



Lake Mendota Drive Reconstruction - 2024

Public Information Meeting
City of Madison Engineering Division
Thursday, November 30th at 6pm

Thank you for attending. We will begin shortly...



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.



How to Participate

The screenshot displays a Zoom meeting interface. At the top, a green banner reads "You are viewing City of Madison's screen" with a "View Options" dropdown. Below this is a shared Microsoft Excel spreadsheet showing a calendar for 2019 and 2020. The spreadsheet has columns for months and rows for years. A "City of Madison" logo is visible in the top right corner of the shared content. In the bottom left corner, there is a "Join Audio" button with a headset icon. In the bottom center, there are icons for "Q&A", "Chat", and "Raise Hand". In the bottom right corner, there is a "Leave Webinar" button. A "Phone Call" button is visible in the middle of the screen, and a "Computer Audio" button is highlighted with a white box. A blue button labeled "Join Audio by Computer" is positioned below the "Computer Audio" button, with a red arrow pointing to it.



Make sure to join audio



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. Below this is a Microsoft Excel spreadsheet with a ribbon and a grid. The grid shows a calendar for 2019 and 2020. A "City of Madison" logo is visible in the top right corner of the screen. In the center, there are two buttons: "Phone Call" and "Computer Audio". A blue button labeled "Join Audio by Computer" is positioned below them. At the bottom of the screen, there is a toolbar with icons for "Join Audio", "Q&A", "Chat", and "Raise Hand". A red arrow points to the "Raise Hand" icon. The text "Leave Webinar" is visible in the bottom right corner.

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



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How to Participate

The screenshot displays a Zoom meeting interface. At the top, a green banner reads "You are viewing City of Madison's screen" with a "View Options" dropdown. The main content is a shared Microsoft Excel spreadsheet. The spreadsheet has a header row with columns labeled A through Z. Row 1 contains the name "Sally" in column A, followed by a calendar for the year 2019 (columns K through X) and another calendar for the year 2020 (columns Y through Z). Below the spreadsheet, there are two audio options: "Phone Call" and "Computer Audio". A blue button labeled "Join Audio by Computer" is positioned below these options. At the bottom of the Zoom window, there is a toolbar with icons for "Join Audio", "Q&A", "Chat", and "Raise Hand". A "Leave Webinar" button is located in the bottom right corner.

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



How to Participate

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To leave the meeting
click here

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Presentation Outline

- Project Location
- Scope of Work
- Existing Conditions
- Proposed Utility Work
- Proposed Street Work – Review Plan
- Stormwater Treatment Opportunities
- Forestry Information
- Assessment Policy
- Construction Access & Info
- Project Schedule & Meetings
- Q&A Discussion



Project Location



Scope of Work

➤ Utility Work

- Install Sanitary Sewer Structures & Main
 - Limited Lateral Replacement
- Replace & Upgrade Storm Sewer
 - Stormwater Treatment Opportunities
- Existing Water Main lined in advance

➤ Street Work

- Replace Asphalt Pavement & Rock Base
- Curb & Gutter (Rolled, Village-style)
- Sidewalk (both sides as approved 2022)



- MG&E will also replace gas main within project limits

Existing Street Conditions

- Lake Mendota Drive
 - Epworth Ct to Spring Harbor Dr
- Pavement Rating = 4-6 out of 10
- Incomplete Sections of Curb & Sidewalk
- Existing Street Width
 - 26-Ft to 36-Ft
- City Right-of-Way Width
 - 66-Ft
- On-Street Parking on Both Sides of Streets
 - Parking Restrictions around Spring Harbor Middle School



Utility Work: Sanitary Sewer

➤ Existing Sanitary Main

- Lake Mendota Dr - Epworth Ct to Spring Harbor Dr = 18" CIP Lined (2019)
- Norman Way = 8" VCP (1952)
- Harbor Ct = 6" CI (1938) – Stub Extension for Future

