

City of Miami Beach
Muss Park, Chase Avenue & W 44th Street Drainage Improvements

Public Meeting

300 ENGINEERING GROUP, LLC

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November 17, 2026

MEETING AGENDA

01 Introduction

02 Project Overview

03 Existing Conditions

04 Proposed Improvements

05 Permitting Status

06 Project Schedule

07 Community Questions

PROJECT TEAM

OWNER

City of Miami Beach
Public Works Department

ENGINEER OF RECORD

300 Engineering Group, LLC

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PROJECT OVERVIEW

Location

Nautilus B Neighborhood- Muss Park, Chase Avenue, and W 44th street



Objective

- ✓ Identified as Critical Needs Project #2 in the City's 2024 Stormwater Master Plan
- ✓ Improve stormwater collection, conveyance, storage, quality, and provide permanent pumping capability to mitigate flooding

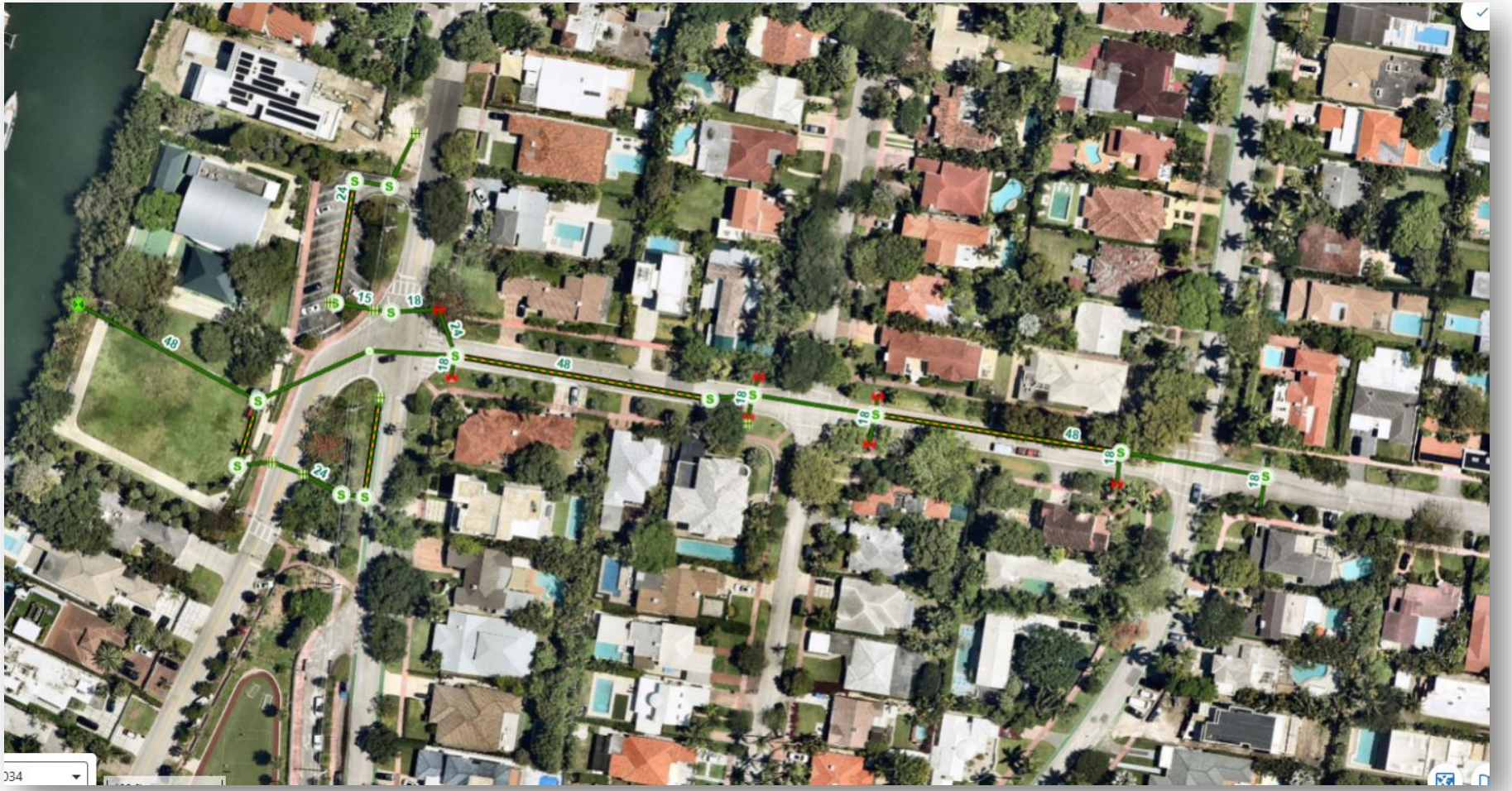
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EXISTING CONDITIONS

