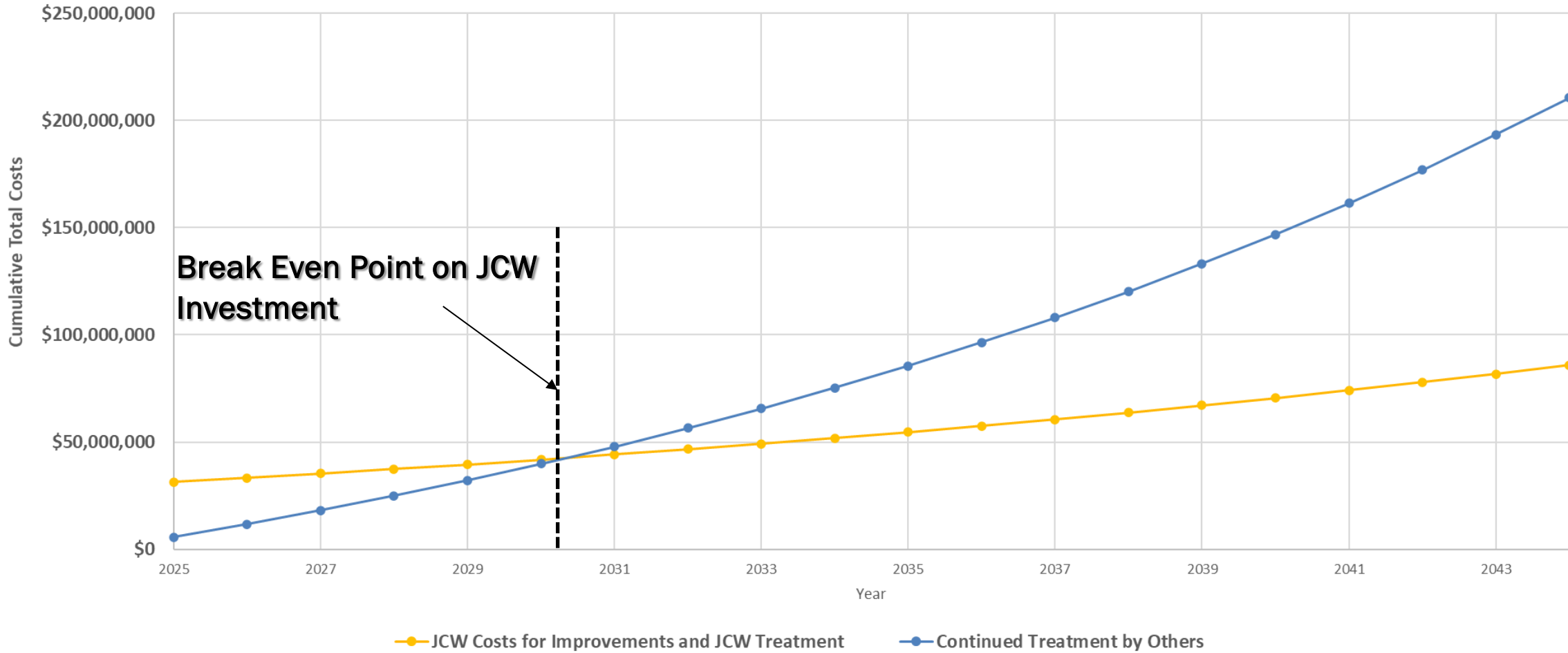
- Purpose and Overview of Project
- Background and Public Input
- Final Design Considerations
- Site Renderings
- Project Schedule
- Q&A

