



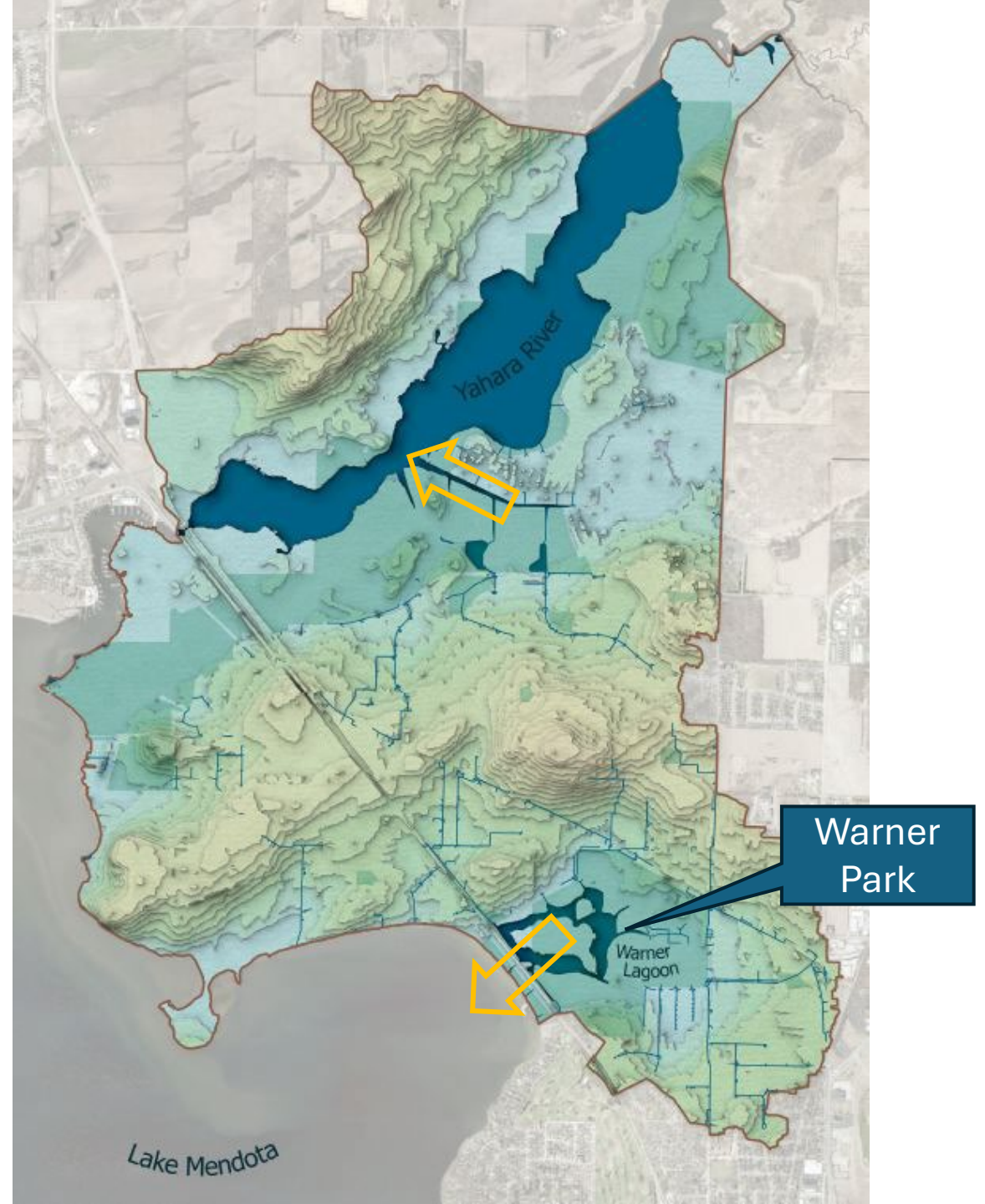
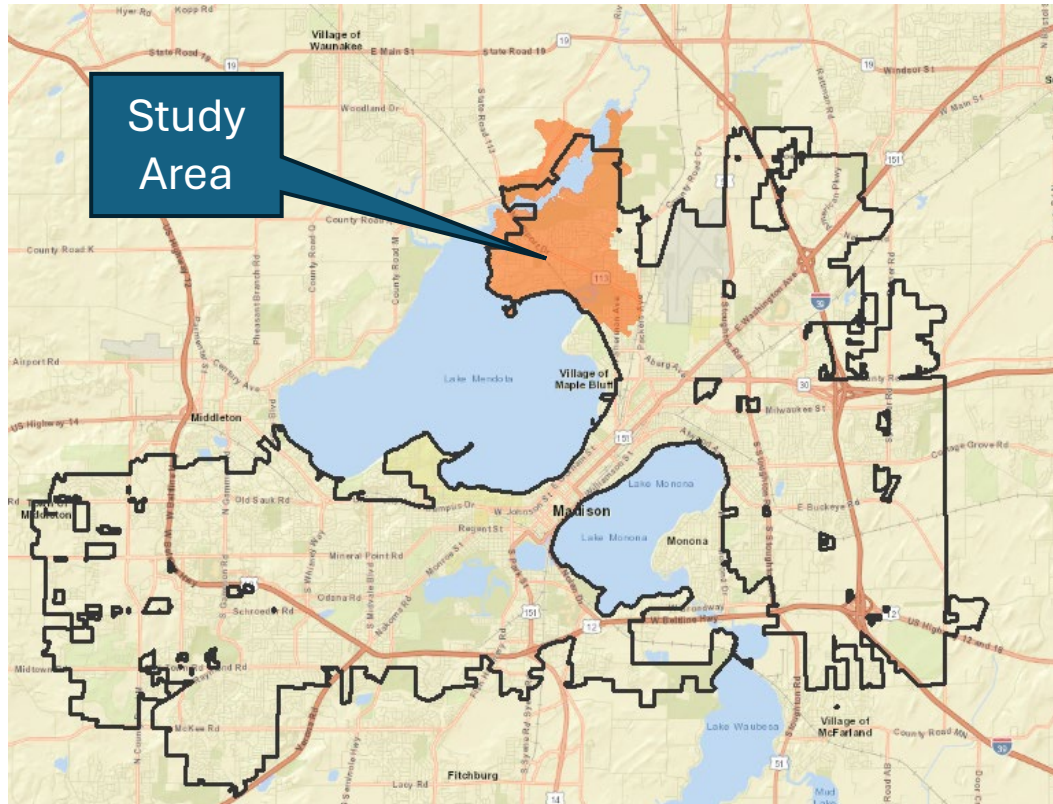
Warner Park & Cherokee Marsh Watershed Study Solutions

City of Madison Engineering Division
Board of Park Commissioners Meeting
4/15/26

[LINK TO FINAL REPORT](#)

(Or can be found on project webpage: www.cityofmadison.com/WarnerCherokeeWatershed)

Warner Park and Cherokee Marsh Watershed



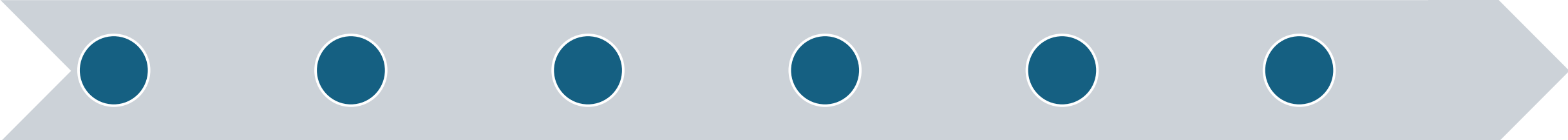
Schedule

Spring 2023 -
Spring 2024

*Create and
Calibrate
Model – 1st
Public Meeting*

Fall 2024
*2nd Public
Meeting**

Fall 2025
*3rd Public
Meeting*



Summer 2024
*Identify Flood
Impacts*

Fall 2024 –
Summer 2025
*Evaluate
Solutions*

Winter-Spring
2026
*Public
Comment
Period*



Finalize Study

Warner/Cherokee Watershed Study Milestones

- PIM 1: 7/20/23
- PIM 2: 10/21/24
- Public Works Improvements: 7/1/25
- Informational to BPC: 7/9/25
- PIM 3: 9/23/25
- Report Public Comment Period: 2/25/26-3/30/26
- BPC: 4/15/26
- BPW: 4/22/26
- FINAL REPORT: Can be found on project webpage:
www.cityofmadison.com/WarnerCherokeeWatershed

