



# Lower Badger Mill Creek Pond Construction

Public Information Meeting  
City of Madison Engineering Division  
Strand Associates  
July 26, 2022

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# Meeting Technical Housekeeping

- This meeting will be recorded and posted to the project page.
- All attendees should be muted to keep background noise to a minimum.
- Use the “chat” button for technical issues with meeting to troubleshoot with staff to assist.
- Use the “Q and A” button to type questions about presentation. Questions will be answered live after the presentation.
- Inappropriate questions may be dismissed.
- Use the **“raise your hand”** button to verbally ask your question. You will be prompted to unmute when it is your turn.

**This meeting is being recorded.**

**It is a public record subject to disclosure.**

By continuing to be in the meeting, you are consenting to being recorded and consenting to this record being released to public record requestors.

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# How to Participate

The screenshot displays a Zoom webinar interface. At the top, a green banner reads "You are viewing City of Madison's screen" with a "View Options" dropdown. The main content area shows a presentation slide titled "City of Madison" featuring a Microsoft Excel spreadsheet. The spreadsheet has a header row for months from May 2019 to August 2020, with data for "Sally" in May 2019 (\$2064) and "Sally" in May 2020 (\$2064). Below the spreadsheet, a blue button labeled "Join Audio by Computer" is highlighted with a red arrow. In the bottom left corner, a "Join Audio" button with a headset icon is also highlighted with a red arrow. The bottom right corner features a "Leave Webinar" button. The bottom toolbar includes icons for "Join Audio", "Q&A", "Chat", and "Raise Hand".

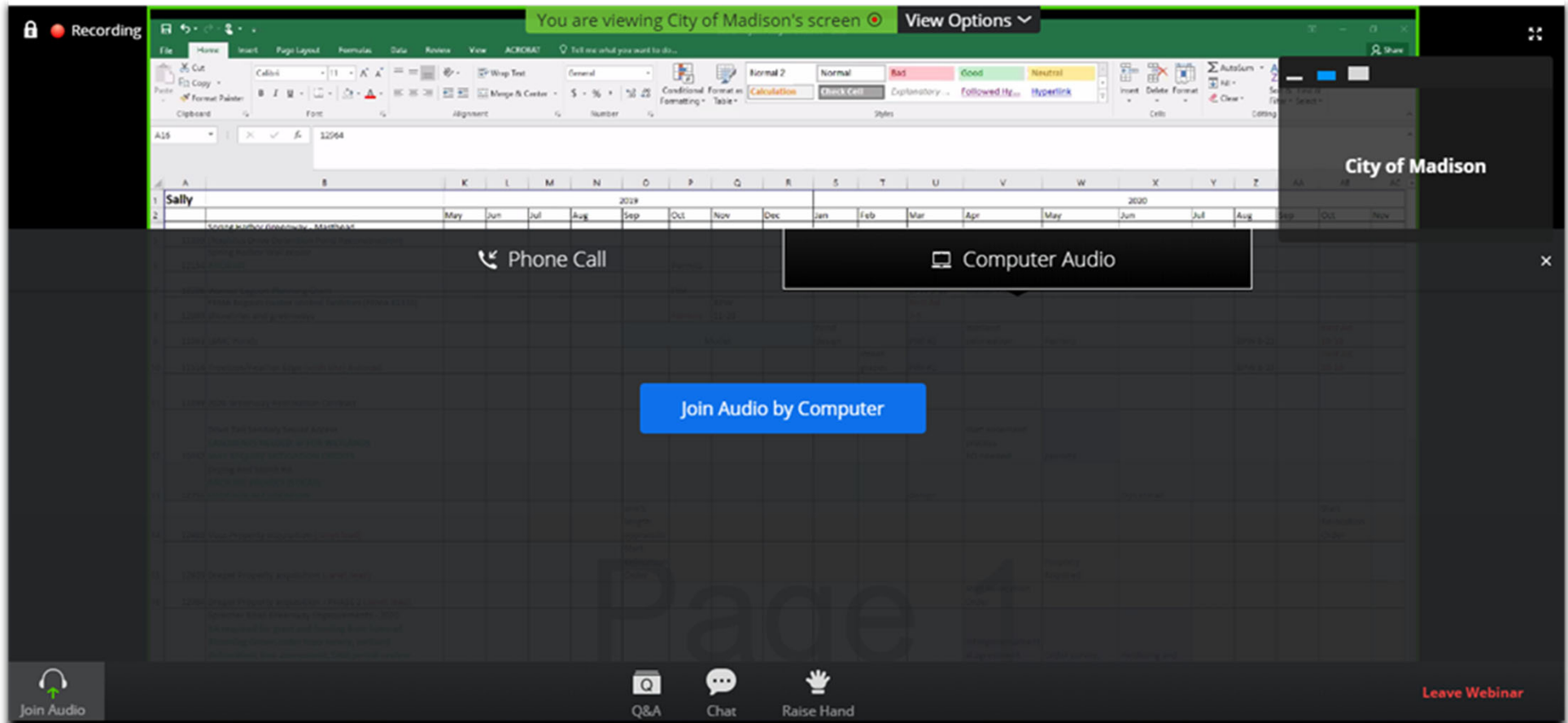
Make sure to join audio

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# How to Participate



Raise your hand to be unmuted  
For comments or ask additional questions.



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# How to Participate

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Use chat if you have technical issues  
or a question for the panelists



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Use Q/A if you have questions.  
We will answer after the presentation



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To leave the meeting  
click here **CITY OF MADISON**



# Overview

- Project Introduction
  - Project team
  - Project location and limits
  - Existing Conditions
- Design Alternatives
  - Design Objectives
  - Alternatives Analysis
  - Construction and Access
- Project Schedule
- Questions

# Project Team



- City of Madison
  - Matt Allie, P.E., Project Manager
  - Reid Stiteley, Project Engineer
  - Jim Wolfe, P.E., Project Engineer
  - Hannah Mohelnitzky, Public Information Officer
  - Janet Schmidt, P.E., Principal Engineer
  - Alder Barbara McKinney, District 1
- Strand Associates, Inc.
  - Justin Gutoski, P.E.
  - Keith Lyster
  - Skylar Yaktus
  - Keith Behrend, P.E.

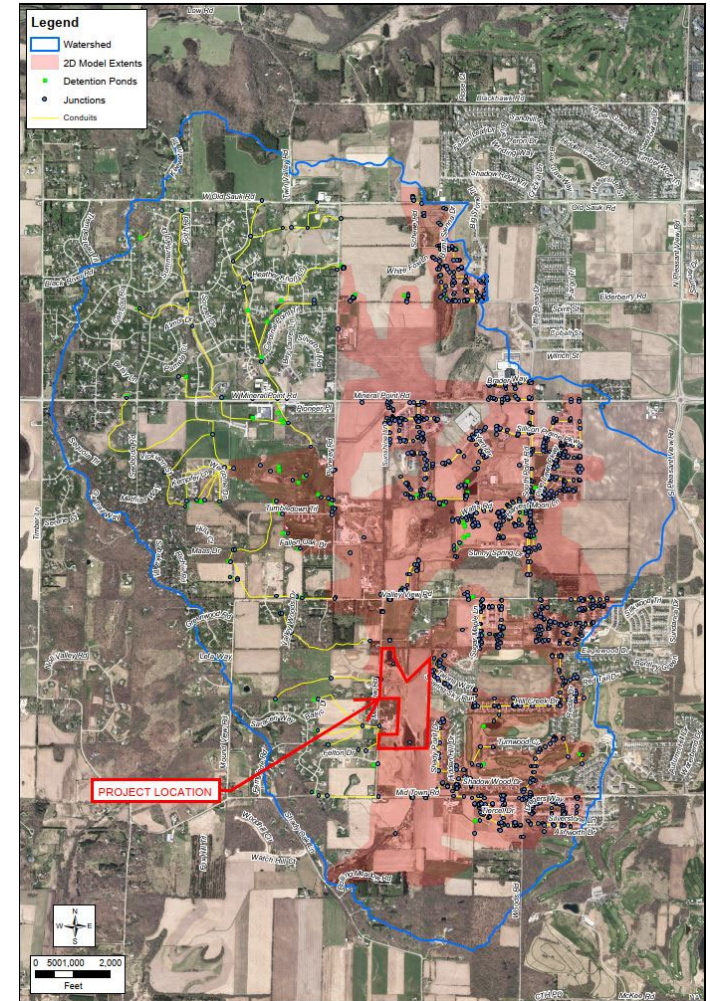


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# Lower Badger Mill Creek Watershed