Purpose and Overview

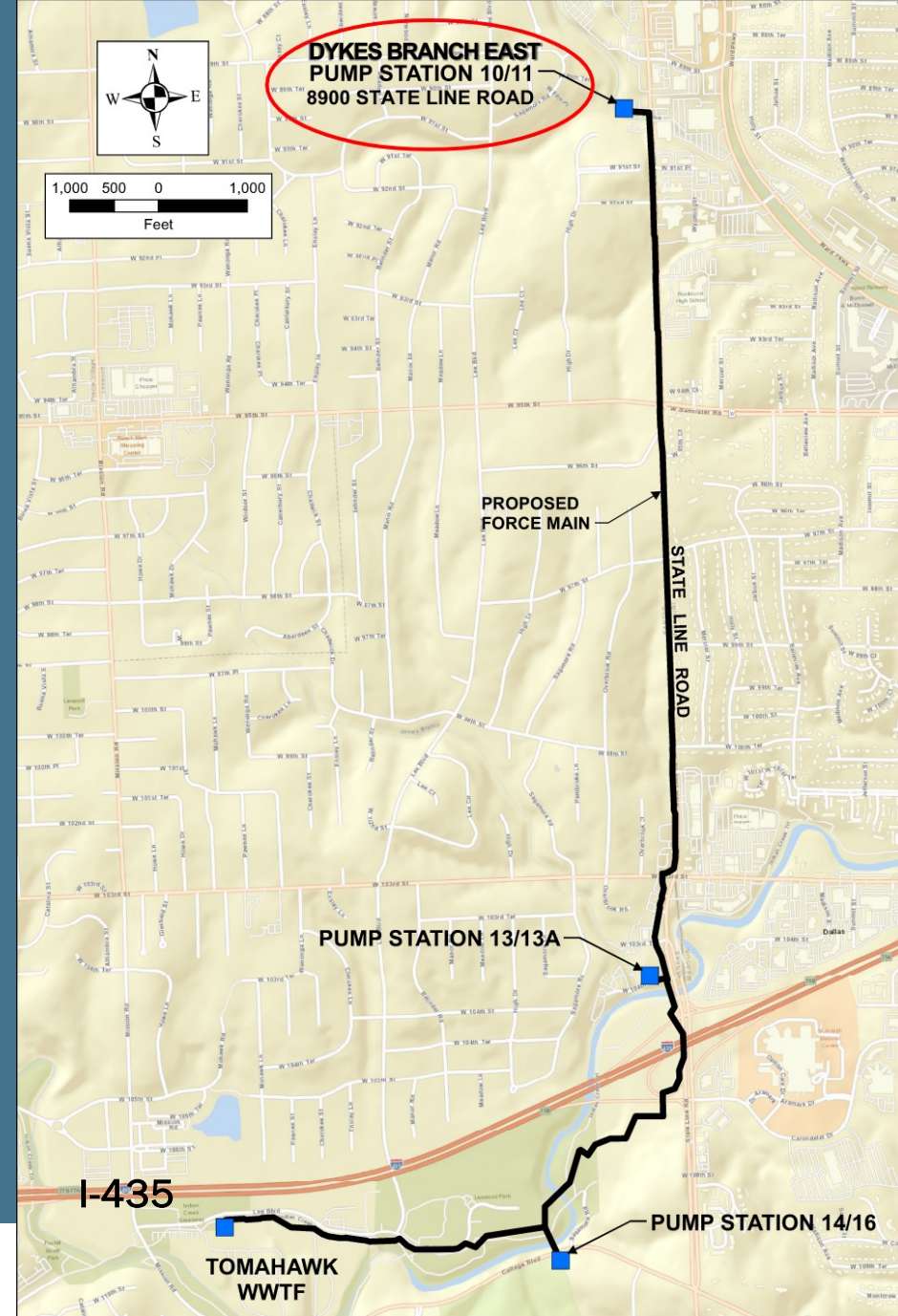
Dykes Branch East Pump Station (10/11) - 8900 State Line

This Project Will Save an Estimated \$100 Million Over the Next 20 Years

Total Cost Comparison - JCW Improvements and Treatment vs. Continued Treatment by Others