Public Outreach

29,479+ points of outreach or interactions for the Warner Park and Cherokee Marsh Watershed Study



Public Meetings
3 meetings, 175 participants



Postcards sent
27,920
*included notification of nearly flooding



Community Events to share information
5 events, ~132 conversations



Project Website
1,178 views



Email Lists
65 subscribers



Virtual Focus Groups
4 groups



Social Media Posts
5 related project posts

Watershed Study Performance Targets

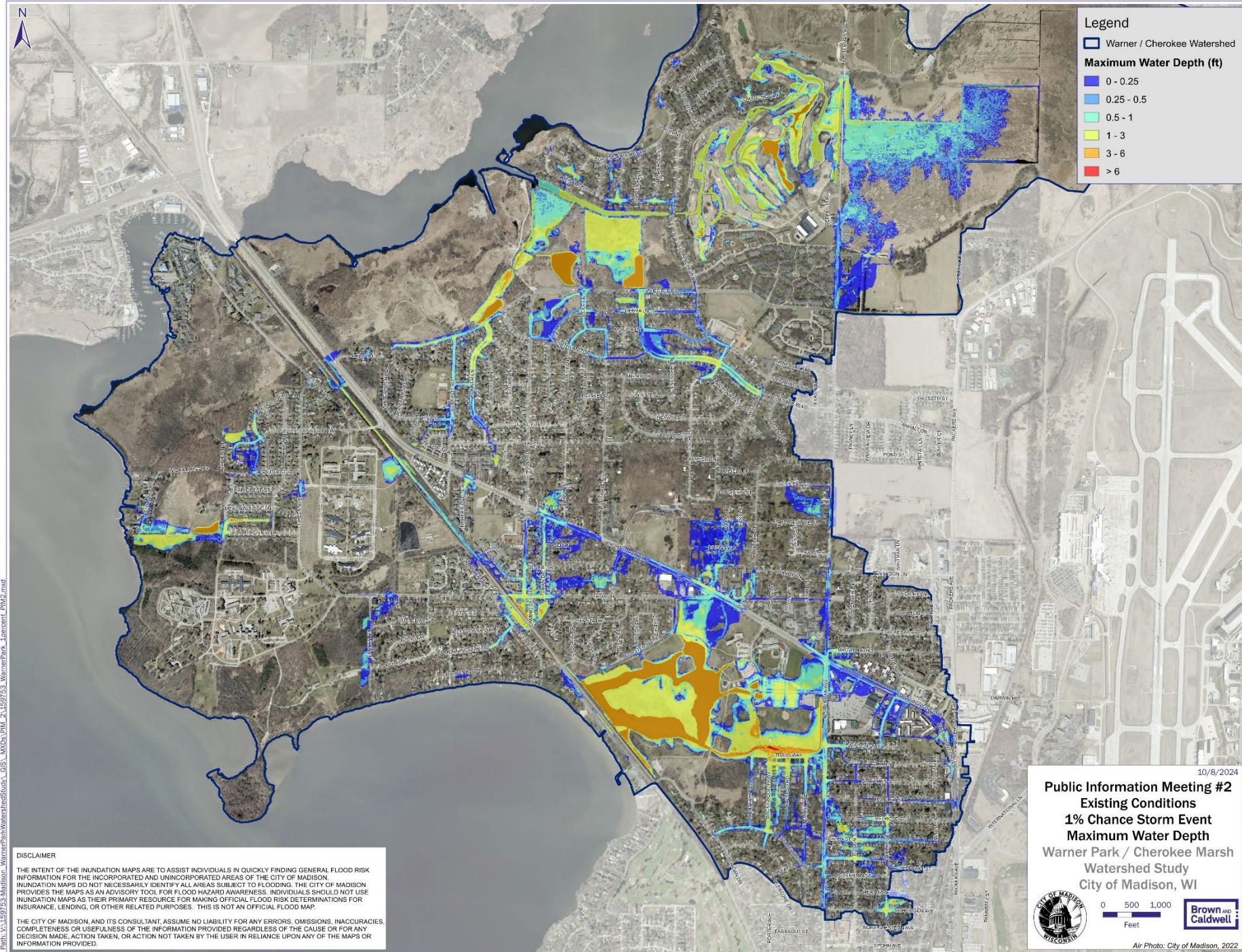
- 10% Event (*4.09" rain/24 hours*).
 - No surcharging of storm sewer onto roadway (storm sewer pipes are sized to carry storm)
- 4% Event (*5.01" rain/24 hours*)
 - Roads passable for emergency vehicles
- 1% Event (*6.66" rain/24 hours*)
 - No structure (home/building) flooding
 - No greenway crossing overflow
 - Safe overflow from enclosed depressions
- 0.2% Chance Event (*8.81" rain/24 hours*)
 - Safe conveyance of overflow



Tenney Park, Madison, WI

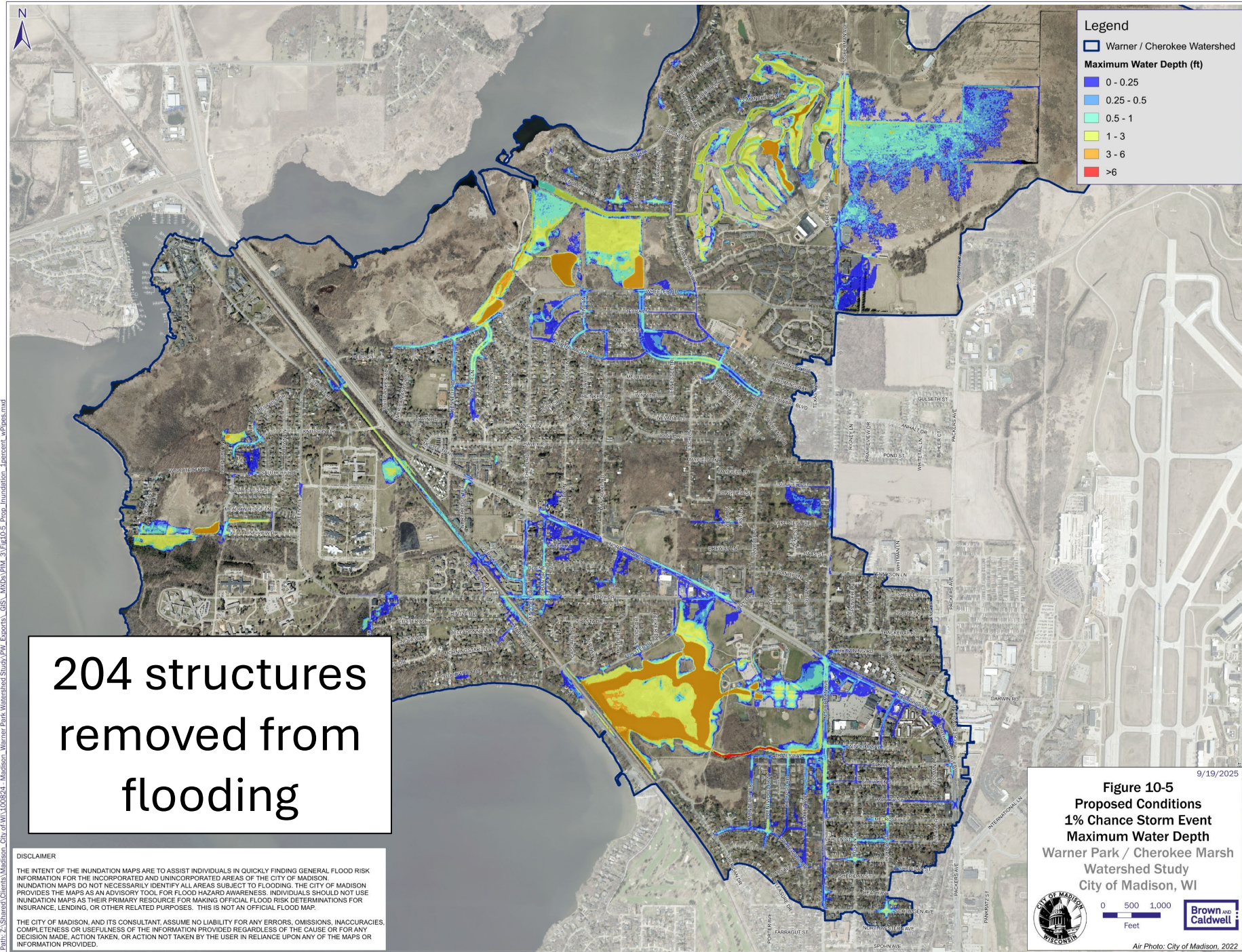
1% Chance (100-year) Existing Inundation Mapping

