

# Sauk Creek Corridor Plan

## DRAFT PRELIMINARY CORRIDOR PLAN - MEETING #3

PRESENTATION: 6:30-7:45 PM

Q&A: 7:45PM-8:15PM

BREAKOUT ROOMS (OPTIONAL): 8:15PM-8:30PM



OCTOBER, 2024

CITY OF MADISON

# Meeting Technical Housekeeping

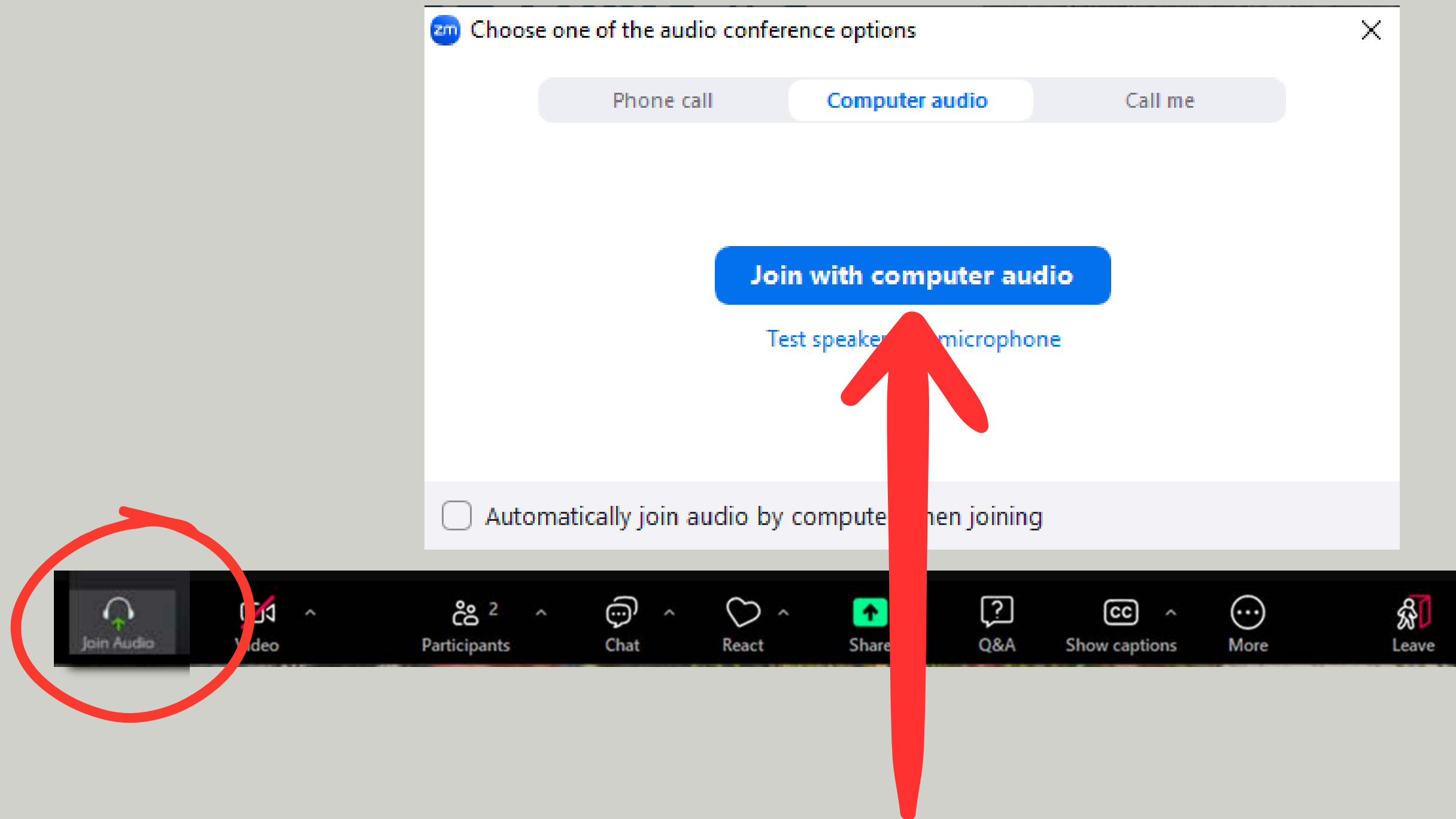
- This meeting will be recorded and posted to the project page.
- All attendees should be muted to keep background noise to a minimum.
- Use the “Q&A” button for technical issues with meeting to troubleshoot with staff to assist.
- Use the “Q&A” button to type questions about presentation.
  - Questions will be answered live after the presentation.
- 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.**

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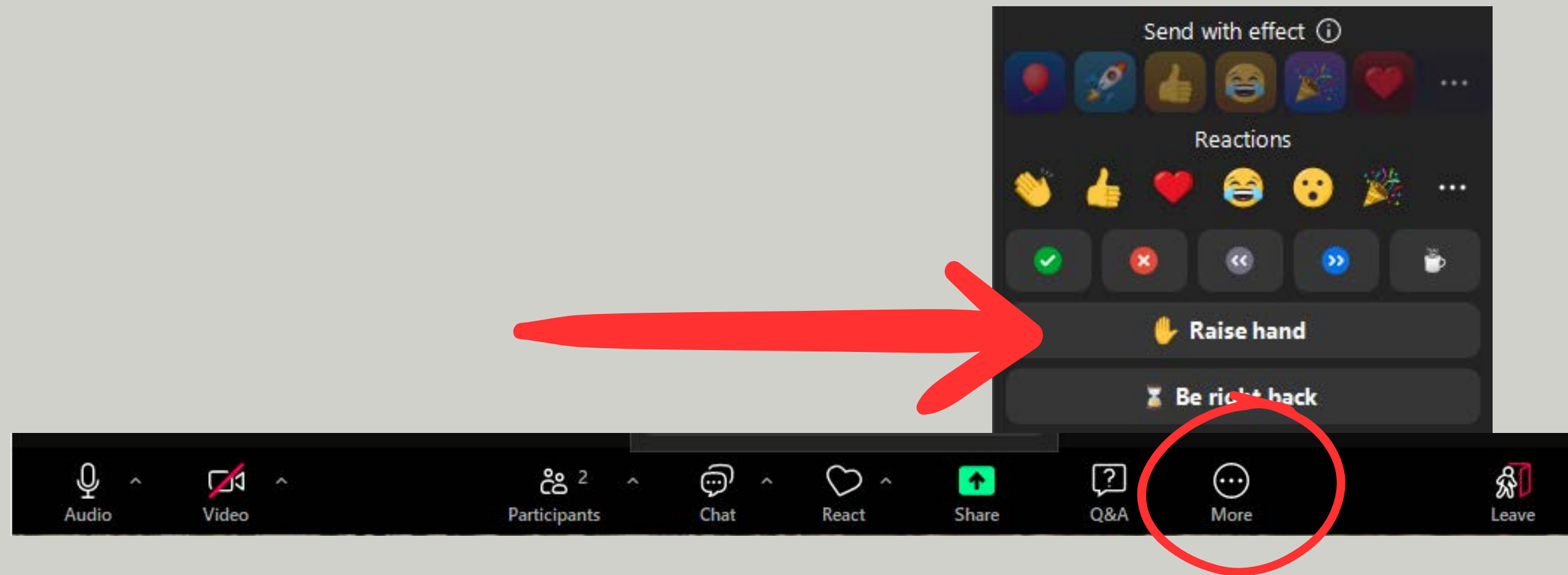
By continuing to be in the meeting, you are consenting to being recorded and consenting to this record being released to public record requestors.

# How to Participate



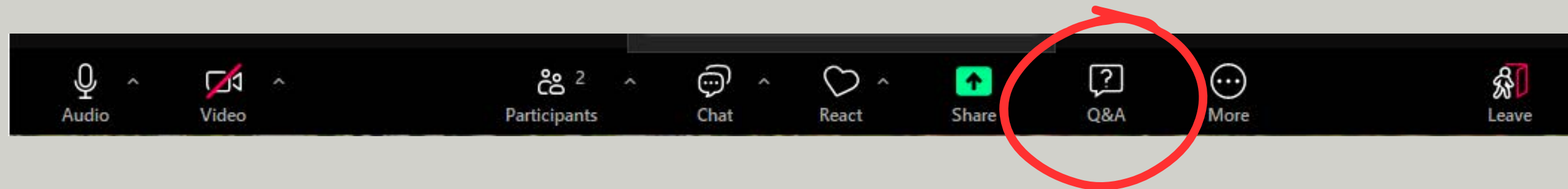
Make sure to join audio

# How to Participate



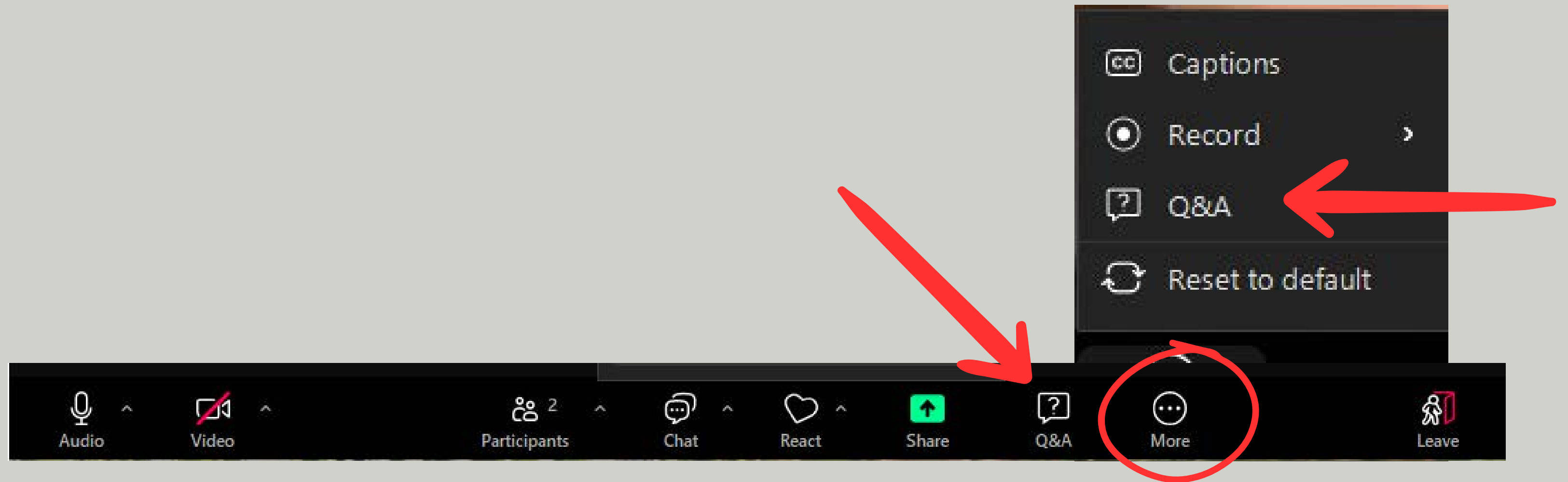
Raise your hand to be unmuted for comments or ask additional questions.  
(click “More” for pop-up menu that includes “Raise Hand”)

# How to Participate



Use Q&A if you have technical issues or need quick clarification during the presentation.

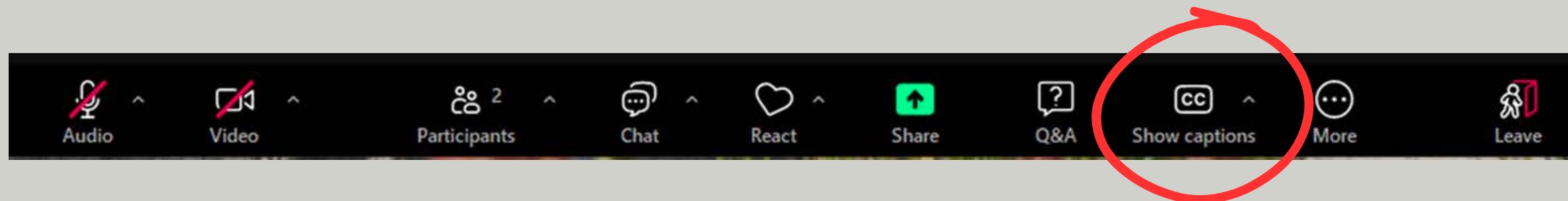
# How to Participate



Use Q & A if you have questions.

We will answer after the presentation.

# How to Participate



Click “Show Captions” for zoom automated captions.

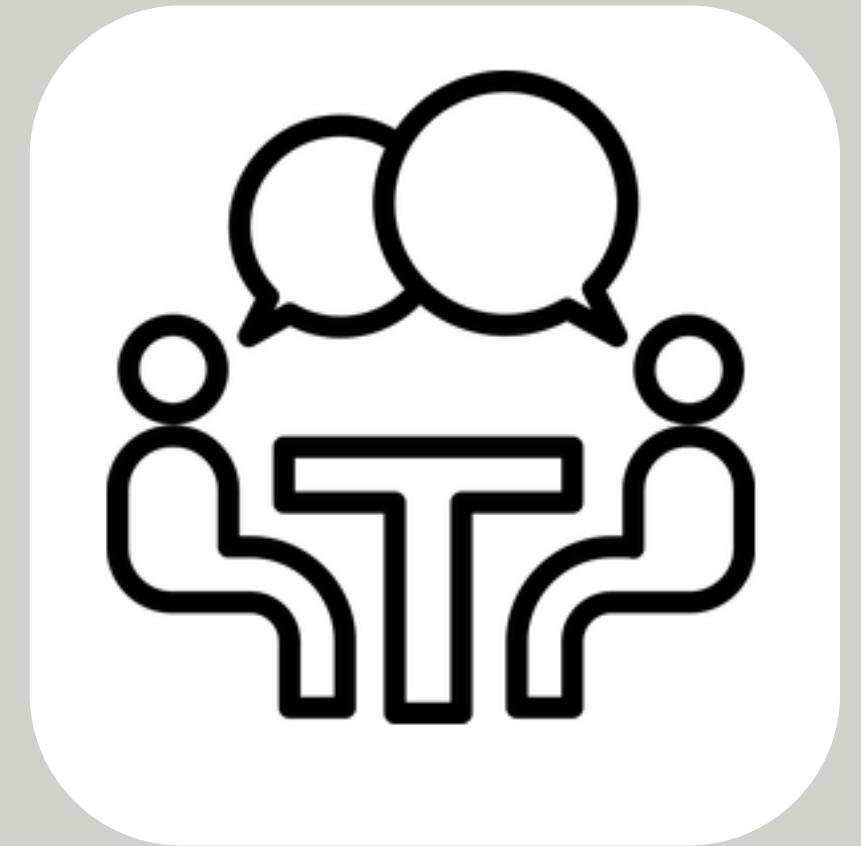
# How to Participate



To leave the  
meeting click here

# Meeting Facilitation Requests

- Ask clarifying questions as we go.  
(e.g. explain a term)
- Save discussion questions for the end.
- Practice putting yourself in others' shoes, but speak from your own experience.
- Be respectful. Be open to listening. Respect others in this meeting the way you wish to be respected.
- Recognize that personal opinions differ, there are often competing priorities, differing values, and perspectives.



# Our Team



## Presenters Bios:

**Jojo O'Brien, PE - Project Manager**, is a Water Resources Engineer and UW-Madison graduate with a B.S. Degree in Natural Resources and Environmental Engineering and Environmental Studies. She joined the City of Madison in 2016.

**Maddie Dumas-Stormwater Vegetation Coordinator**, has a Master's of Science from UW-Madison. She joined the City of Madison in 2018, and previously managed 660 acres of restored prairie and wetland for a non-profit.

**Aaron Canton, PE – Transportation Engineer**, is the Bicycle-Pedestrian Lead for City Engineering. Aaron is a UW-Madison graduate with a B.S. in Civil Engineering. He joined the City of Madison in 2019.

## Supporting Staff Bios:

**Janet Schmidt, PE - Principal Engineer for the City Stormwater section**, is a Civil Engineer and a 1994 UW-Madison graduate with a B.S. Degree in Civil & Environmental Engineering.

**Greg Fries, PE - Deputy City Engineer**, is a Civil Engineer and a UW-Madison graduate with a B.S. Degree in Civil & Environmental Engineering and Masters Degree in Business.

**Ian Brown - City Forester**, has a BA in Biology and MS in Natural Resources Management. He joined the City of Madison in 2023 after working with the WDNR and City of Milwaukee.

**Ryan Schmidt - Engineering Operations Supervisor**, joined the City of Madison in 2016, currently oversees construction and maintenance operations for the City of Madison's Pond and Greenways.

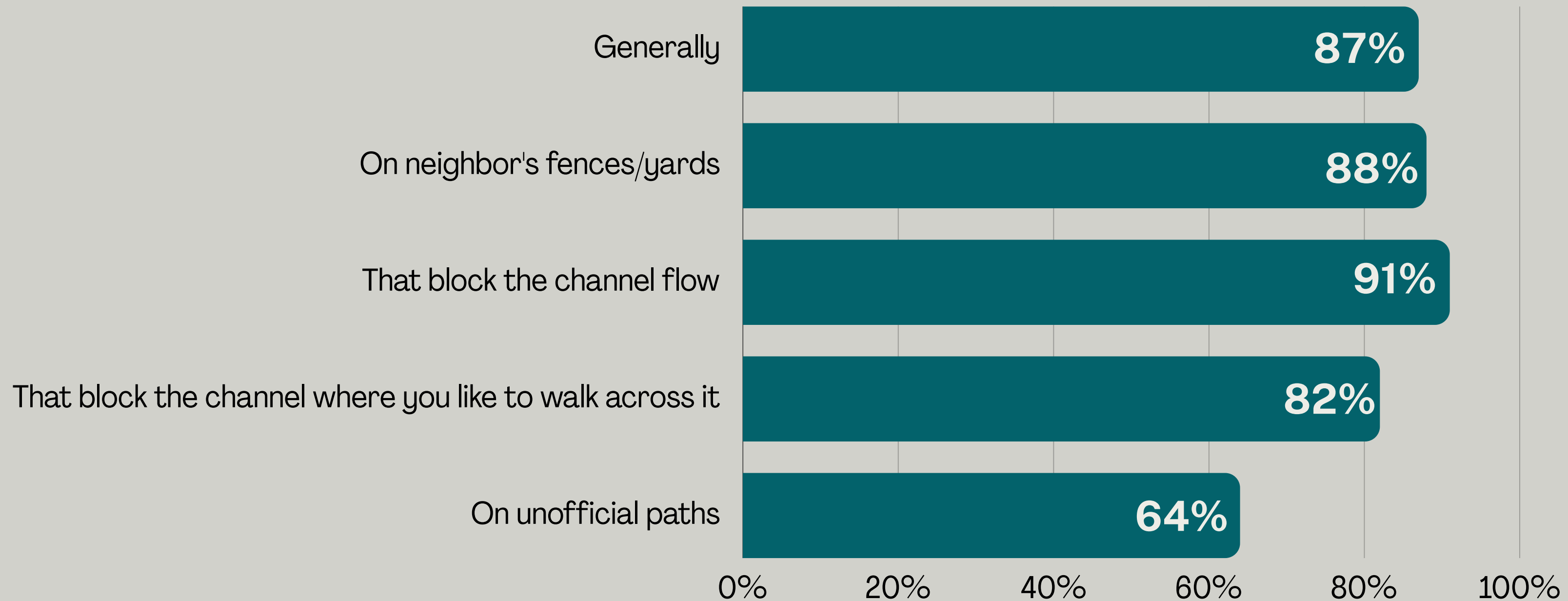
**Alder Conklin - District 9**

# Agenda

1. **Input received and common questions**
2. **Draft preliminary corridor plan**
  - a. **Base proposal**
  - b. **Community input on options**
3. **Restoration proposal & community input**
4. **East-west multi-use path update**
5. **Q&A**
6. *(Optional) Focus Groups: area-specific break-out groups to discuss vegetation*

# Maintenance Access

During the last meeting, respondents shared it is somewhat important, or very important that the City have access to remove dead/down trees in the following situations:



# Current Maintenance - Clarifying Info

For sanitary maintenance a smaller machine was used due to neighbor complaints that large equipment rutted access paths in areas adjacent to their homes, and large equipment hasn't been able to cross channel near Tree Lane. However, smaller equipment:

- Takes additional resources (3 crews, 2-3 pieces of equipment)
- Due to the additional crews and equipment, cannot quickly and efficiently respond to an emergency
  - Response times are >4x more during non-business hours.
  - Increased risk of damage to adjacent homes and natural resources during emergency

City will be using standard vactor moving forward



Vactor truck has scheduled maintenance **THIS FALL** to clean the sanitary sewer, and will be followed with a truck that can televise the pipes to assess their condition

# Utilizing Channel As Access?

## Advantages:

- Smaller footprint could result in fewer impacts to trees

## Challenges:

- Regular habitat disturbance of macroinvertebrates, salamanders, small mammals, turtles, and birds in natural pools
- Equipment could destabilize existing stable banks or impact trees along banks
- Slower maintenance response
  - Branches, down trees, boulders, and wet pools make construction and maintenance access challenging.
  - Much of spring/summer is too wet to bring in equipment
  - Increased level of maintenance would be needed to reach critical blockages

# Utilizing Channel As Access?

## Challenges:

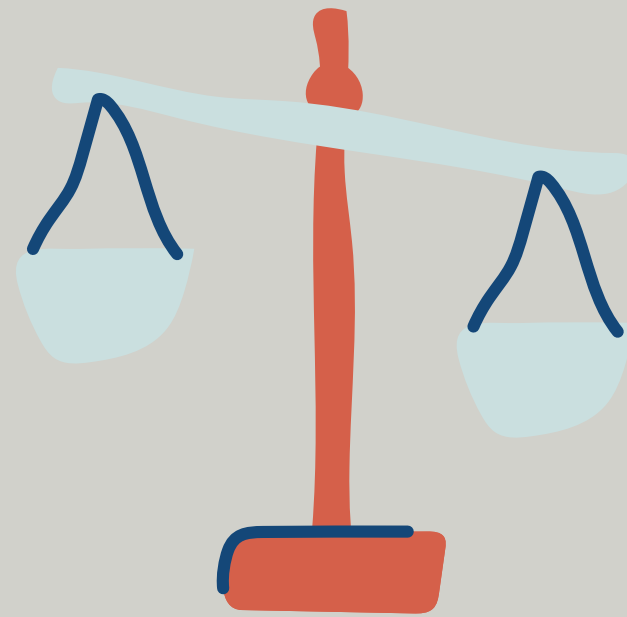
- Small equipment would be needed to navigate the narrow channel bottom and sharp turns
  - ~Doubles the cost of the construction (contractor estimates)
  - Increase staff time to complete maintenance
  - Tracked bobcat with a grapple is Operation's smallest piece of equipment that could navigate the channel
    - Safety concerns arise in log jams because limbs often have a "loaded" force on them. When crews have to manually cut or pull apart log jams there is a hazard of loaded limbs unloading the stored force, breaking equipment, and endangering the cutting crew.
    - The safest and most efficient piece of equipment to remove log jams is an excavator with a grapple bucket, allowing the operator to grab and lift logs, increasing the distance from equipment and ground crews having to cut the jam apart.
      - Our tracked excavator cannot access the majority of the channel.