- Drainage network comprises a total of sixteen (16) catch basins, six (6) manholes with approximately 850 LF of storm pipe & 625 LF of exfiltration trenches



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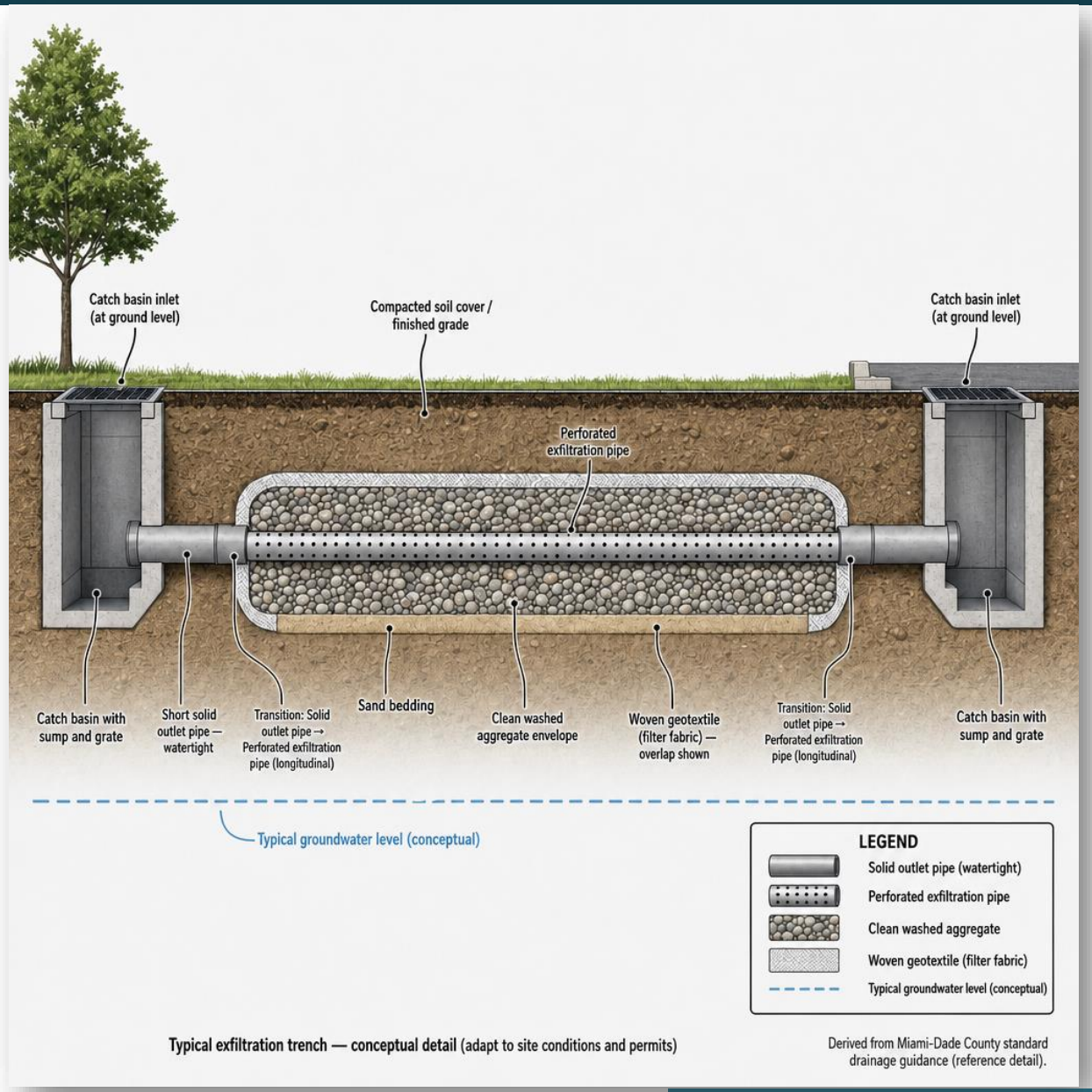
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EXISTING CONDITIONS

– **WHAT IS AN EXFILTRATION TRENCH?**

- An underground drainage system designed to collect and infiltrate stormwater into the surrounding soil
- Stormwater enters through catch basins and flows into perforated pipes surrounded by gravel.
- The gravel provides temporary storage while stormwater gradually infiltrates into the soil.
- Helps reduce surface flooding and stormwater runoff.