1% Chance Event
(6.66 inches in 24 hours)



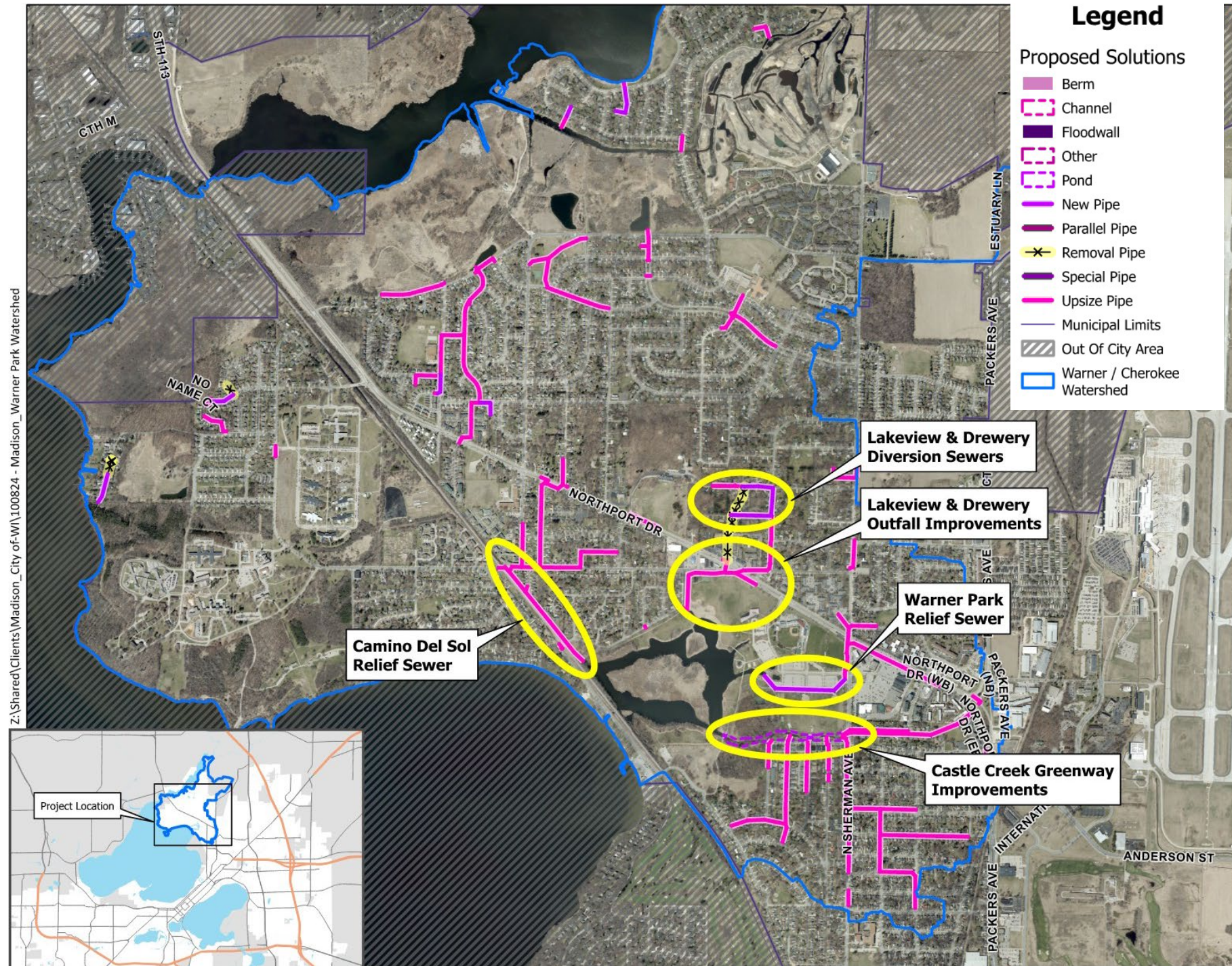
1% Chance (100-year) Proposed Inundation Mapping

1% Chance Event
(6.66 inches in 24
hours)