# Utilizing Channel As Access?

## Summary

### Advantages:

- Smaller footprint and fewer tree impacts



### Challenges:

- Harms in-channel habitat
- Destabilize adjacent banks
- Slower response
- More expensive to construct and maintain
- Decreased safety for maintenance crews

**Separate access to be included**

# MAINTENANCE ACCESS PATH

During the last meeting we asked which types of access cover people would be OK with.

Results: people are equally OK with soil & veg and gravel only. Asphalt wasn't preferred.

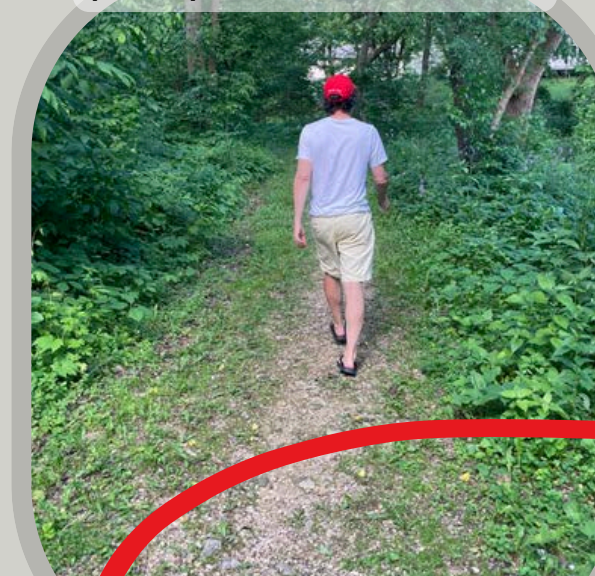
City will propose gravel access paths in plan (cheaper to construct, more stable, less maintenance, more accessible)

Sauk Creek Gwy, ~12  
years post path  
construction



1-Soil and Veg: 68%

Heritage Prairie Gwy, ~7 years  
post path construction



Owen Park Gwy



2-Gravel - 68%

Quarterdeck Gwy



3-Asphalt- 9%



# CHANNEL

During the last meeting we asked for input on the extent of channel stabilization.

## Results

Option 1: Begin with bank stabilization in City's priority areas only (red/orange banks -- least stable)

45%

A mix of Option 1 and Option 2: Begin with bank stabilization in all areas identified to have steep or vertical/undercut banks

44%

Option 2: Stabilize all banks throughout channel

11%

Increased stabilization  
& impact



# CHANNEL

During the last meeting we asked for input on channel stabilization techniques --

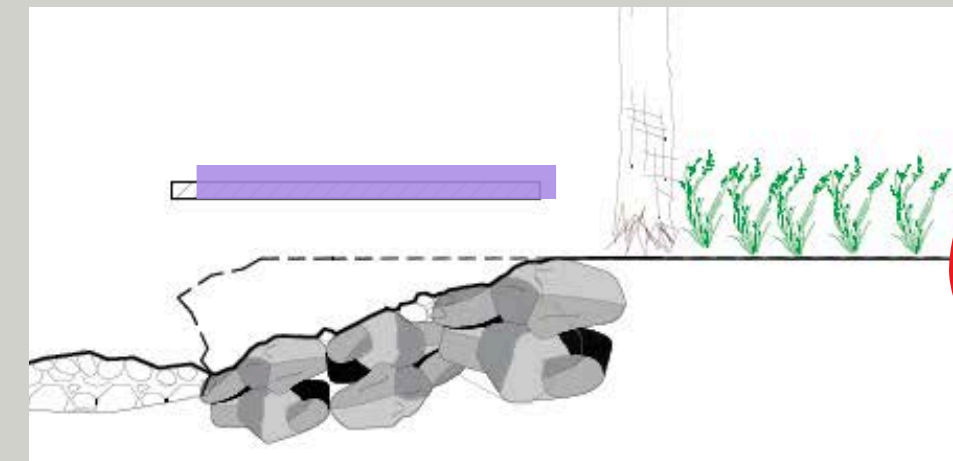
Select one.

1. Boulders (riprap)

2. A mix of boulders (riprap), vegetation, and other natural materials (such as soil lifts)

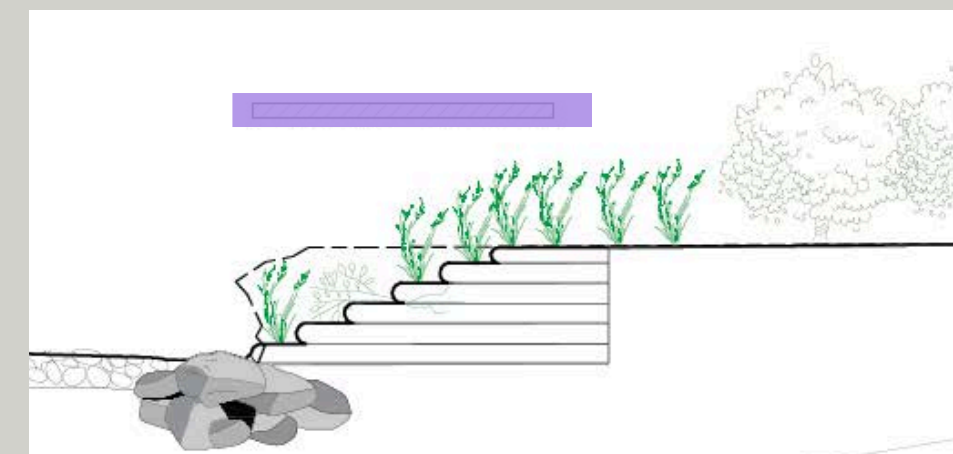
3. Use as much vegetation as possible

Increased impact to  
adjacent trees

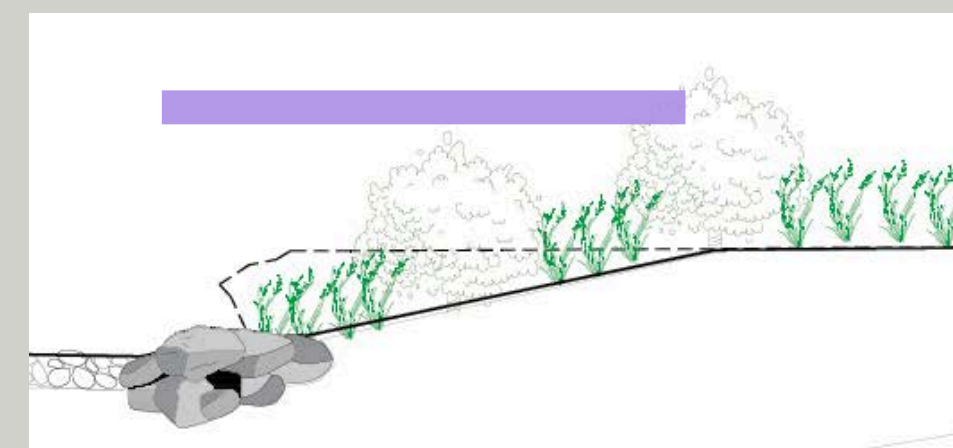


Results

60%



32%



8%

# CHANNEL

## Review of existing bank condition

Existing Sanitary Access Path

Corridor Plan Area

Unmaintained Walking Paths

### Bank Condition Analysis is

>4' Tall vertical and undercut banks

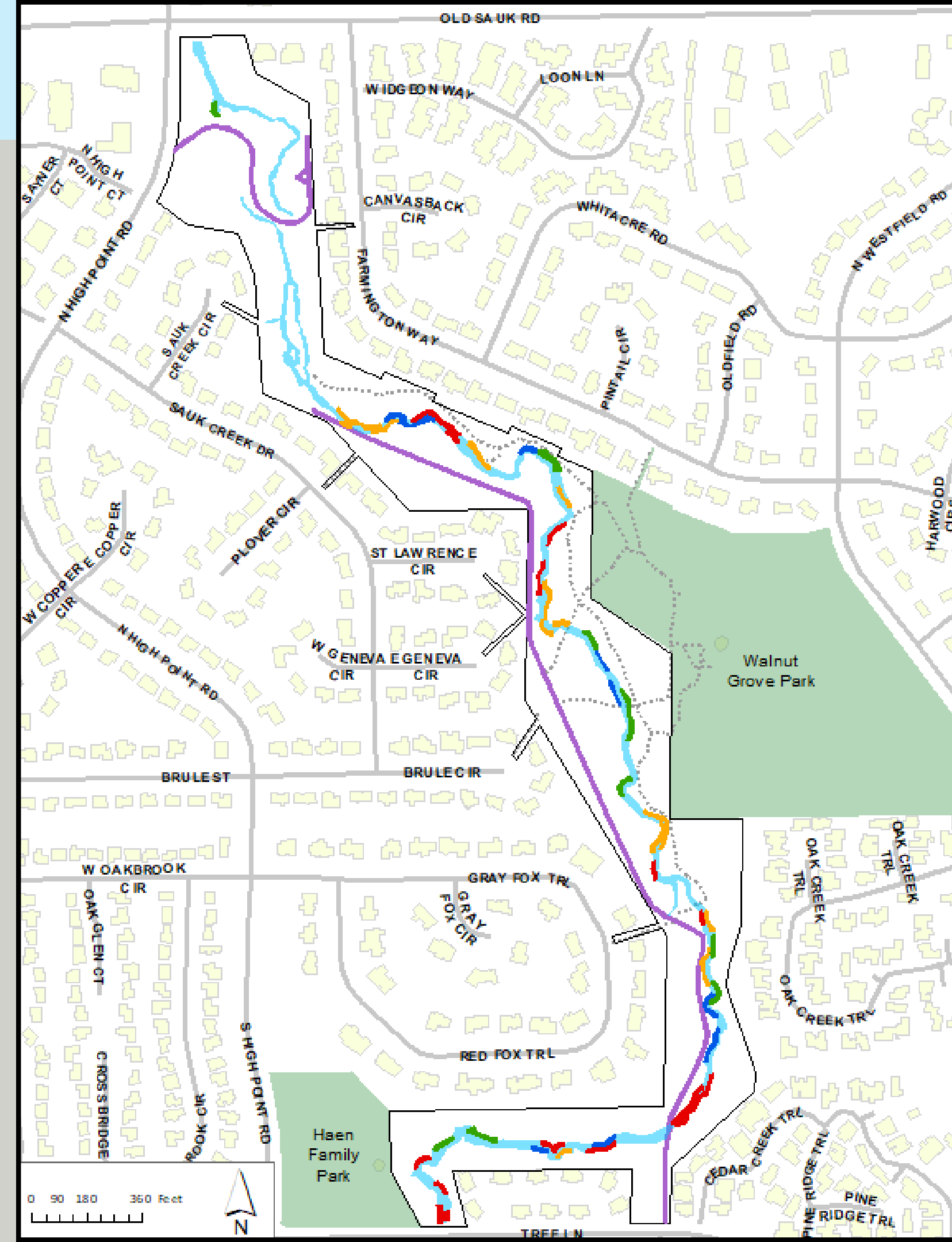
3-4' tall vertical and undercut banks

>4' tall banks, 2:1 or steeper

3-4' banks, 2:1 or steeper



Generally,  
more  
susceptible  
to erosion



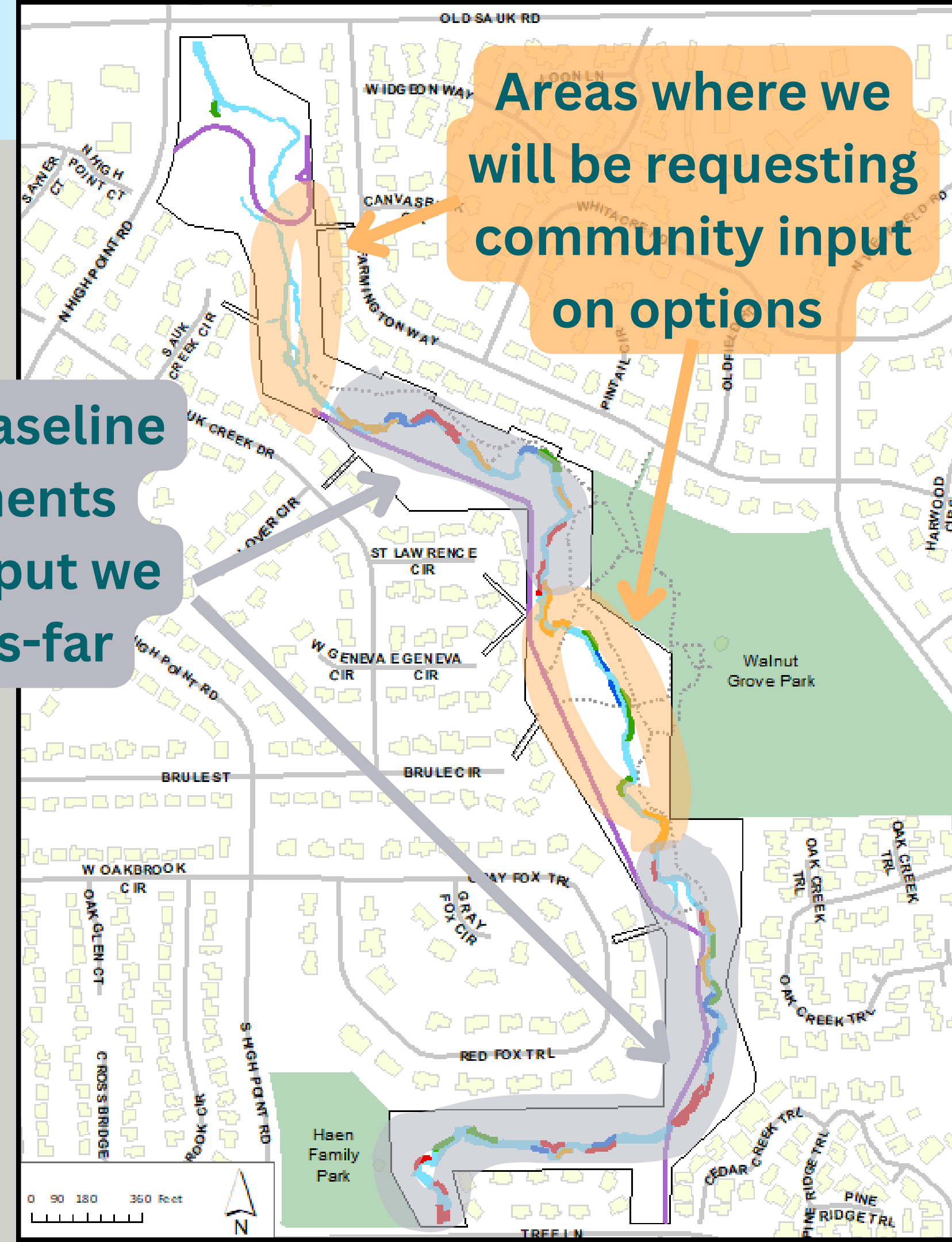
# CHANNEL

## Stormwater Improvements Proposal

Over the next few slides the City will share parts of the stormwater improvements we are recommending as baseline improvements, and asking for input on specific areas

Proposed baseline improvements based on input we heard thus-far

Areas where we will be requesting community input on options



# Minimum riprap bank protection recommended by City shown in black

based on public input

Includes highest risk banks (red/orange category) as well as:

- Banks next to critical infrastructure
- Banks at risk of eroding (green/blue) that are adjacent to the above banks
- Connections between banks to limit the riprap/bare bank interface

Existing Sanitary Access Path

Corridor Plan Area

Unmaintained Walking Paths

## Bank Condition Analysis

>4' Tall vertical and undercut banks

3-4' tall vertical and undercut banks

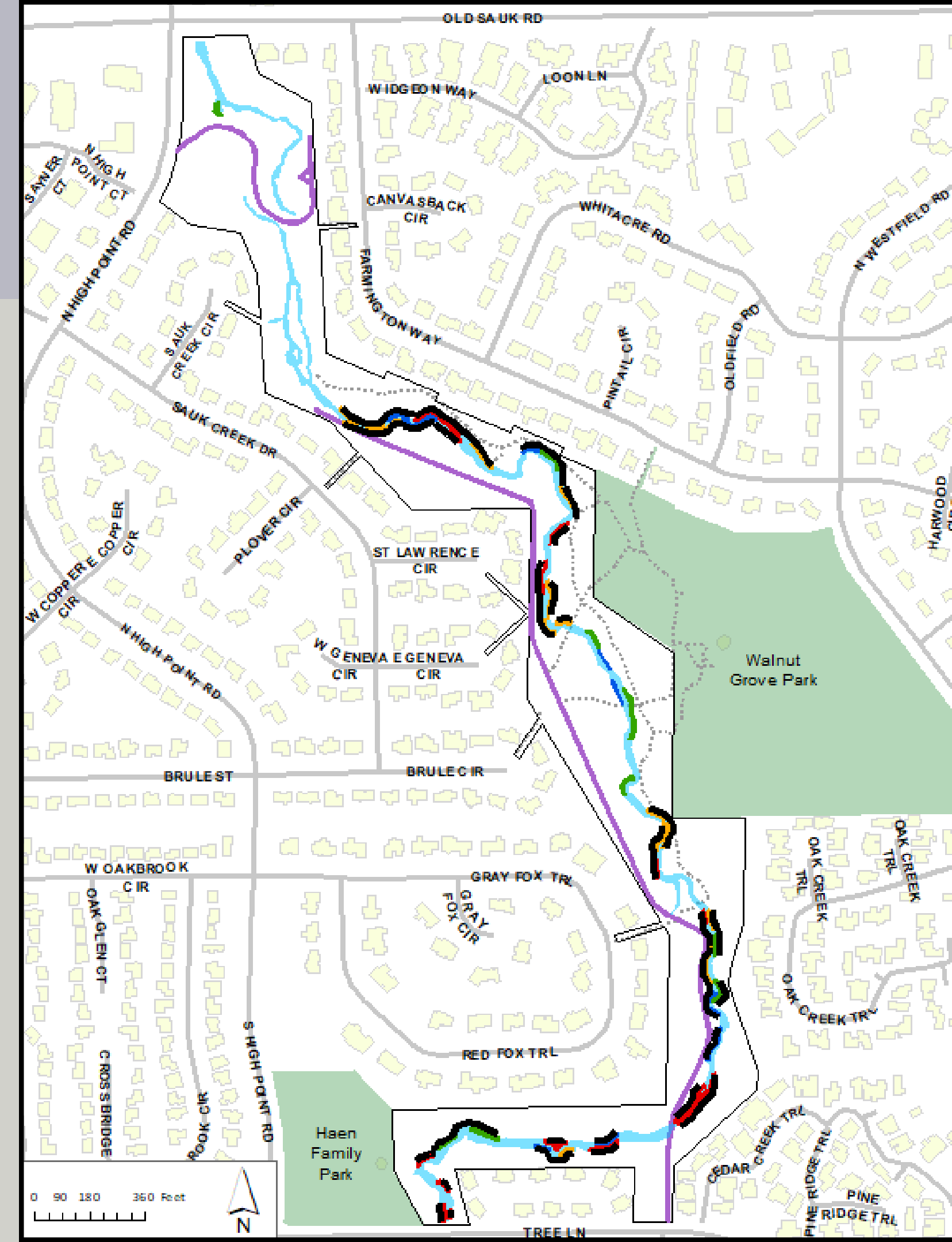
>4' tall banks, 2:1 or steeper

3-4' banks, 2:1 or steeper



More  
susceptible  
to erosion

*Note: final location of all improvements will be adjusted based on detailed design including minimizing grading impacts, as well as minimizing tree impacts (per design guidance input from community)*



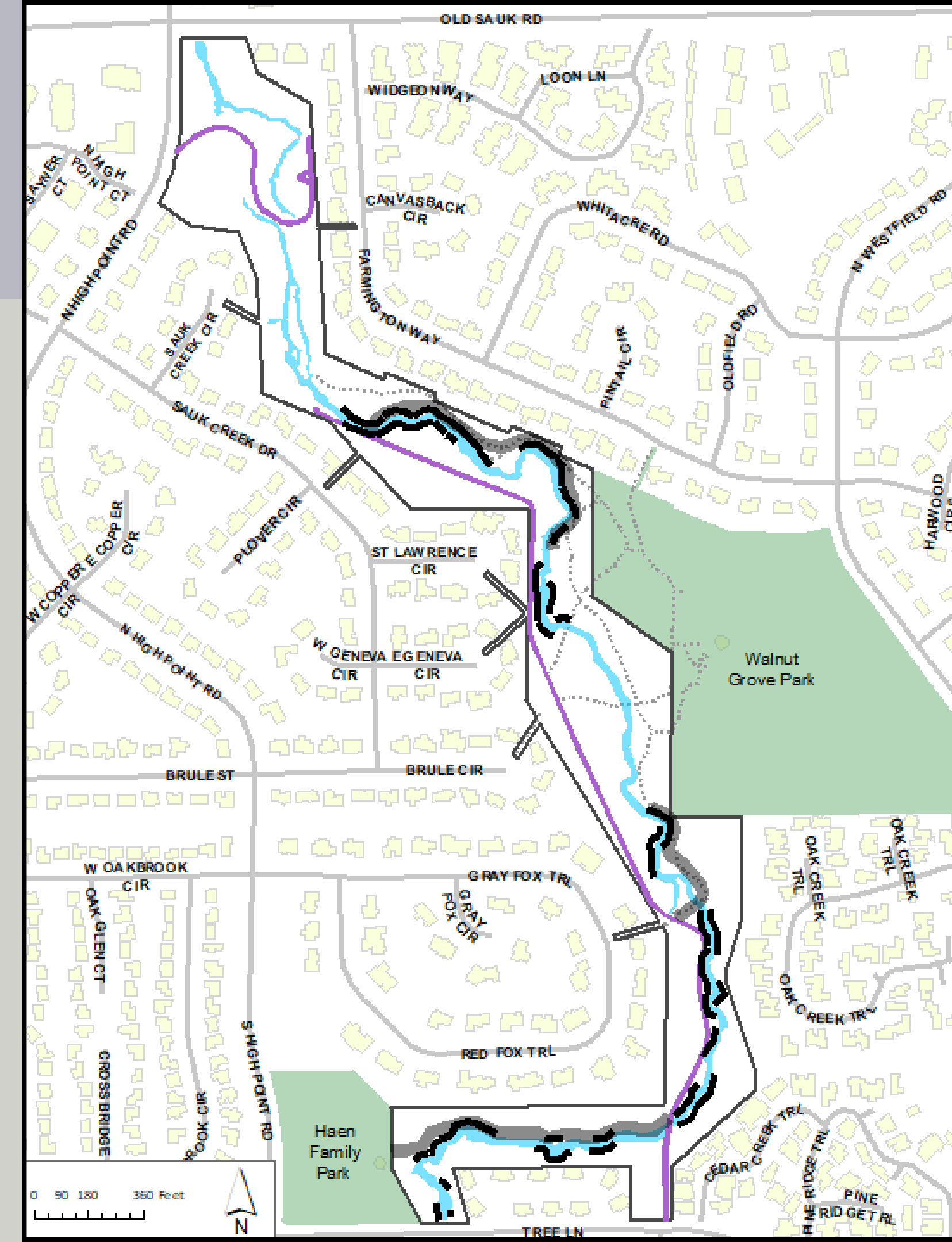
# Minimum construction/maintenance access for channel

(in addition to existing sanitary access path)