Project Map 8900 State Line to Tomahawk Wastewater Treatment Facility

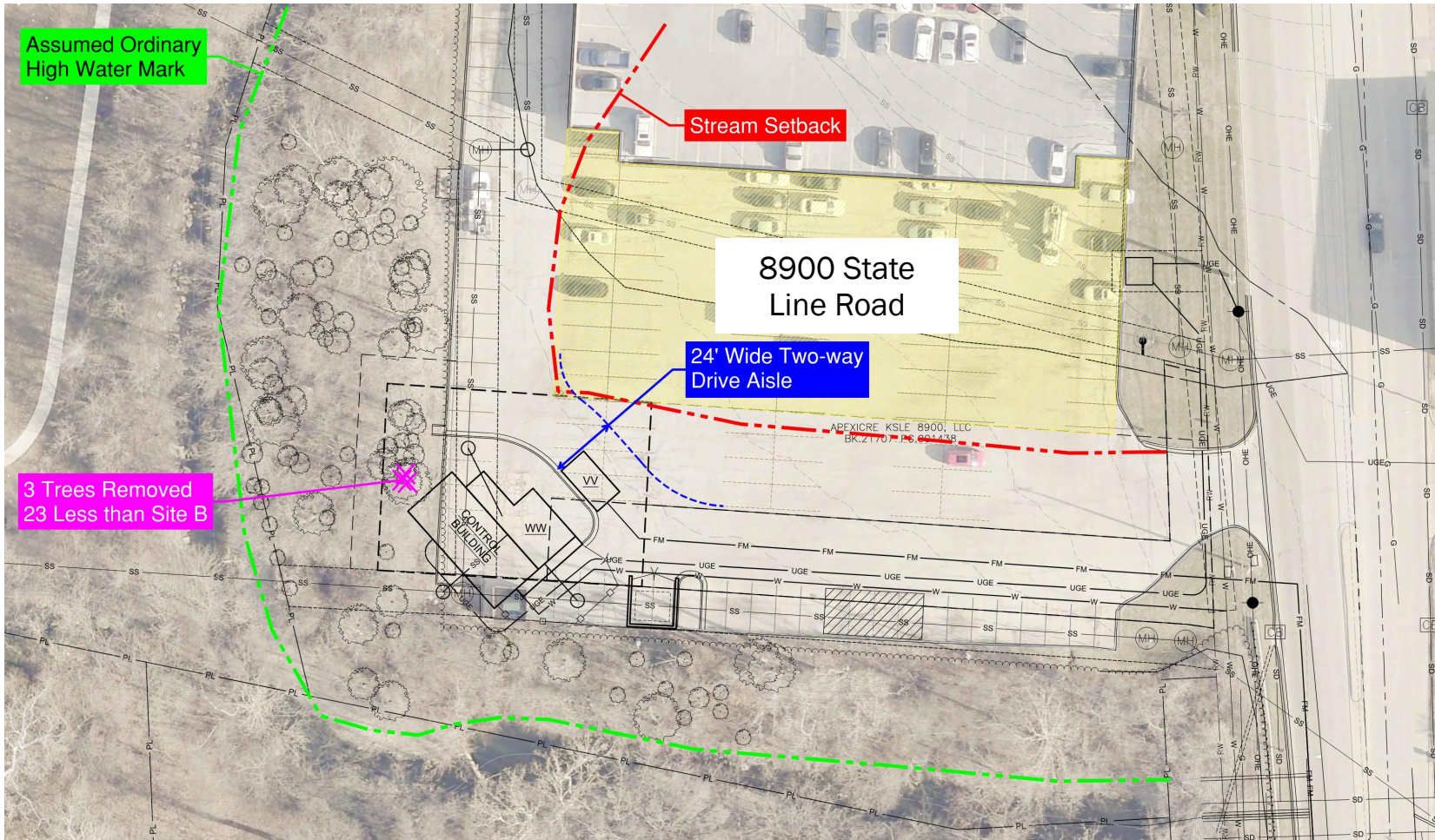


Background and Public Input

Preliminary Development Plan

Dykes Branch East Pump Station (10/11) - 8900 State Line