- Lower Badger Mill Creek watershed area ~5,000 acres
- 2003 and 2021 watershed studies
- Project area contributing watershed ~3,900 acres
- Project goals include flood mitigation, water quality enhancement, and environmental benefits

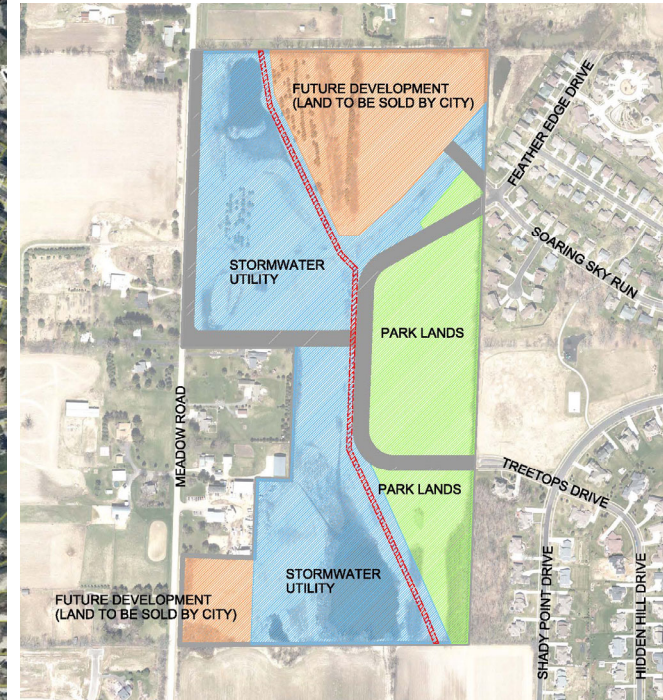
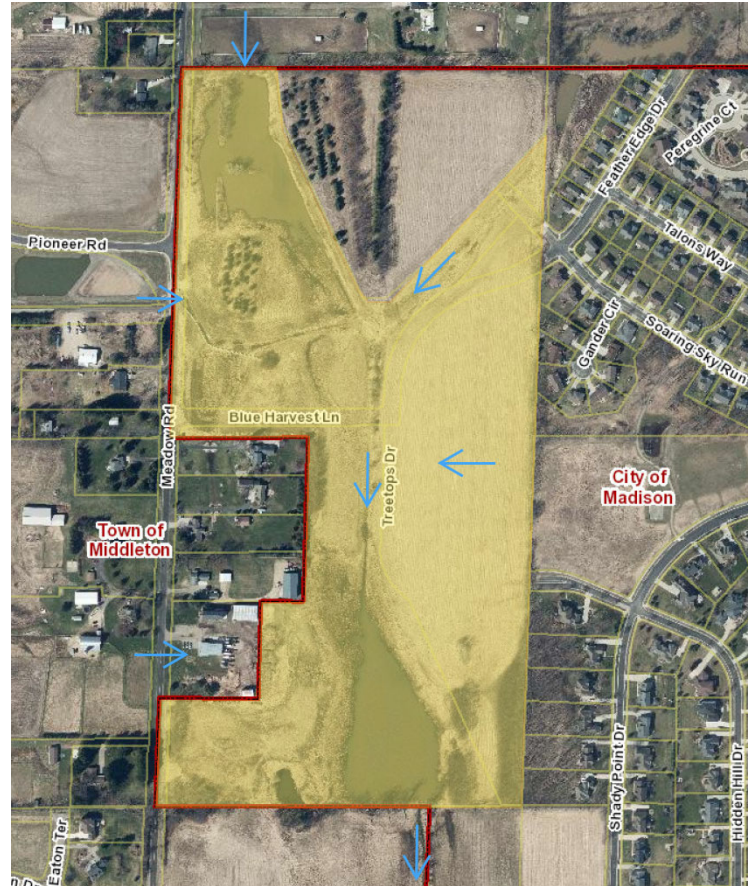
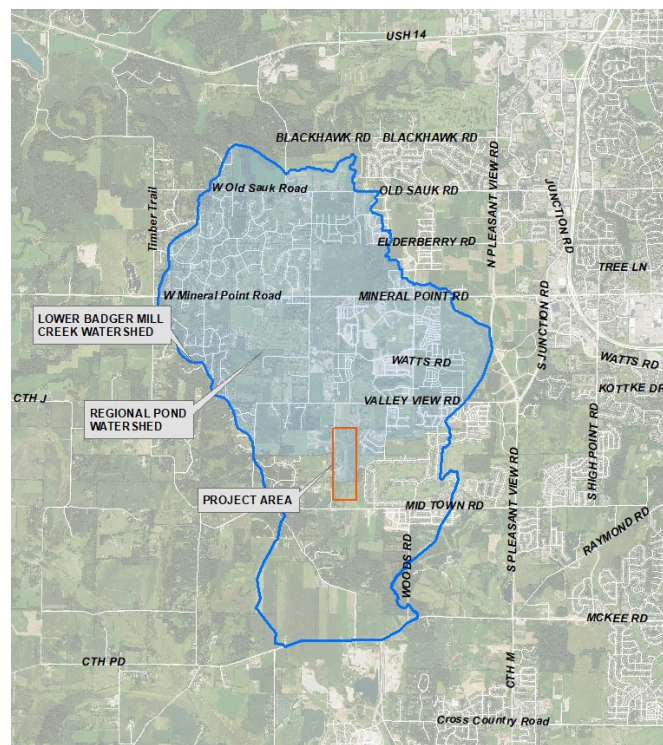


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# Project Location





# Existing Conditions

- Wetland delineation was completed in 2016 and boundary updated in 2022
- Wetland exemption request submitted to WDNR in 2021
- Wetlands within study area dominated by reed canary grass



PHOTO LOCATION 2 (facing S):

This photo was taken while standing on a four-wheeler access path. The previous photo was taken while facing north; this photo was taken while facing south. The water entrance to the upper pond is shown here. It consists of a gravel lined low point.



PHOTO LOCATION 7 (facing WSW):

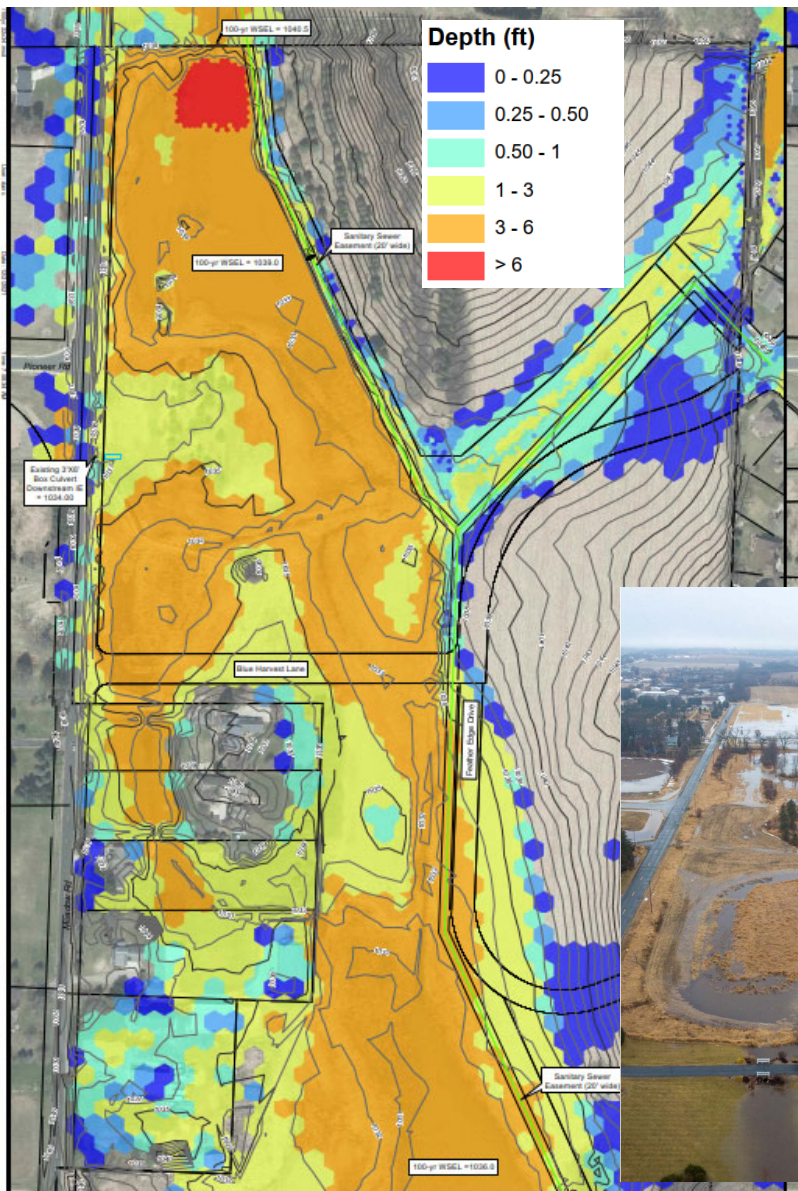
The flow path in this area becomes less distinct. Standing water was noted for a significant distance in this area. No significant changes in the reed canary grass were noted.