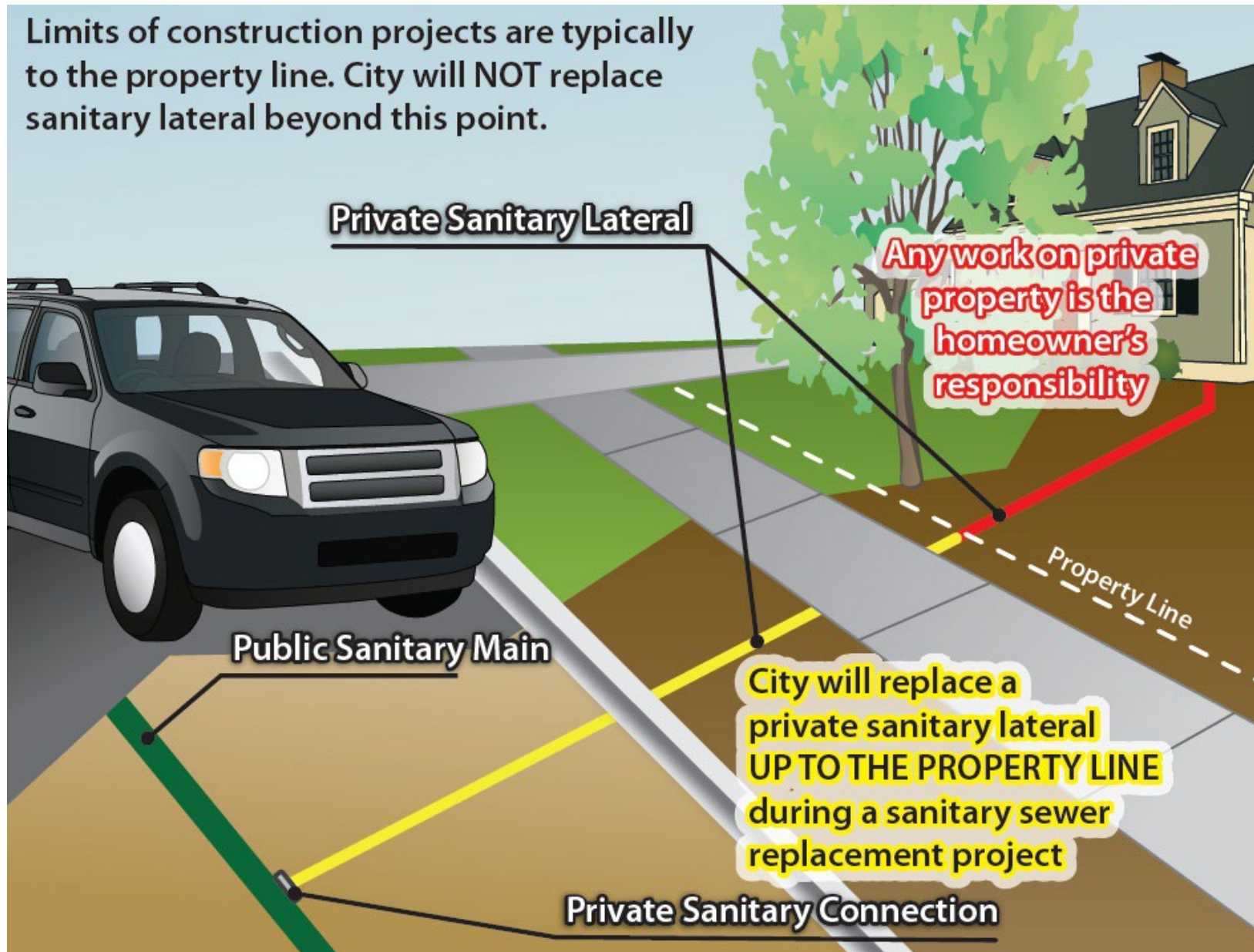
➤ Existing Private Shared Laterals – (4 Locations)

- Existing shared laterals connect at MMSD structures
- Plan to extend new City sewer main & reconnect laterals from MMSD structure
 - Where necessary, new lateral pipe will be installed from new City sewer to property lines. (assessable w/ cost-share)

➤ Proposed Sanitary Sewer

- Replace all sanitary sewer main with min. 8" PVC Pipe
- Replace all sanitary sewer laterals with 6" PVC Pipe
 - Lateral replacement from new main to property line

Limits of construction projects are typically to the property line. City will NOT replace sanitary lateral beyond this point.



Utility Work: Sanitary Sewer Laterals

Utility Work: Storm Sewer

➤ Existing Storm Sewer – Norman Way

- 3'x4' box culvert from Lake Mendota Dr to lake
 - Path along Spring Harbor Beach functions as path (to remain)
- Flood Mitigation Study identified need for capacity improvements

➤ Existing Storm Sewer – Clifford Ct

- 15" RCP discharges to lake
- No planned improvements for existing outlet pipe
 - Replace storm sewer within LMD ROW
 - Install catchbasin upstream of outlet

➤ Existing Storm Sewer – Harbor Ct to Norman Way

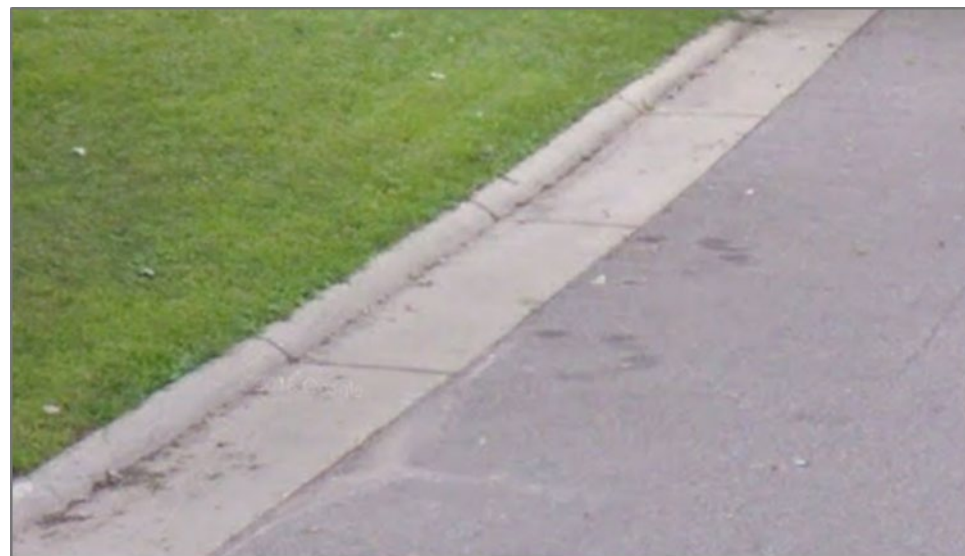
- 18" RCP connects to 3'x4' box culvert from low point near Harbor Ct
- Flood Mitigation Study identified sewer was undersized