Approved Site – Resident and City Feedback

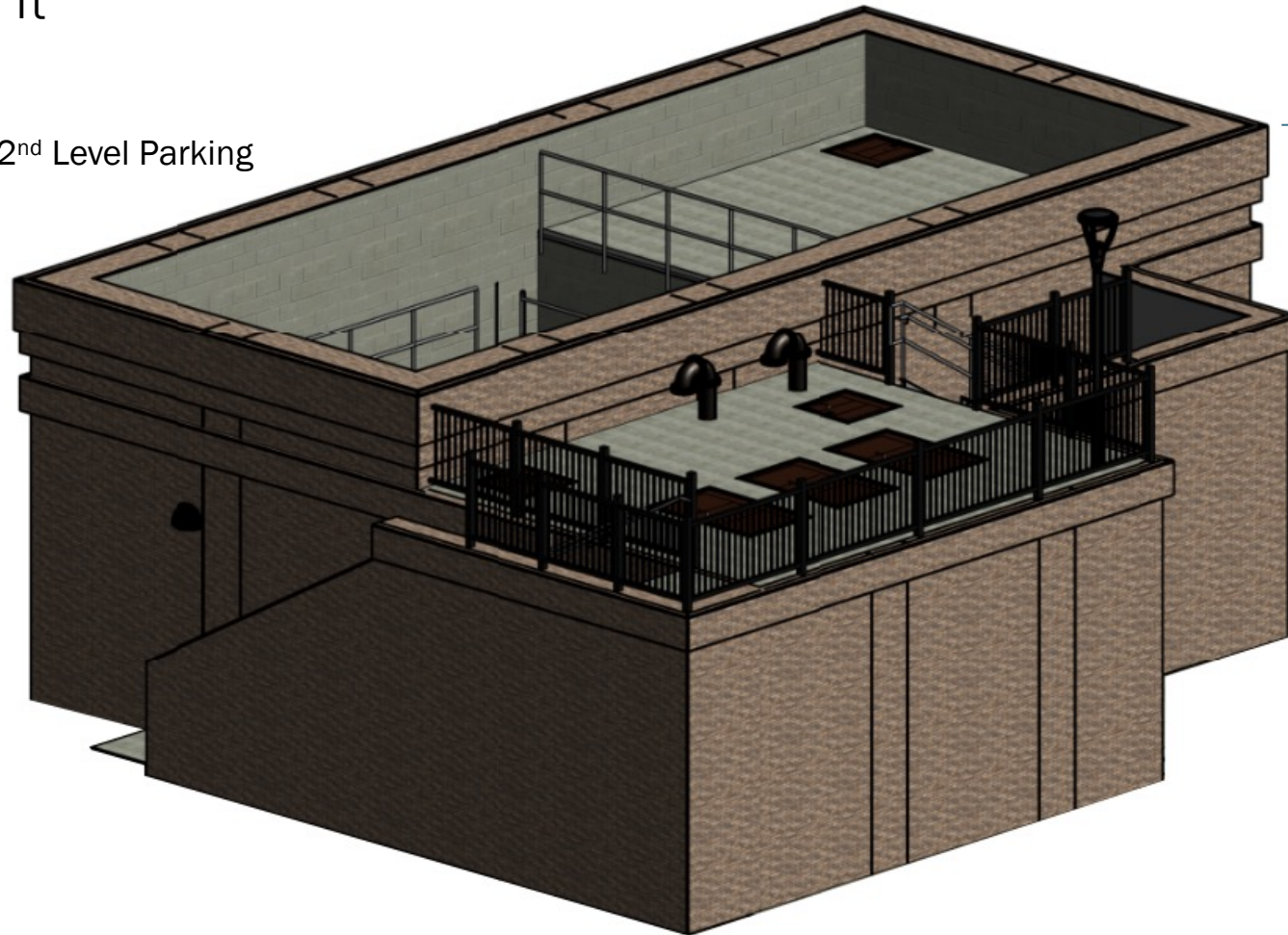


- Achieves “No Rise”
- Only 3 Trees Required to be Removed, 23 less than original site

