MMSD FRESHCOAST PROTECTION PARTNERSHIP
powered by Corvias

IAFSM ANNUAL CONFERENCE

March 14, 2023

MMSD
PARTNERS FOR A CLEANER ENVIRONMENT

New Testament Church Constructed Wetland, Milwaukee, WI

New Testament Church - Wetlands

COMMUNITY BASED PARTNERSHIPS

Community Based + Performance Based

Community Based

- Build Stormwater Industry Capacity
- Local Resident Workforce Development
- Prioritizing Disadvantaged Communities

Performance Based

- Surety of Execution (Cost & Schedule)
- Surety of Compliance
- Working Capital Investments to Accelerate Delivery

Environmental	Social	Governance
Climate resilient water quality, conservation, and flooding programs for regulated communities around key stressed environmental assets in North America.	Local work force utilization; Disadvantaged communities and contractor development training programs. +Community +Economic	Performance based environmental and socio-economic goals; Compensation incentives tied to quantitative metrics.

Prince George's County, MD Clean Water Partnership

$500M+ in green infrastructure retrofits, water quality and pollution reduction targets surrounding the world's largest estuary, the Chesapeake Bay

Stormwater Authority of Chester, PA Community-Based Partnership

$53M in pollution reduction and greening of both the separate water and combined sewer areas

LA County Clean Water Program Slauson Connect

$5M+ green alleys retrofits for public safety, water conservation and infiltration objectives

Milwaukee Metropolitan Sewerage District (MMSD) Fresh Coast Protection Partnership

$47M+ in green infrastructure retrofits to achieve 20M gallons of runoff, pollution and flooding reduction targets

Seattle Public Utilities RainCity Partnerships

$15M+ in green stormwater infrastructure and riparian restoration with an emphasis on community-sourced projects and BIPoC participation

STARTS WITH A PUBLIC VISION

Capture the first half-inch of rainfall across impervious surfaces within the Milwaukee Metropolitan Sewer District's Service Area.

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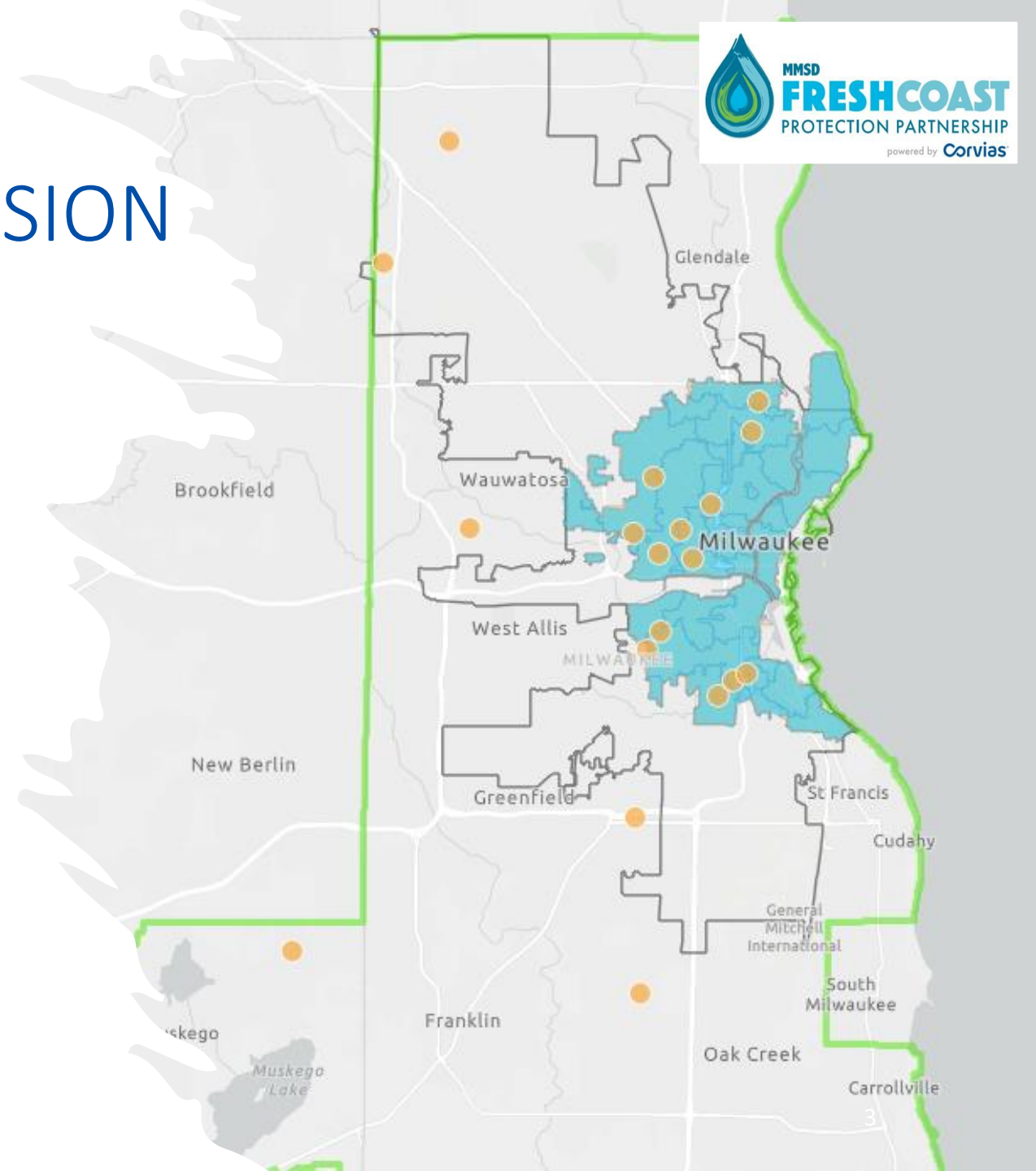
Target Goal of 756M gallons