➤ Proposed Storm Sewer

- Increase stormwater collection and conveyance capacity
 - Install storm sewer along side existing box culvert
 - Plan for Norman Way Public Works project (2026)
 - Improve collection along LMD near Harbor Ct
 - Extend toward Spring Harbor Dr & connect raingarden outlet
- Relocate & replace existing LMD ROW storm sewer

Proposed Street Work

- Replace the pavement & gravel base; install curb (village-type) and sidewalk
- Layout of new street per geometrics approved by Council in April 2022
 - Narrowed street width (26-28 Ft)
 - Continuous sidewalk on both sides
 - Epworth Ct to Spring Harbor Dr
 - Traffic Circle at Norman Way Intersection
 - Raised Pedestrian Crossing by Middle School
 - Speed Hump for cars
 - Chicanes for Tree Preservation/Rain Gardens
 - Traffic Calming
- Planning Dept. is looking into citywide, historical marker signage
 - Include on Lake Mendota Drive
 - Working with Ho-Chunk Nation



Lower profile, rolled curb head (village-style)

REVIEW PLAN



PARKING NOTES:

- ALTERNATE EACH SIDE OF THE STREET TO PROVIDE TRAFFIC CALMING.
- 47 PROPOSED PARKING SPOTS.
- MATCHES PHASE 1 (BAKER AVE TO EPWORTH COURT)

Proposed Parking Layout on LMD Ph3



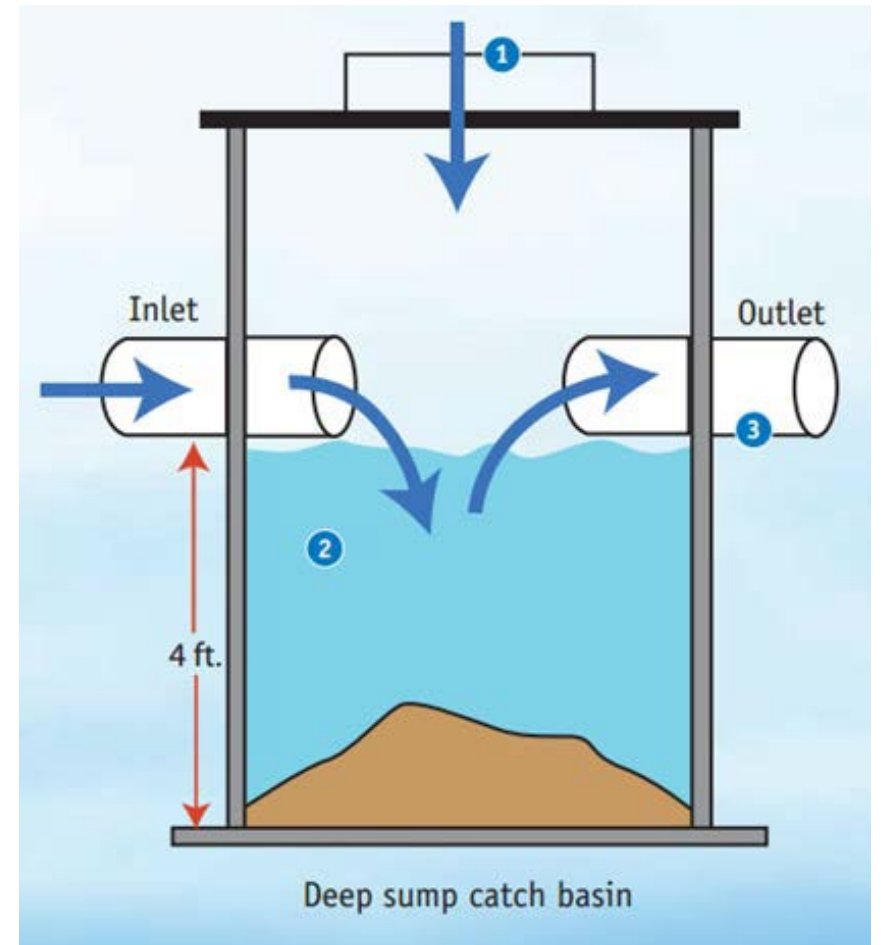
General Water Quality Approach on Street Projects