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## Existing Conditions 1% Chance Flood Depth

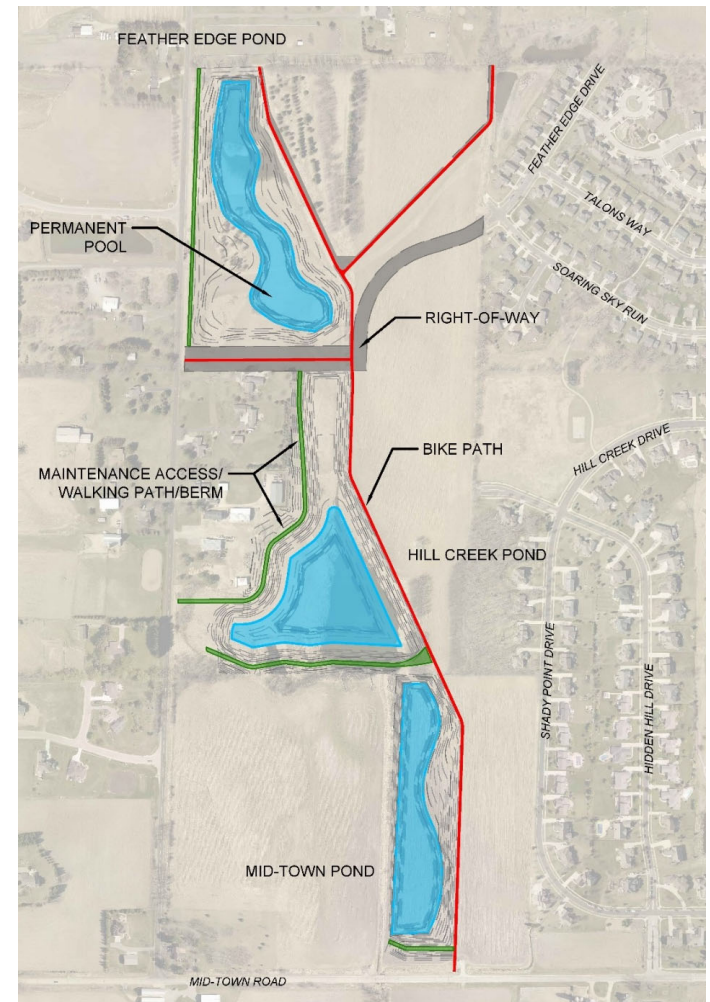
- Inundation spreads out from Meadow Road to east edge of Stormwater Utility property
- 1% chance event high water elevation 1039.0 at the north end and 1036.0 at the south end
- Localized flooding on private properties along Meadow Road

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# Proposed Design Objectives

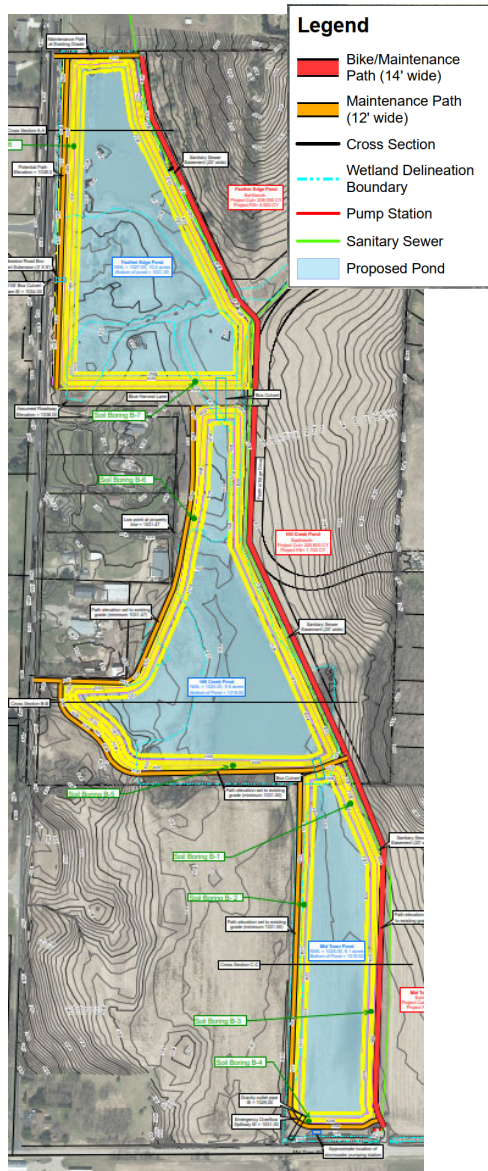
- Regional stormwater storage
- Limit the amount of open water storage
- Flow diversion to reduce regional flow leaving SWU parcels
- Low-flow channel through site
- 6" inundation or less on proposed Blue Harvest Lane for 1% chance event
- Abide by permitting requirements
- 12-foot-wide gravel maintenance paths and paved multi-use paths
- Mountain bike trail connections
- Water quality benefits
  - Total Suspended Solids reduction
- Utilize native plantings in restoration plan



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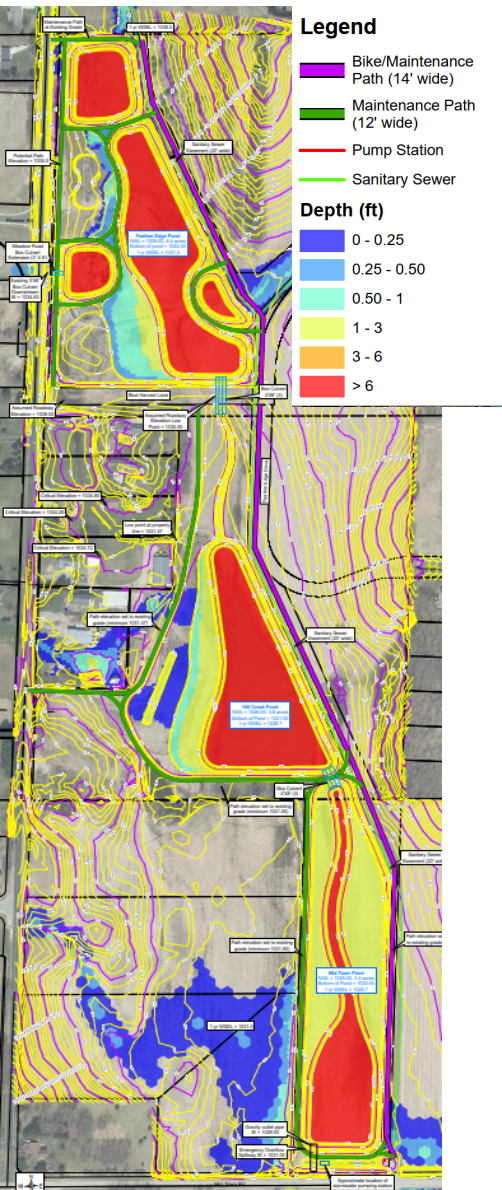






## Proposed Design – Alternative 1

- Maximize storage
- Three wet detention ponds
  - Feather Edge (north) = 10.0 acres
  - Hill Creek Pond (middle) = 9.6 acres
  - Mid Town Pond (south) = 6.1 acres
- South pond would require a stormwater pumping station to drawdown water levels
- Maintenance paths and multi-use path
- Pros
  - Provides a lot of storage and biggest impact on mitigating localized flooding
  - Greatest water quality benefit
- Cons
  - All open water storage
  - Large wetland disturbance
  - Expensive
  - Possible permitting issues