Environmental

Climate resilient water quality, conservation, and flooding programs for regulated communities around key stressed environmental assets in North America.



WITH CLEAR COMMUNITY BENEFITS

- Push beyond the scope of previous GI programs to better direct where GI is placed (to maximize benefits), for broader local economic value,
- Make GI more affordable alternative to grey infrastructure,
- Reduce overflow volume and regional flooding,
- Incentivize economic development for local business and property owners,
- Build local GI capacity and participation in Milwaukee region

Social

Local work force utilization; Disadvantaged communities and contractor development training programs. +Community +Economic

19
MUNICIPALITIES

THAT ARE OUTCOME & PERFORMANCE BASED

- Upfront private “at risk” investment all the way through certification
- Certified gallon captured credits with a fixed price of $2.36/gallon
- Up to 20M gallons in first 5 years
- Minimum 25% SWMBE utilization
- 60% of Projects to be located on Private Property
- 5 yr warranty with vegetation establishment

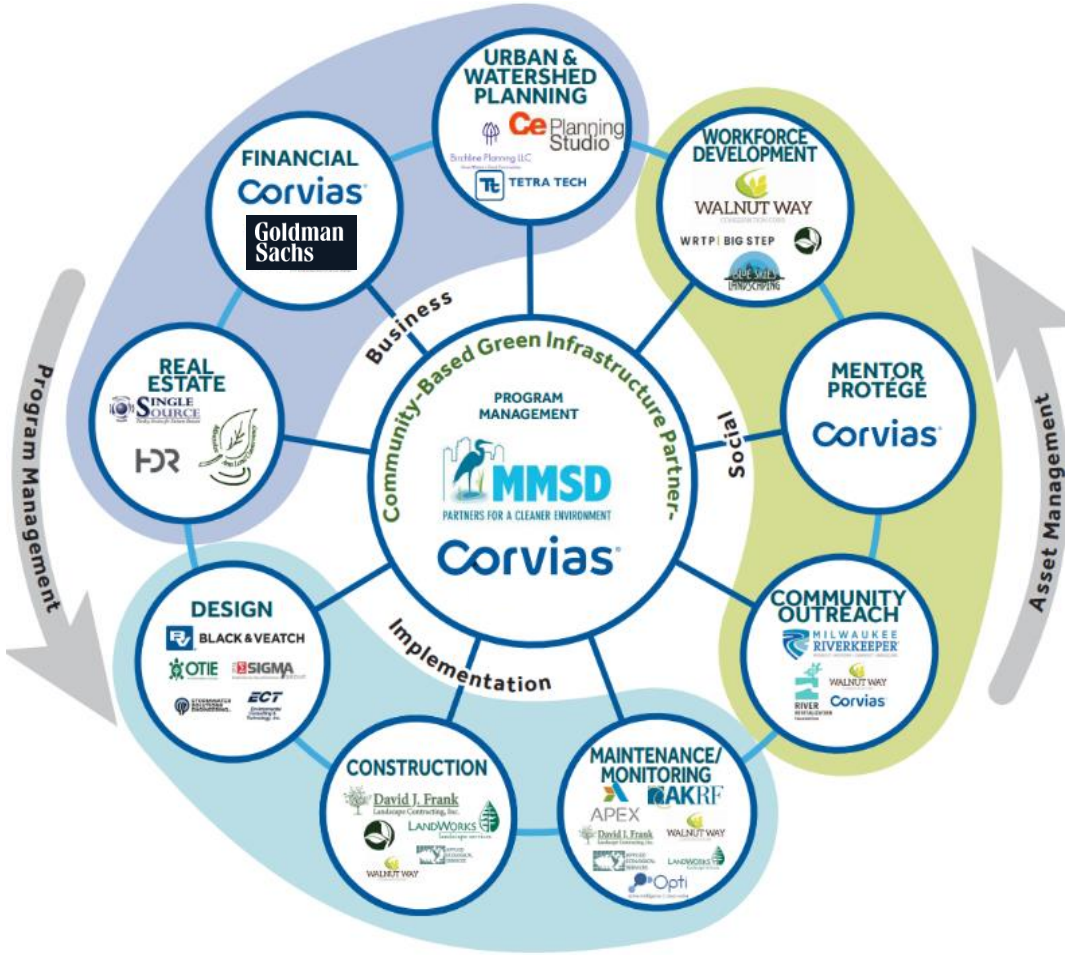
Governance

Performance based environmental and socio-economic goals; Compensation incentives tied to quantitative metrics.

8 YEARS
2020-2028

IT TAKES A VILLAGE!

- Urban Planners
- Real Estate Developers
- Private Property Owners
- Designers / Engineers
- Local Contractors (SWMBE)
  - General Contractors
  - Subcontractors
- Workforce Development
- Community Outreach



PROPERTY ACCESS

- **(56+) PROPERTIES ASSESSED TO DATE;**
- **(14) RIGHT OF ENTRY PROPOSALS**
- **(9) ACTIVE CONSERVATION EASEMENTS;**

“AT RISK” LOCAL INVESTMENT

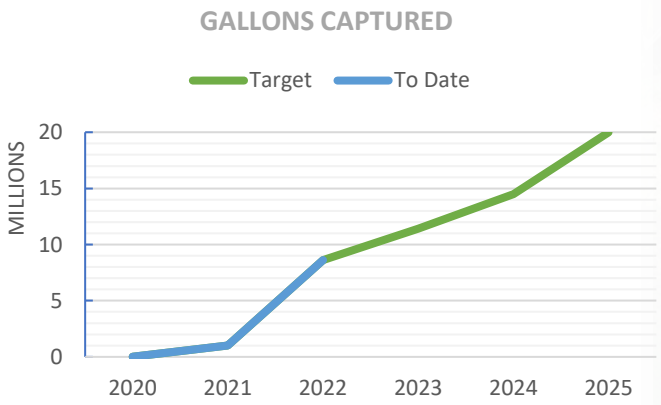
19M+ GALLONS OF DESIGN, PROPERTY ACCESS, CONSTRUCTION, OR WARRANTY ACTIVITIES.