## Impact:

- Connects existing sanitary access path on north side of the channel to Haen Family Park
  - Allows maintenance of channel in this section
- Creates a stable crossing from Red Fox/Gray Fox area to the east side of the channel
  - Allows maintenance of channel in this section
- Access on north side of channel along Farmington Way
  - Sets path on public property (current unmaintained paths cross onto private property)
  - Allows for maintaining this section of channel and trees on north side of channel

*Note: final location of all improvements will be adjusted based on detailed design including minimizing grading impacts, as well as minimizing tree impacts (per design guidance input from community)*



# Minimum construction/maintenance access for channel

(in addition to existing sanitary access path)

## Crossing improvements proposed

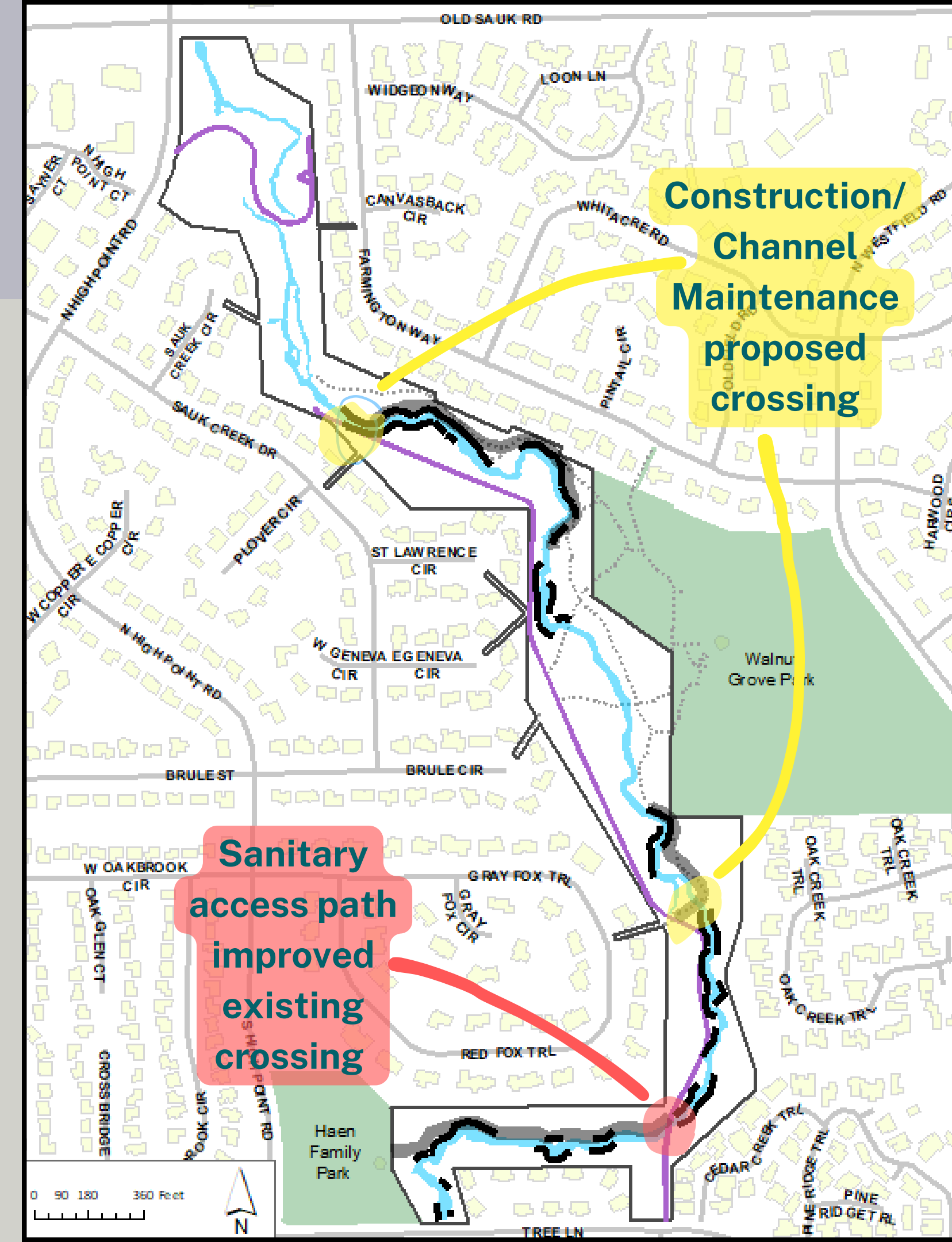
Existing crossing at Tree Lane and Randolph -

- Broken crossing does not allow for quick-response during emergencies
- City wants to improve this crossing with a culvert so it is accessible in wet or dry conditions

Construction/ Channel Maintenance Crossings -

- Concrete ford crossings will allow channel maintenance equipment to go down and back up banks without destabilizing them

*Note: final location of all improvements will be adjusted based on detailed design including minimizing grading impacts, as well as minimizing tree impacts (per design guidance input from community)*



# Existing Channel Crossings

## Current channel crossings:



At Sanitary Access Path near Tree Lane and Randolph. Re-damaged in 2018.



Unofficial walking path crossing channel

# Proposed Channel Crossings



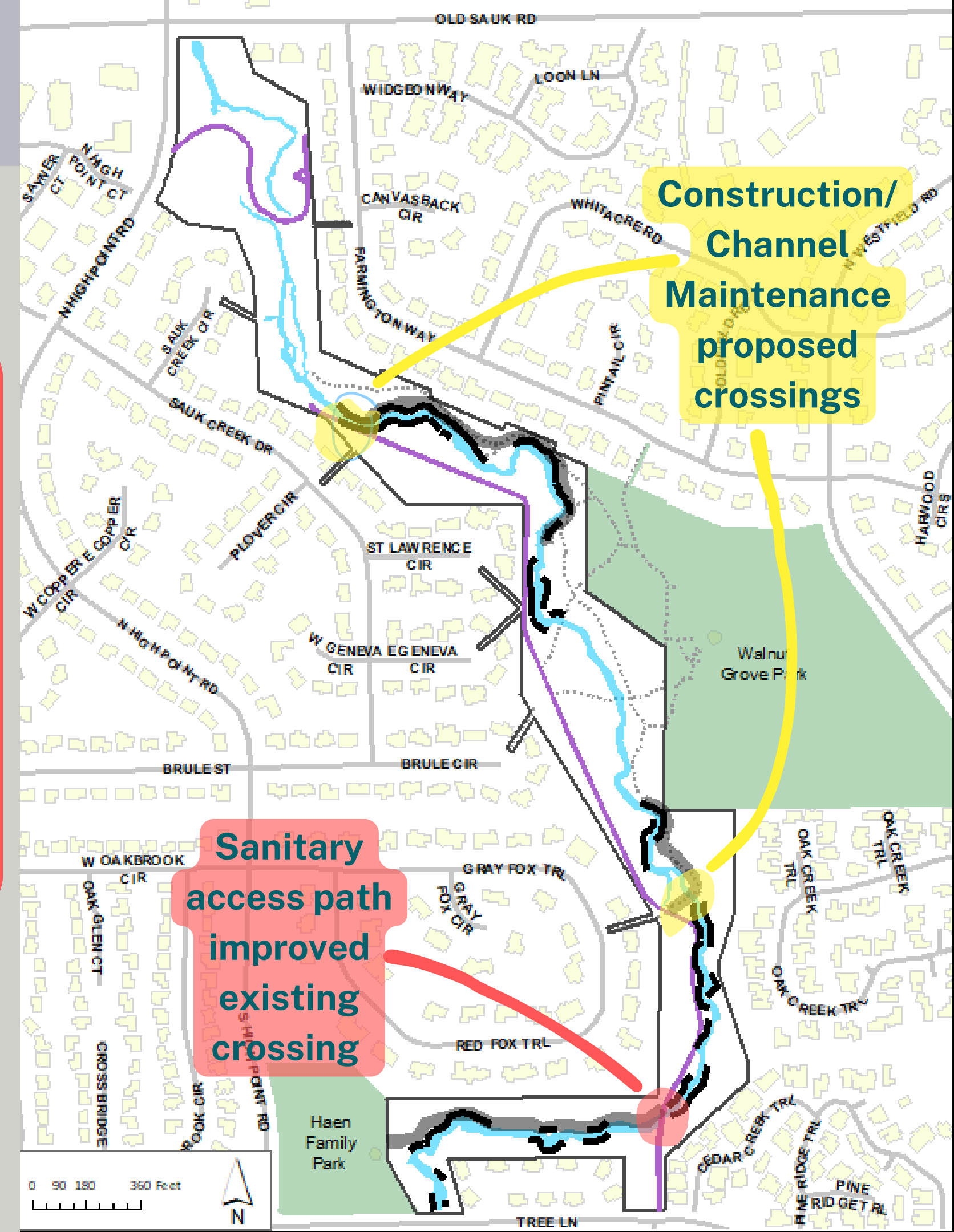
## Construction/ Channel Maintenance crossing

### - Concrete Ford -



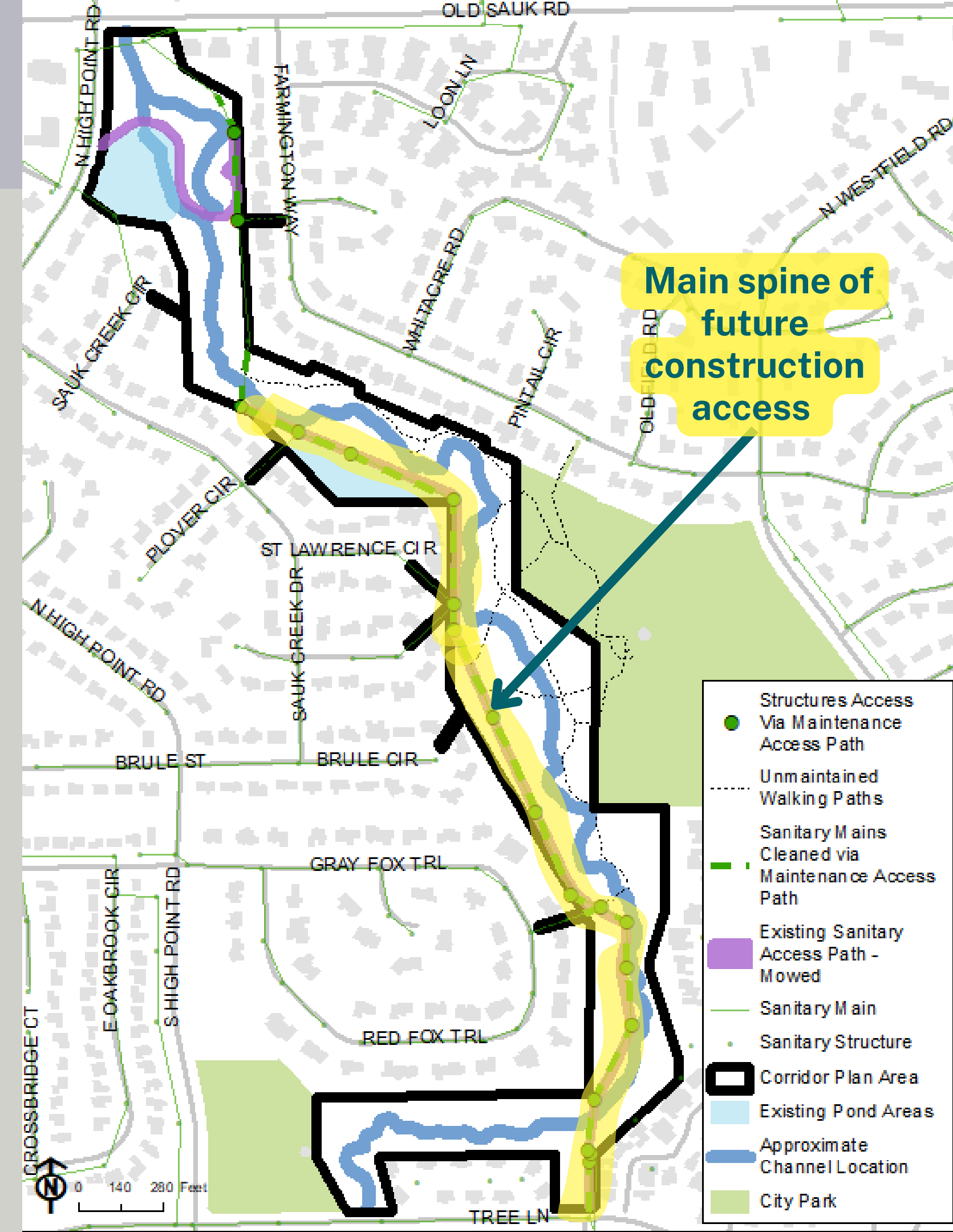
**Sanitary access path improved  
crossing Culverts will help vector  
truck more safely cross the channel**

**\*note: material over top of culvert will be concrete for stability\***



# Construction Access

- To minimize tree impacts, existing sanitary access from Tree Lane to Plover Circle will be main spine for future construction access when channel repairs are completed
- Moving forward, repairs of sanitary access path will be completed with gravel



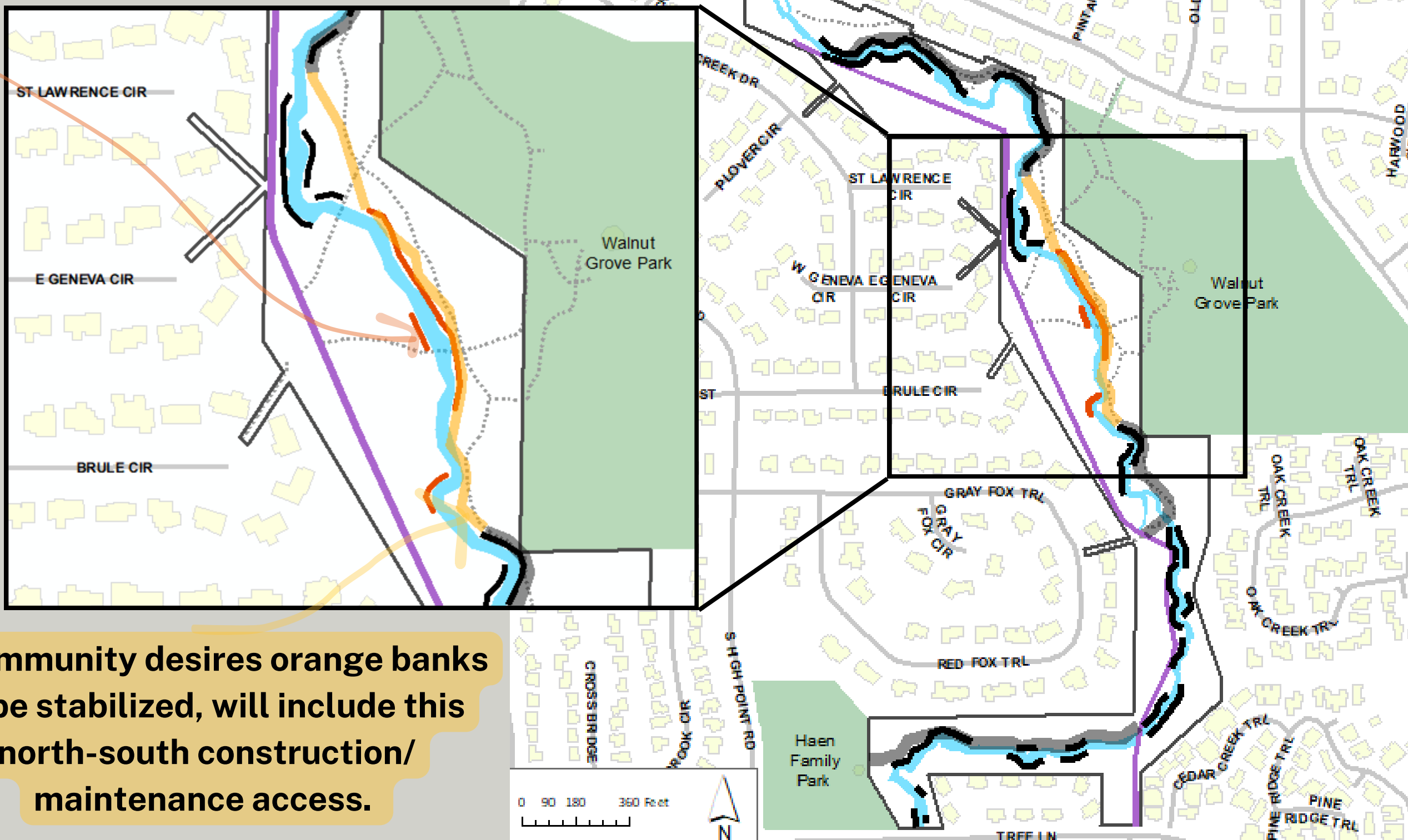
# The City is looking for input on the *\*middle\** section

Potential additional bank protection areas -- community to provide input on whether this is desired

- >4' tall banks, 2:1 or steeper
- 3-4' banks, 2:1 or steeper



## OPTION 1



If community desires orange banks to be stabilized, will include this north-south construction/maintenance access.

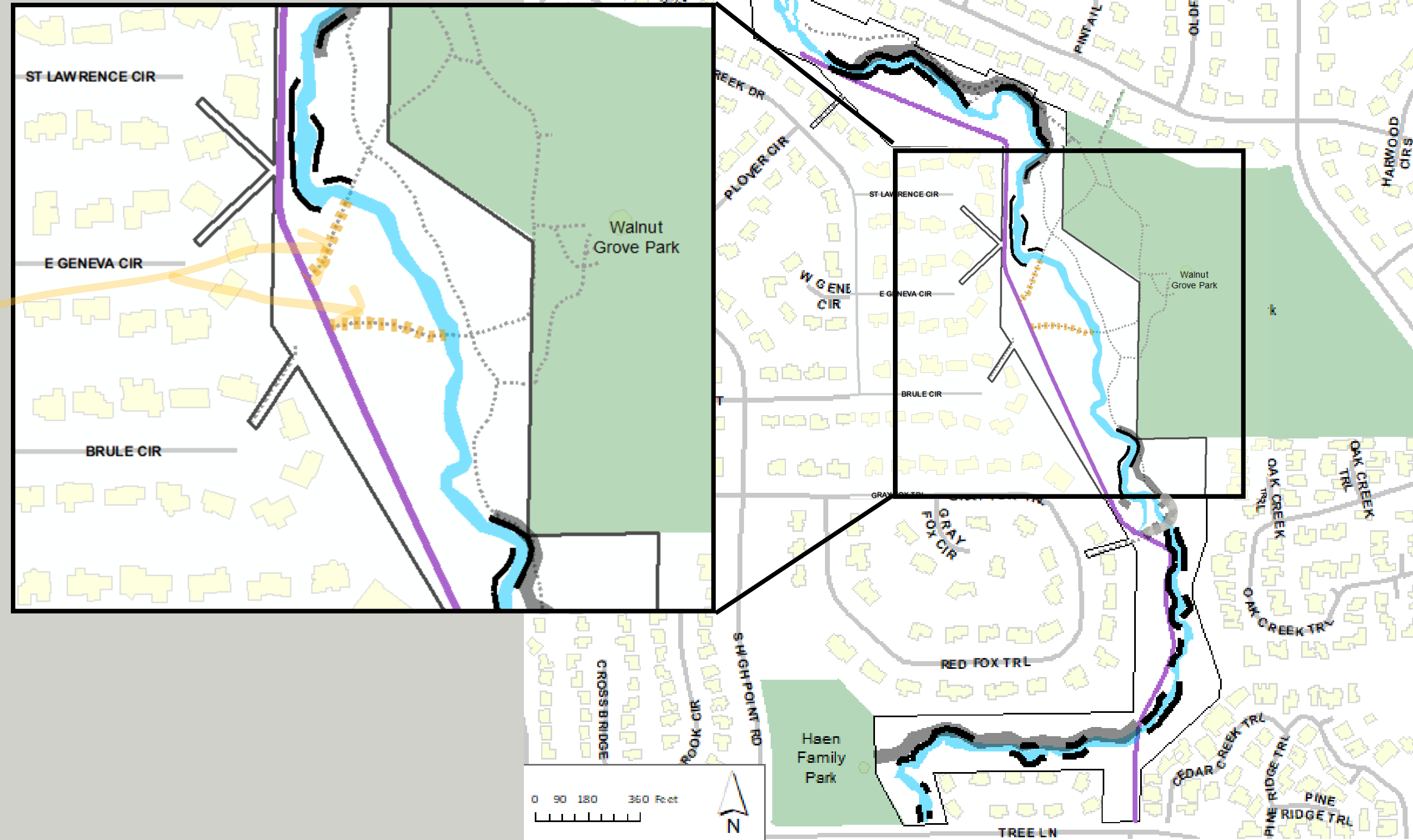
The City is looking for input on  
the *\*middle\** section

## OPTION 2

No bank stabilization in  
middle section

Create maintenance access  
from existing sanitary  
access path to the channel in  
two locations.