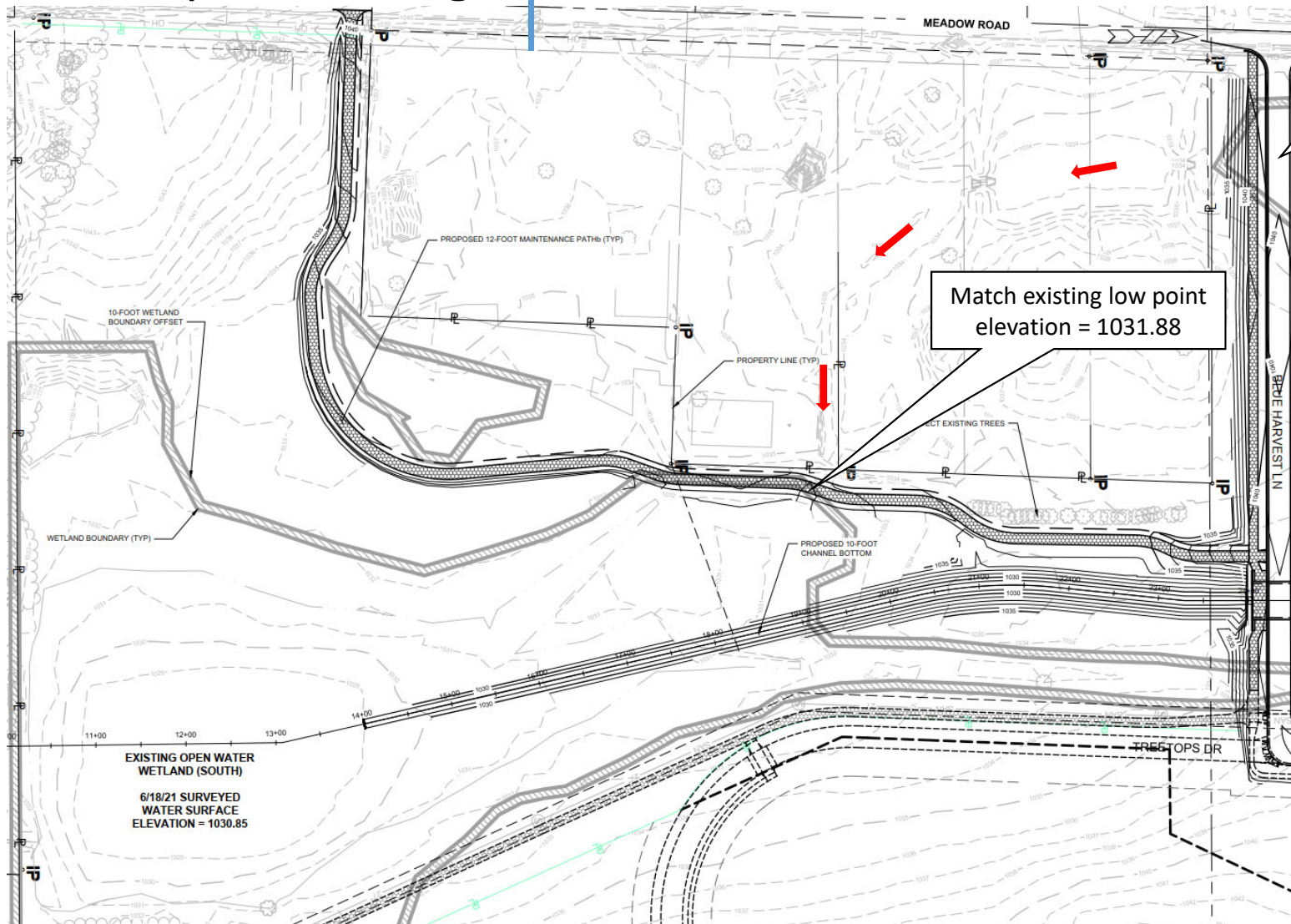
## Proposed Design – Alternative 2

- Three wet detention ponds
  - Feather Edge (north) = 6.4 acres
  - Hill Creek Pond (middle) = 3.8 acres
  - Mid Town Pond (south) = 3.4 acres
- South pond would require a stormwater pumping station to drawdown water levels
- Maintenance paths and multi-use path
- Upland emergent wetland and storage areas
- Low flow channel in Hill Creek and Mid Town ponds
- Pros
  - Meets the majority of project goals
- Cons
  - Large wetland disturbance
  - Expensive
  - Reduced storage





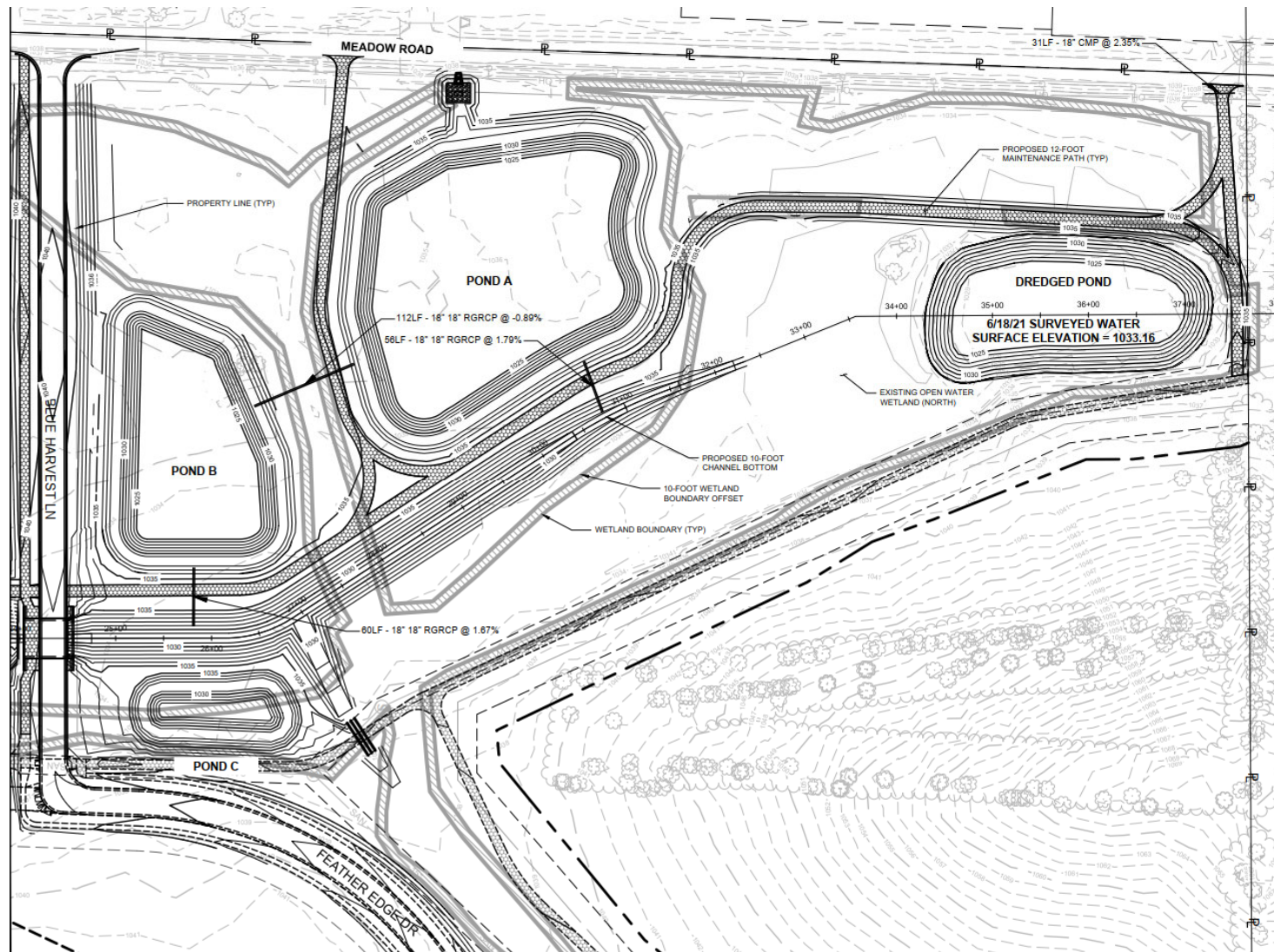
# Proposed Design – South of Blue Harvest Lane