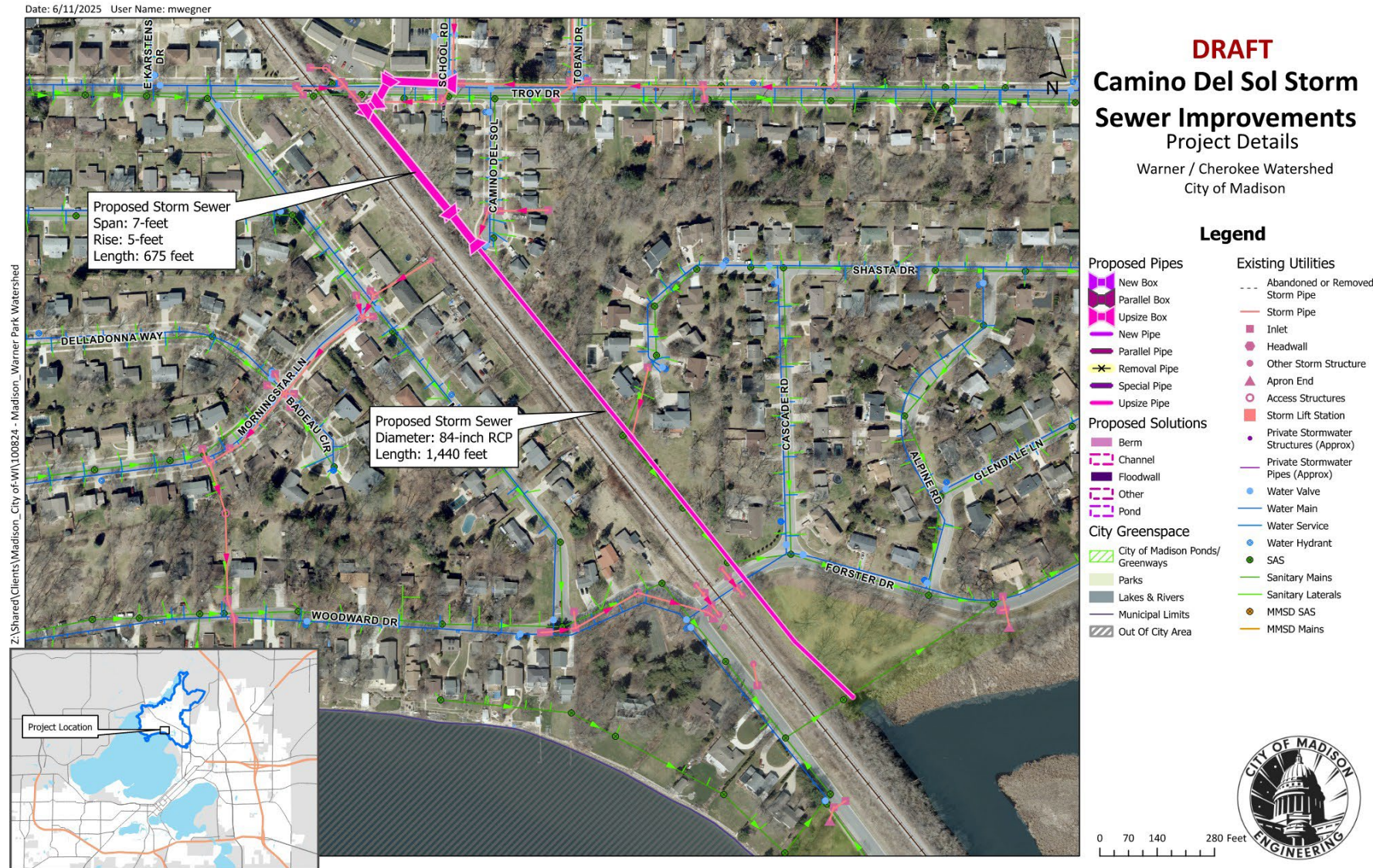
Proposed Solutions

- Local storm sewer improvements
- Camino Del Sol Relief Sewer
- Lake View & Drewery Diversion Sewers
- Warner Park Relief Sewer
- Castle Creek Greenway Improvements



Camino Del Sol Relief Sewer

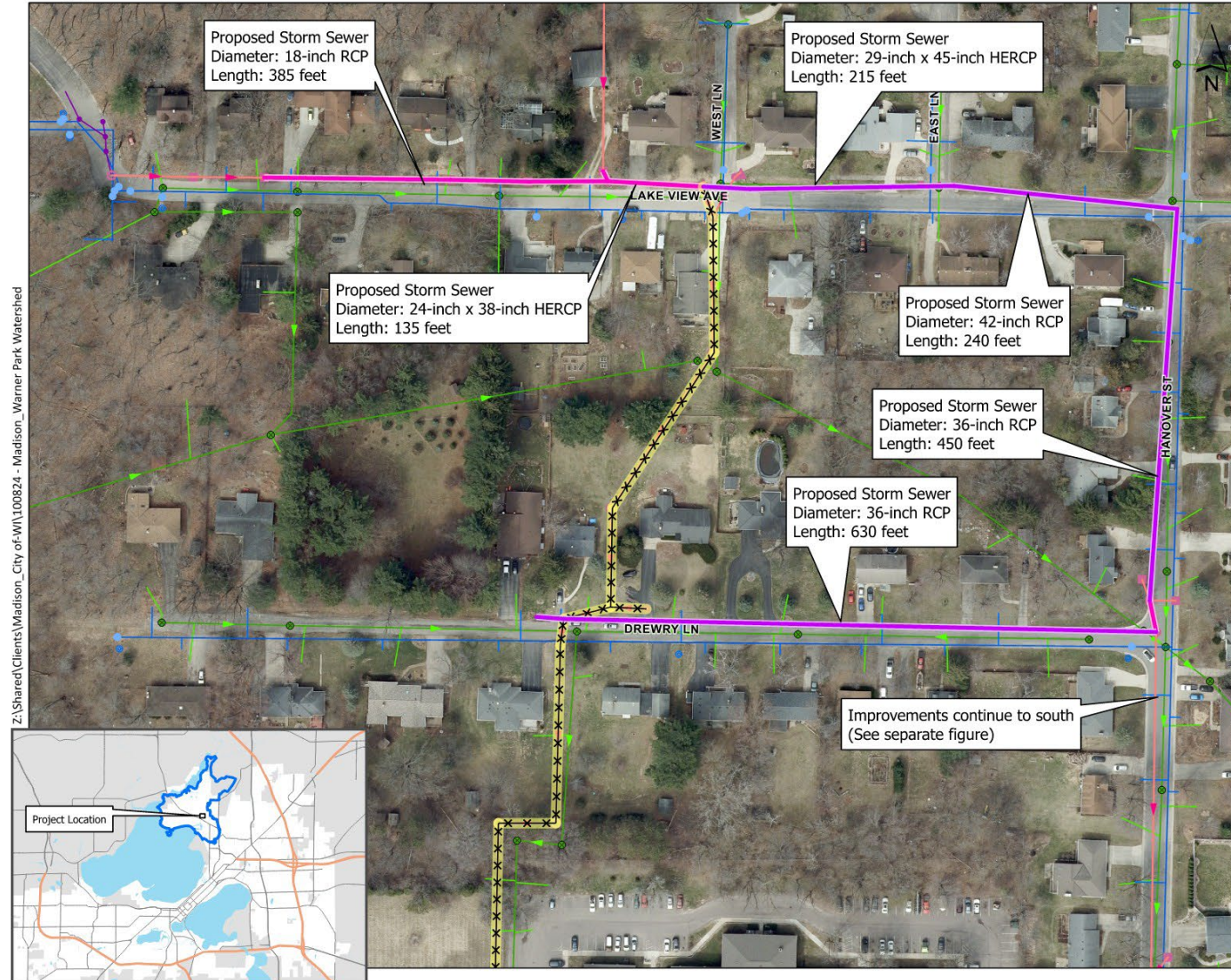
- Enlarge existing storm sewer from Troy Drive to Warner Lagoon
- Reduce flooding in Camino Del Sol cul-de-sac, Troy Dr, & surrounding streets



Lake View & Drewery Diversion Sewers

- Divert runoff to east along Lake View Ave & Drewery Ln
- In conjunction with road urbanization
- Coordination with other utilities
- Investigate abandonment of storm sewer outside ROW

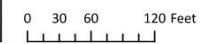
Date: 6/20/2025 User Name: mwegner



DRAFT
Lakeview & Drewery
Diversion Sewers
 Project Details
 Warner / Cherokee Watershed
 City of Madison