PDP Plan with Reduced Building Height

Building Height = 17 ft

Note:
Same Height as Adjacent 2nd Level Parking



Top El. 881.0

Flood Wall in lieu of 2nd Level

Feedback from City and Neighbors

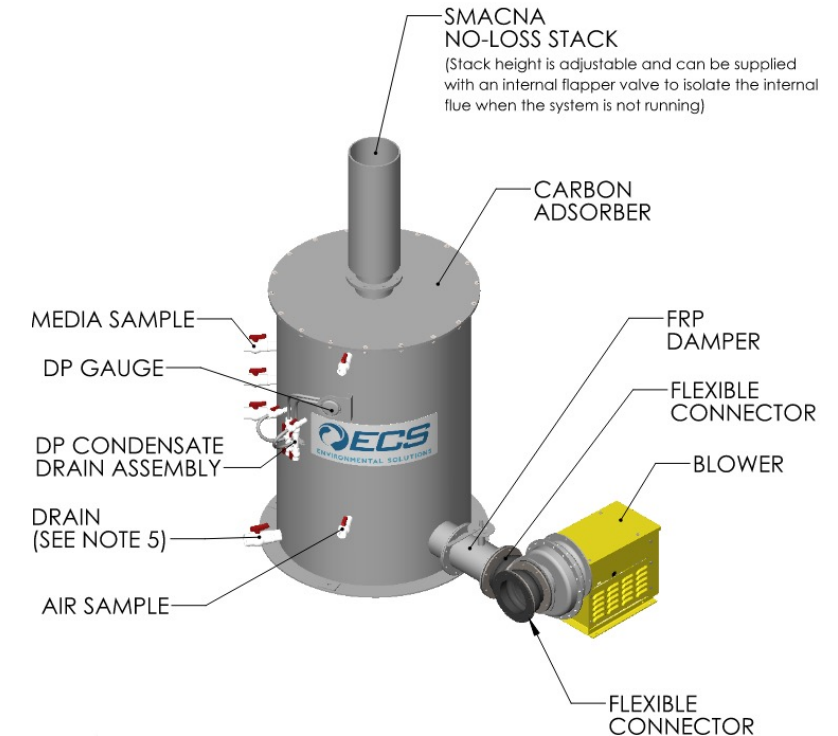
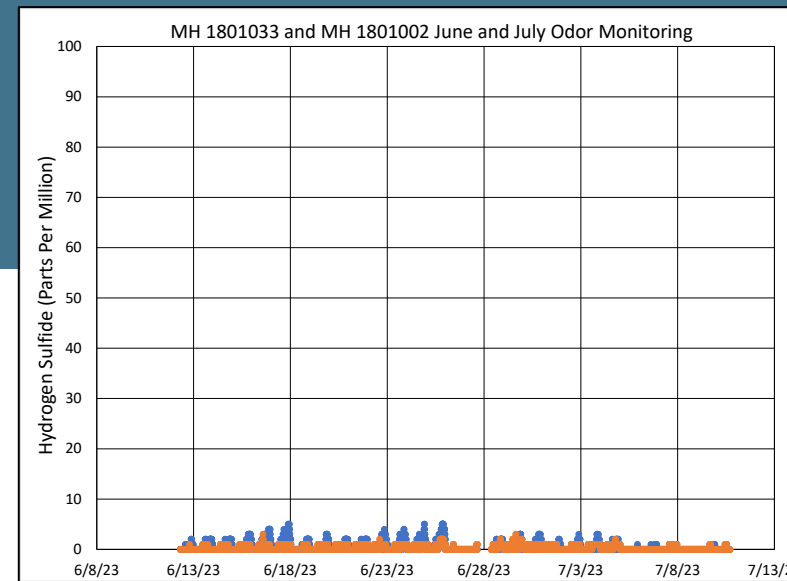
- Stipulations from City
 - Landscaping with Evergreens
 - Station Appearance
 - Limiting Noise
 - Minimizing Light Sources from Exterior Lighting
- Additional Feedback from Neighbors
 - Odor Control
 - Height of Structure
 - Floodplain