SON



# Proposed Design – North of Blue Harvest Lane

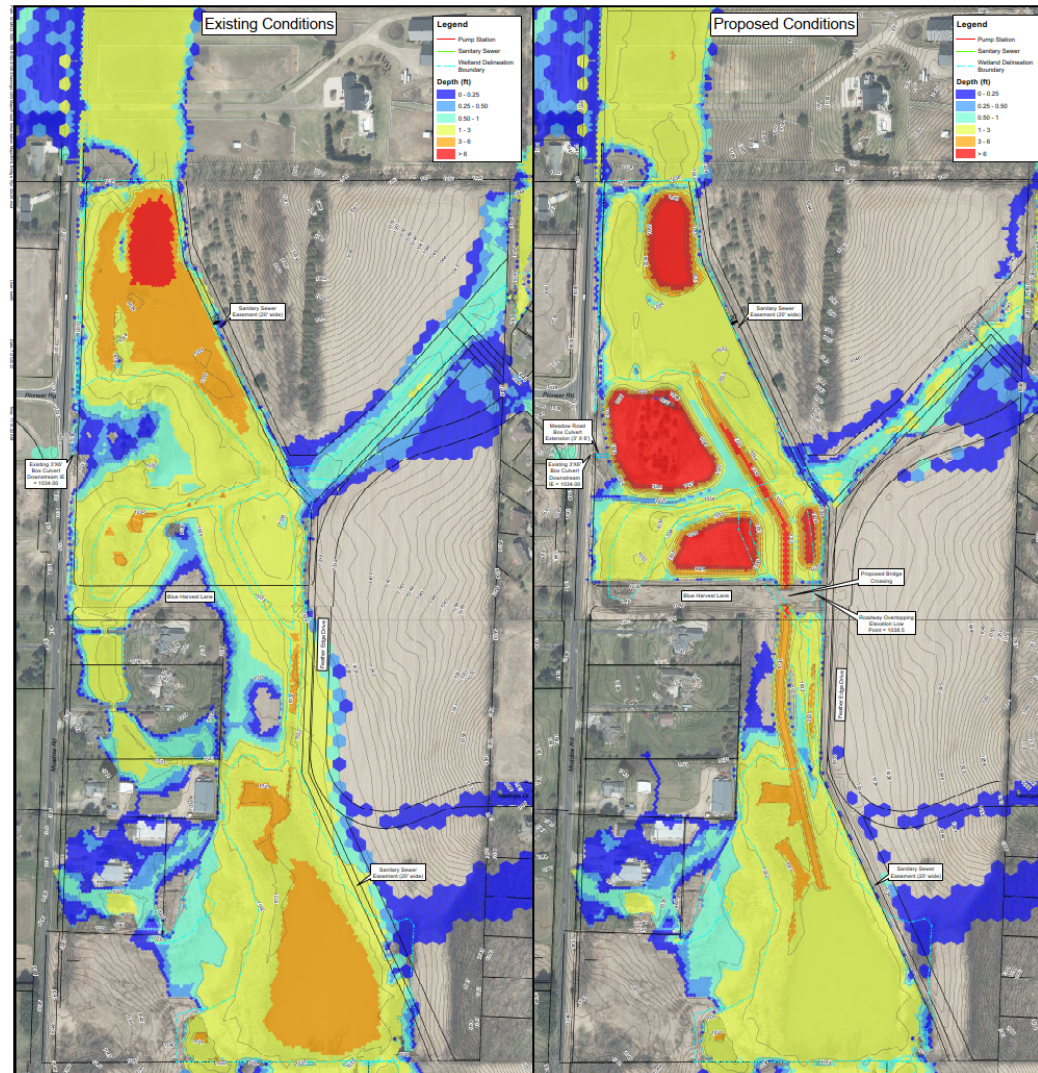


DISON

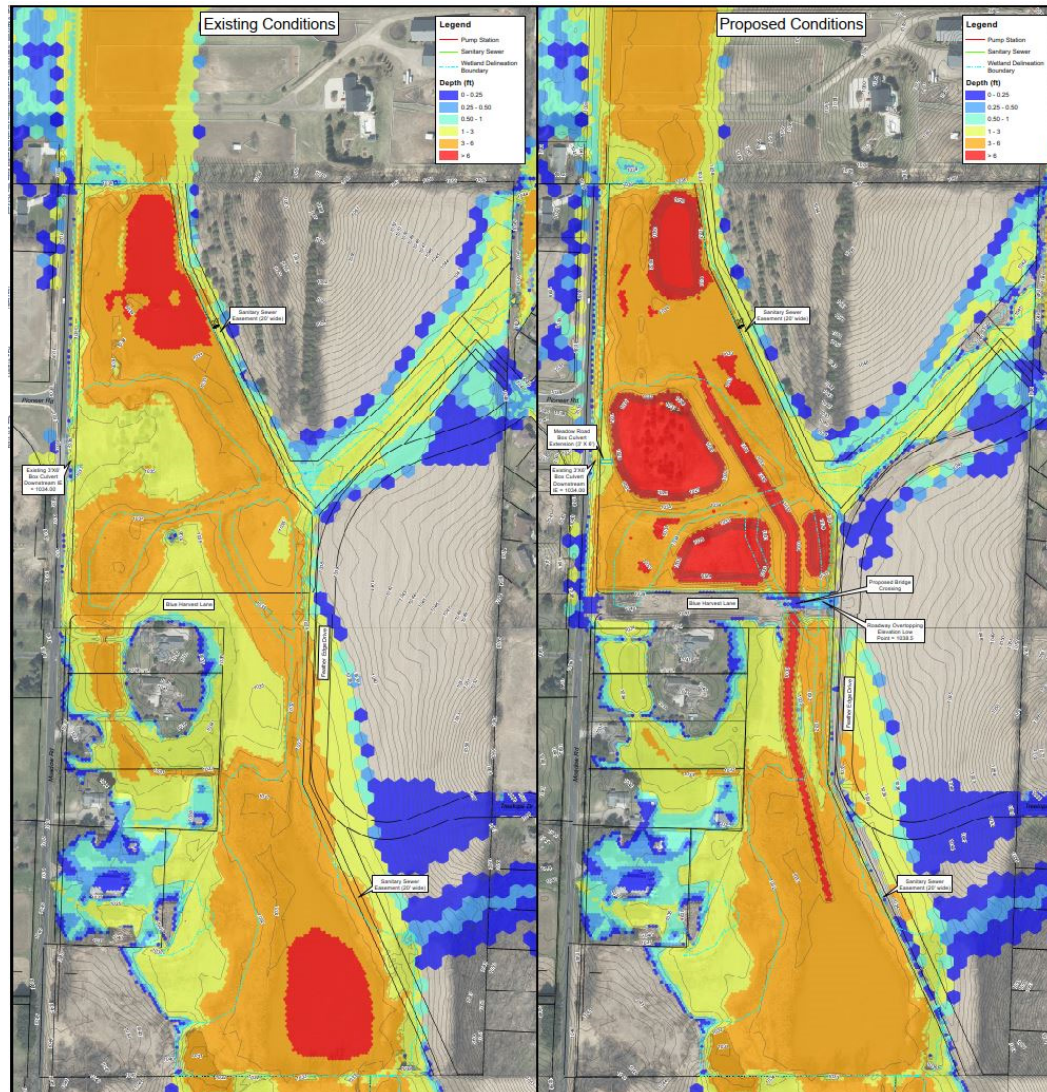




# Proposed Conditions 10% Chance Flood Depth



# Proposed Conditions 1% Chance Flood Depth



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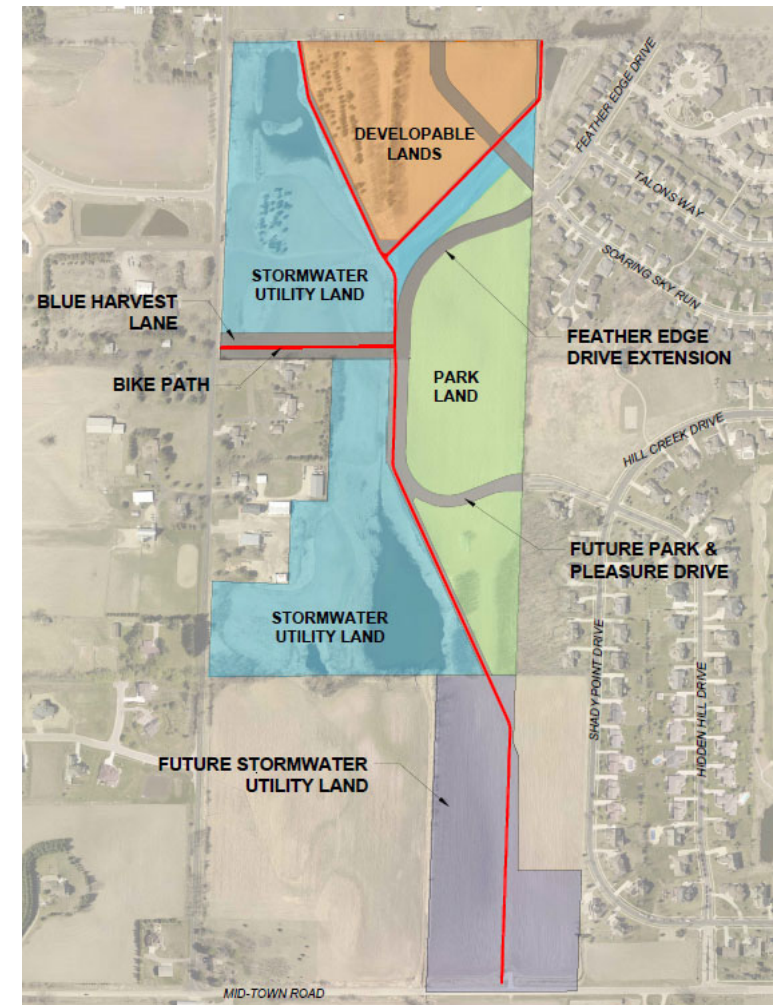
# Greenway Restoration Plan

- Native forbes & grasses will be incorporated into restoration
  - Plant plugs based on anticipated inundation conditions
  - Place seed mix, takes time to become established