$29.2 MILLION
DEVELOPMENT COST

LOT T – UNDERGROUND STORAGE & PERMEABLE PAVEMENT

SCALABLE ENVIRONMENTAL OUTCOMES

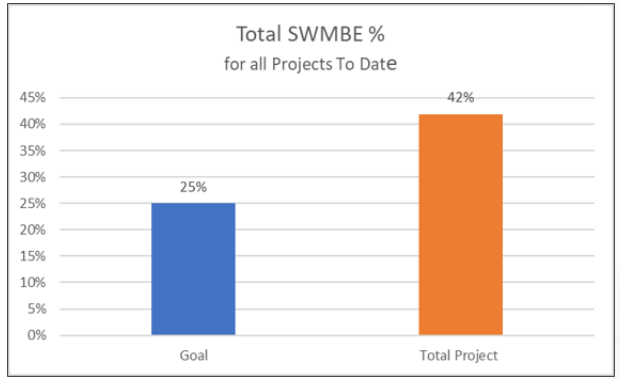
***8.6M Gallons* developed and certified within past 24 Months.**



LALUMIERE - BIORETENTION FACILITY

LOCAL PARTICIPATION

42% SWMBE CONTRACTED TO DATE



COMMUNITY ENGAGEMENT

A Public Private Community Based Partnership between Milwaukee Metropolitan Sewer District

MORE THAN 50%
OF PROJECTS LOCATED IN LOW-TO-MODERATE INCOME AREAS

90%
OF PROJECTS ARE LOCATED ON PRIVATE PROPERTY

RIVER TRAIL SCHOOL – URBAN SUSTAINABILITY FOREST

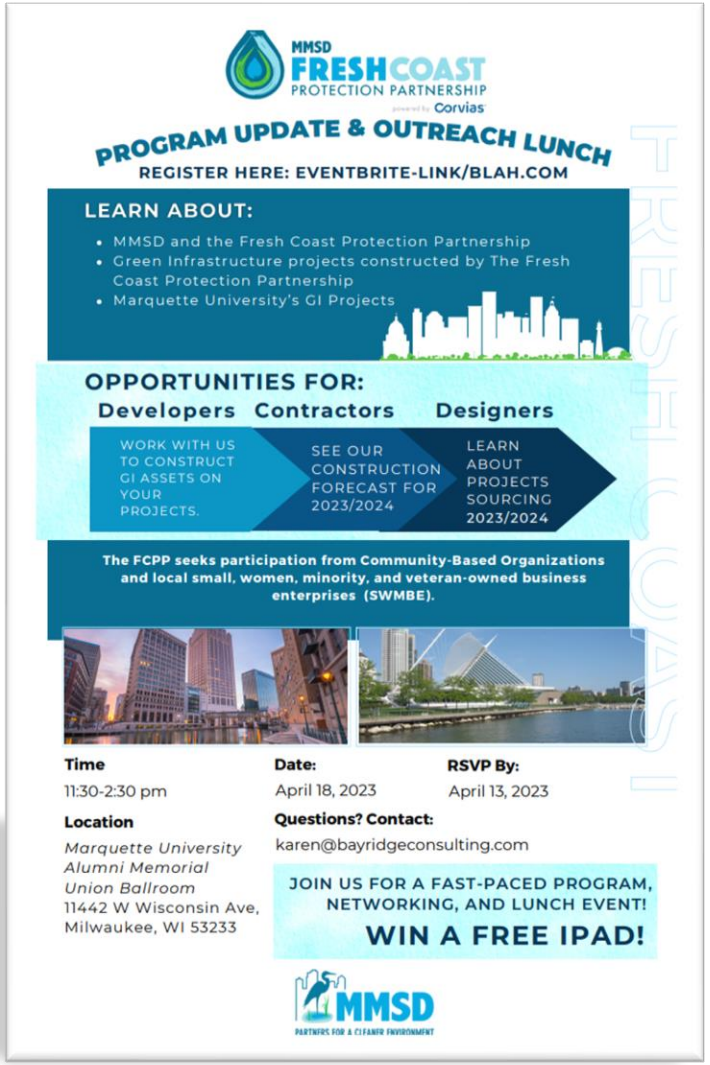
Interested

LEARN MORE
https://www.freshcoastguardians.com/resources/green-infrastructure-program/fresh-coast-protection-partnership

SUBMIT A PROPERTY
https://cisolutions.myrainplan.com/

SIGN UP FOR OPPORTUNITIES
https://cisolutions.myrainplan.com/

MEET THE TEAM AT OUR NEXT EVENT
APRIL 18TH Ribbon Cutting; Lunch and Learn - Marquette University