Final Design Considerations

Dykes Branch East Pump Station (10/11) - 8900 State Line

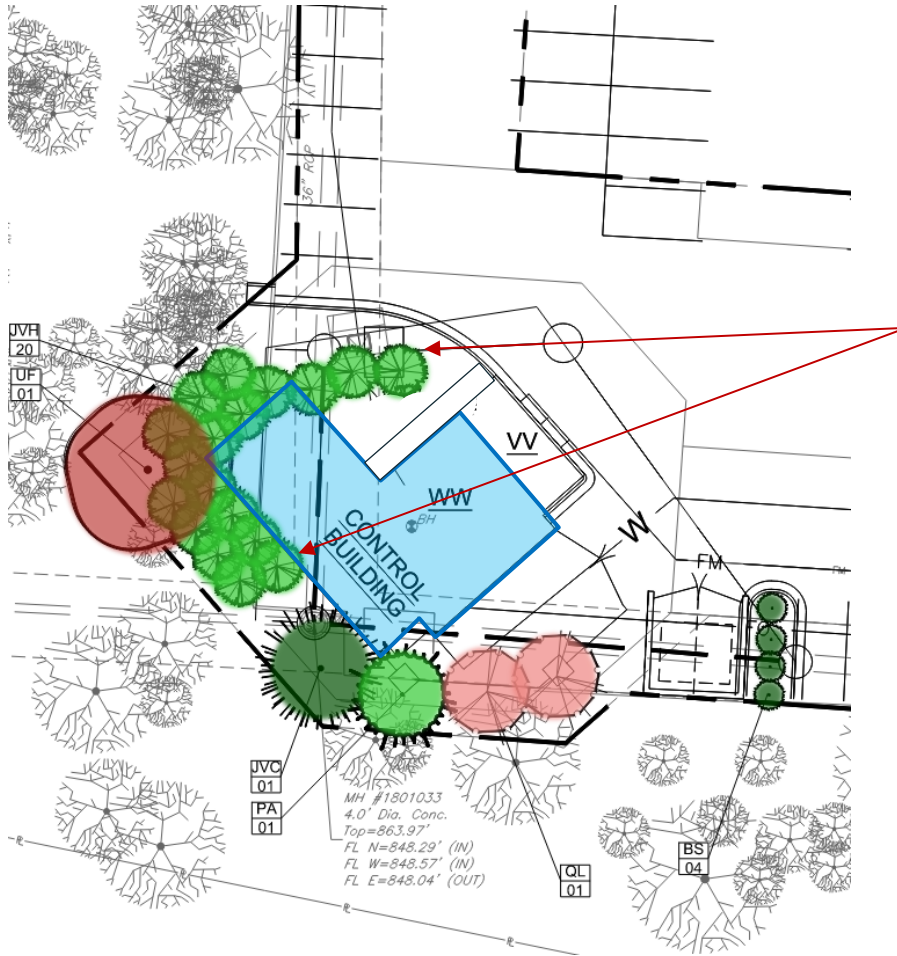
Odor Control

- Odor Sampling Testing Results
 - June and July odor monitoring
 - Measurements inside two existing structures upstream of pump station
 - Very low measurements recorded
 - Dual odor control systems to remain
- Equipment Redundancy
 - Spare fan for odor scrubber
 - Portable generator for power outages
- Equipment Monitored Remotely
 - 24/7




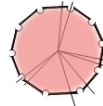
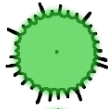

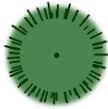

Odor Scrubber

Landscaping Plan



2' to 3' of growth per year

LEGEND

-  - CANOPY TREE (FRONTIER ELM)
-  - CANOPY TREE (PRARIEFIRE CRABAPPLE)
-  - EVERGREEN TREE (CANAERTII RED CEDAR)
-  - EVERGREEN TREE (HETZII JUNIPER)
-  - EVERGREEN TREE (NORWAY SPRUCE)
-  - SHRUB (WINTERGREEN BOXWOOD)

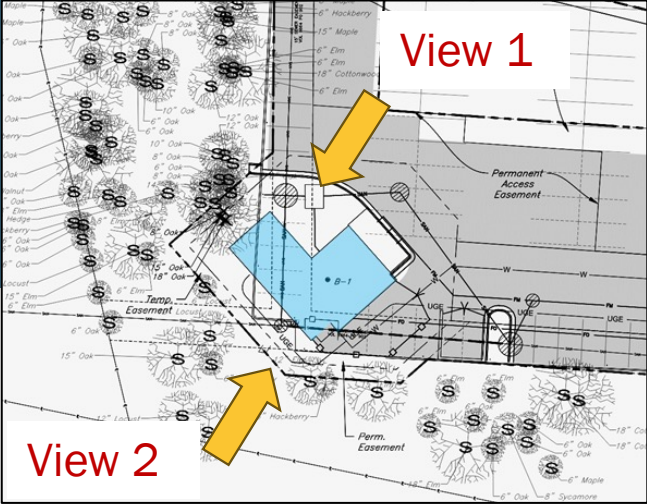
Height of Structure and Appearance

- “...continue to investigate ways to make the building fit in with the surrounding area, **including possible addition of a sloped roofs to match the buildings to the north and south.**”