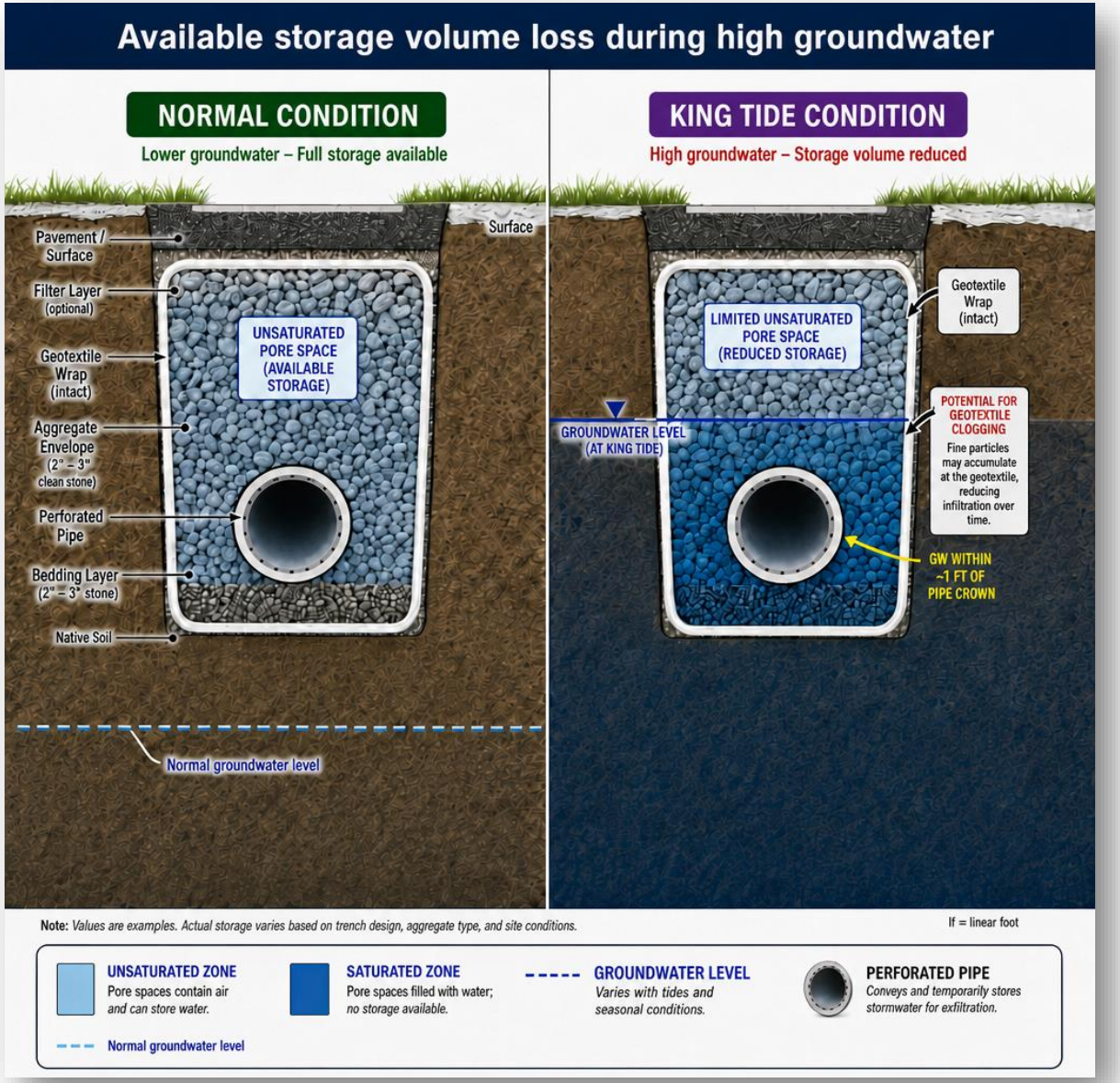
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EXISTING CONDITIONS