FCPP Project Design & Implementation

Green Infrastructure Design

- Civil Engineering & Landscape Architecture
  - Stormwater modeling/sizing, utility layout, grading, erosion control
- Best Management Practices:

Bioretention

Constructed Wetlands

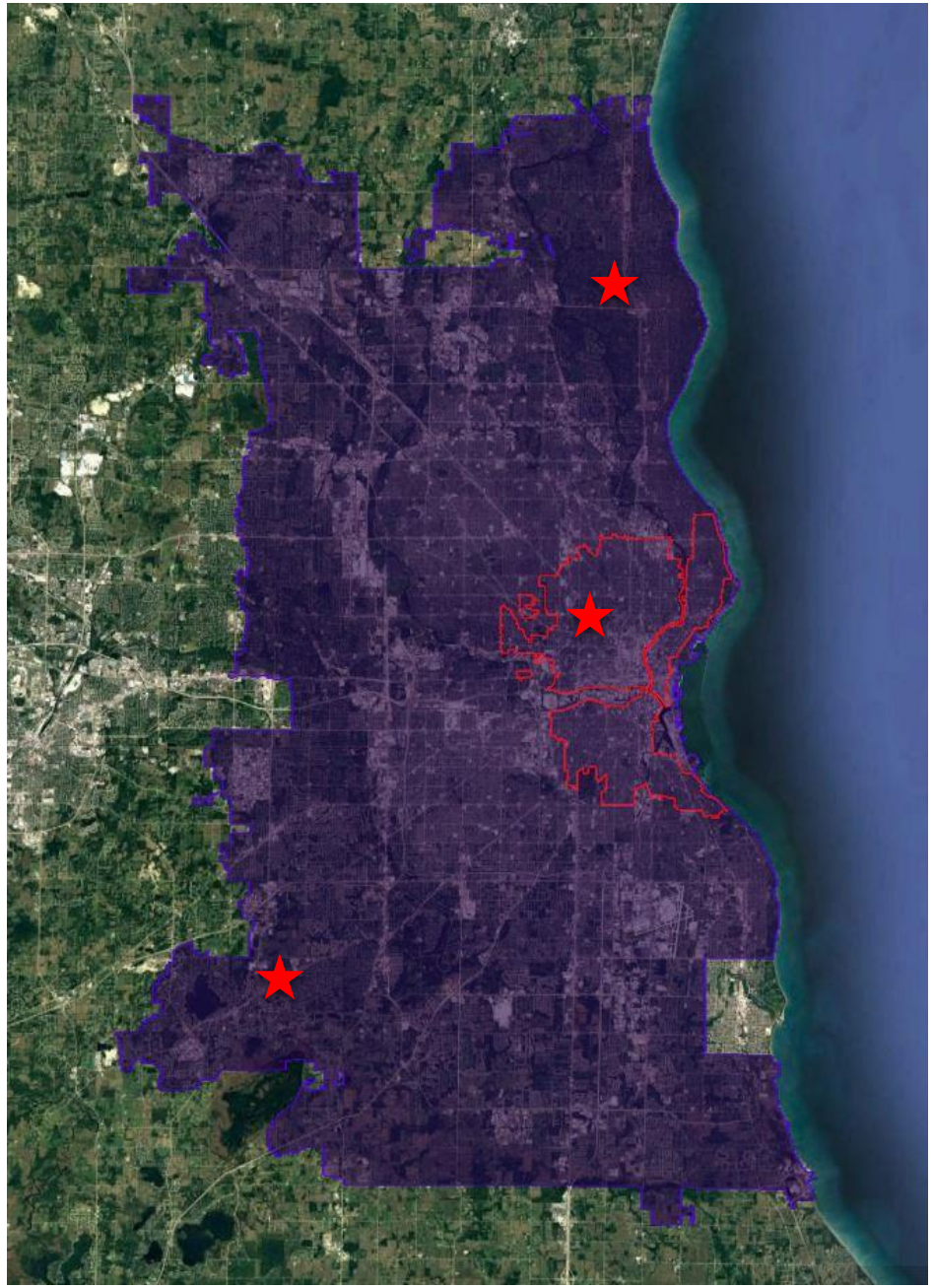
Subsurface Storage

Permeable Pavement

Project Sourcing

Development Criteria:

- Inside MMSD service area
- 30% within combined sewer area
- 30% outside the City of Milwaukee
- Target underserved communities and areas with existing flooding/stormwater issues



Completed Projects

River Hills Constructed Wetlands

- Two constructed wetland basins storing 2.5 MG of water during heaviest rain event
- 18 acres of restored prairie reduces runoff and provides habitat for native plants and animals

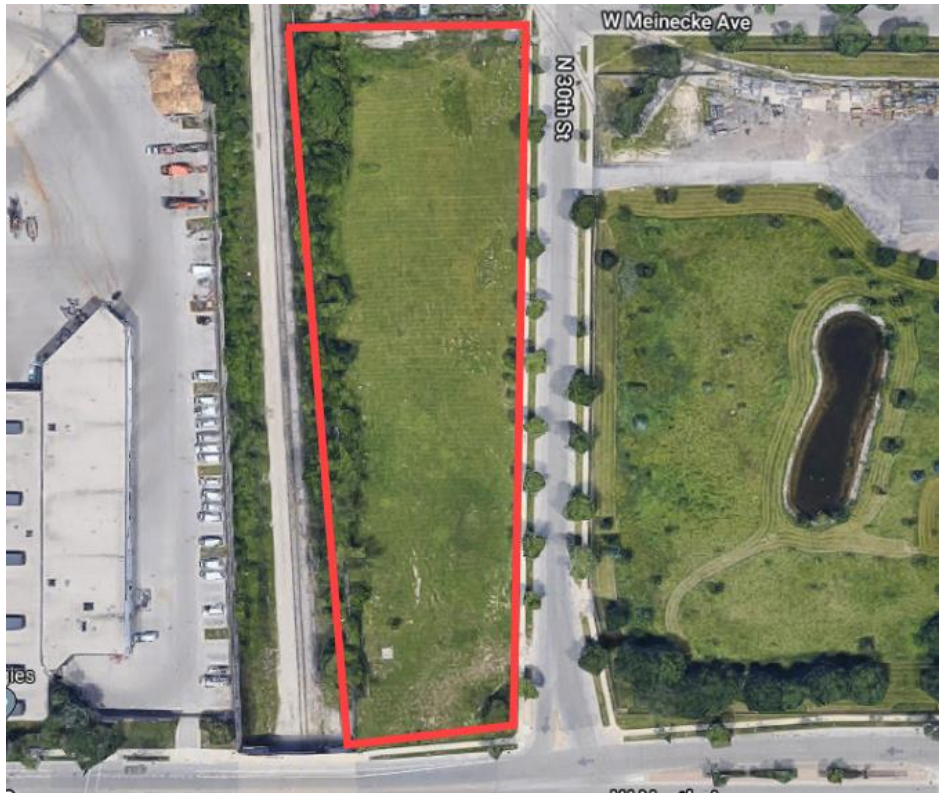
Muskego Senior Housing

- Design completed prior to FCPP program with standard detention basin
- Modified basin to create a constructed wetland with native vegetation storing 619,000 gal of stormwater

30th & North Avenue Bioretention

Existing conditions

- 3 vacant parcels in Milwaukee's Metcalfe Park neighborhood owned by Redevelopment Authority of the City of Milwaukee (RACM)
- Previously used for manufacturing processes and gasoline fuel stations
- Brownfield site with contaminated soils and monitoring wells



30th & North Avenue Bioretention

Goal: to turn a brownfield site into a functional green space providing both ecological and socioeconomic benefits to community members

- MATC & We Energies- training facility for linemen
- Metcalfe Park Community Bridges- advocating for future community green space
- MMSD & FCPP- provide stormwater storage in combined sewer area