Height of Structure and Aesthetics

Current Plan



Sloped Roof with Eave Overhang Brackets

Structure Top El. 881.0

Brick with Banding to Mimic Elements of Adjacent Buildings

Added a "Front Door" to Building

Moved Flood Door and Landing to South Side of Building

View 1 - Northeast Perspective

View 2 - Southwest Perspective



Lighter Colored Brick



Darker Colored Brick

Architectural Finishes

- Wrought Iron Style Fence
- Enhanced Pump Station Screening



Decorative Fence Style



Screening of Pump Station Equipment

Site Renderings (Previous and Current)

Dykes Branch East Pump Station (10/11) - 8900 State Line

Future View from State Line – Winter, After Construction



Preliminary Plan



PUMP STATION 10/11 - WINTER RENDERINGS
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October 2023
CONFLUENCE

Current Design

Future View from VOL Residences – Winter, After Construction



Preliminary Plan



Current Design

Future View from VOL Residences – Summer, After Construction



Preliminary Plan



PUMP STATION 10/11 - SUMMER RENDERINGS

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August 2023
CONFLUENCE

Current Design

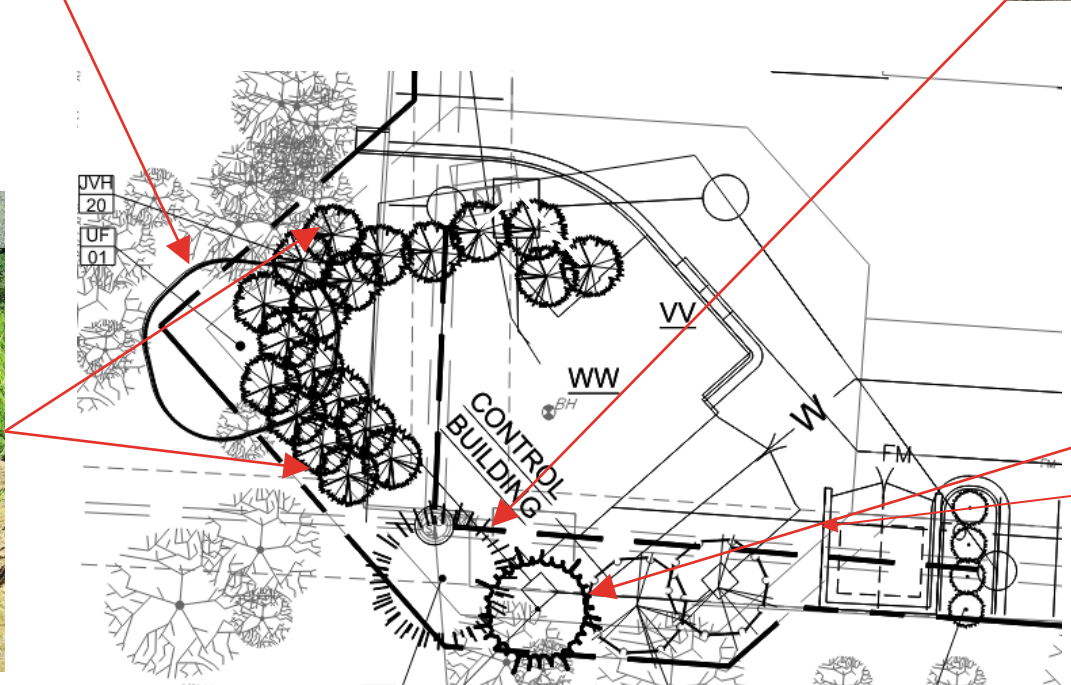
Schedule

- Engineering Design
 - Completion January 2024
 - Final Development Plan Early 2024
- Bidding & Contract Award
 - February 2024 to June 2024
- Pump Station Construction
 - Summer 2024 to Fall 2025
- Force Main Construction
 - Summer 2024 to Fall 2025

Questions?



Selected Landscaping



2' to 3' of growth per year