Proposed to overlap existing  
walking paths



# Considerations for Middle Section

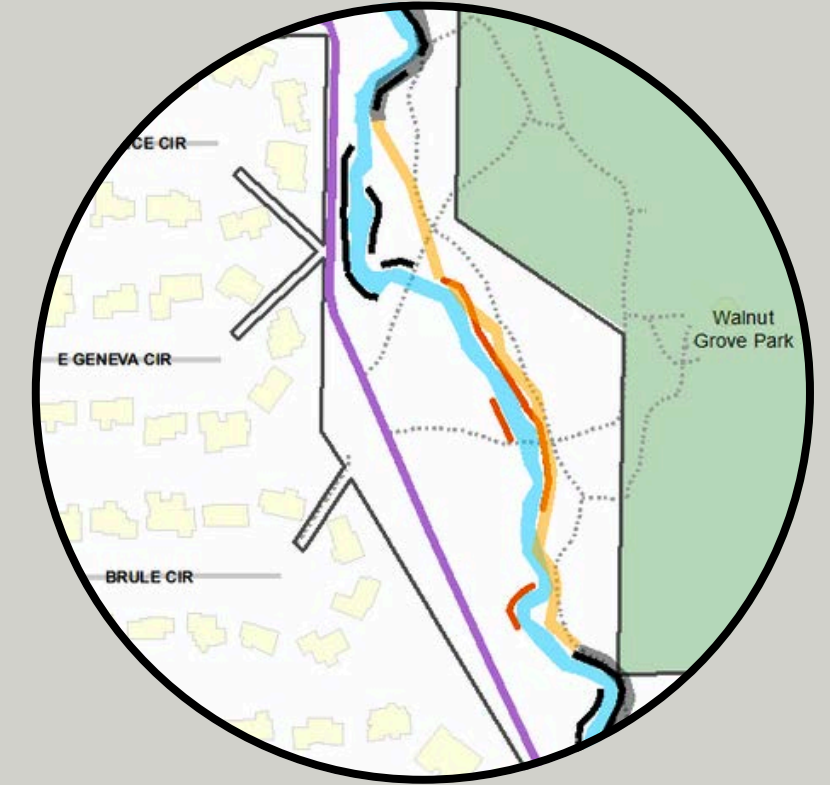
## Option 1

- More disturbance with project
- Stabilizes banks which will prevent downstream erosion
- Creates improved access to channel so blockages can be removed in the future
- Create a more-connected, maintenance access path

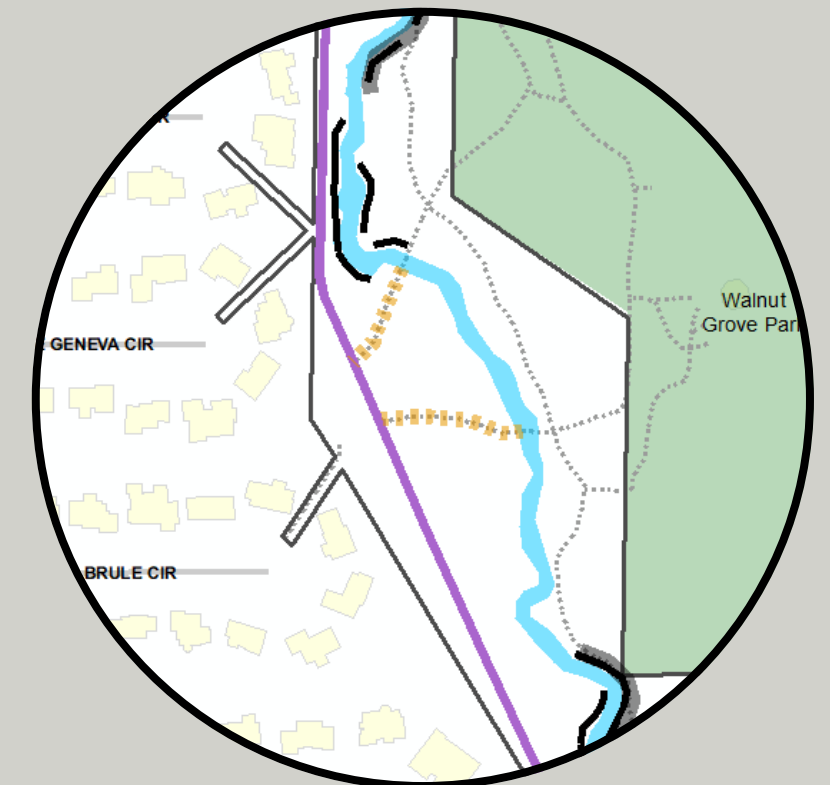
## Option 2

- Less disturbance with project
- Some banks may continue eroding, leading to additional tree impacts
- Only allows for channel maintenance near where the access paths intersect the channel

## OPTION 1



## OPTION 2

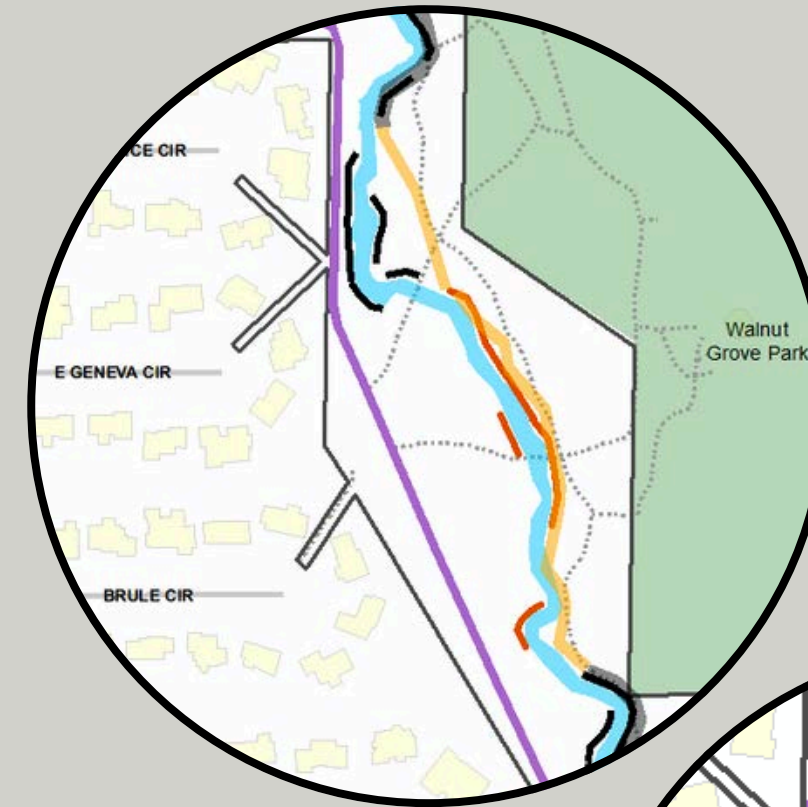


## Which option do you prefer in the middle of the corridor?

1. **Option 1:** Stabilize unstable portions of channel (dark orange) and create construction/maintenance access that would allow city to maintain channel in this section (clear debris, spot repair banks etc)

2. **Option 2:** Do not stabilize orange banks, or create connected maintenance access in middle section. Instead create maintenance access spurs to the channel to allow for channel maintenance at these specific access points (dashed light orange)

3. I am OK with either option



# CHANNEL - POLL RESULTS

Q1

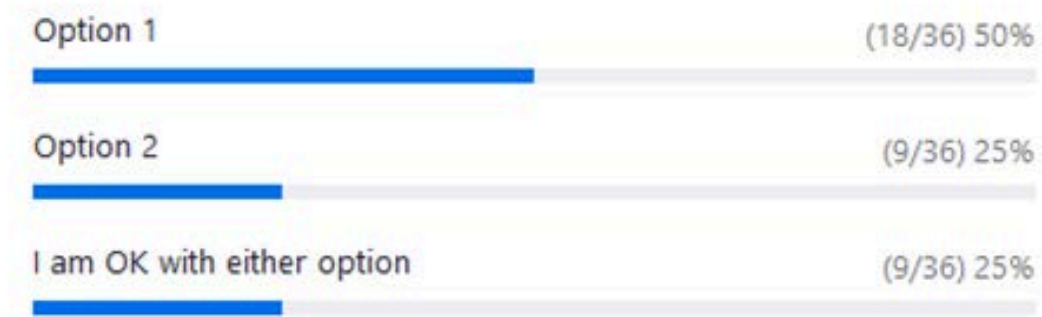
[< Back](#)

## Q1 - Sauk Creek Corridor Plan PIM3

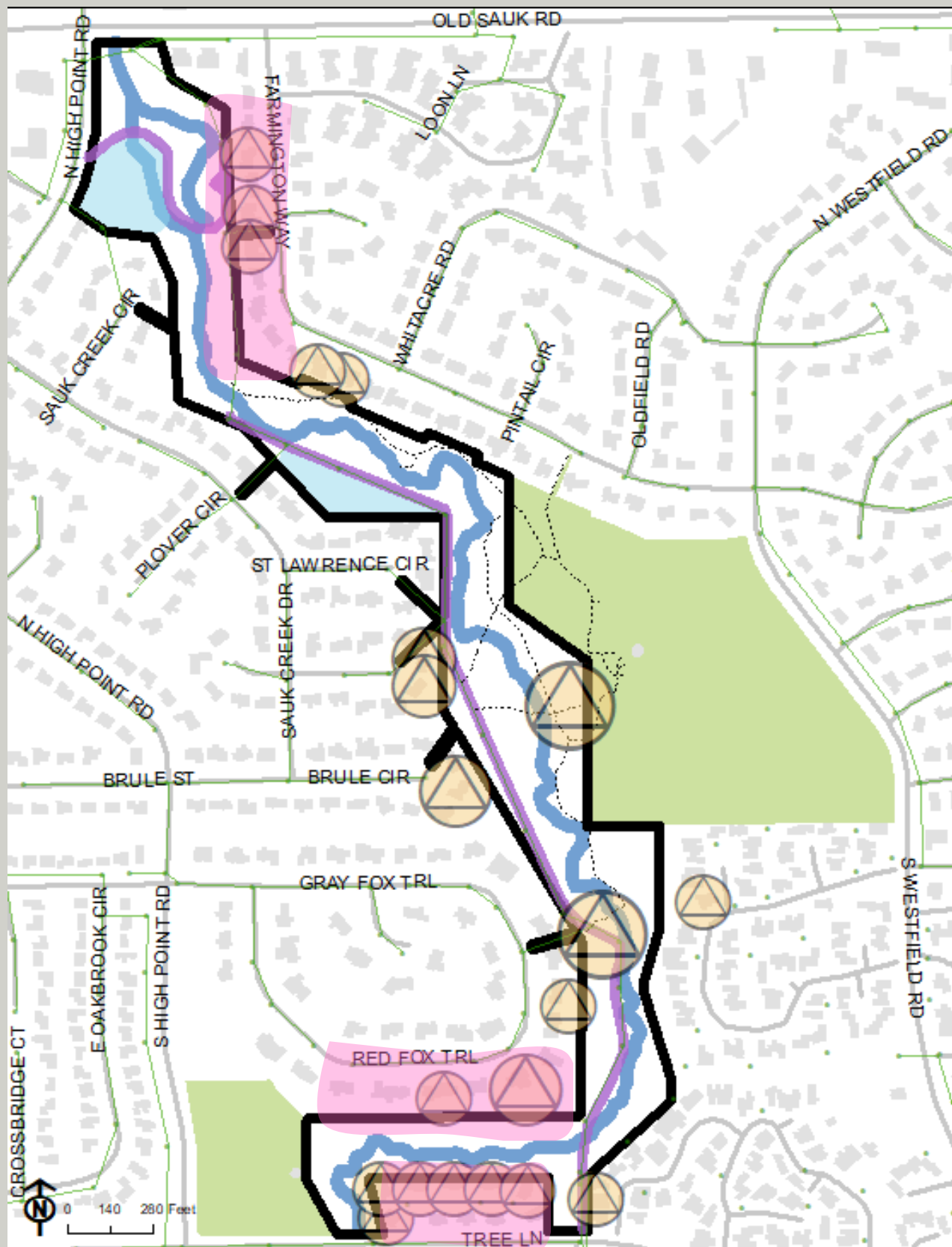
Poll | 1 question | 36 of 38 (94%) participated

1. Which option do you prefer in the middle of the corridor? (Single choice)

36/36 (100%) answered



# Maintenance Requests



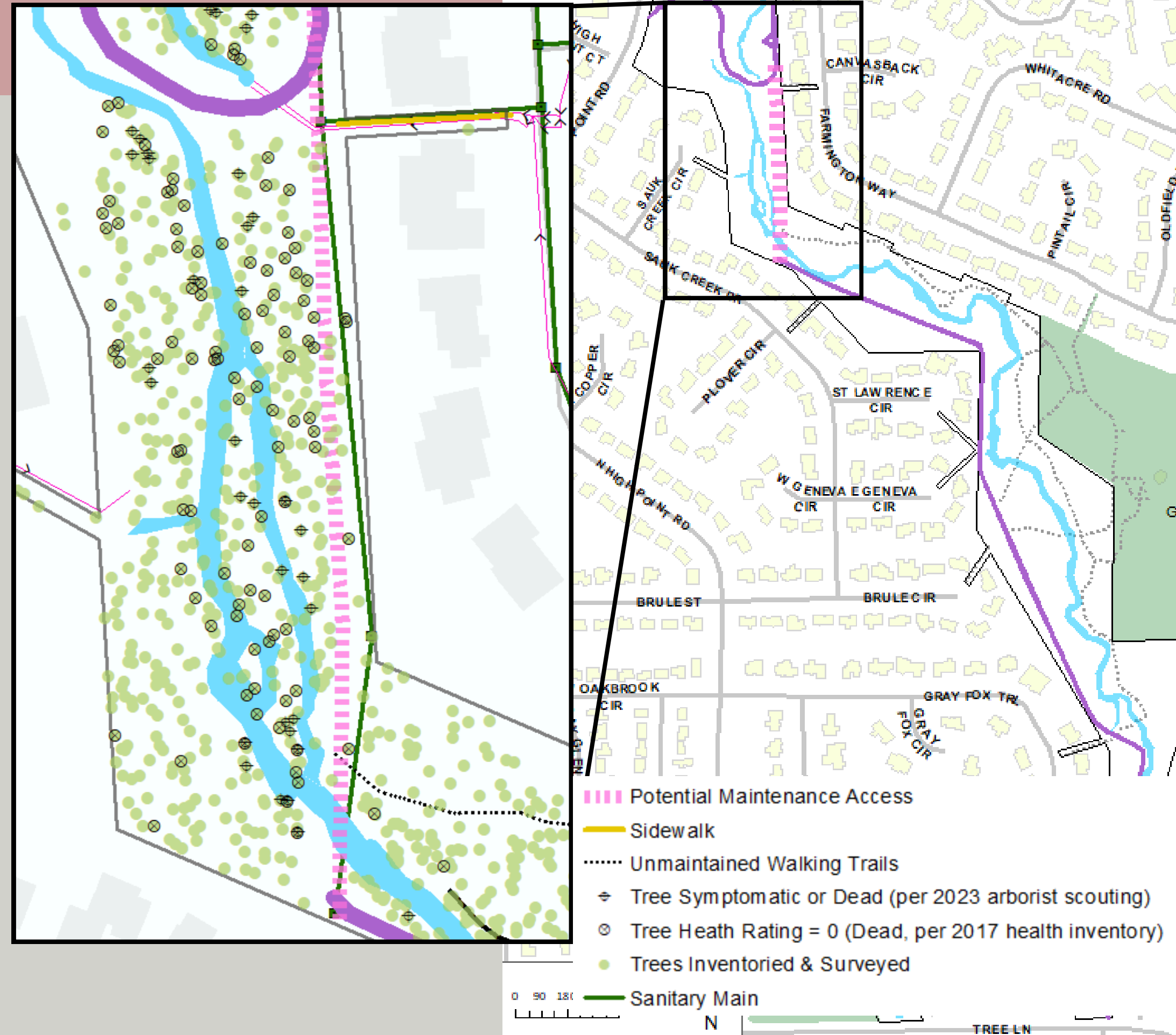
## Tree Removals

- The City receives frequent requests to remove standing dead, or fallen trees.
- Since 2018, Engineering Operations has received >40 requests for tree removals in the Sauk Creek Greenway alone

**Existing paths/plan shared so far doesn't address tree-related maintenance requests in areas highlighted in pink**

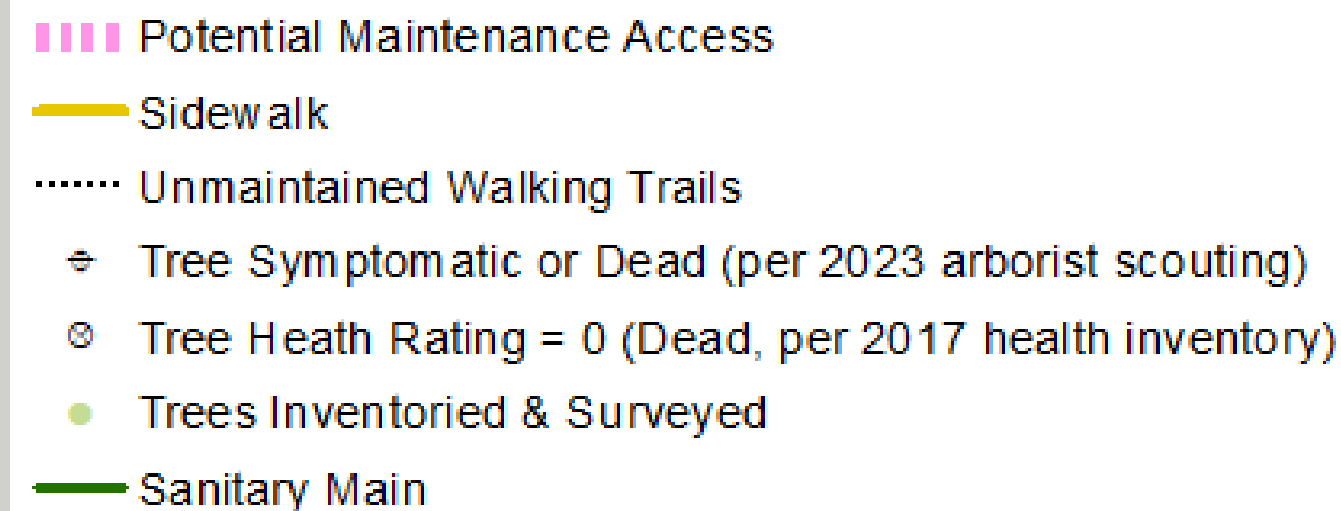
# The City is looking for input on the \*upper\* section

- Access proposed following sanitary sewer line (improves maintenance access)
- Would allow ability to better maintain area with high density of dead or unhealthy trees and respond to neighbor requests on Farmington Way to remove dead/down trees
- Path could be located in area with few trees on eastern edge of corridor
- Would create defined walking path through this area connecting the north and southern sanitary access paths
- No bank stabilization proposed



## What type of maintenance access are you interested in in the upper section of the corridor?

1. I'd like maintenance access added in the upper section
2. I could live with maintenance access added in the upper section
3. I do not want maintenance access added in the upper section
4. I am not sure



# MAINTENANCE- POLL RESULTS

Q2

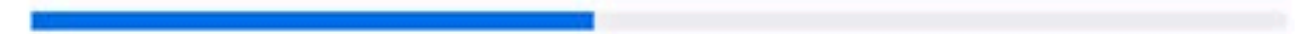
## Q2 - Sauk Creek Corridor Plan PIM3

Poll | 1 question | 33 of 35 (94%) participated

1. What type of maintenance access are you interested in in the upper section of the corridor? (Single choice)

33/33 (100%) answered

I'd like maintenance access added in the upper section (15/33) 45%



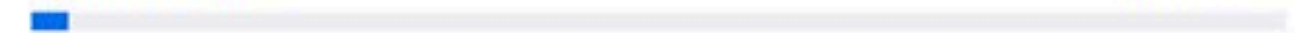
I could live with maintenance access added in the upper section (13/33) 39%



I do not want maintenance access added in the upper section (4/33) 12%



I am not sure (1/33) 3%

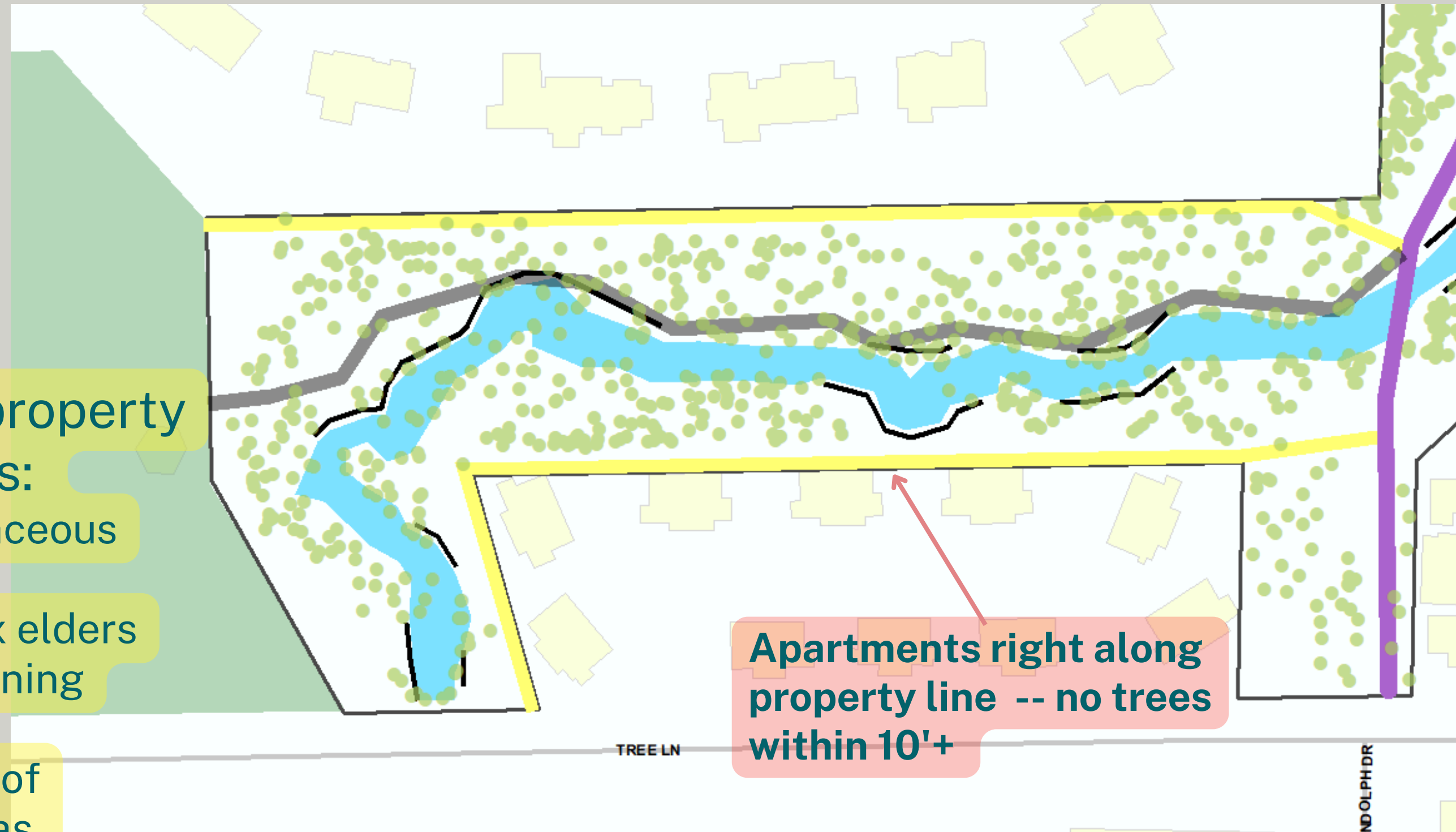


# Preventing Dead/Down Trees on Neighbor's Fences/Yards

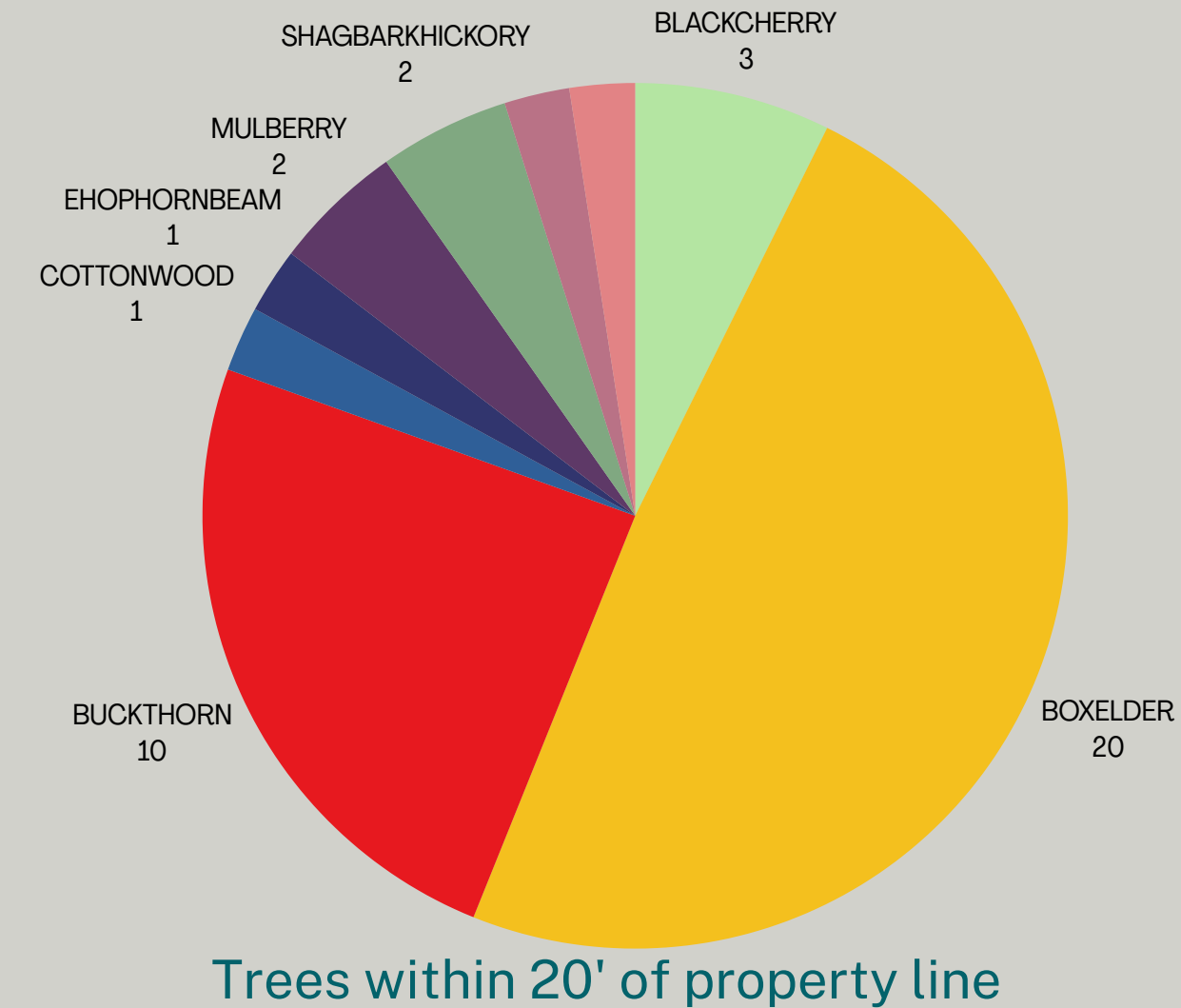
88% of respondents shared that it was somewhat important, or very important that the City have access to remove dead/down trees on neighbor's fences and yards