- Limited capacity to manage runoff during significant rainfall and king tide conditions
- Exfiltration trenches lack adequate storage capacity to infiltrate flows within the project due to high water table
- During king tides, rising groundwater further limits the available storage capacity within the exfiltration trench, increasing the risk of flooding



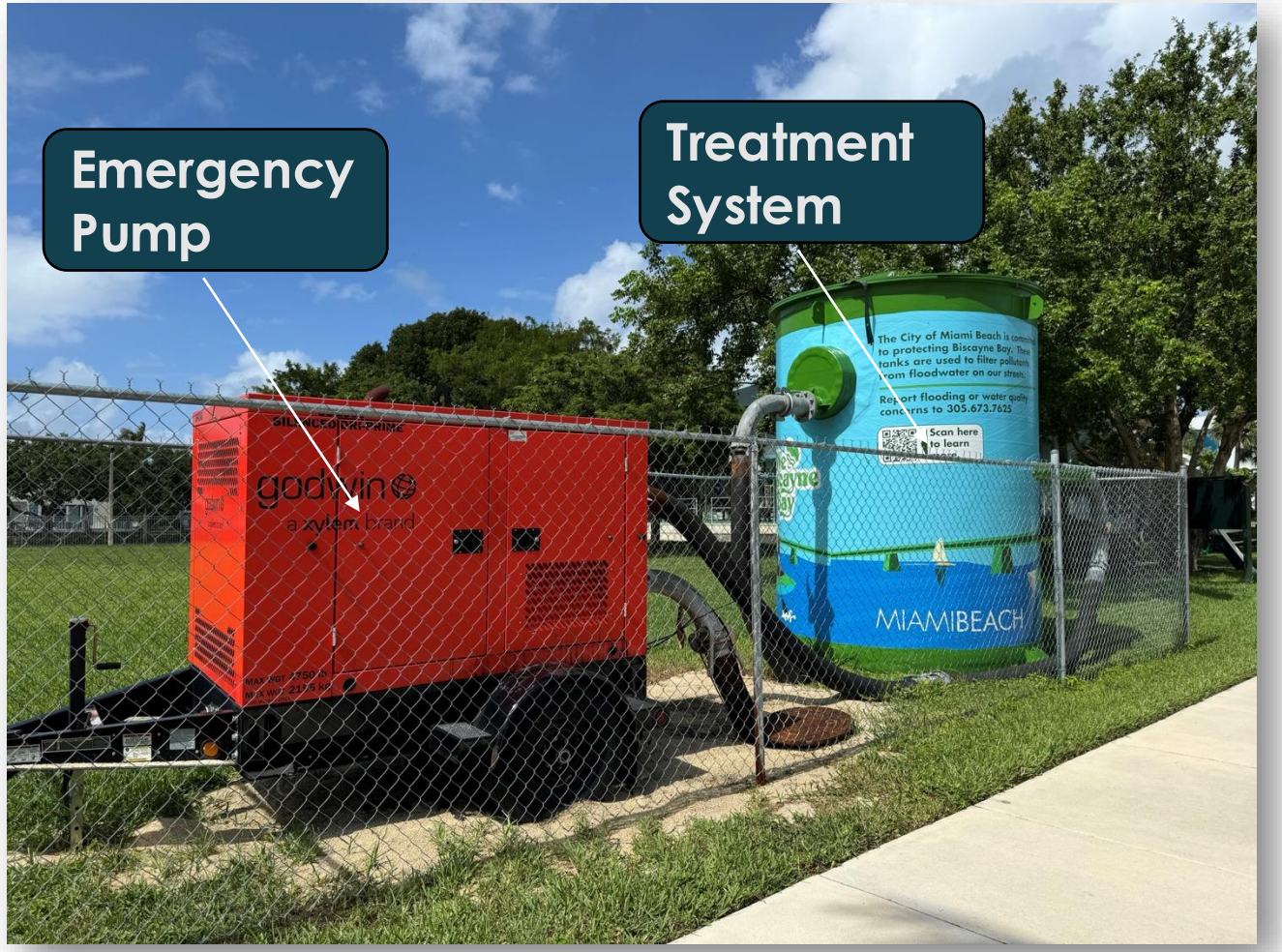
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EXISTING CONDITIONS

- The City currently uses a temporary emergency pump and above-ground treatment system prior to discharge to the outfall to solve conveyance issues
- The Existing Outfall discharges to Biscayne Waterway
- One of the project's primary objectives is to replace this temporary system with a permanent stormwater management solution