- Water Quality improvement is a consideration with all projects
- Streets without curb or defined ditches can be problematic
 - Stormwater drains along street edge that is not stabilized, resulting in erosion
 - Runoff from this areas carries sediment & pollutants
- Install physical improvements with projects to limit erosion and collect sediment



Water Quality

- Curb and gutter & new pavement
 - Provides stable surface for stormwater
 - Limits erosion by keeping vehicles and equipment on street
 - Allows for more effective sweeping
- Install Catchbasins
 - Underground storm sewer structures
 - 1 per every 4 acres on average
 - Clean twice a year with a Vector Truck as part of routine structure cleaning
 - Effective at trapping larger particles (sand) ~ 10% TSS removal



Green Infrastructure Opportunities

- 2 Community Rain Gardens
 - Installed w/ project, maintained by n'hood
 - Goal: Filter road pollutants, infiltrate stormwater, provide habitat for pollinators
 - Met w/ SHNA Ad-hoc committee to discuss locations & proposed designs
- Extra Right-of-way space near school
- Along Spring Harbor Beach Parking

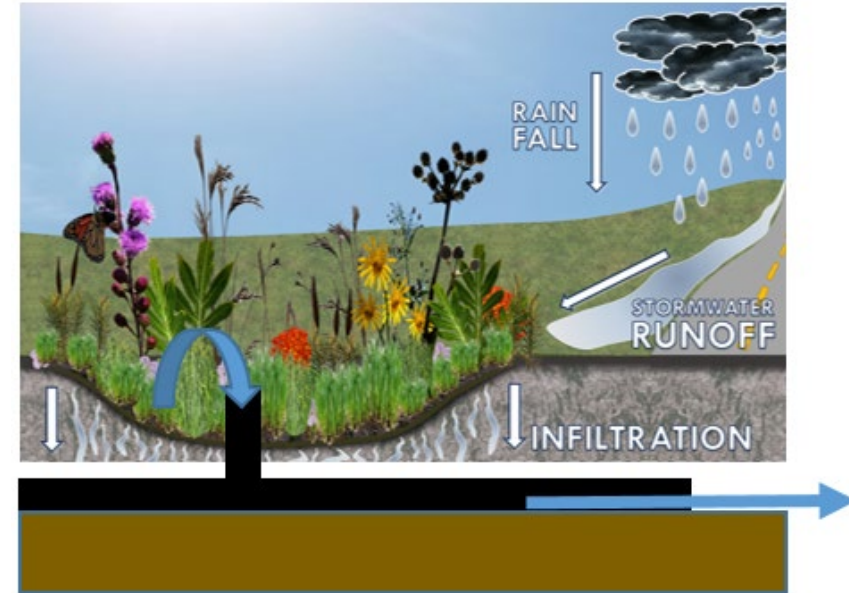
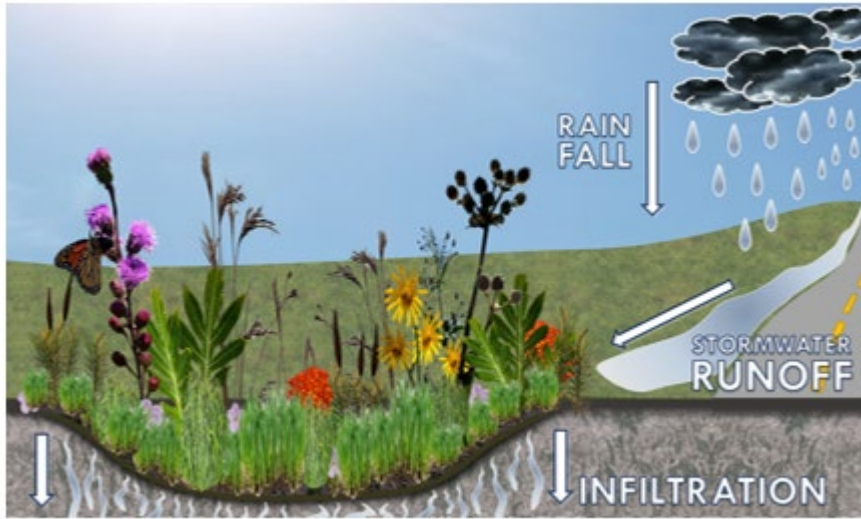


Dudgeon Park Bioretention: Neighborhood/City/School Collaboration July 2022 photo

Rain Gardens

VS.