Propose that 10'-20' from property line in high-complaint areas:

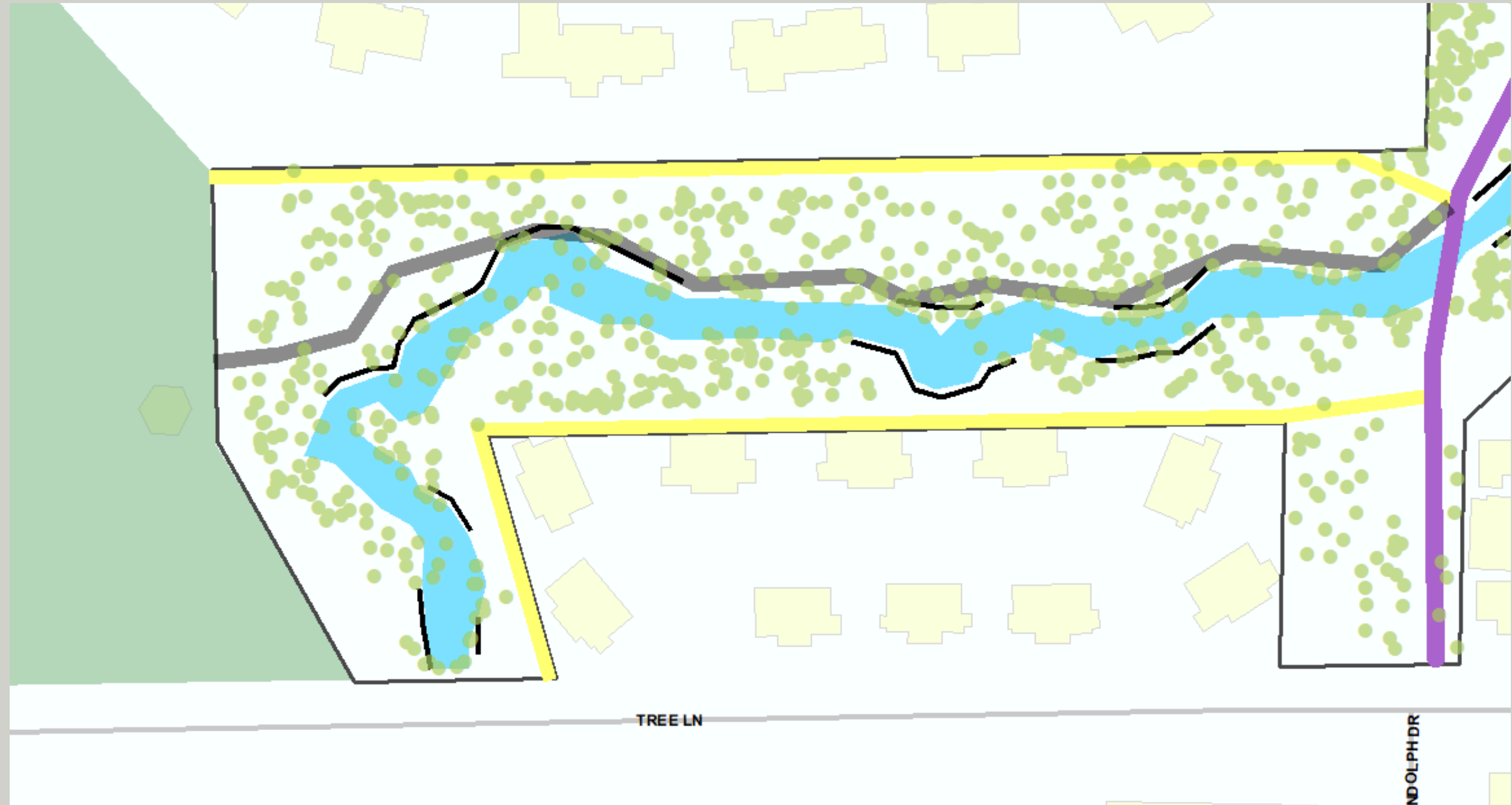
- Work to establish native herbaceous understory
- Prevent the growth of new box elders that tend to lean into light opening (yards)
- Do not replant trees within 10' of property line in high-issue areas



# Preventing Dead/Down Trees on Neighbor's Fences/Yards

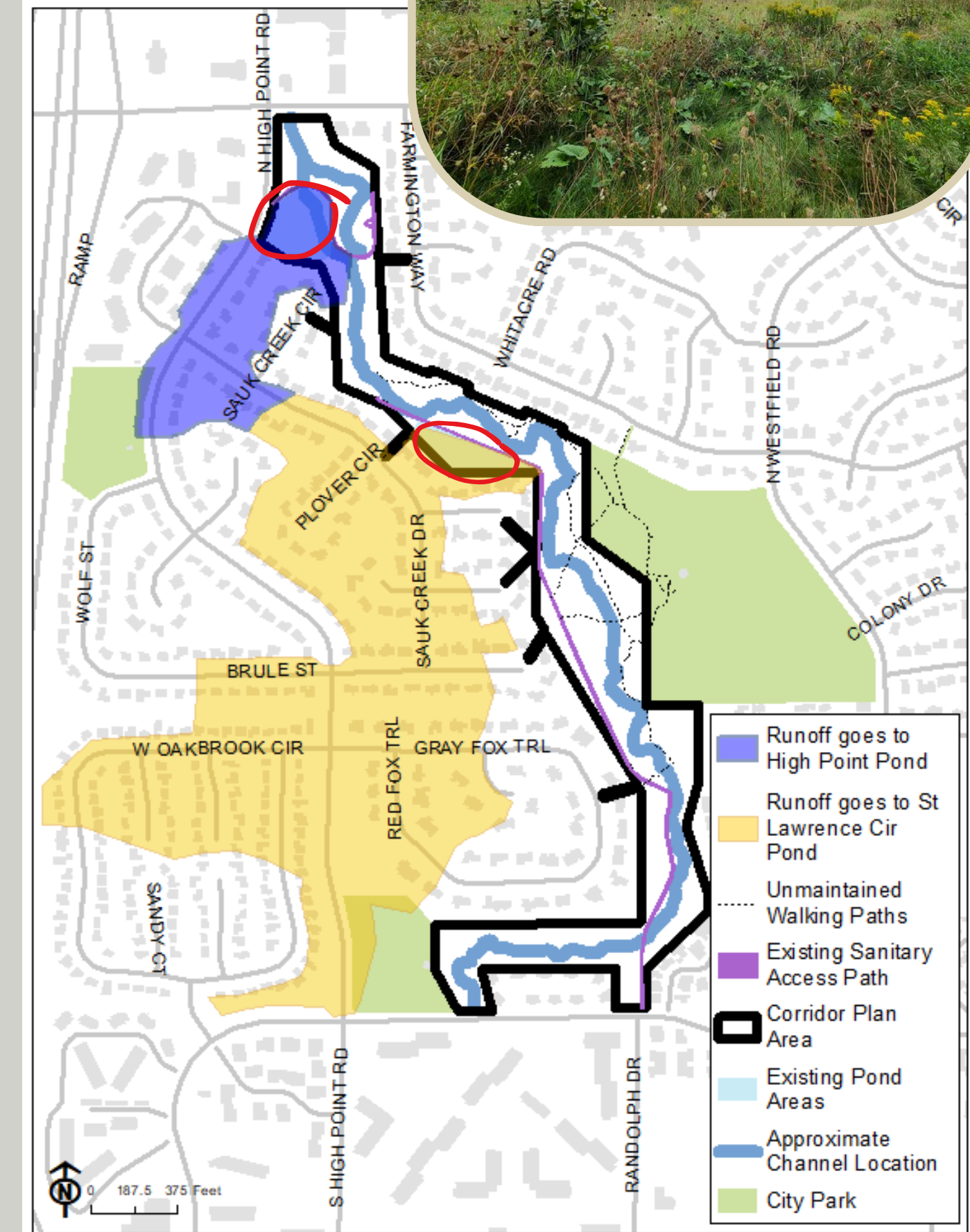


**Will be opportunity to  
provide input on this  
proposal during the  
location-based breakout  
groups after presentation**



# POND IMPROVEMENTS

- St Lawrence Circle pond potential improvements
  - Improve flow of water into pond near Plover Circle (clear out pipes if necessary)
  - Deepen and add filtration medium. Restore with native plants to promote infiltration (improve water quality)
  - Remove failed diversion structure from channel
- High Point pond potential improvements
  - Improve design so sediment can be removed
  - Reconnect main channel to bypass pond
  - Assess sediment loading after channel stabilization to determine improvement options



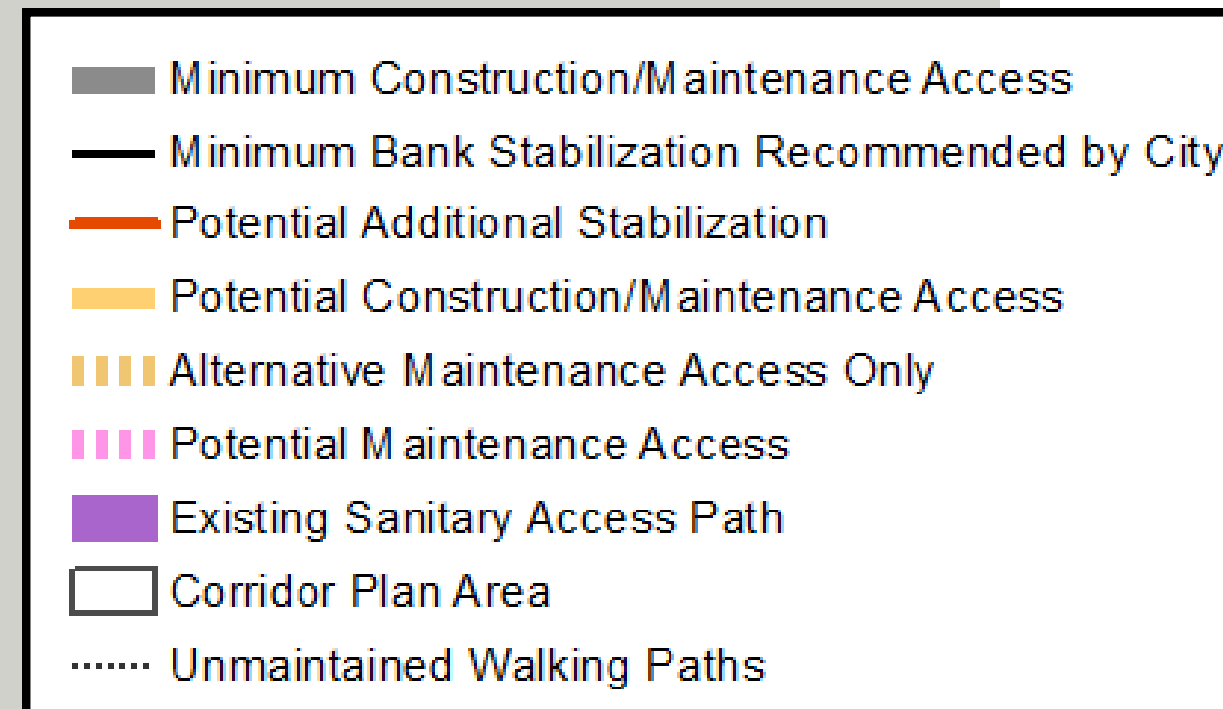
# Review of Draft potential stormwater improvements

## Proposed improvements:

- Channel stabilization and maintenance access proposed by City
- Channel crossings for maintenance access - Yellow circles
- Generalized goals for pond improvements

## Requested input from community on:

- Upper corridor section maintenance access
- Middle corridor channel stabilization + maintenance access -or- spurs from existing sanitary access to channel



During the last meeting we heard the community is interested in preserving existing oaks. We want to understand more of the community's values in considering trees while designing the specific location of the improvements (i.e. shifting channel stabilization or maintenance access to avoiding specific trees) during the future design phase.

Do you agree with the prioritization below?

- **Priority 1:** Design around the largest quantity of healthy, native trees that are included in the natural ecological communities identified in the ecological assessment
- **Priority 2:** Design around healthy trees not included in the natural ecological communities identified in the ecological assessment

1. Yes

2. No

3. I'm not sure



### Q3 - Sauk Creek Corridor Plan PIM3

Poll | 1 question | 34 of 37 (91%) participated

1. Do you agree with the prioritization below?

Priority 1: Design around the largest quantity of healthy, native trees that are included in the natural ecological communities identified in the ecological assessment

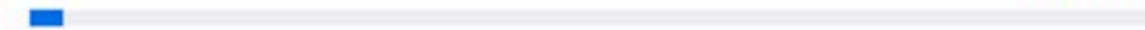
Priority 2: Design around healthy trees not included in the natural ecological communities identified in the ecological assessment (Single choice)

34/34 (100%) answered

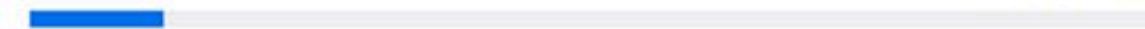
Yes (29/34) 85%



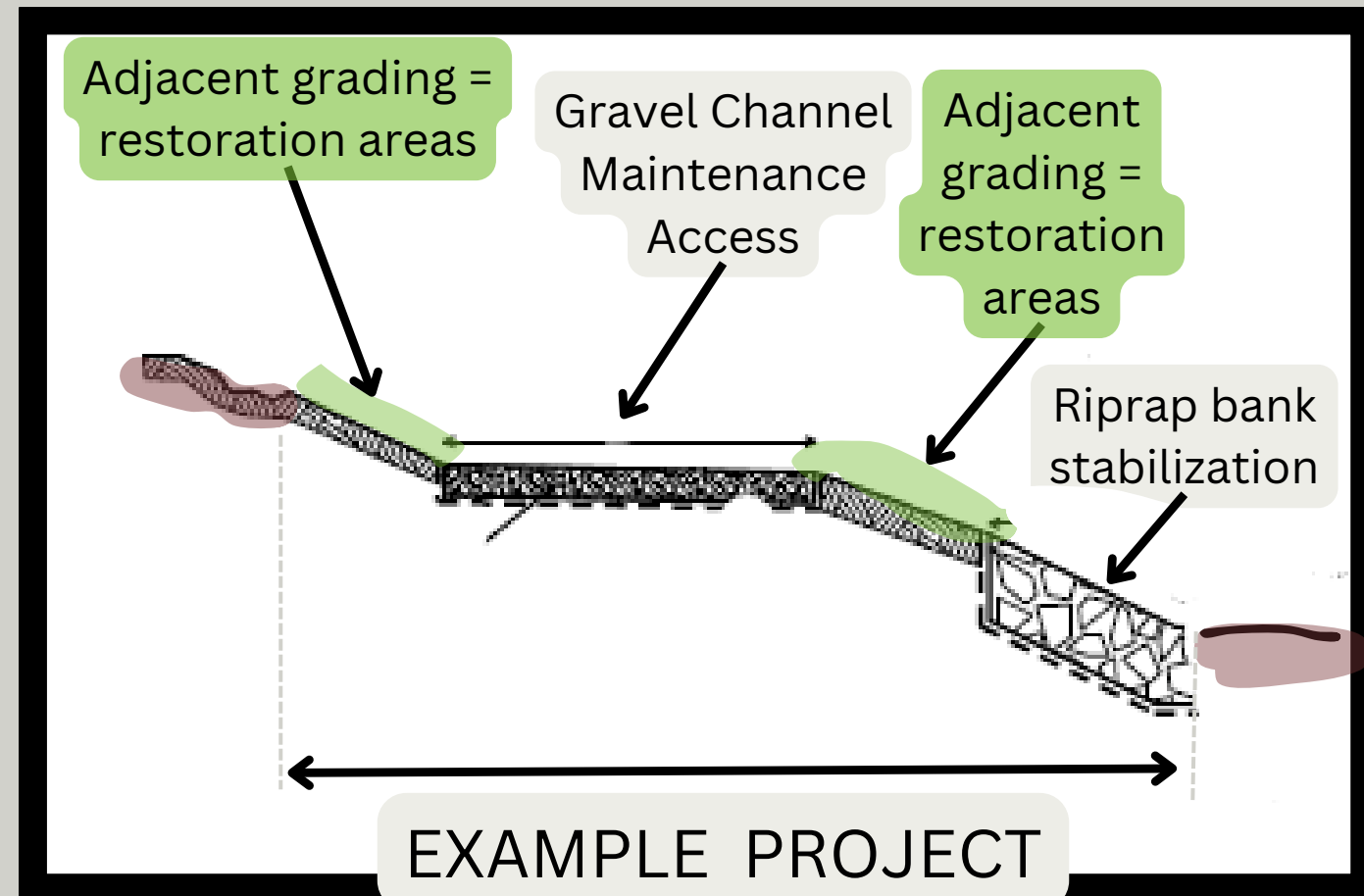
No (1/34) 3%



I'm not sure (4/34) 12%



# Defining the Project Boundary



Proposed Restoration Areas: grading adjacent to stormwater improvements

Potential Restoration Areas based on public input about improvements - will update in final draft of corridor plan



# Ecological Input Summary

- Threats community is most concerned about include:
  - Invasive Species
  - Erosion
  - Replacement of Oaks
  - Flooding and Sedimentation from the channel
- 97% of respondents are somewhat or very concerned about preserving the health of existing oaks.
- 93% of respondents think it is somewhat or very important to get new oaks to grow in the greenway.
- 87% of respondents are somewhat or very interested in expanding coverage and increasing the diversity of native herbaceous species (non-tree or shrub plants) in the greenway.

Oaks are being replaced by trees that are more common in the landscape and provide less ecological value. Oaks are considered critical keystone species that provide an enormous contribution to our food webs, as many moths, butterflies, and insects depend on oaks to lay their eggs. These caterpillars and insects in turn are used as food for young birds, and the cycle continues (Tallamy 2021). Oaks also provide acorns that feed numerous wildlife.

-Heartland Ecological Group  
Sauk Creek Ecological Assessment

# Oak Health Update

- During project site walk-thrus, we noticed that some oaks that were healthy in the 2017 inventory had died. We hired a certified arborist to investigate, and they **confirmed oak wilt is present** in the corridor. The arborist also noted other diseases and stressors such as drought, root rot, sedimentation.
- Managing for oak wilt is complex and resource intensive
- City will evaluate oak wilt at this site as part of the design process
- City is actively having conversations across agencies for how to address citywide
- Any designs to minimize tree impacts will be complex. We will hire an arborist with expertise in woodlot management to help with the stormwater improvements design, and tree protection during construction
  - Additional Resources: <https://dnr.wisconsin.gov/topic/foresthealth/oakwilt>

# Proposed Ecological Restoration Actions

## During Construction

- Preserve healthy, mature canopy trees with emphasis on species that are included in the natural ecological communities identified in the ecological assessment
- Utilize certified arborists to provide enhanced tree protection zones and on-site monitoring during construction

## Post-Construction Invasive Species Control

- Control herbaceous invasive species especially reed canary grass, garlic mustard, dame's rocket, burdock, daylily, periwinkle, goutweed and other horticultural plants.
- Ongoing control of invasive woody species growth



*\*Ecological Restoration will only occur within project boundaries. Select restoration work may occur outside of project boundaries if desired by residents and within City resources.*

# Proposed Ecological Restoration Actions

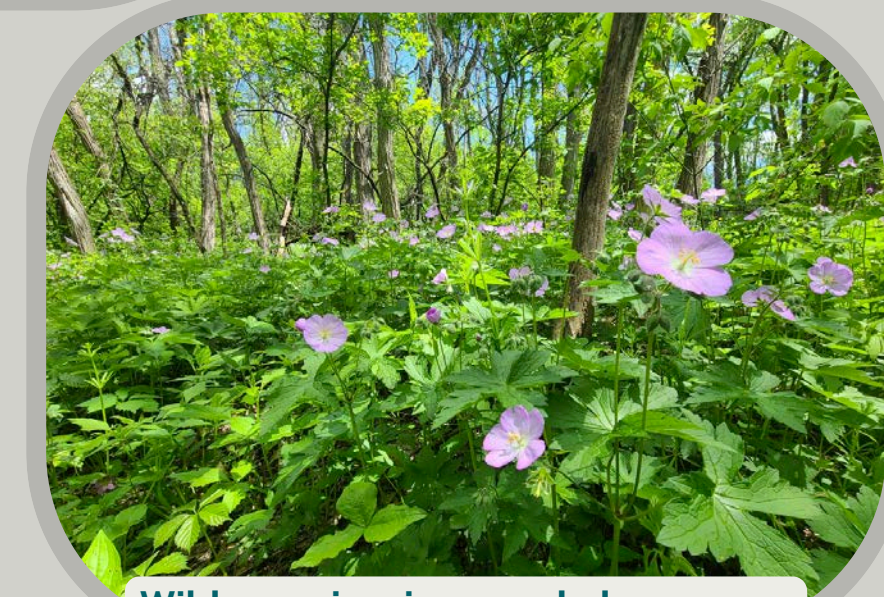
## Post-Construction Native Planting

- Plant native trees: bur oak, swamp white oak, swamp-bur hybrid oak, shagbark hickory, bitternut hickory, hackberry or others
- Plant native woodland shrubs: witch hazel, bladdernut, pagoda dogwood, Eastern wahoo, elderberry or others
- Plant native plugs in select areas, particularly for stabilization along channel, or in areas where tree removal has created pockets of light: species to be determined based on final design plan, but would include **woodland** or **wetland** species.
  - Examples: giant Solomon's seal, mayapple, wild geranium, Canada anemone, ostrich fern, sensitive fern, columbine, big-leaved aster, elm-leaved goldenrod, zigzag goldenrod, Virginia bluebells, figwort, great blue lobelia, Jacob's ladder, golden Alexander, Virginia wild rye, silky wild rye, riverbank wild rye, bottlebrush grass, common wood sedge, rosy sedge and others
- Sow native seed across entire disturbed area. Components would include woodland and partially shade tolerant species as well as some wetland species, particularly aggressive species, along channel.