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PROPOSED IMPROVEMENTS

- ✓ Remove exfiltration trenches
- ✓ Increase conveyance and storage capacity with additional catch basins, manholes and upsized solid pipe
- ✓ Provide new permanent water quality structure
- ✓ Provide permanent pumping capabilities with emergency overflows to outfall
- ✓ Provide a new permanent control structure prior the outfall



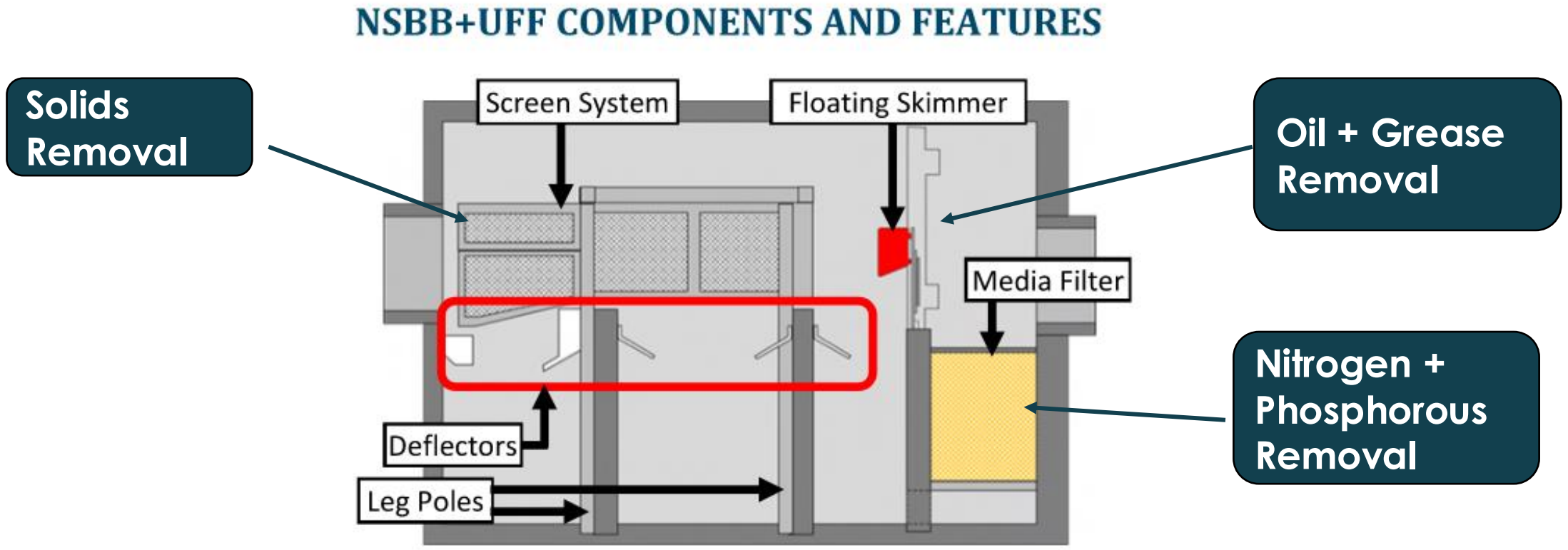
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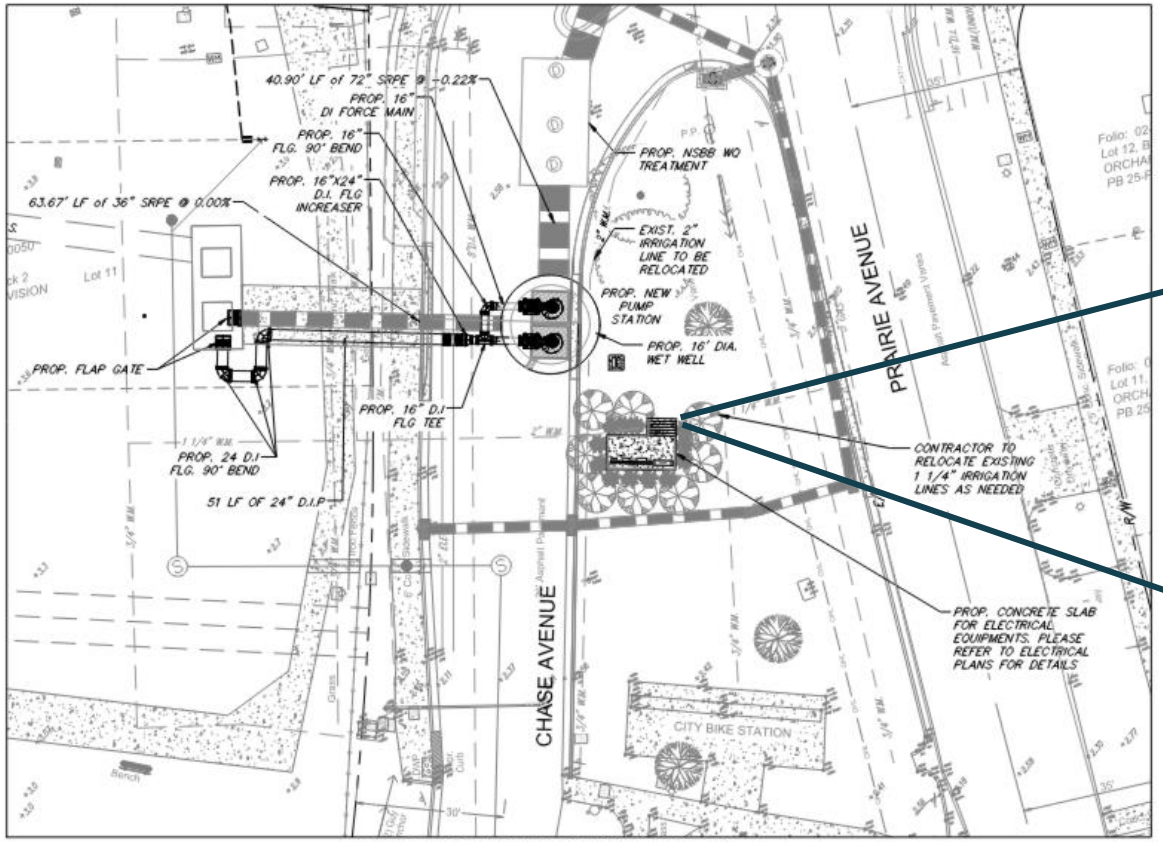
PROPOSED IMPROVEMENTS: WATER QUALITY TREATMENT