Bioretention

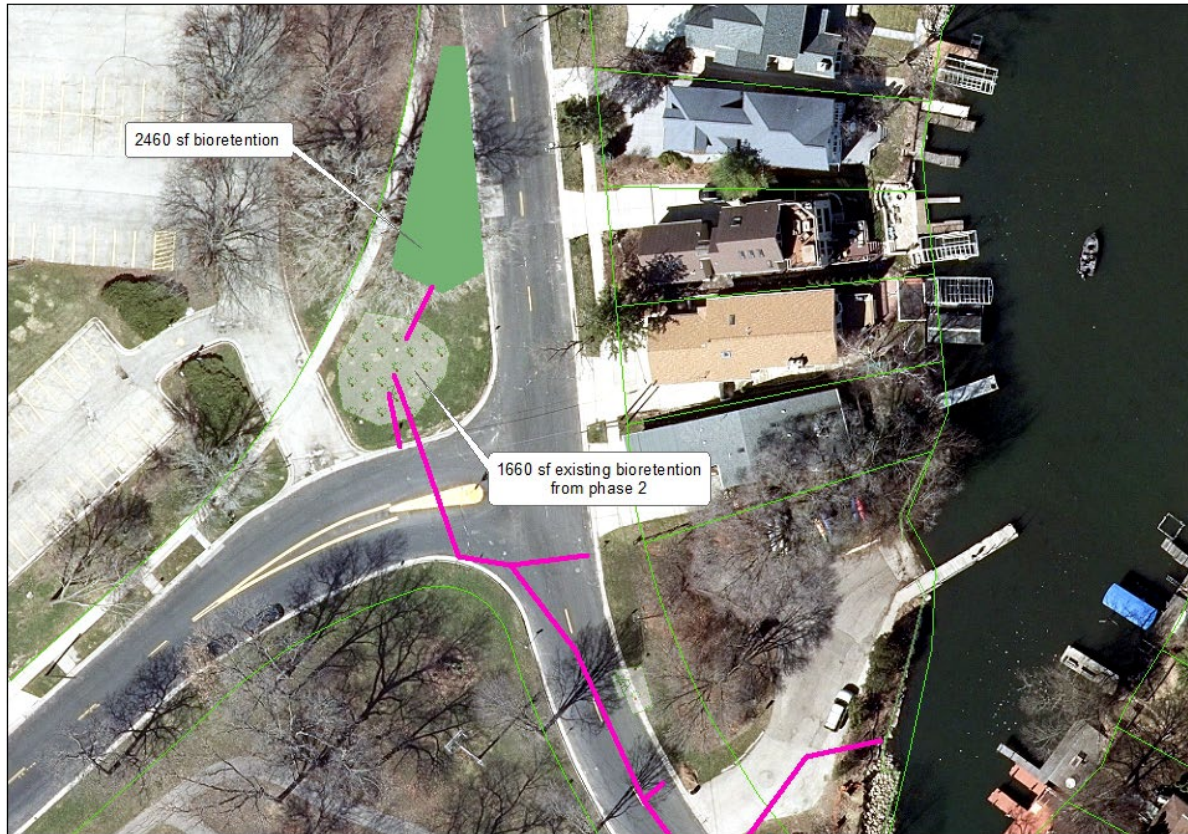


- 2' special soil: 30% compost & 70% sand
- Planted in Natives
- No piped over flow, overflows to street, excess water bypasses system
- 6" ponding depth
- Filtering & infiltration capacity controlled by native soil
- Lower cost, does not need storm sewer near by

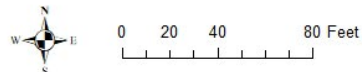
- 2' special soil: 30% compost & 70% sand
- Planted in Natives
- Underdrain & Overflow pipe
- 6-12" ponding depth
- Filtering controlled by special soil, and the infiltration controlled by native soil
- Need outlet for underdrain (storm sewer)

➤ For larger, neighborhood features, try to install bioretention due to additional filtering benefits, but may not be possible in all locations