Native rosy sedge and Virginia creeper dominate the groundlayer in this wooded portion of Bram St pond

55% of people thought that native forest overstory with native diverse understory would be aesthetically pleasing, resilient to flooding and erosion, and beneficial to ecosystem services.



Wild geranium in a wooded greenway

*\*Ecological Restoration will only occur within project boundaries. Select restoration work may occur outside of project boundaries if desired by residents and within City resources.*

# Proposed Ecological Restoration

## Post-Construction Ecological Restoration Contract

- For the first 3-5 years after construction, the project area will be maintained by an ecological restoration firm. Firms focus on invasive species control and targeted actions to foster native plant growth.

## Ongoing Targeted Maintenance

- Project areas that are restored become “Tier 1 Vegetation Maintenance” sites managed by Engineering Conservation staff. These sites receive the highest level of vegetation maintenance service across stormwater land.

### Level of Service

- Each site receives a maintenance visit at least twice during the growing season; this includes targeted invasive species control at this visit overseen by conservation staff.
- Supplemental native seeding or plug planting as needed.
- These sites are burned on a maintenance cycle of 3 to 7 years if site conditions and species composition allows. Native planting beds (as opposed to large native restoration sites) are likely to be burned at a shorter return interval.
- Each site will receive spot brush cutting of woody invasive every 3 years, alternating prescribed burn years.
- Each site receives a flora survey once every 3 to 5 years.
- Hybrid Non-Native Cattails and Reed Canary Grass are typically managed in these areas if they are new populations or impede stormwater flow contributing to flooding.

### Tier 1

These sites are characterized by their great diversity of native species and receive the highest level of maintenance for ecological restoration. These sites are primarily rain gardens, bioretention basins, native plant demonstration beds, ponds, greenways and shorelines with vegetation most closely resembling a native ecosystem. Tier 1 sites are characterized by majority native plant cover, high diversity of native plant species, low invasive plant presence, and great potential for supporting species specialists that require native plants.



**Tier 1 sites are dominated by native species including the canopy layer (for wooded sites), and a diverse assemblage of herbaceous species. Blue tree tube shelters a planted hickory sapling.**



**Engineering Conservation staff watering native plants grown in-house for use on stormwater land**

*\*Ecological Restoration will only occur within project boundaries. Select restoration work may occur outside of project boundaries if desired by residents and within City resources.*

# Ecological Restoration

## Wisconsin DNR Invasive Species Identification, Classification, and Control Rule (NR 40) - Invasive Trees

### Regulated and Restricted

- Black locust (*Robinia pseudocacia*)
- Burning bush (*Euonymous alatus*)
- Common buckthorn (*Rhamnus cathartica*)
- Siberian elm (*Ulmus pumila*)
- White mulberry (*Morus alba*)

#### Restricted Invasive Species\*

- Already widely established in the state
- High environmental and/or economic impacts are evident with these species
- Complete eradication is unlikely

Regulations: Cannot transport, transfer, or introduce without a permit.\*\*

Possession is allowed except for fish or crayfish.

**Control is encouraged but not required.**



Common buckthorn in a wooded greenway. The Ecological Assessment makes a connection between invasive trees/shrubs and a lack of biodiversity.

#### Wildlife Impacts

“While birds (and sometimes mice) do eat buckthorn berries, it's often because it's the only available seed source. But buckthorn berries are not a good food source. They're low in protein and high in carbohydrates and produce a severe laxative effect in some animals. For smaller birds, the laxative effect can even be strong enough to result in death. Adding insult to injury, the excreting birds also distribute buckthorn seeds over long distances.”

-Friends of the Mississippi River



Invasive species were identified as a threat to the ecological health of the greenway in the Ecological Assessment and is a top concern of the community as identified in the previous Public Information Meeting. We want to understand more of the community's values in considering how restoration efforts could impact trees and shrubs adjacent to the project area.

Should the City:

1. Keep all NR 40 invasive trees and shrubs directly adjacent to the the project area?
2. Remove majority of NR 40 invasive trees and shrubs within 10-20' the project area except a select few that have significant canopy impacts?
3. Remove all NR 40 invasive trees and shrubs within 10-20' of the project area?
4. I'm not sure

Improves wildlife habitat offerings in the greenway and protects restoration efforts in project boundaries

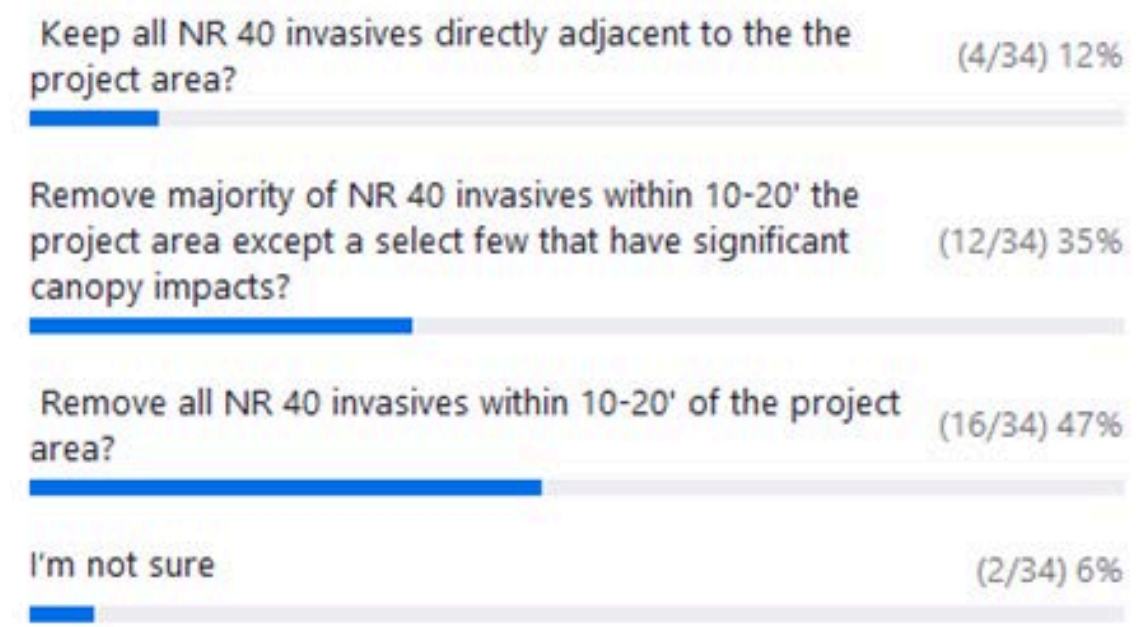
## Q4 - Sauk Creek Corridor Plan PIM3

Poll ended | 1 question | 34 of 36 (94%) participated

1. We want to understand more of the community's values in considering how restoration efforts could impact trees adjacent to the project area.

Should the City: (Single choice)

34/34 (100%) answered



# Community Involvement in Ecological Improvements

**Volunteer Efforts:** Volunteers can assist in improving native plant diversity and controlling invasive plants on the greenway.

- Cut brush, especially invasive shrubs such as buckthorn, honeysuckle, privet, burning bush to create pockets of light for oak regeneration and herbaceous native plants
- Dig or hand pull invasive herbaceous species such as dame's rocket, garlic mustard, burdock to reduce competition with native plants
- Collect native seed and sow to diversify herbaceous native plants
- Citizen Science: post wildlife and plant sightings to the City of Madison Stormwater iNaturalist page; <https://www.inaturalist.org/projects/stormwater-species-of-madison-wisconsin>
  - Or participate in WI DNR Bumble Bee Brigade; <https://wiatri.net/inventory/bbb/>

**Curb Encroachments:** Area residents can reduce the threat of invasive species or horticultural plant spread into the greenway.

- Stop dumping yard waste and brush into greenway
- In areas where encroachment has expanded turf/horticultural plants or smothered previously existing vegetation, work with City to replant trees or potentially introduce herbaceous native species



# INFORMATIONAL – Paths

West Area Plan Approved with East-West path across greenway:

- *During the Sauk Creek Greenway Corridor Plan, use detailed engineering data to consider the impacts and benefits of adding an All Ages and Abilities shared-use path to make an east-west connection across the greenway to Walnut Grove Park. Any All Ages and Abilities path should be designed using environmentally sensitive best practices and minimizing impacts to trees and other vegetation, wildlife habitat, and adjacent properties.*

# INFORMATIONAL - Paths

During a high level analysis of the design data, the City found options to connect E-W through the corridor that:

- Overlap existing sanitary access or proposed maintenance access to minimize tree impacts
- Are ADA compliant and can connect the channel to Walnut Grove Park without switch backs
  - Minimizes impacts to trees and other vegetation
  - Improves visibility for path users to reduce conflicts
- Does not impact wetlands
- Minimizes impacts to adjacent properties
- Improves accessibility through the greenway

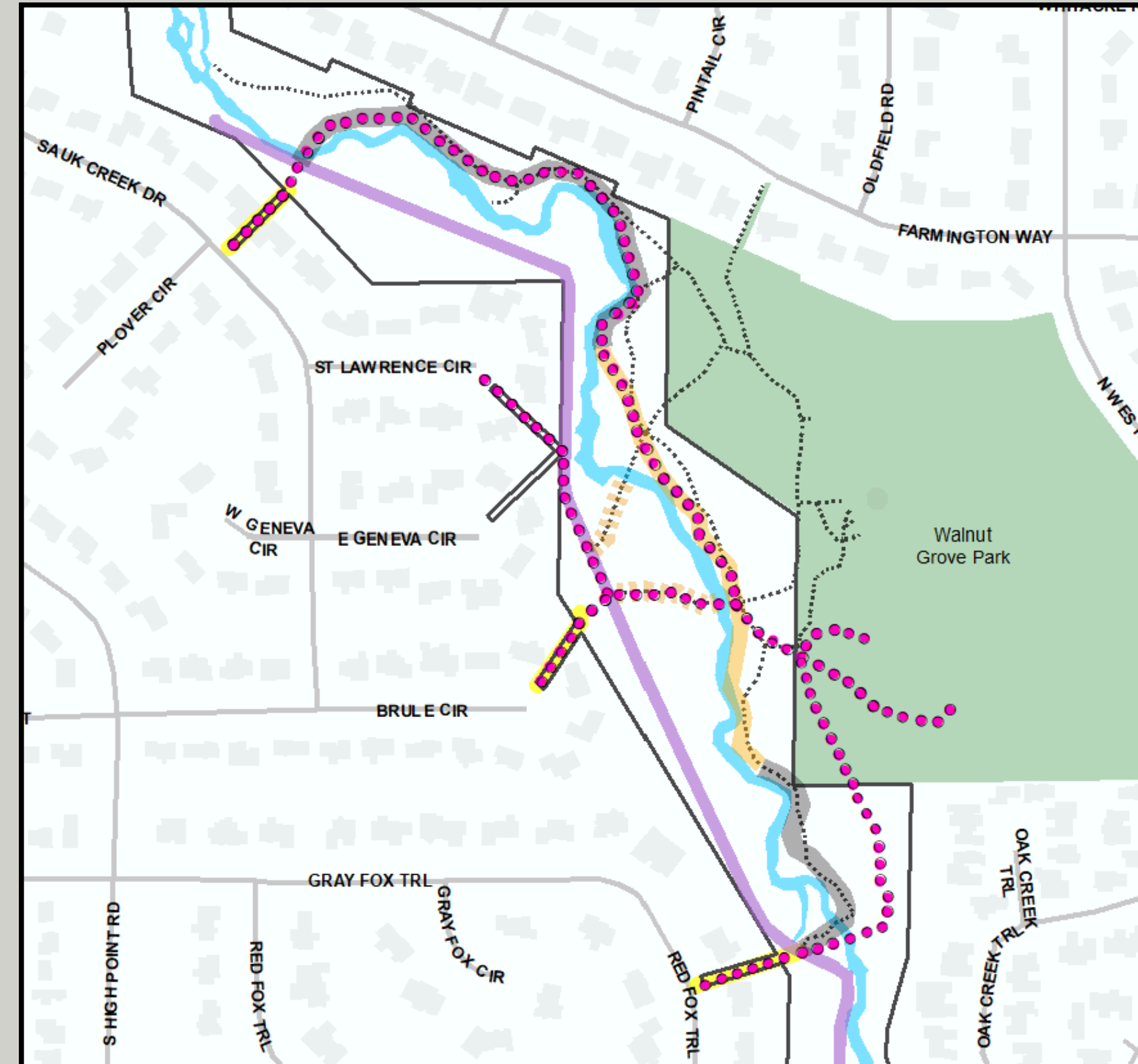
# INFORMATIONAL - Paths

- However, the East-West connection is NOT a priority for construction and isn't funded in the 6 year Transportation Improvement Plan
- Stormwater channel stabilization and maintenance access is a project that is distinct from the East-West path connection
- Stormwater channel stabilization and maintenance access improvements have programmed funding, and these improvements will be phased over time
- Wanted to investigate which parts of the East-West connection overlapped the stormwater improvements to see potential for efficiencies to build both projects together
- **Preliminary review of concepts show that construction of a path would not align enough with the stormwater improvements to be built at the same time.**

# INFORMATIONAL - Paths

- High level analysis shows a variety of options for E-W connections
- Overlaps existing and proposed paths as much as possible

- All E-W Multi-Use Path Options
- ||||| Alternative Maintenance Access Only
- Potential Construction/Maintenance Access
- Minimum Construction/Maintenance Access
- Existing Sanitary Access Path
- ▭ Corridor Plan Area
- Existing Sidewalk
- ..... Unmaintained Walking Trail

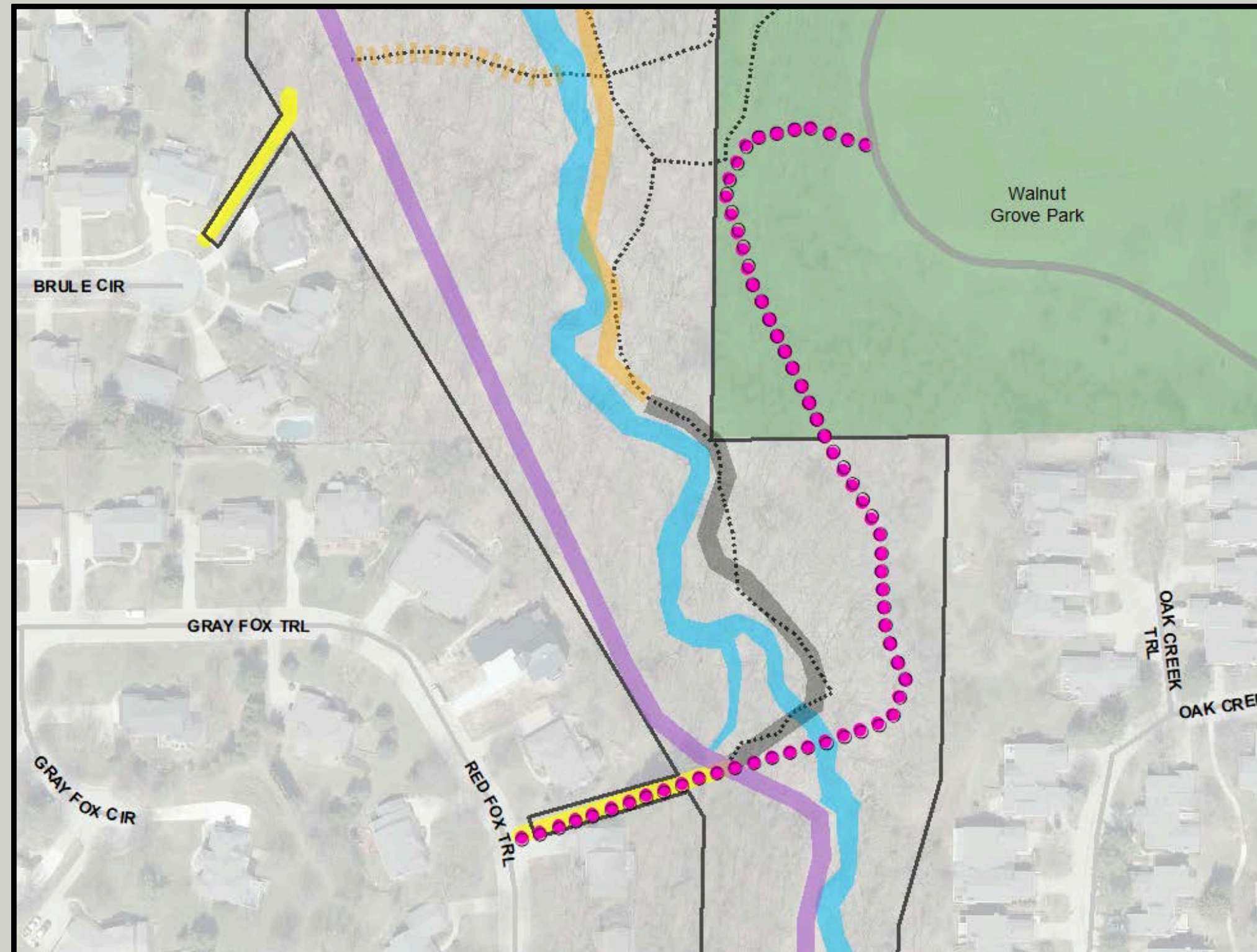


# INFORMATIONAL - Paths

Southern route is not preferred because of known community safety concerns

- There are straighter path options from Walnut Grove Park to the channel

- E-W Multi-Use Path - South Connection
- Existing Walnut Grove Park Path
- |||| Alternative Maintenance Access Only
- Potential Construction/Maintenance Access
- Minimum Construction/Maintenance Access
- Existing Sanitary Access Path
- Corridor Plan Area
- Existing Sidewalk
- ..... Unmaintained Walking Trail

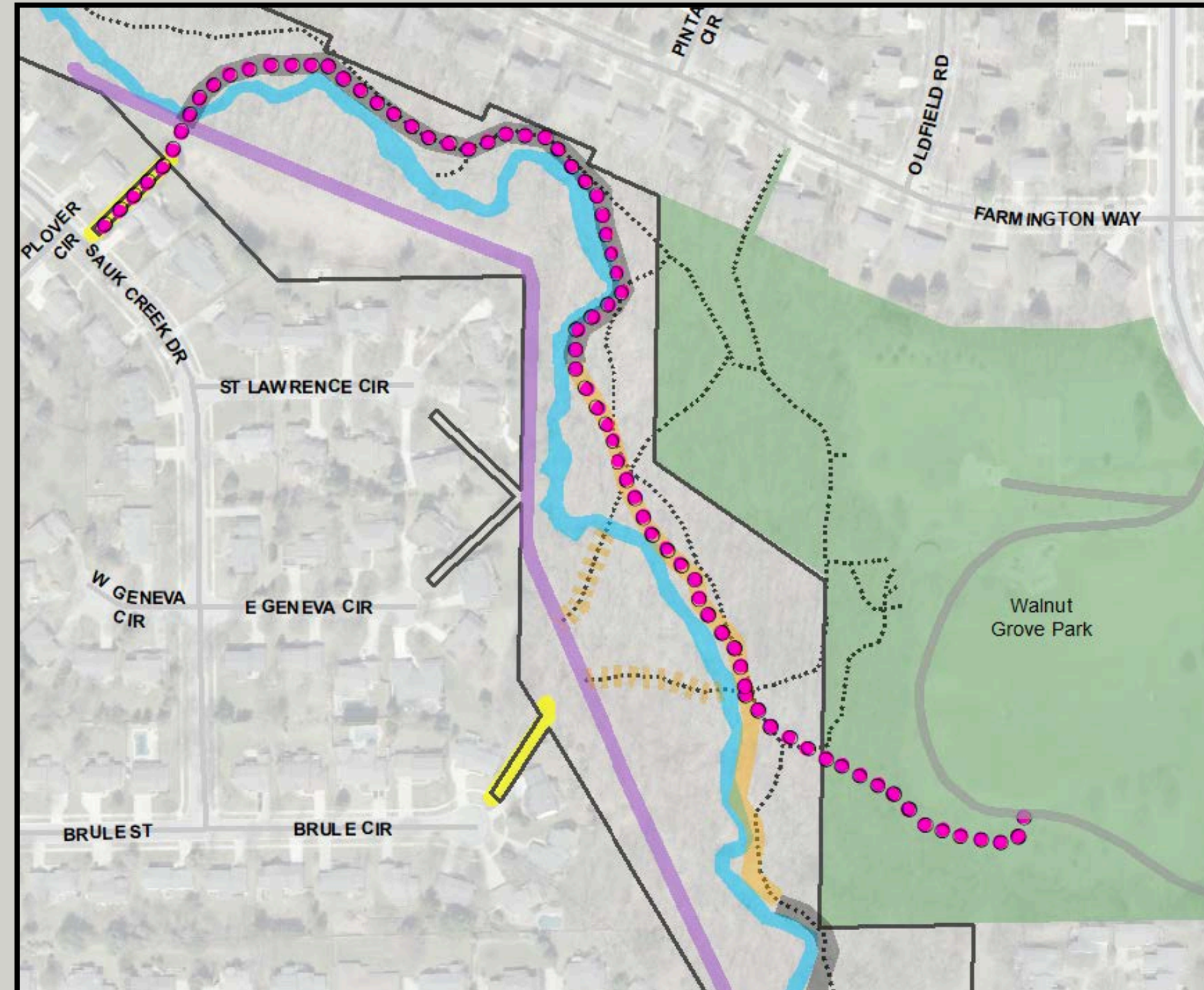


# INFORMATIONAL - Paths

Northern route is longer than the middle routes

- Could be shorter by following the sanitary access path, but it still isn't as direct

- E-W Multi-Use Path - North Connection
- Existing Walnut Grove Park Path
- |||| Alternative Maintenance Access
- Potential Construction/Maintenance
- Minimum Construction/Maintenance
- Existing Sanitary Access Path
- Corridor Plan Area
- Existing Sidewalk
- ..... Unmaintained Walking Trail