Legend

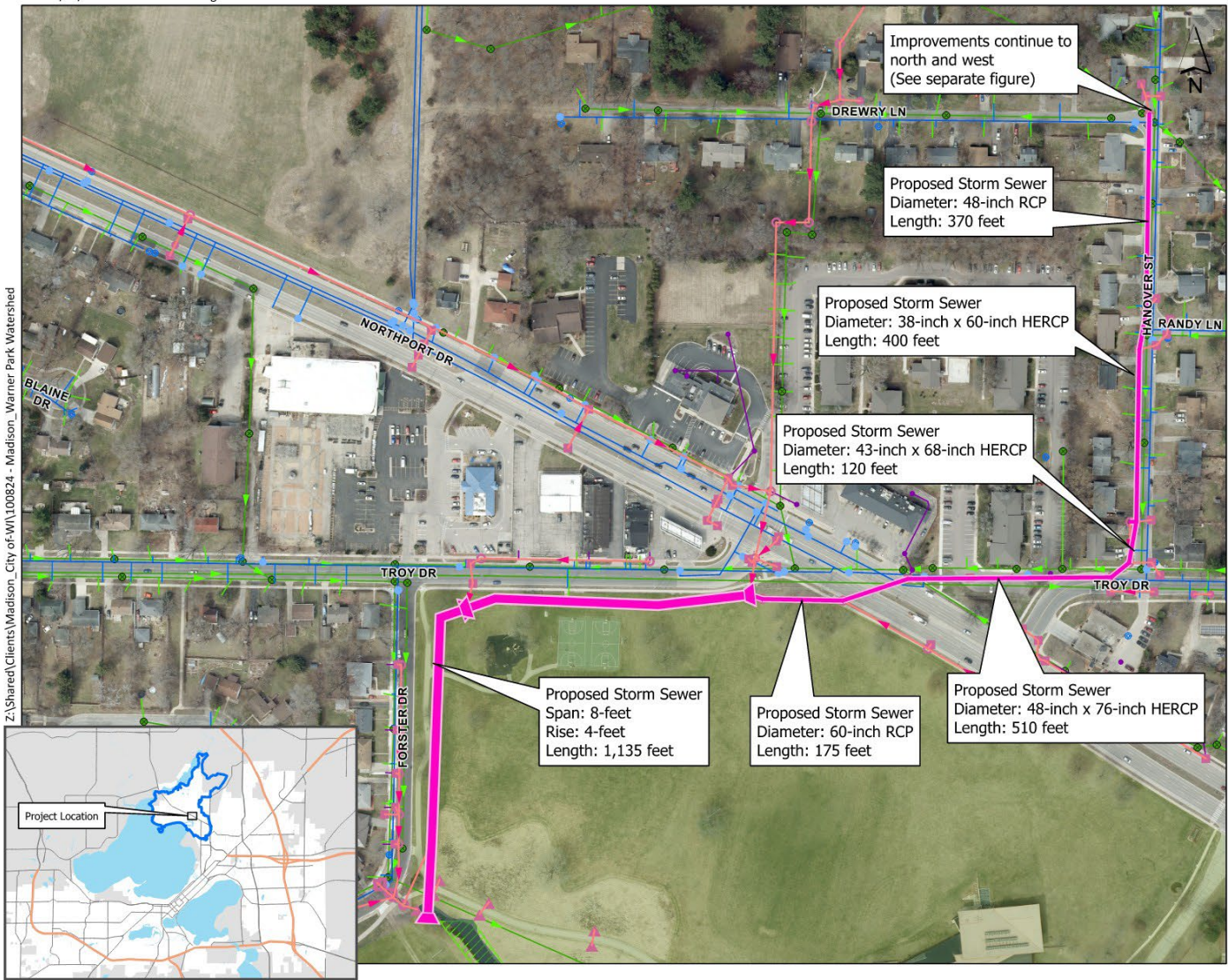
Proposed Pipes	Existing Utilities
<ul style="list-style-type: none"> New Box Parallel Box Upsize Box New Pipe Parallel Pipe Removal Pipe Special Pipe Upsize Pipe 	<ul style="list-style-type: none"> Abandoned or Removed Storm Pipe Storm Pipe Inlet Headwall Other Storm Structure Apron End Access Structures Storm Lift Station Private Stormwater Structures (Approx) Private Stormwater Pipes (Approx) Water Valve Water Main Water Service Water Hydrant SAS Sanitary Mains Sanitary Laterals MMSD SAS MMSD Mains
Proposed Solutions	
<ul style="list-style-type: none"> Berm Channel Floodwall Other Pond 	
City Greenspace	
<ul style="list-style-type: none"> City of Madison Ponds/Greenways Parks Lakes & Rivers Municipal Limits Out Of City Area 	



Lakeview & Drewery Downstream Sewer

- Continue improvements downstream
- Convey added flow & mitigate existing flooding

Date: 6/11/2025 User Name: mwegner



DRAFT
Lakeview Diversion
Downstream Sewers
 Project Details
 Warner / Cherokee Watershed
 City of Madison

Legend

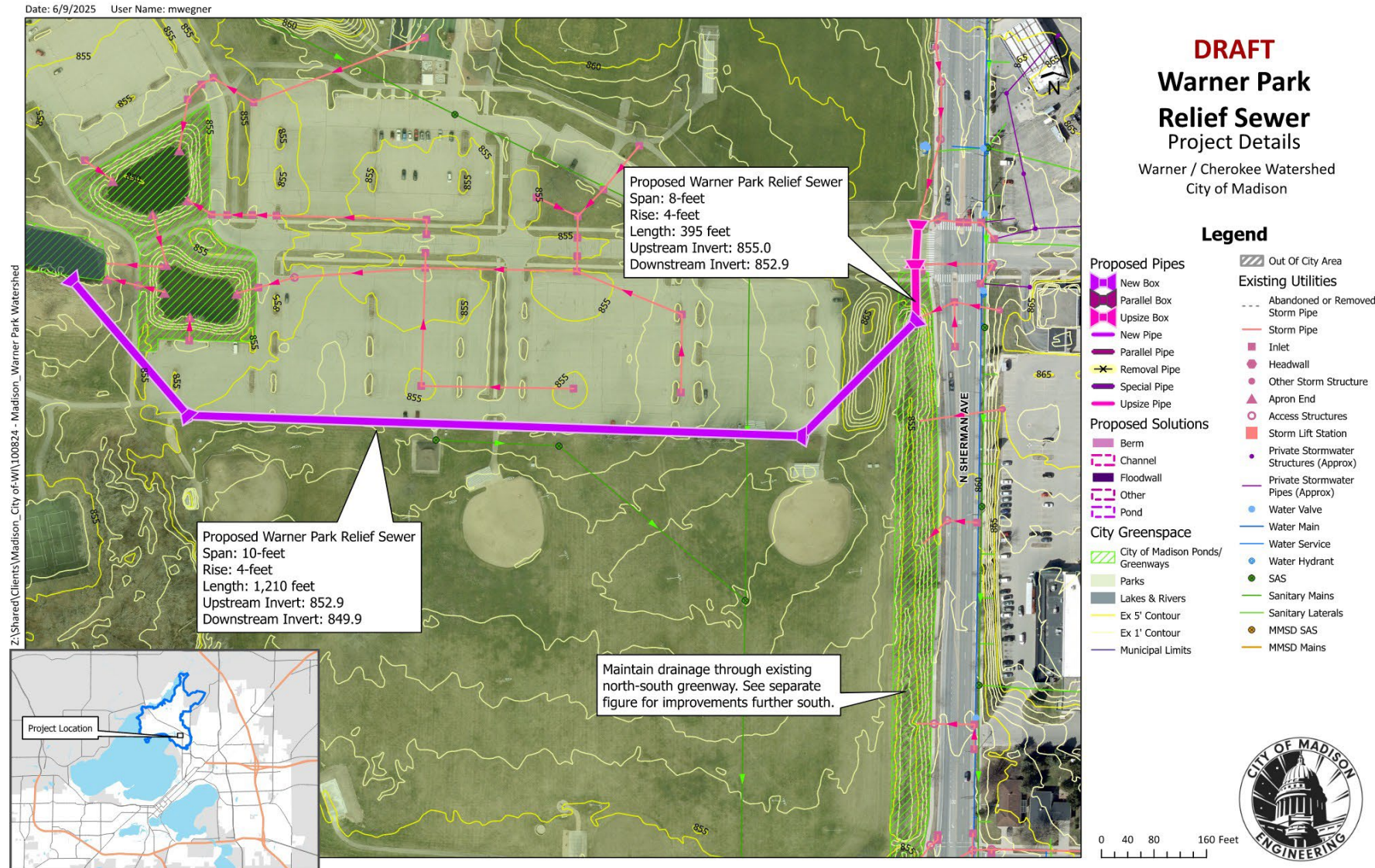
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0 60 120 240 Feet