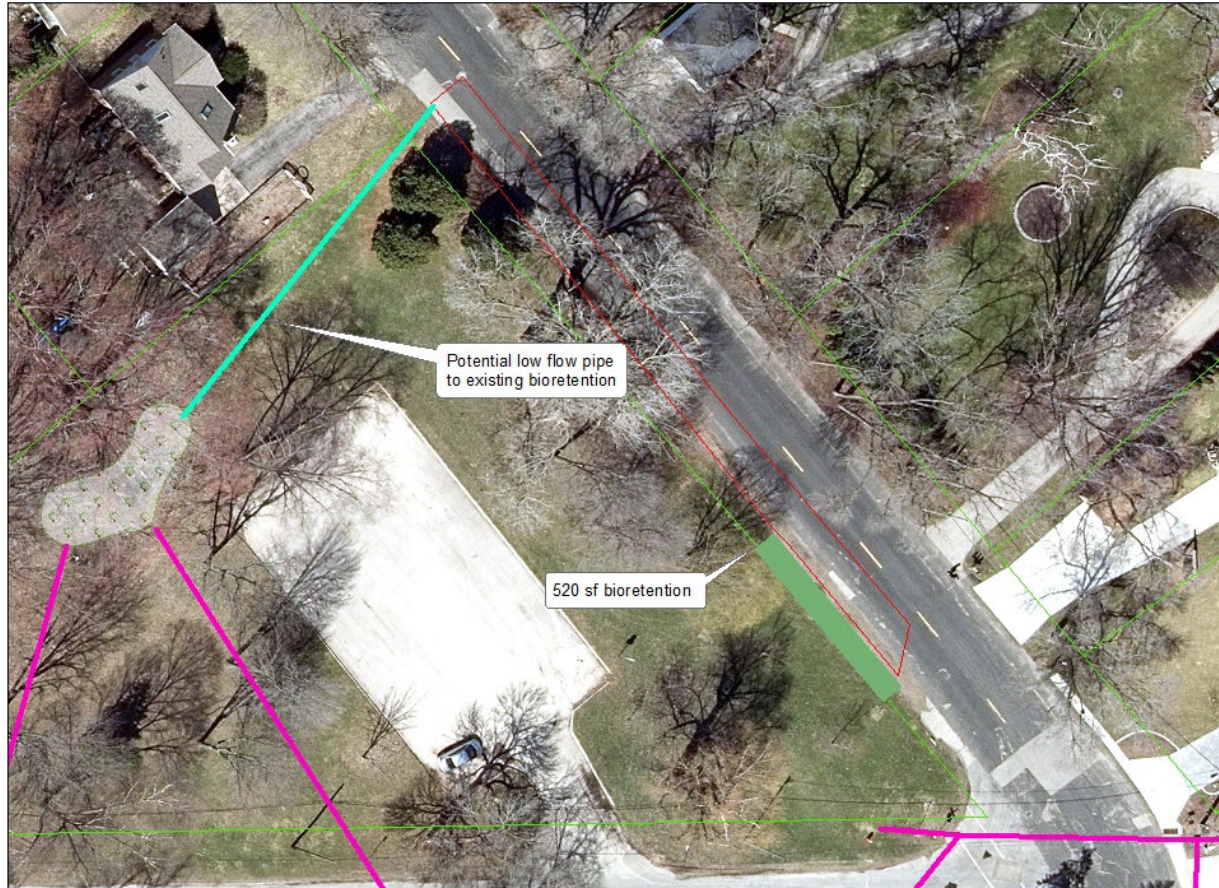
Spring Harbor / Lake Mendota Drive Bioretention



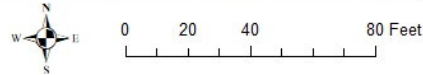
Spring Harbor, Lake Mendota Bioretention
80% TSS Reduction for approximately
70,000 sf of Impervious area.



Spring Harbor Beach Parking Bioretention



Potential Location and Size of Beach Parking Bioretention
80% TSS Reduction for Contributing Area





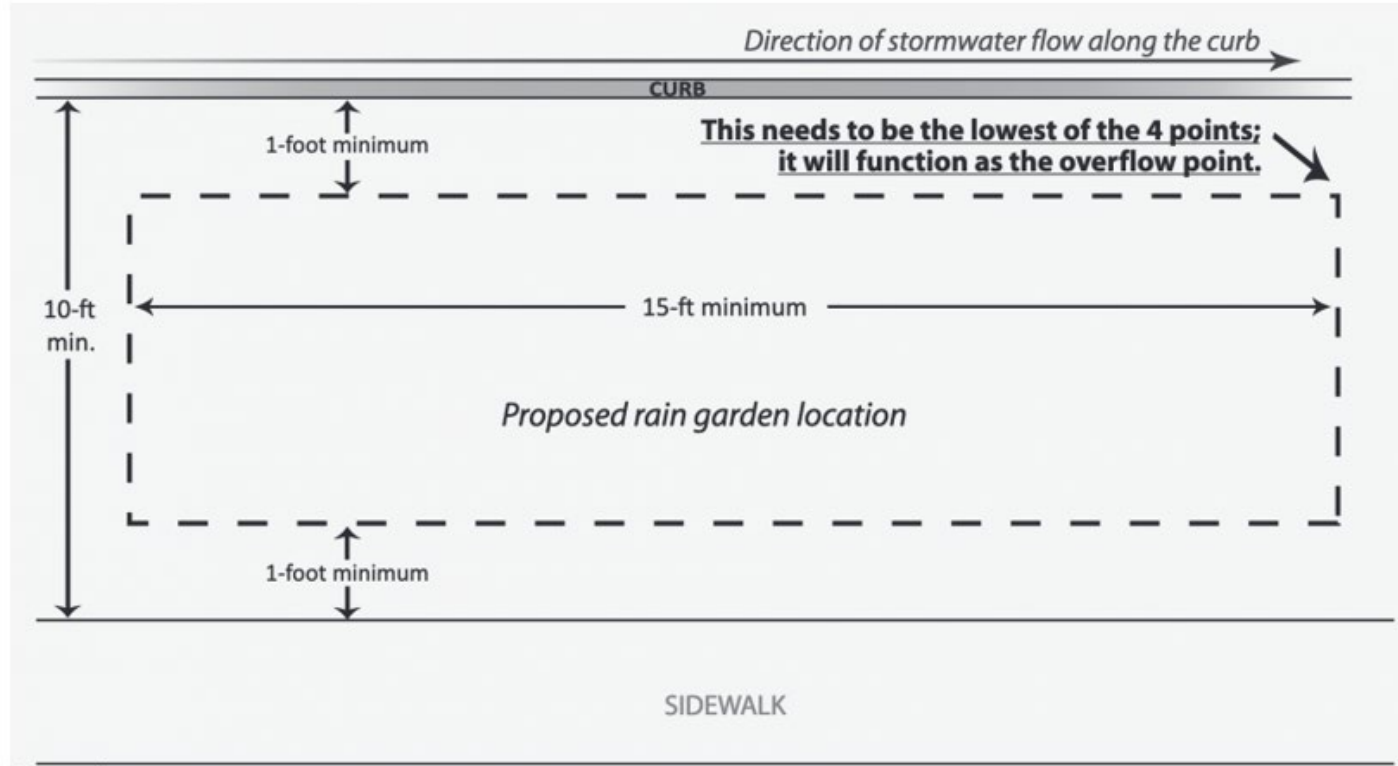
Terrace Rain Gardens: Dean Ave 2022
photo