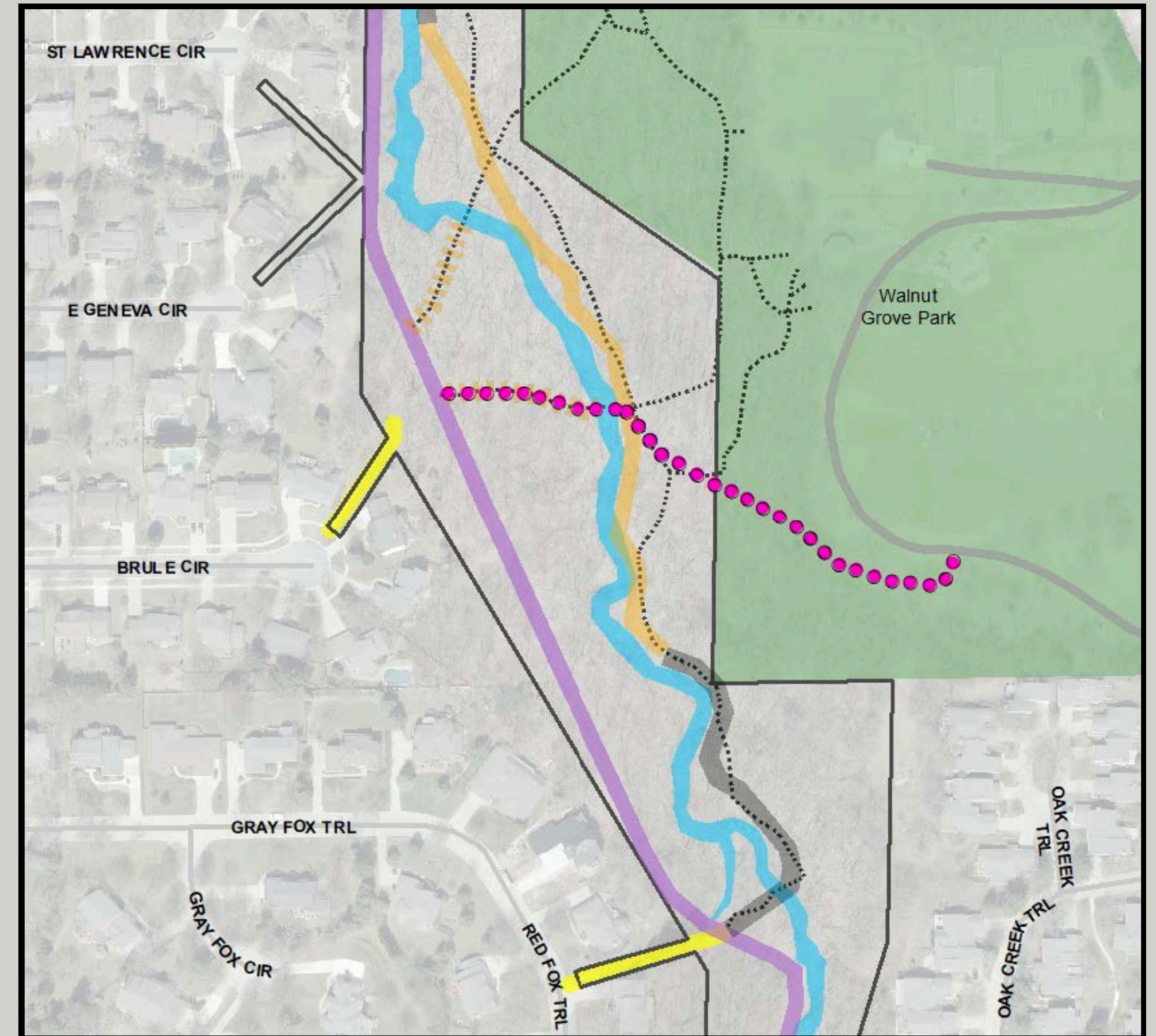


# INFORMATIONAL - Paths

Middle options seem most feasible

- Most direct connections
- No large curves on steep slopes or wooded areas
- Overlaps with portion of Alternative Maintenance Access (existing sanitary access to the channel)
- Multiple connection point options on west side

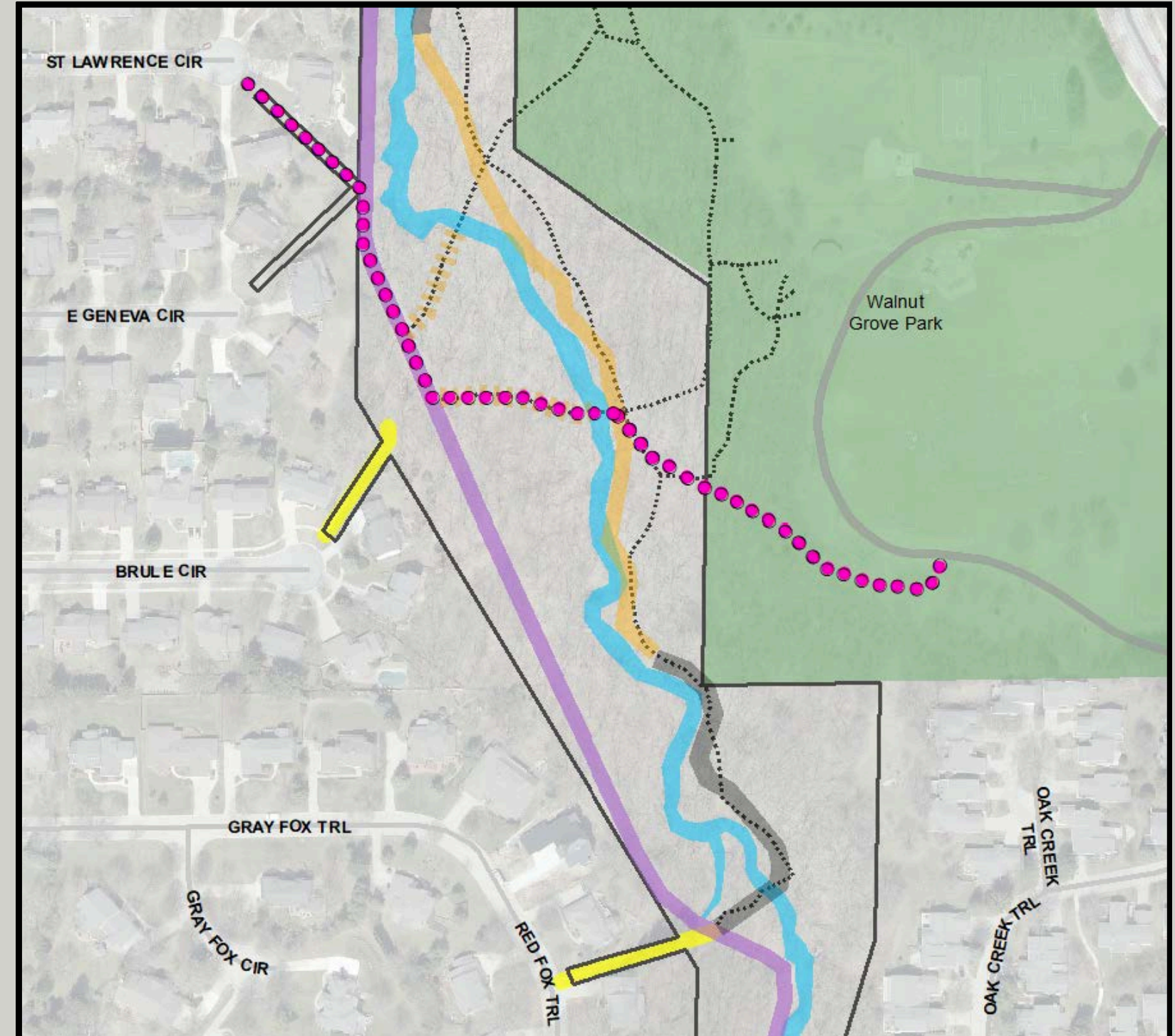
- E-W Multi-Use Path - Middle Connection from Sanitary Access to Walnut Grove
- Existing Walnut Grove Park Path
- ||||| Alternative Maintenance Access Only
- Potential Construction/Maintenance Access
- Minimum Construction/Maintenance Access
- Existing Sanitary Access Path
- ▭ Corridor Plan Area
- Existing Sidewalk
- ..... Unmaintained Walking Trail



# INFORMATIONAL - Paths

- No existing sidewalk
- Could be 5% or less slope (ADA target max slope)

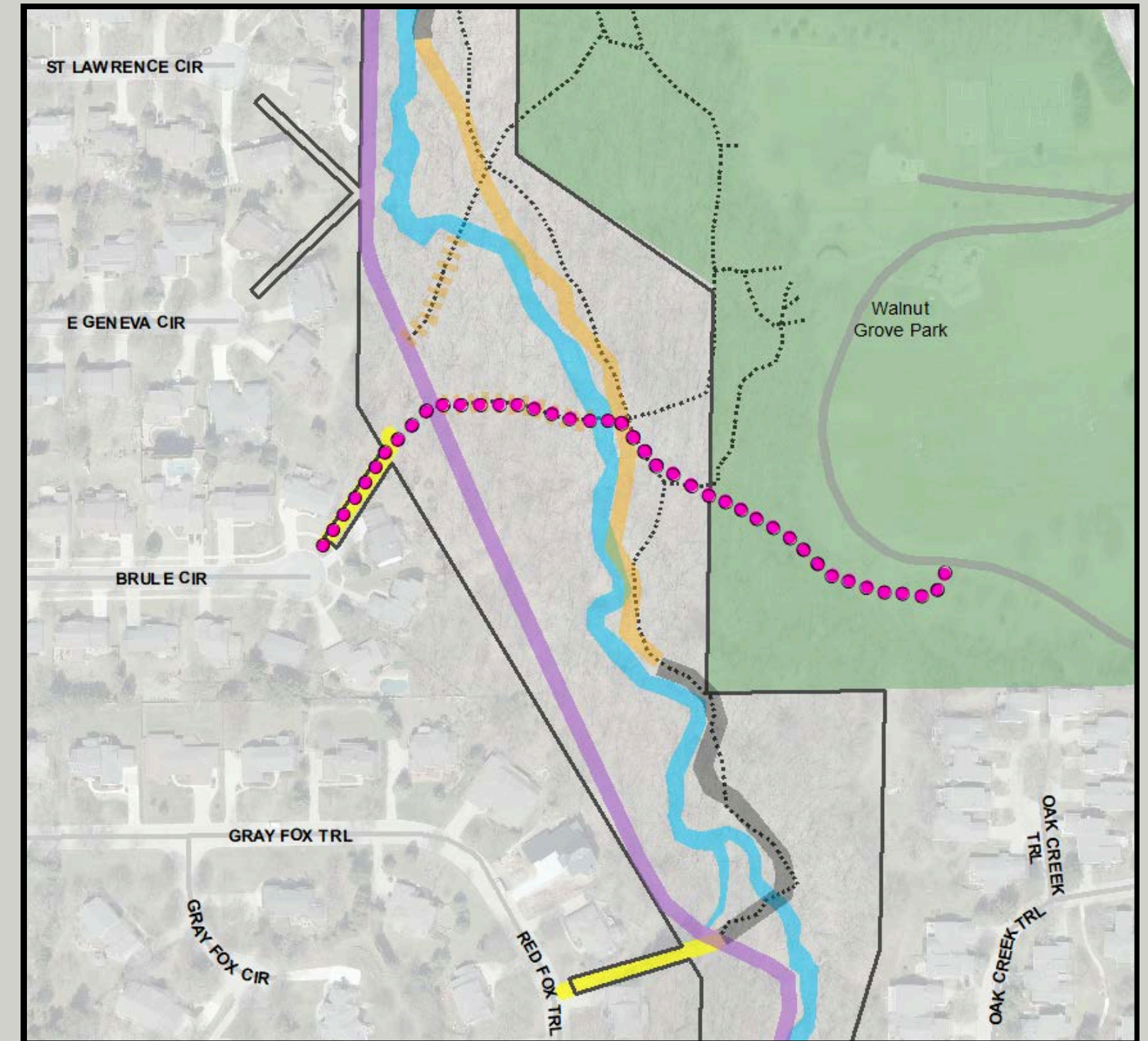
- E-W Multi-Use Path - St Lawrence Connection
- Existing Walnut Grove Park Path
- ||| Alternative Maintenance Access Only
- Potential Construction/Maintenance Access
- Minimum Construction/Maintenance Access
- Existing Sanitary Access Path
- Corridor Plan Area
- Existing Sidewalk
- ..... Unmaintained Walking Trail



# INFORMATIONAL - Paths

- Most direct connection from High Point Rd
  - Ties best into future transportation improvements
- Sidewalk already exists between homes
- Likely would have >5% slope (less accessible)

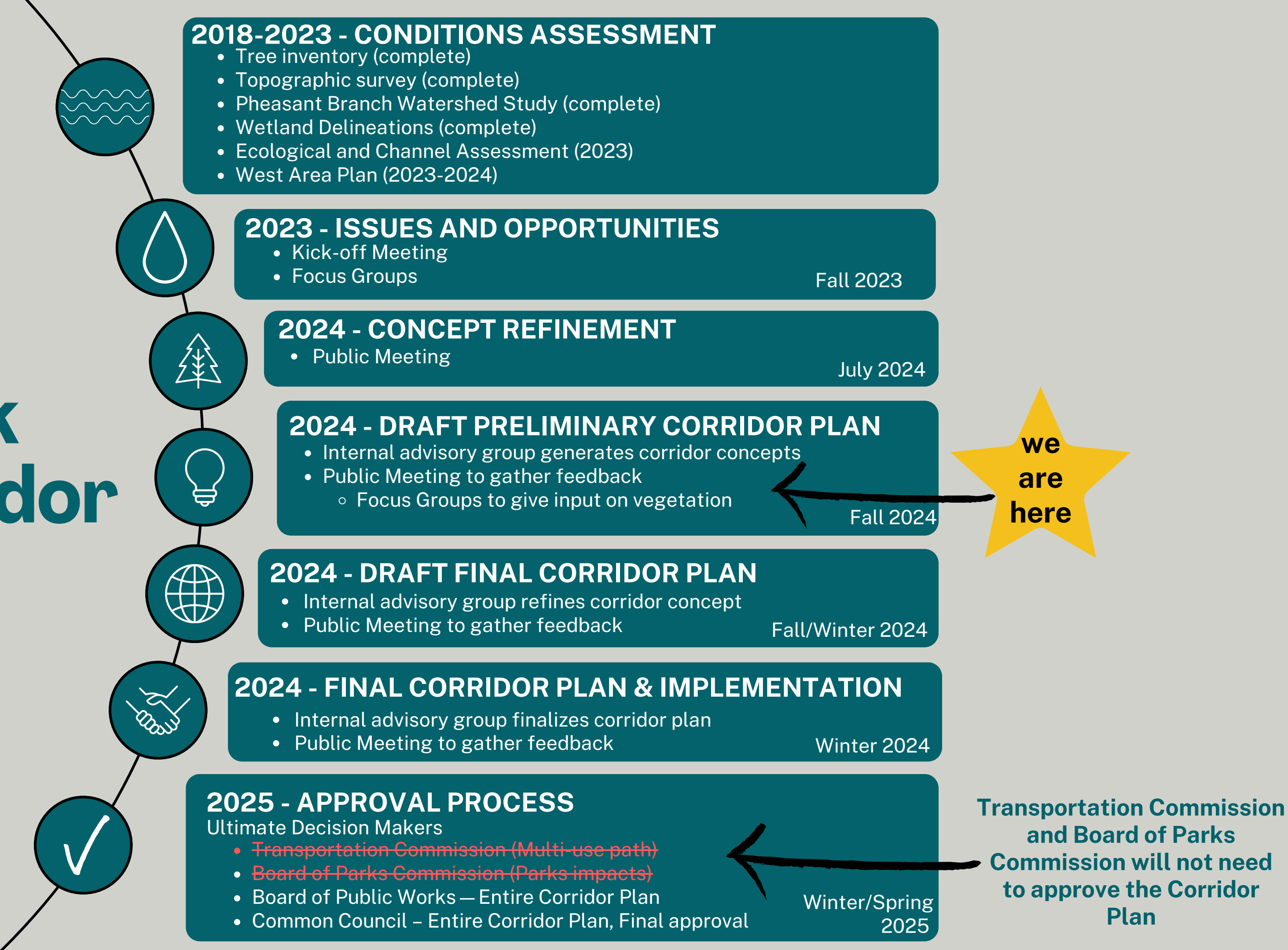
- E-W Multi-Use Path - Brule Cir Connection
- Existing Walnut Grove Park Path
- |||| Alternative Maintenance Access Only
- Potential Construction/Maintenance Access
- Minimum Construction/Maintenance Access
- Existing Sanitary Access Path
- ▭ Corridor Plan Area
- Existing Sidewalk
- ..... Unmaintained Walking Trail



# INFORMATIONAL – Paths

- While the N-S route may have overlapped much more of the stormwater improvements, the E-W connection has less efficiencies to construct at the same time as the stormwater improvements that are generally following the channel north-south.
  - Due to lack of overlap, the E-W Multi-use path will **not** be included with corridor plan and will **not** be built with the stormwater improvements
- This connection will stay on the list of citywide multi-use path improvements.  
Comments to date will be documented and kept in project file.
- Stormwater improvements will be built in a way that doesn't preclude E-W multi-use connections in the future
- We'll add a note to the corridor plan that the East-West path will not be included due to the lack of overlap with the stormwater improvements
  - Will document potential alternatives presented tonight

# Sauk Creek Corridor Plan



\*Developed using the City of Madison Racial Equity and Social Justice Public Participation Resource Guide

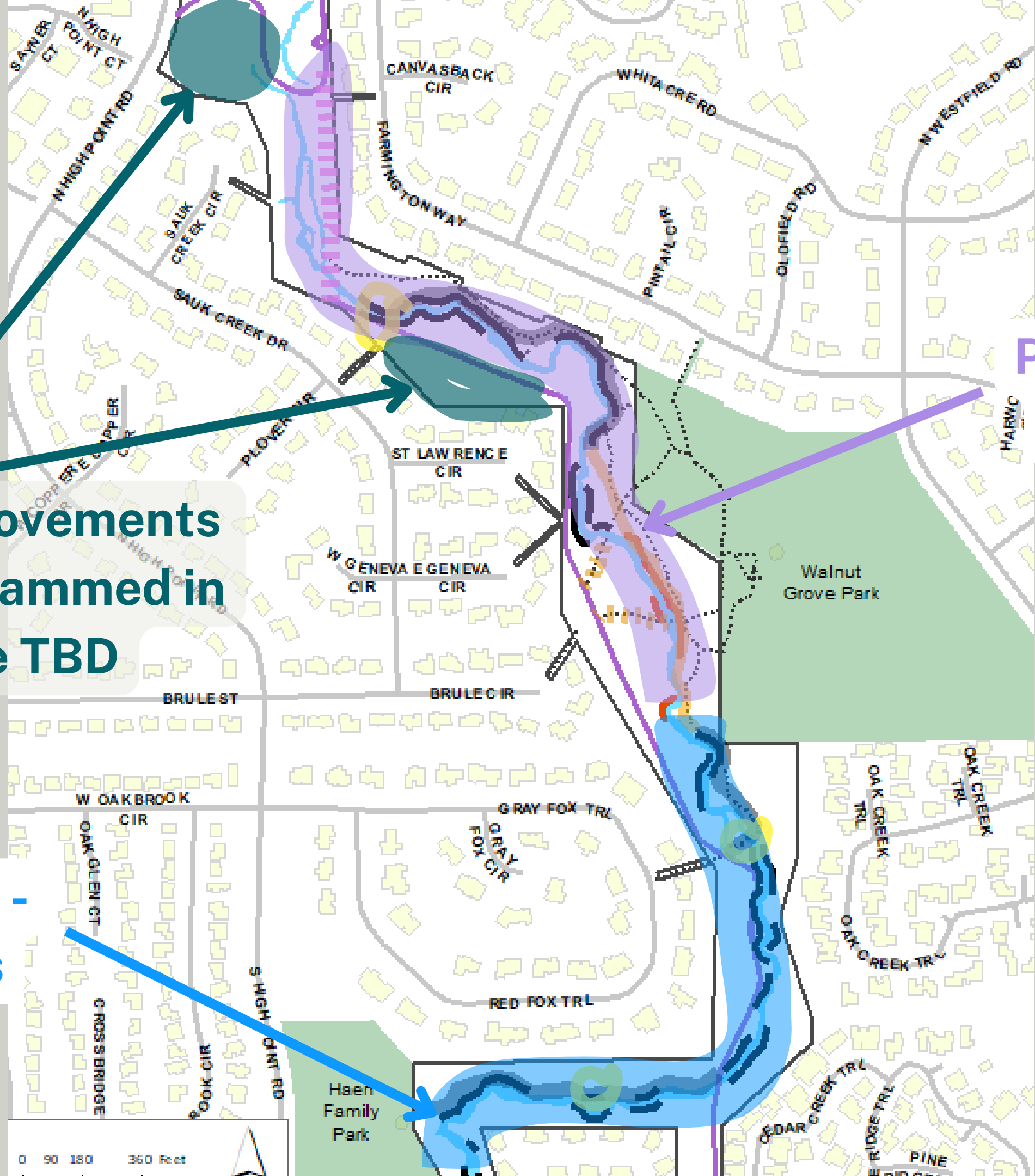
# Draft Phasing of Improvements

Phase 3 - Pond improvements  
- not currently programmed in  
6-year CIP, date TBD

Priority Phase 1 -  
next 2-3 years

Priority Phase 2 -  
next 3-6 years

Estimates based on known  
priorities and best available data  
-- subject to change



# Stormwater Utility Funding

- Not funded from property taxes, which funds the General Fund
- All stormwater related improvements are funded through a charge on your monthly municipal services bill called “stormwater”.
- The average single family house pays \$11/month which is used to fund ALL the operations of the entire stormwater sewer system as well as funding capital projects.

CUSTOMER NUMBER		ACCOUNT NUMBER		BILL NUMBER	
LANDFILL		RATES WENT INTO EFFECT 06/01/2023			
Landfill Remediation				\$0.50	
SEWER		RATES WENT INTO EFFECT 06/01/2023		(608) 266-4751	
City Sewer Demand 5/8" Meter				\$7.87	
MMSD Trtmnt Demand 5/8" Meter				\$7.36	
City Sewer Service	3,426	gallons at	0.001308	\$4.48	
MMSD Treatment Service	3,426	gallons at	0.003439	\$11.78	
Sewer Sub Total				\$31.49	
SPECIAL CHARGES		RATES WENT INTO EFFECT 01/01/2023		(608) 243-5899	
Urban Forestry-Residential				\$6.38	
Resource Recovery				\$4.08	
Special Charges Sub Total				\$10.46	
STORMWATER		RATES WENT INTO EFFECT 05/01/2023		(608) 266-4751	
Stormwater Base				\$2.15	
Stormwater Impervious	1,709	sq. ft. at	0.003470	\$5.93	
Stormwater Pervious	8,569	sq. ft. at	0.000260	\$2.23	
Stormwater Sub Total				\$10.31	
WATER		RATES WENT INTO EFFECT 03/01/2023		(608) 266-4641	
Water Base Charge 5/8"				\$14.00	
Water Consumption Tier 1	3,000	gallons at	0.004600	\$13.80	
Water Consumption Tier 2	426	gallons at	0.006100	\$2.60	
Water Sub Total				\$30.40	
CURRENT CHARGES				\$83.16	

# Next Steps

## Draft Final Corridor Plan

- Internal advisory group meets to use your input to create draft final corridor plan
- In late fall, the City will host another public meeting to share the draft preliminary corridor plan and seek input
  - More opportunities to help shape the corridor plan!