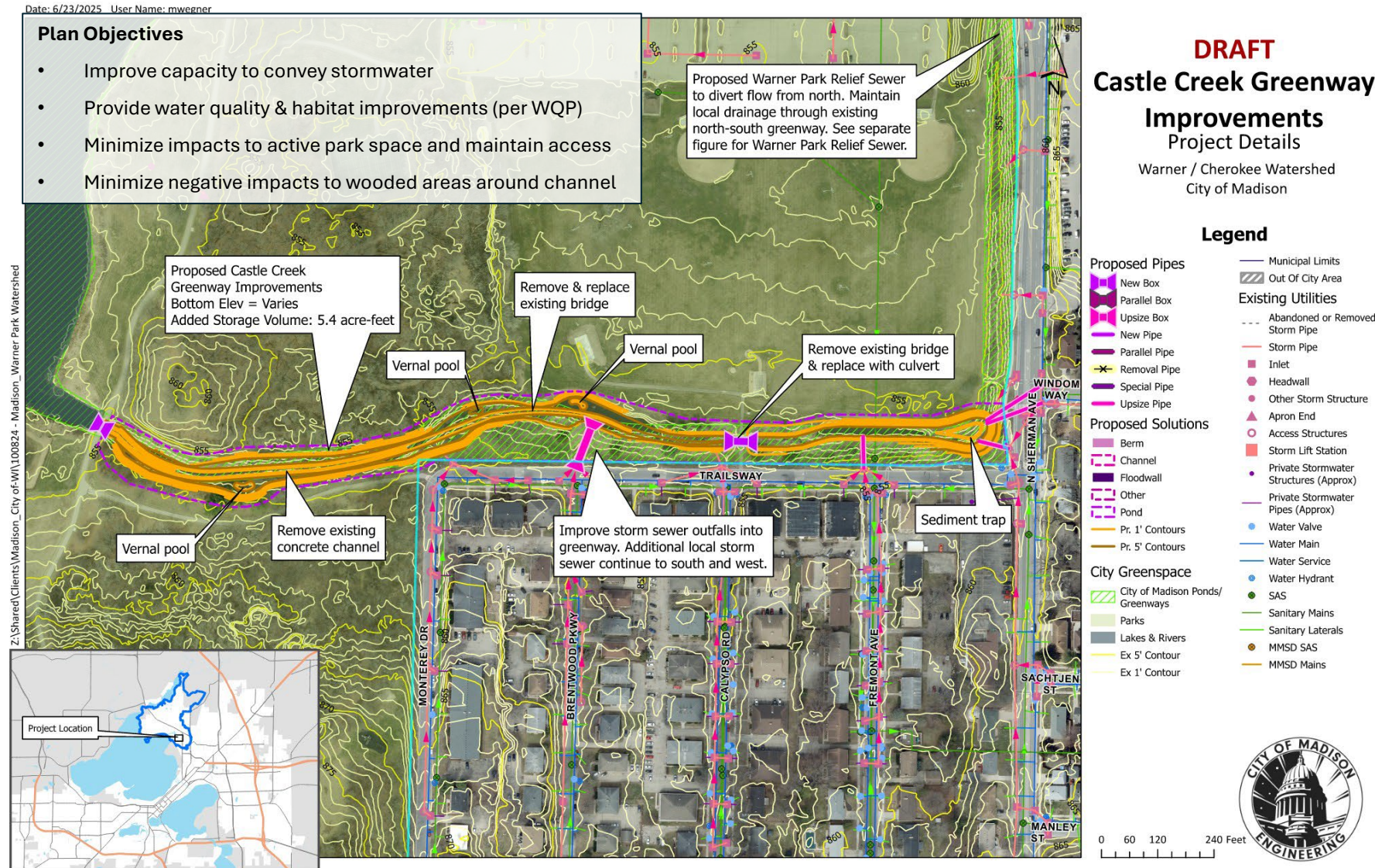
Warner Park Relief Sewer

- Divert runoff from north of park entrance into new relief sewer into Warner Lagoon
- Reduce flow reaching Castle Creek Greenway (to south)



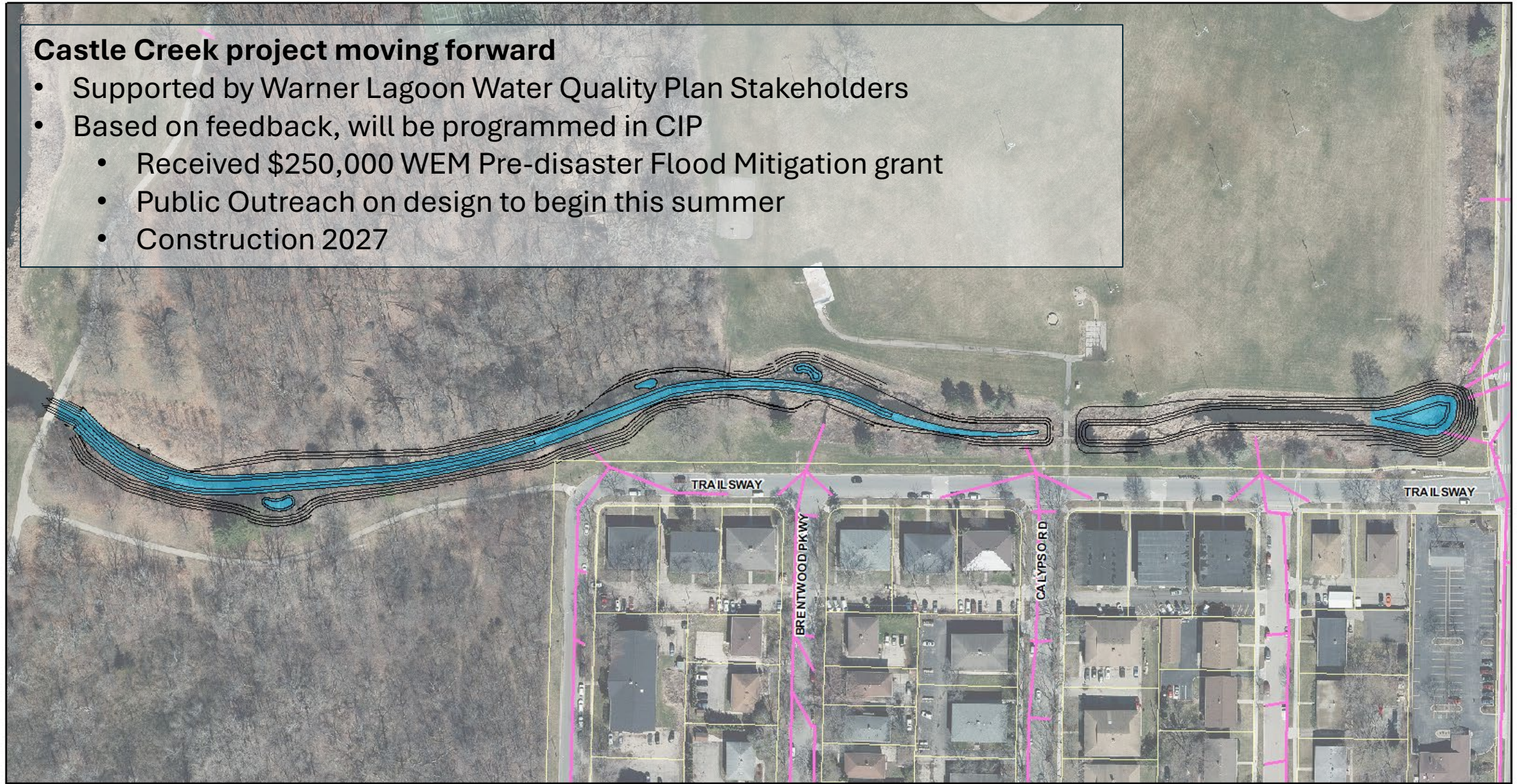
Castle Creek Greenway Improvements

- Re-grade greenway to create deeper channel within existing corridor
 - Add floodplain and vernal pools for improved habitat
- Reduce flooding along Trailsway and adjacent streets
- Incorporates concepts from the approved Warner Lagoon Water Quality Plan (2021)

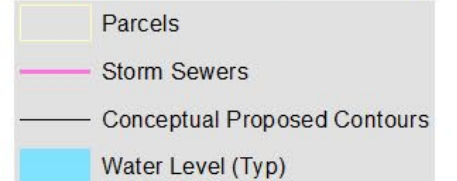


Castle Creek project moving forward

- Supported by Warner Lagoon Water Quality Plan Stakeholders
- Based on feedback, will be programmed in CIP
 - Received \$250,000 WEM Pre-disaster Flood Mitigation grant
 - Public Outreach on design to begin this summer
 - Construction 2027



0 75 150 300 Feet



Cost of Standalone Projects

Project	Estimated Cost
Castle Creek Greenway Improvements	\$2.35 million
Warner Park Relief Sewer	\$3.87 million
Camino Del Sol Relief Sewer	\$3.90 million
Lake View & Drewery Diversion Sewers	\$1.81 million
Lake View Diversion Downstream Sewer	\$4.43 million