# Proposed Street Construction

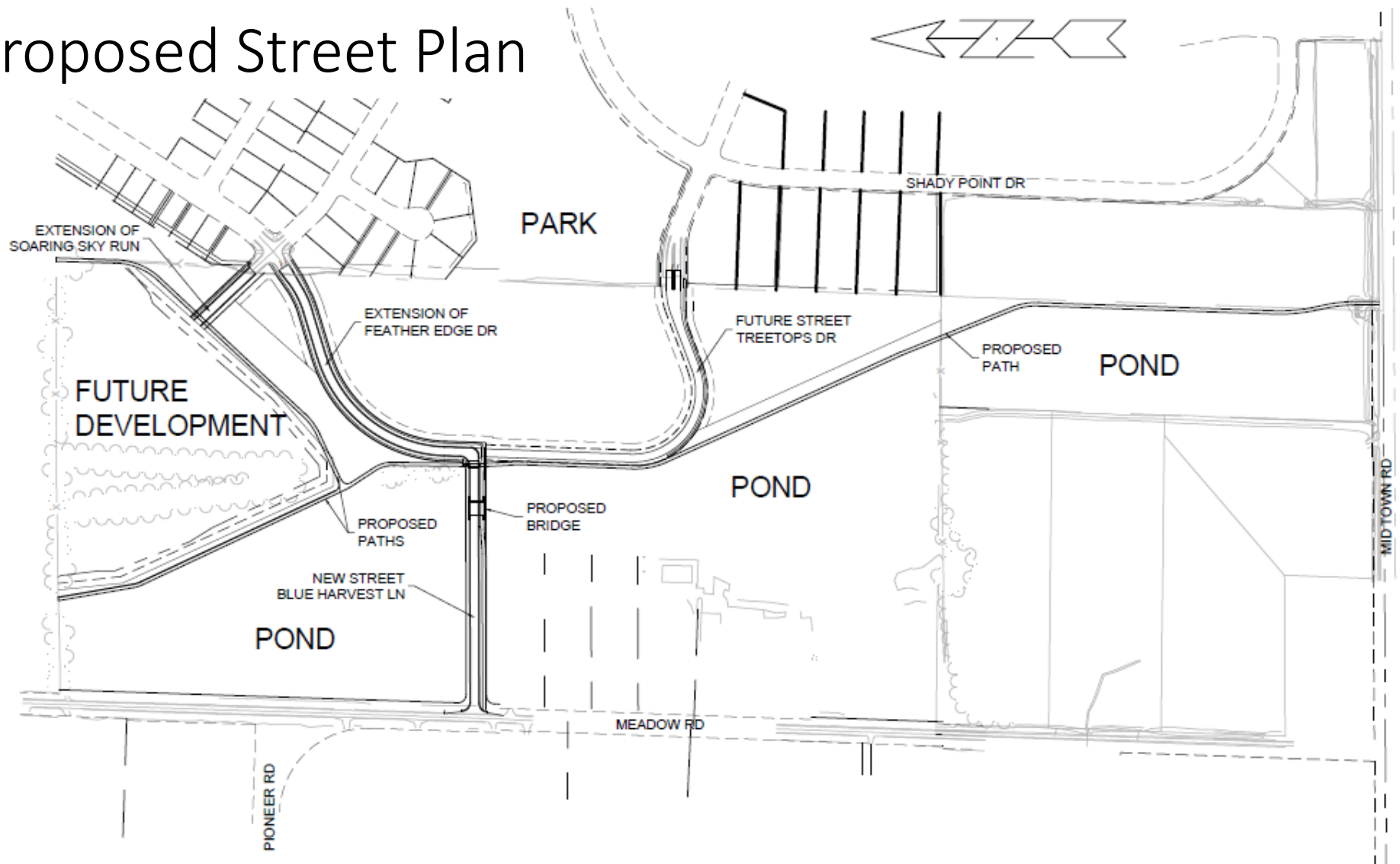
- Construct new streets and paths consistent with adopted Neighborhood Plan
  - Extend Feather Edge, new Blue Harvest Ln
  - Future Treetops connection to be coordinated with Parks
  - Construct Paths from Mid Town to northern project limit
- Install new bridge on Blue Harvest, over new channel



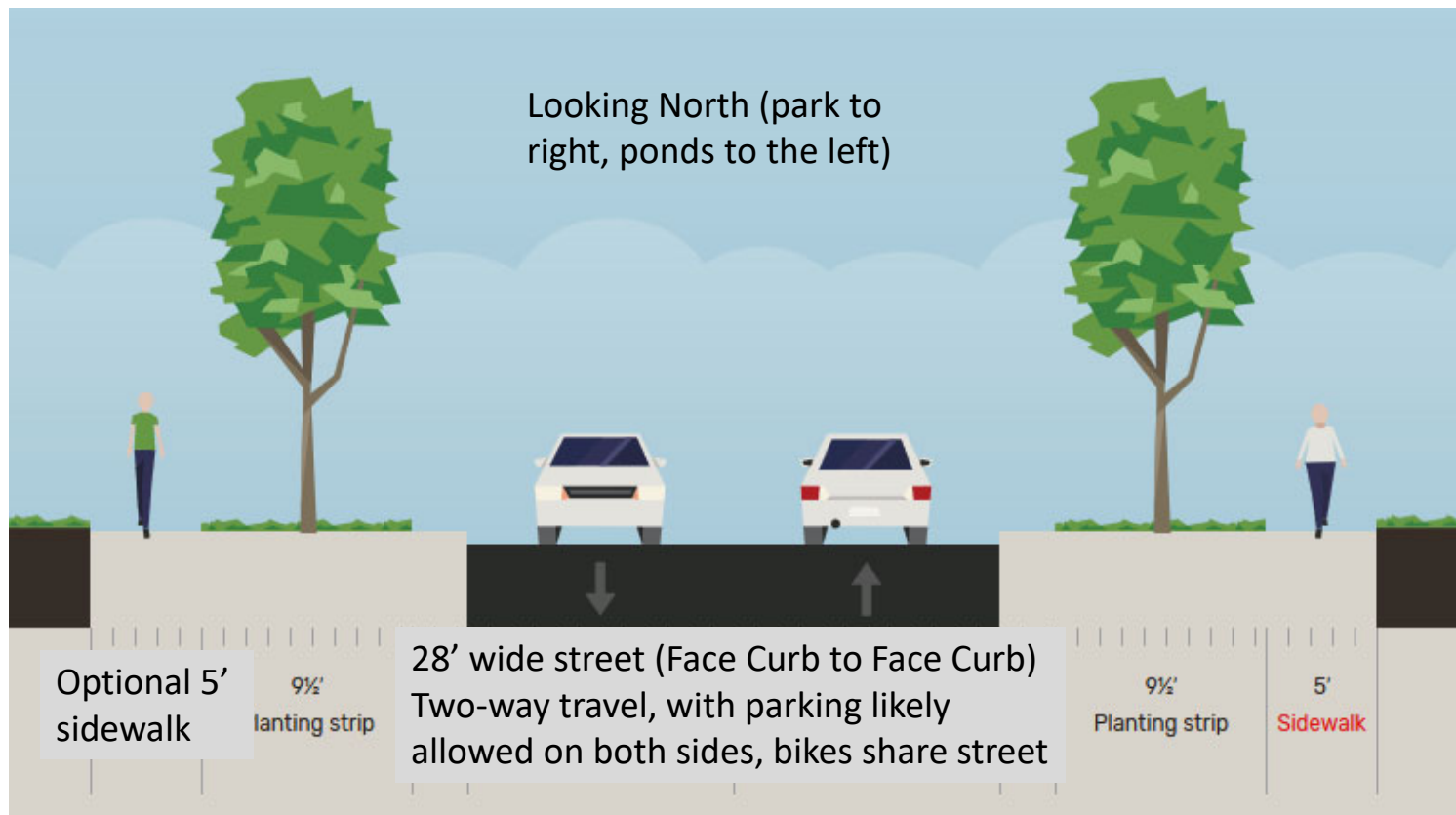
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# Proposed Street Plan