Terrace Rain Gardens

- Collects runoff from road
- 1 foot deep measured from top of curb
- Planted with native vegetation
- Designed, constructed and planted by City
- Maintained by residents
- \$100 assessment and waiver signed by homeowner
- Terrace Constraints limit locations
 - Sidewalk can be curved to make room

Terrace Rain Gardens

- Lake Mendota Drive Terrace Rain Garden Evaluation
 - Limited potential due to terrace width, trees and adjacent slopes.
 - South side of the street may have some Opportunities
- If interested email Phil Gaebler: pgaebler@cityofmadison.com
 - Will also review past requests submitted with previous surveys



Private Property Rain Gardens

- Receives roof water instead of street water
 - Fewer pollutants in supply water
 - Reduces maintenance
 - Improves quality of groundwater recharge
- Less competition for space
- Native plants provide habitat
- Can work with existing landscaping
- Construction can not be completed by City, but we can assist with design and educational resources.
- Great resources here:
 - <https://www.ripple-effects.com/Rain-Gardens>



Rain garden in front of Phil's house

Forestry Information

➤ Anticipated Tree Removals due to Poor Condition (8)

- 17" Ash (5453 Lake Mendota Dr)
- 16" Spruce (5321 Lake Mendota Dr)
- 17" Norway Maple (5316 Lake Mendota Dr)
- 31" Siberian Elm (5328 Lake Mendota Dr)
- 36" Siberian Elm (5330 Lake Mendota Dr)
- 6" Mulberry (5412 Lake Mendota Dr)
- 15" Boxelder (5412 Lake Mendota Dr)
- 21" Ash (5418 Lake Mendota Dr)

➤ Anticipated Tree Removals due to Street Work (1)

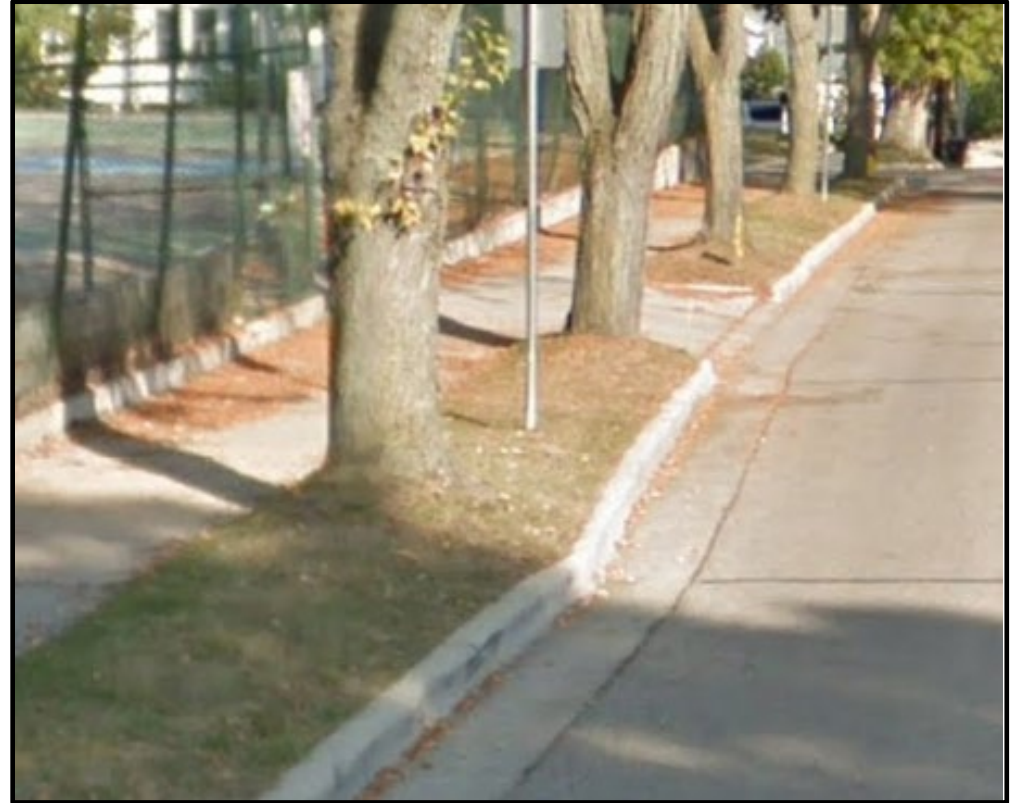
- 13" Black Locust (5453 Lake Mendota Dr)