Treatment Goal: Provide demonstrated net improvement in the stormwater quality discharge.



PROPOSED IMPROVEMENTS: STORMWATER PUMP STATION

Pump station for the water quality flow to improve conveyance and discharge capacity to outfall.



PROPOSED PUMP STATION SITE PLAN





Above Ground Electrical Equipment

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PERMITTING STATUS

PERMIT / AGENCY	SCOPE	CURRENT STATUS
DERM Class II	County approval for drainage infrastructure	Addressing request for additional information
City Building Permit	City approval for above ground features	Process initiated
Design Review Board (DRB)	City's urban design and aesthetics review	Process initiated
Sewer Extension Permit	County approval for required sanitary sewer relocation	Addressing request for additional information
Municipal Permit	County environmental review	To be submitted after DERM Class II approval
City Driveway Permit	City approval of new access at Muss Park for maintenance of equipment	Pending Submission
SFWMD / Dewatering	State approval for drainage infrastructure and outfall connection	Pending Submission

PROJECT ESTIMATED SCHEDULE

TASK	DURATION (DAYS)	START	FINISH
Finalize Permits & DRB	140	Nov 16, 2026	April 5, 2027
ITB Draft Preparation *(Starting earlier to save time)*	90	November 30, 2026	Feb. 18, 2027
Bid Set Preparation / City Submittal	15	April 8, 2027	April 23, 2027
ITB Issuance + Bid Opening *(This task may start earlier depending on the comments from the Permit Agencies)*	90	May 3, 2027	August 1, 2027
Commission Contract Award	60	August 2, 2027	September 30, 2027
Contract Document Review / Execution	60	October 1, 2027	November 29, 2027
Contractor Insurance / Bonds / Munis	60	November 30, 2027	January 28, 2028
Construction NTP1 to NTP2 *(Contractor to obtain dewatering permits from DERM, submit shop drawings and traffic control plans for review and approval, and procure the necessary materials before beginning construction)*	150	January 29, 2028	June 26, 2028
Estimated Construction Schedule *(From Mobilization to Substantial Completion)*	420	June 28, 2028	August 22, 2029

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Community Questions