# Extension of Feather Edge

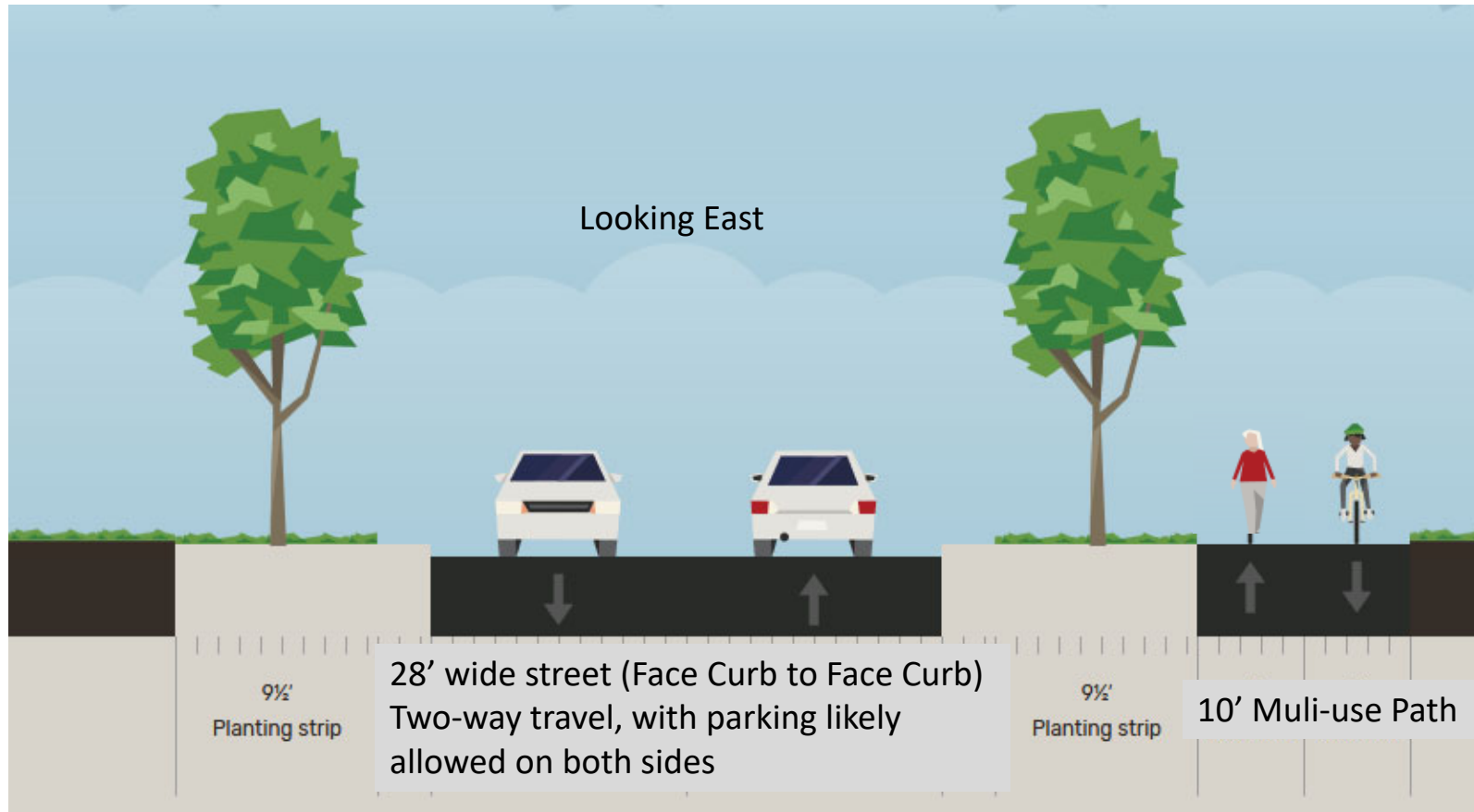


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# New Blue Harvest Ln.

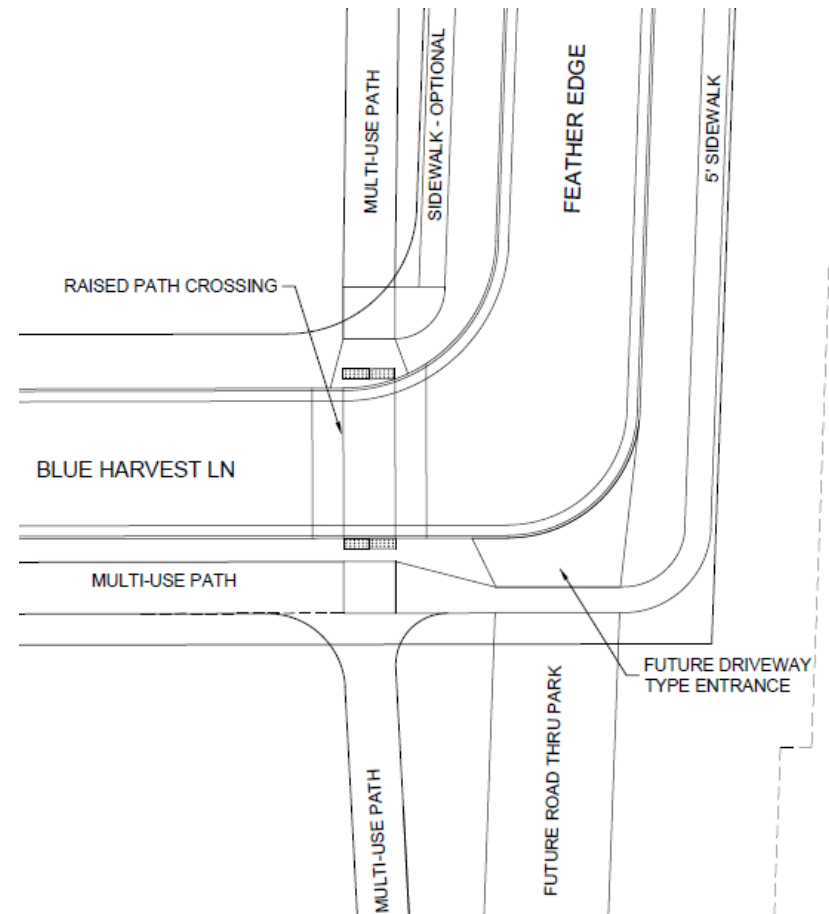


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# Feather Edge & Blue Harvest Intersection

- Narrow street width
- Tight curve
  - Raised path crossing
  - Priority to bike/ped crossing
- Speed reduction
- Future driveway type entrance to park road