METCALFE PARK COMMUNITY BRIDGES

RACM REDEVELOPMENT AUTHORITY OF THE CITY OF MILWAUKEE

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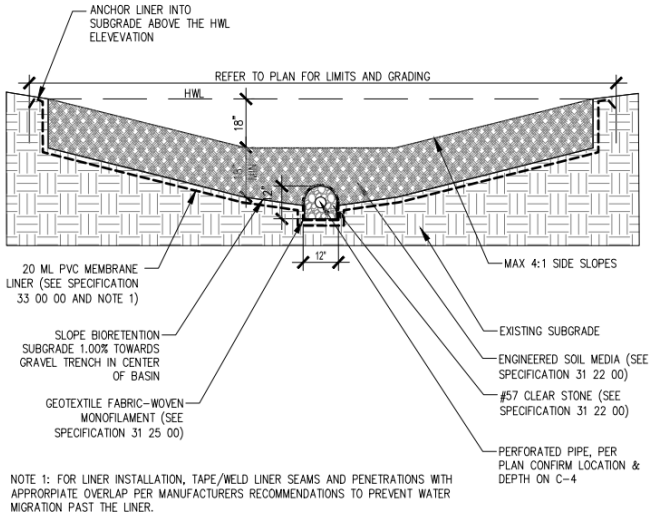
We Energies

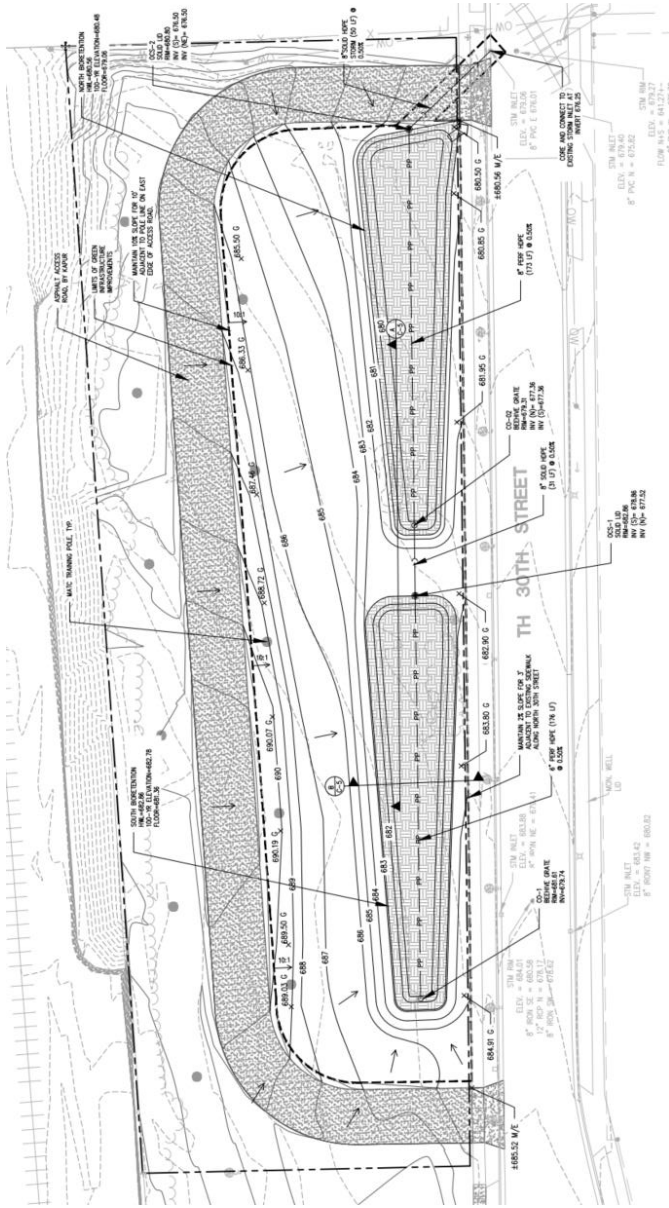
MILWAUKEE AREA Technical College

30th & North Avenue Bioretention

Design

- Access road and power poles for MATC/We Energies linemen training facility
- Tiered bioretention basins collect runoff from adjacent impermeable surfaces
- South parcels dedicated to future community gathering area





30th & North Avenue Bioretention

Triple Bottom Line Benefits

Social: Turns empty lot into an aesthetic naturalized feature and future park space for community members

Environmental: Bioretention creates habitat for native plants and pollinators and provides volume control while filtering 150,000 gallons of runoff before it enters combined sewer system

Economic: Leverages partnerships with local community college to fund improvements that provide workforce training in an underserved community


Q & A