➤ Shrubs and Bushes within Right-of-Way potentially removed

➤ Tree Pruning prior to Construction = Winter 2023/2024

➤ Tree Protection Measures – Review with Forestry beforehand

- Fencing, Adjust Curb and Sidewalk around tree roots, hand-form work



Assessment Policy & Costs

- Street Assessment Policy
 - Properties assessed for pavement replacement (10' width) based on property frontage
 - No assessments for Curb & Sidewalk
 - Properties assessed for sewer lateral and driveway apron replacement based on specific dimensions measured during construction
 - Assessed costs for specific items are based on an average of bid prices from the last 3 years of projects = standardizes costs, removes bidding variability
 - Unit Prices for Driveways, Pavement Reconstruction, and Terrace Walks will be set rates
 - Unit Prices for Sanitary Laterals and Private Storm Connections will be based on final bid prices
- Preliminary, estimated assessments mailed prior to project (Winter 2023/2024)
- Final assessments are calculated, and final billing sent the summer after Construction (Summer 2025)
- Assessments are payable in lump sum or in up to 8 installments at the current interest rate (5% for 2024 approval)

Assessment Policy & Costs

Item	Property Owner Share	City Share
Replace 10-ft width of Asphalt Pavement*	100%	0%
Remainder of Pavement width	0%	100%
Replace Driveway Apron & Terrace Walk	50%	50%
Install New Sidewalk	0%	100%
Install New Curb & Gutter	0%	100%
Sanitary Sewer Main	0%	100%
Sanitary Sewer Laterals to Property Line	25%	75%
Storm Sewer Main	0%	100%
Private Storm Connects, if any	100%	0%
Water Main & Services	0%	100%
Street Trees Removals & Plantings	0%	100%

*Based on LF Frontage of Individual Properties

A reduction factor will be applied to single/two-family residential corner lots



Construction Access & Info

- Lake Mendota Drive (Epworth Ct to Spring Harbor Dr) will be closed to thru-traffic during construction
- On-Street Parking will not be allowed during construction hours
- Standard work hours 7am-7pm Mon-Sat; 10am-7pm Sun
 - Limited weekend work anticipated
- Residential driveways may be closed for up to 20 days (including overnight) for installation of concrete items and curing time
 - In addition, driveway access may be limited during utility installation
- Contractor may need to pump ground water to keep utility trenches dry and safe
 - If needed, pumps will likely need to run over night
- Contractor will remove and replace mailboxes at the street with the project
 - Temporary Mailboxes will be setup for USPS Deliveries

Construction Access & Info

- Any existing landscaping within Right-of-Way will likely be disturbed
- Please remove any plantings, raised beds, structures, stone landscaping, retaining walls, pavers, railings, etc... that you wish to save from the terrace prior to construction.
 - Contractor will not replace/reinstall these items after construction
- Fences within City Right-of-Way will need to be removed prior to Construction
 - Property Owner's responsibility to remove OR obtain privilege-in-streets agreement to keep it
- Encroaching Fences at the following addresses:
 - *5400 Lake Mendota Dr*
- Disturbed bare ground will be restored with topsoil, grass seed, and erosion matting
- Residents will be notified by mail 2 weeks prior to the start of construction
- Best guess construction timeframe: *May 2024 thru September 2024*
 - MG&E's work could extend construction timeframe
 - Adjust schedule around school year and bus routes

Project Schedule & Meetings

- Public Informational Meeting: November 30th, 2023
- Mail Estimated Assessments/BPW Notice: December 29th, 2023
- Board of Public Works Public Hearing: January 10th, 2024
- Common Council Public Hearing: January 23rd, 2024
- Advertise Contract for Bids: February 8th, 2024
- *Start of Construction: May 2024*
- *End of Construction: September 2024*



Contact Information & Resources

- Project Manager/Streets & Paths, Aaron Canton, (608) 242-4763, acanton@cityofmadison.com
- Sanitary & Storm Sewer, Daniel Olivares, (608) 261-9285, daolivares@cityofmadison.com
- Water Resources Engineer, Phil Gaebler, (608) 266-4059, pgaebler@cityofmadison.com
- Water Utility, Nathan Mendez, (608) 354-4094, nmendez@cityofmadison.com
- Traffic Engineering, Lukas Collins, (608) 261-9625, lcollins@cityofmadison.com

- Project Webpage: <https://www.cityofmadison.com/engineering/projects/lake-mendota-drive>
 - Sign-up for updates on road closures & work progress
 - Presentation recording & slides posted to project page

- Project Questionnaire available on Project Webpage through Friday, December 15th 2023

- Facebook – City of Madison Engineering
- Twitter – @MadisonEngr
- Everyday Engineering Podcast – search “Everyday Engineering” on Apple iTunes or GooglePlay



Q & A