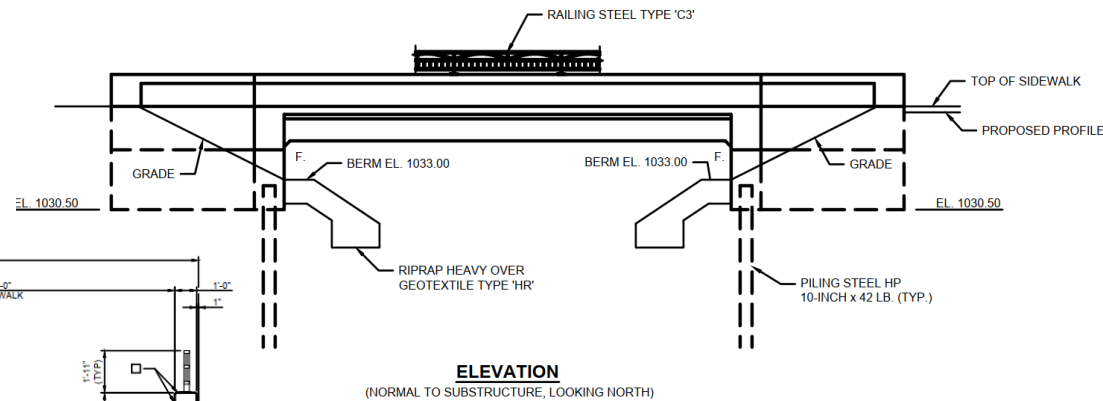
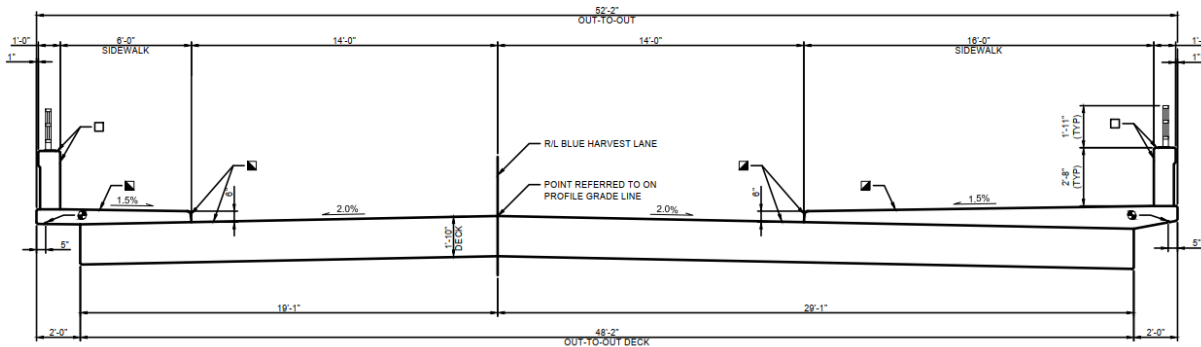
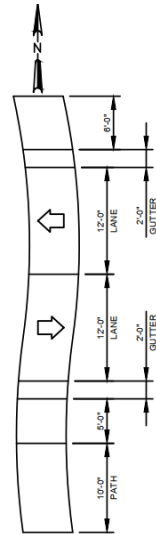
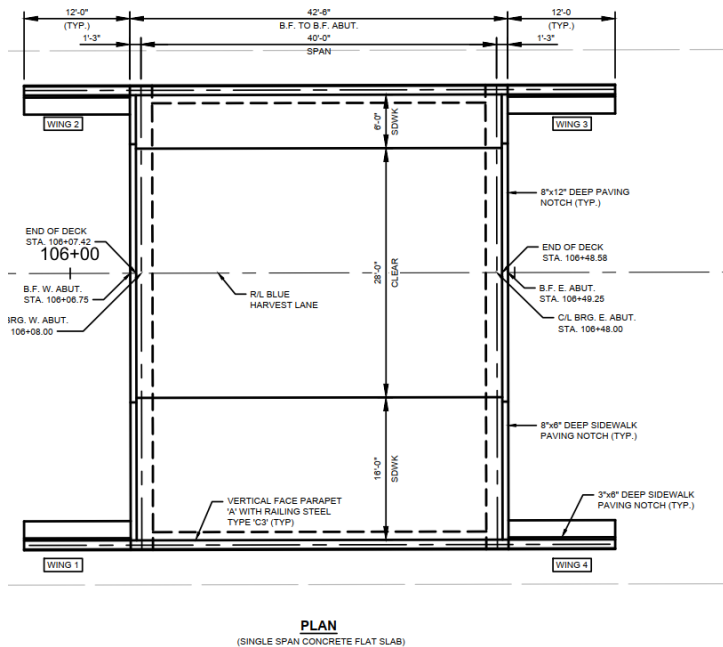
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# Proposed Design – Blue Harvest Lane Bridge

- Designed by Strand Associates
- 40-foot-wide single span concrete flat slab bridge
- Concrete parapets with decorative steel railing
- Concrete wingwalls
- Multi-use path carried across bridge



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## Construction & Access

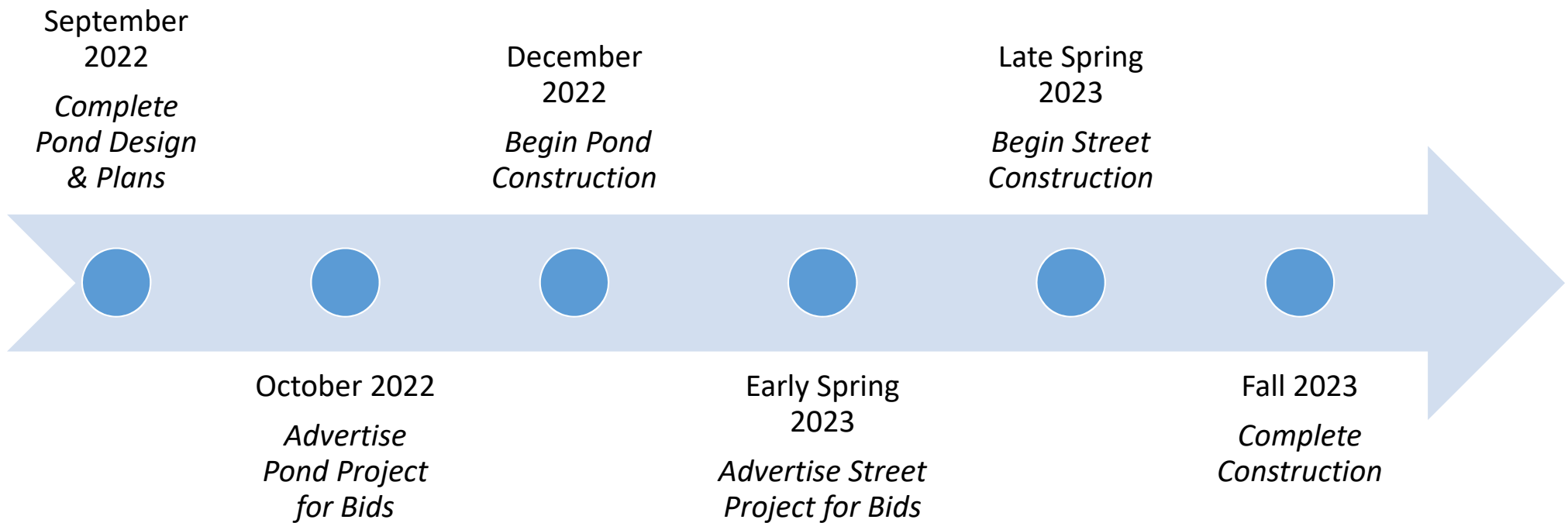
- Pond to be constructed solely on Stormwater Utility property
- Construction access primarily from Meadow Road
- Blue Harvest Lane and Feather Edge Drive project will coincide with pond construction
- Existing stormwater conveyance systems will remain online during construction



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# Project Schedule



# Contact Information & Resources

## ➤ Engineering

- Matt Allie P.E., 608-266-4058, MAllie@cityofmadison.com
- Hannah Mohelnitzky, Public Information Officer, 608-242-6003, HMohelnitzky@cityofmadison.com
- Reid Stiteley, 608-266-4093, RStiteley@cityofmadison.com

## ➤ Project Website: [cityofmadison.com/engineering/projects/lower-badger-mill-creek-pond](http://cityofmadison.com/engineering/projects/lower-badger-mill-creek-pond)

- Sign-up for project email updates on the website
- Updates on closures & work progress will be posted to the project website

## ➤ Facebook – City of Madison Engineering

## ➤ Twitter – @MadisonEngr

## ➤ Engineering Podcast: Everyday Engineering on iTunes, GooglePlay

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Questions and Answers

Thank You For Attending

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