Total = \$16.36M

Solution Impacts

Table ES-1. Existing Conditions and Proposed Solutions Results Compared to Flood Mitigation Targets

Warner Park & Cherokee Marsh Watershed Study
City of Madison, WI

Design Storm Events	Target	Watershed-wide Metric	Existing Conditions	Proposed Solutions
10% Chance Event	No Surcharging onto the street	16.1 miles of storm sewer	43% of modeled storm sewers surcharge onto street	9% of modeled storm sewers surcharge onto street
4% Chance Event	Centerline of street remains passable	49.8 miles of road	7% of roads with more than 0.5-ft of water	<1% of roads with more than 0.5-ft of water
1% Chance Event	No structure flooding	5,659 structures	232 (4%) structures impacted	25 (<1%) structures impacted
	Greenway crossings overtopped	2 greenway crossings	0 (100%) greenway crossings overtopped	0 (100%) greenway crossings overtopped
0.2% Chance Event	Safely convey stormwater	5,659 structures	443 structures impacted	203 structures impacted

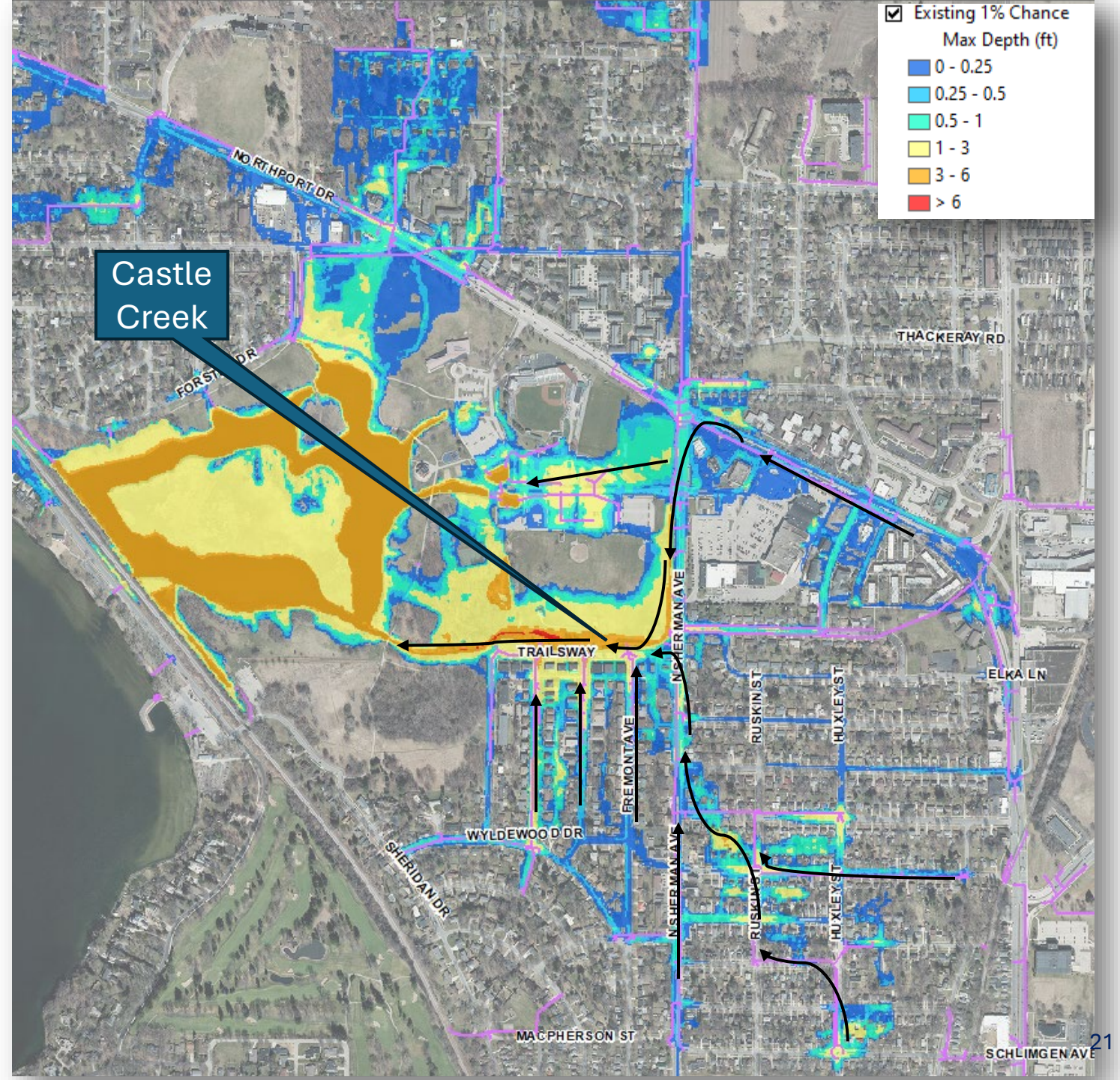
Questions?

Additional slides for reference only

Warner Park and Castle Creek Drainage Area

Existing Conditions 1% Chance Event (6.66" in 24 hr)

Castle Creek is a significant limitation in the drainage system. Several areas that flood drain out through Castle Creek and Warner Park



Existing 1% Chance

Max Depth (ft)

0 - 0.25

0.25 - 0.5

0.5 - 1

1 - 3

3 - 6

> 6



Brentwood Neighborhood

- Several multi family units flooding in 1% annual chance storm
- Building's parking lots flooded 1-3' deep
- Trailsway, Brentwood Pkwy, Calypso Rd flooding approaching 3' deep
- Flooding >1' deep on N Sherman Ave

Castle Creek Current Conditions



March 2025



March 2025

Castle Creek Current Conditions - Cunette



March 2023

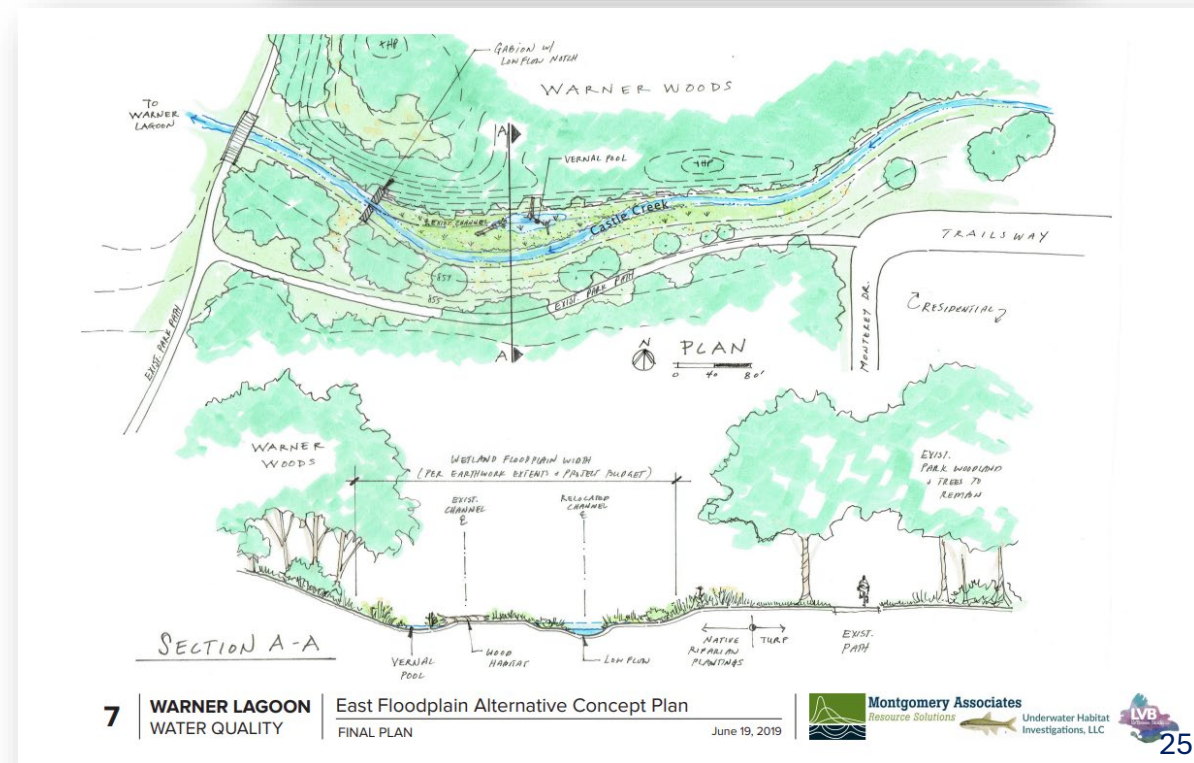


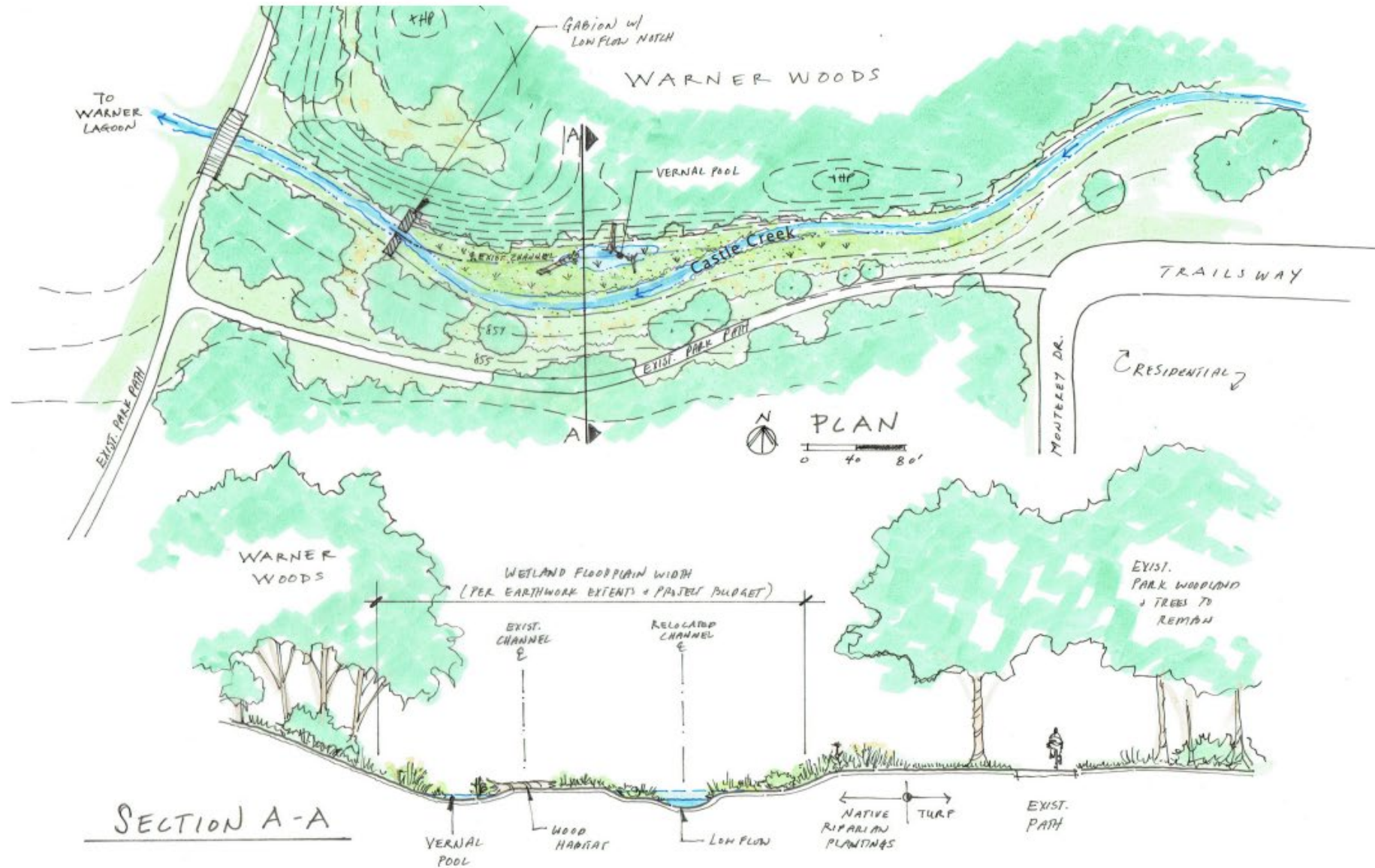
March 2025

Warner Lagoon Water Quality Plan (2016-2021)

- Objectives:
 - Maintain or Improve Recreational Access
 - Improve Water Quality
 - Habitat Maintenance and Improvement
 - Increase Educational Opportunities

- Stakeholders
 - Wild Warner Park
 - Yahara Fishing Club
 - Dane County Conservation League
 - Clean Lakes Alliance
 - Alders from Districts 12 and 18
 - City of Madison Engineering Division
 - City of Madison Parks Division
 - WDNR
 - Individual Residents





7

WARNER LAGOON
WATER QUALITY

East Floodplain Alternative Concept Plan

FINAL PLAN

June 19, 2019



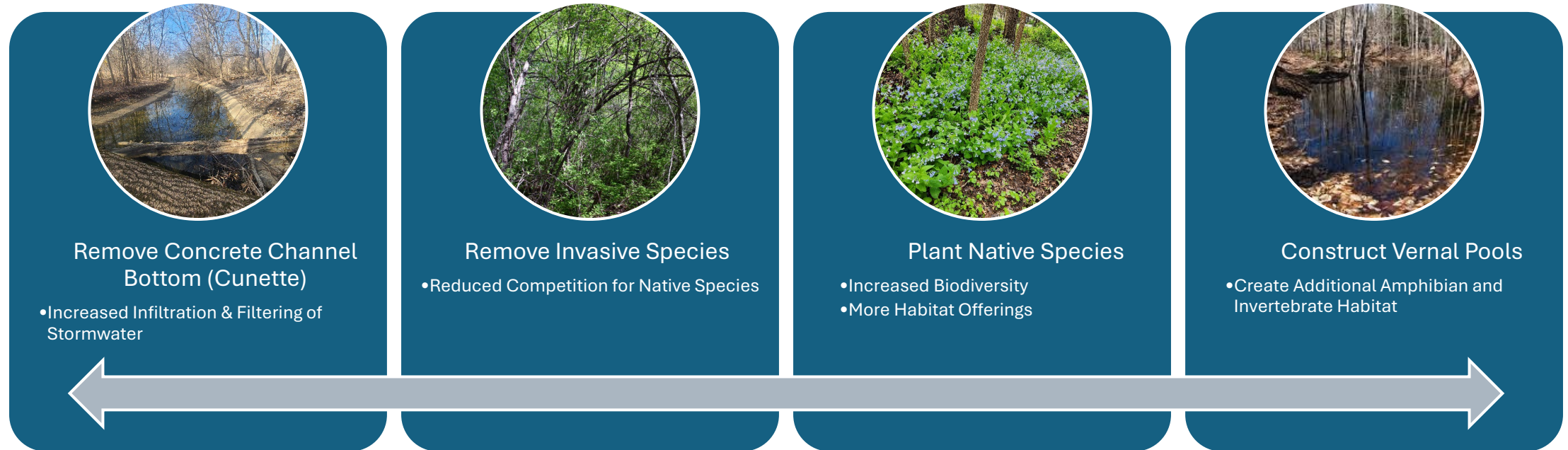
Montgomery Associates
Resource Solutions



Underwater Habitat
Investigations, LLC



Ecological Benefits & Potential Restoration Approaches



- Build on the Parks Green Team work removing invasives around the channel
- Plant desirable native species appropriate for the given conditions
- Conduct critical ongoing maintenance during native species establishment