# Ecological Resources

- **Native Landscaping**

- WDNR and UW-Extension [“Landscaping Alternatives for Terrestrial Invasive Flowers and Grasses”](#)
- Woody Invasives of the Great Lakes Collaborative (WIGL) [“Landscape Alternatives for Invasives Trees, Shrubs & Vines”](#)
- [Native and non-native root comparison chart](#)

- **Invasive Plants**

- [Dane County Invasive Tree & Brush Removal](#)
- [Woody Invasives of the Great Lakes Collaborative \(WIGL\)](#)
- [Invasive Plants Association of Wisconsin \(IPAW\)](#)

- **Oak Wilt**

- [DNR Oak Wilt](#)
- [UW Extension: Oak Wilt](#)
- [Identify, Prevent, and Control Oak Wilt](#)
- 

*Oak ecosystems are among the most highly productive ecosystems in the world but are rapidly declining and globally imperiled. Oaks are a keystone species, providing habitat structure and critical compositional features for 250+ species of birds, 500+ species of insects, and 500+ species of plants.*

- Natural Resources Conservation Service ([NRCS](#))

# Contact Information & Resources

## Contacts

- Project Manager, Jojo O'Brien
  - Email: [jobrien@cityofmadison.com](mailto:jobrien@cityofmadison.com)

## Project website

- [www.cityofmadison.com/SaukCreekGwy](http://www.cityofmadison.com/SaukCreekGwy)
  - Sign-up for project email updates on the website
  - Updates on plan status will be posted to the project website
  - Recording for virtual meeting, and meeting slides will be posted

## Please take our survey to:

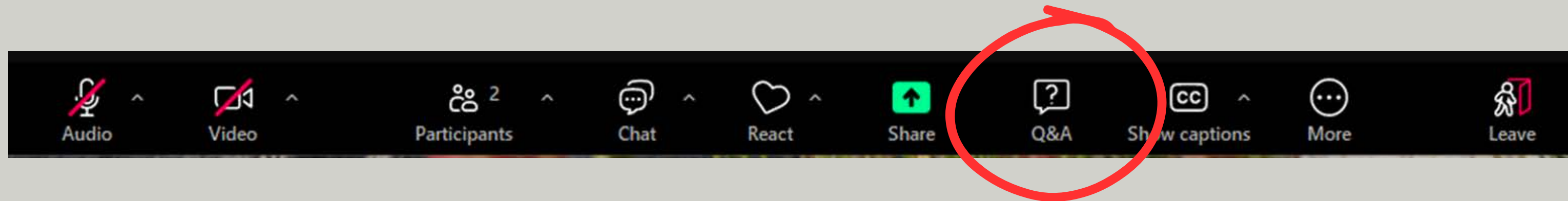
- Provide input on how the meeting went
- Provide additional comments by category to make sure we can address them in upcoming meetings
- <https://www.surveymonkey.com/r/SKFJG2L>
  - We will email this out to everyone after the meeting

### Subscribe to Sauk Creek Greenway Restoration Updates

Email

**SUBSCRIBE**

# Questions?



Use Q&A button, or raise your hand to be unmuted for comments or ask additional questions.

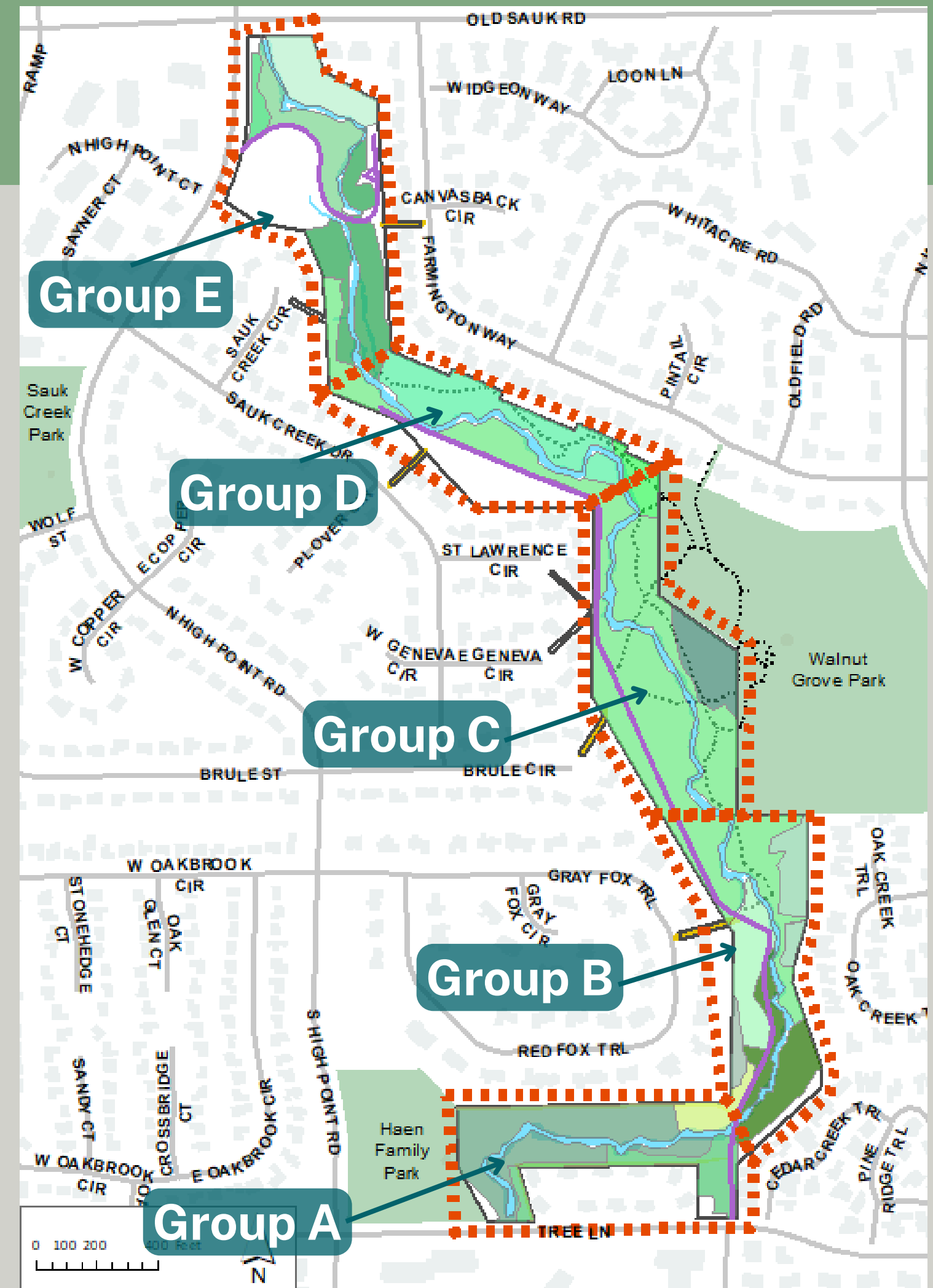
(click “More” for pop-up menu that includes “Raise Hand”)

# Ecological Breakout Groups



If you are interested, you may join a Zoom Breakout Room Session

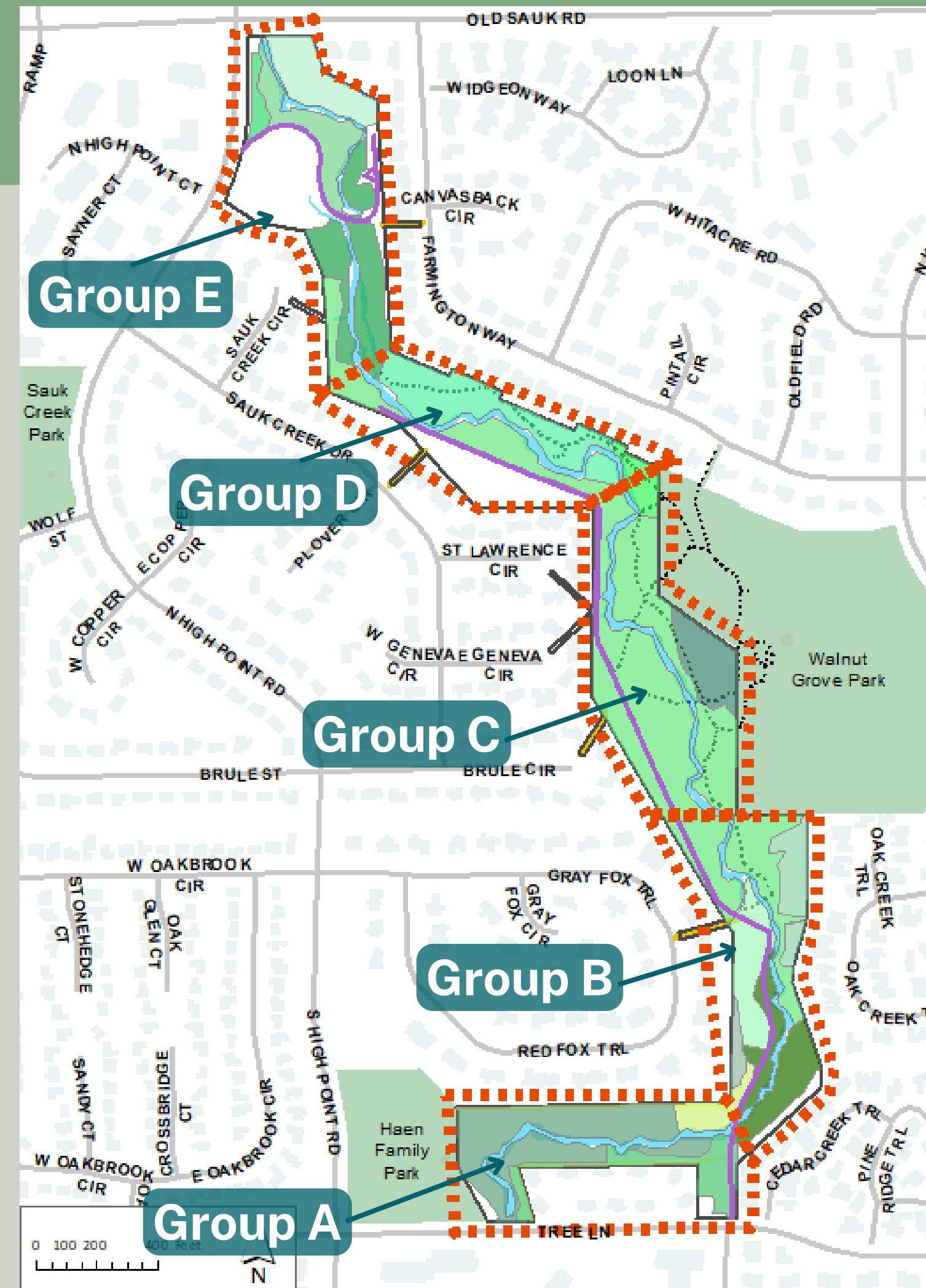
- Window will pop up where you can select which group you'd like to join
- If a window doesn't pop up, look for a button on the bottom that says "Breakout Rooms." Click the button and room options will appear.



# Ecological Breakout Groups

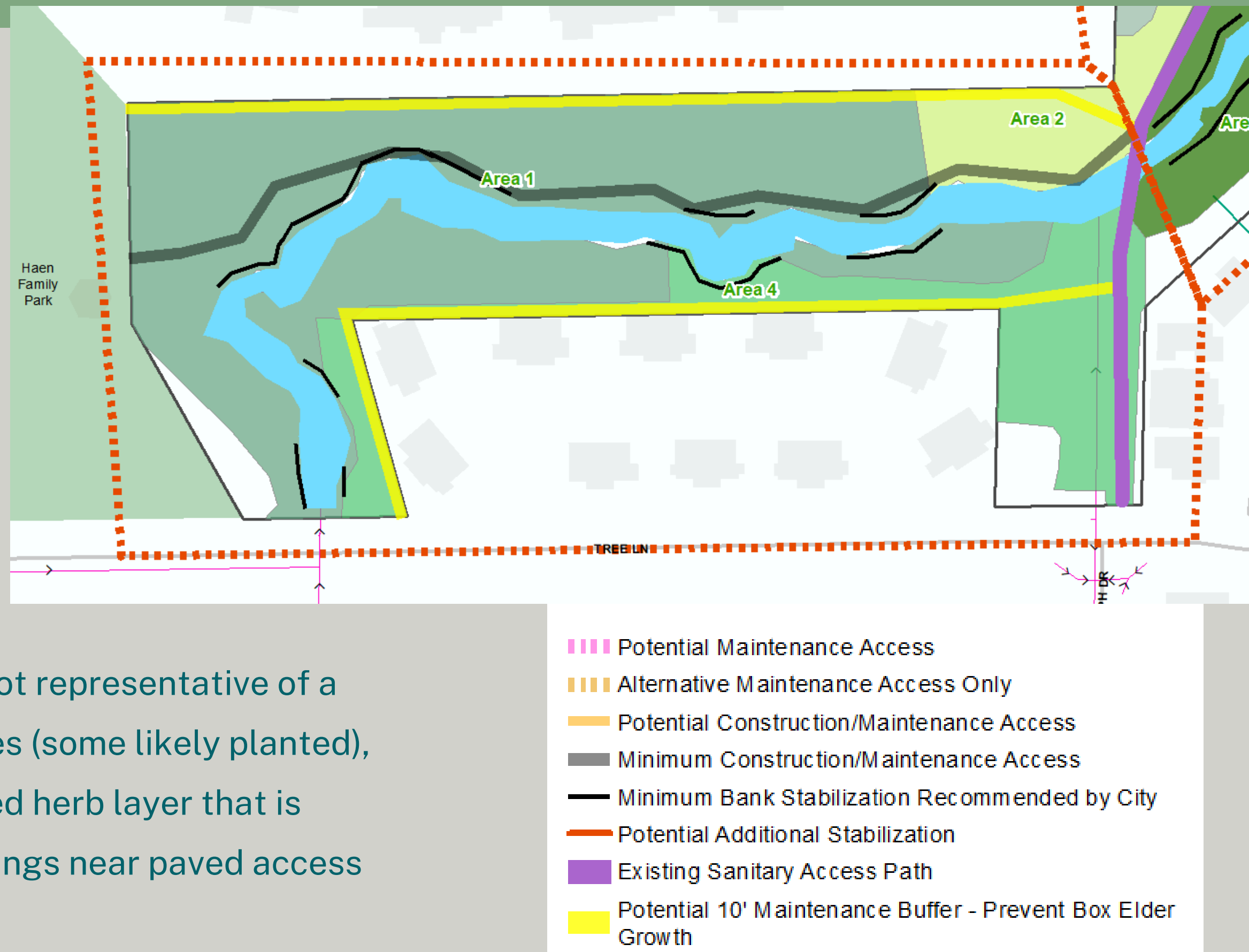
Discussion questions:

1. What most concerns you about the existing vegetation in this area?
2. What type of vegetation improvements would you like to see in the project area?



# Ecological Breakout Groups - Group A

- Area 1: Degraded oak woodland/oak hickory forest. Large bur oaks and shagbark hickory dominant. Canopy appears stressed and the understory is low quality. Dense oak leaf litter.
- Area 2: Degraded southern dry-mesic forest. Contains more dry mesic and mesic canopy trees than Area 1 and with oak species besides bur oak. Some healthy canopy trees remain but understory is degraded.
- Area 4: Low quality shrubby woodland that is not representative of a natural community. Random assortment of trees (some likely planted), invading tree saplings and shrubs, and disturbed herb layer that is impacted by adjacent residences. Planted saplings near paved access include 2 oaks, 2 hackberry, 1 maple.

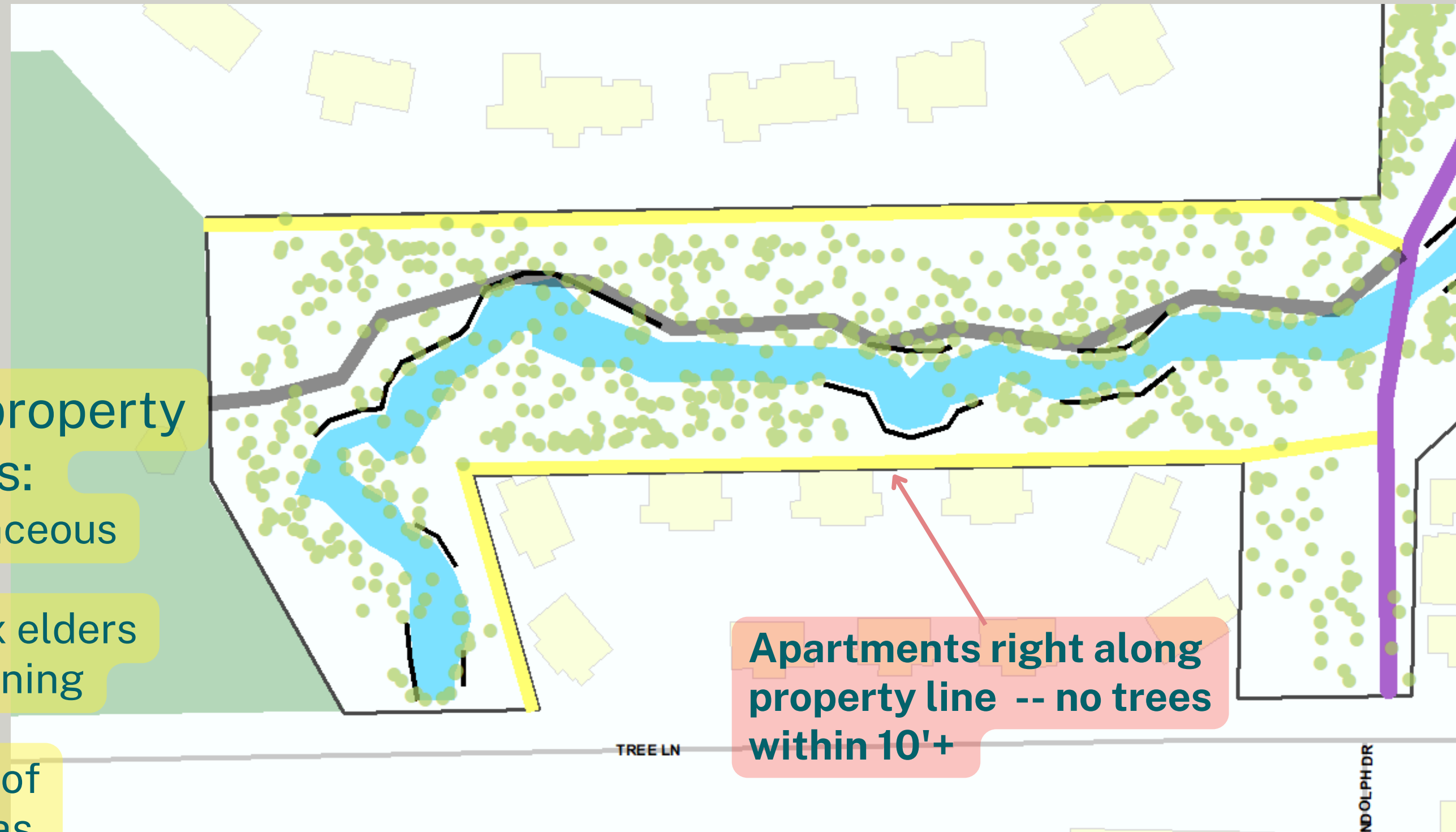


# Preventing Dead/Down Trees on Neighbor's Fences/Yards

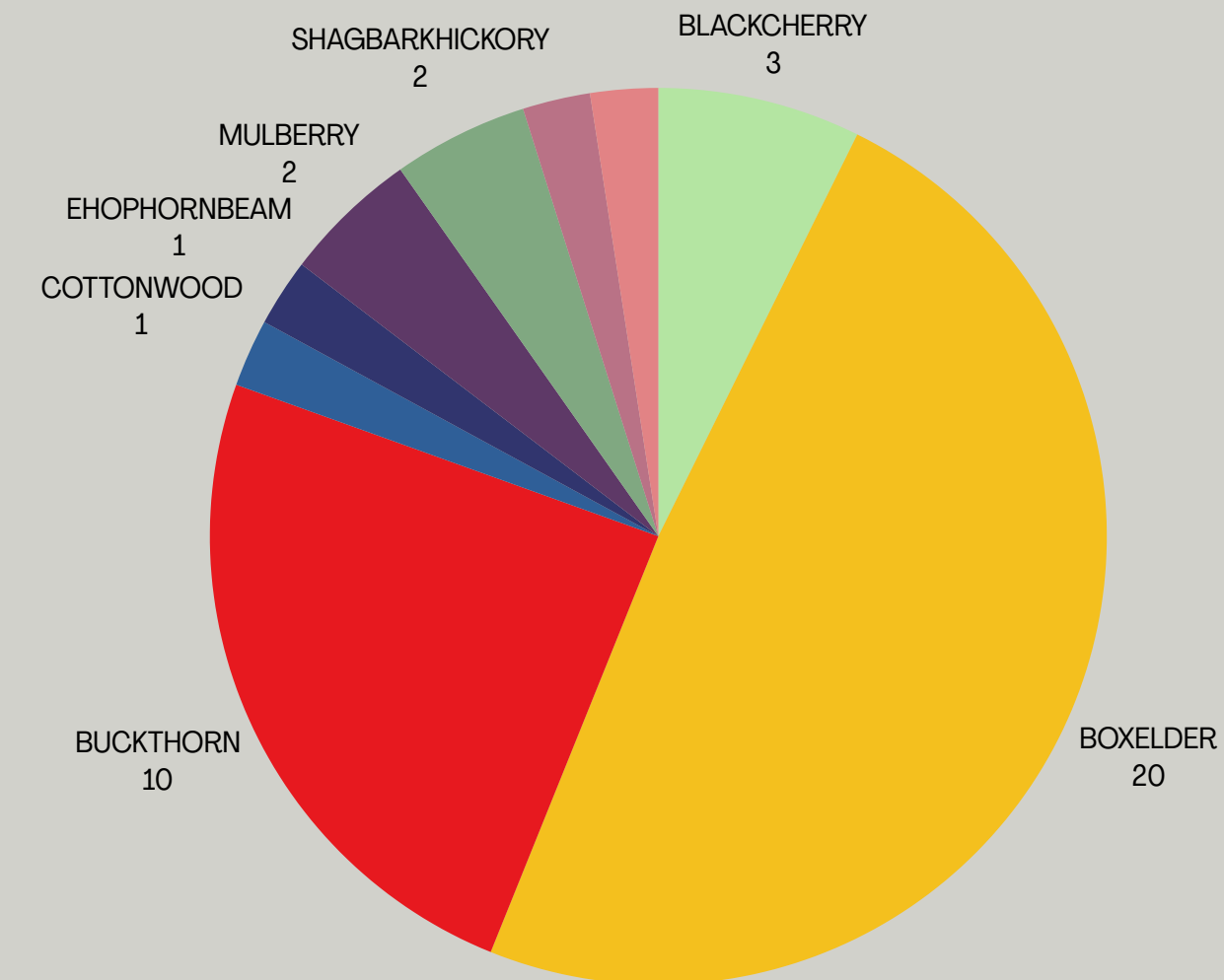
88% of respondents shared that it was somewhat important, or very important that the City have access to remove dead/down trees on neighbor's fences and yards

Propose that 10'-20' from property line in high-complaint areas:

- Work to establish native herbaceous understory
- Prevent the growth of new box elders that tend to lean into light opening (yards)
- Do not replant trees within 10' of property line in high-issue areas

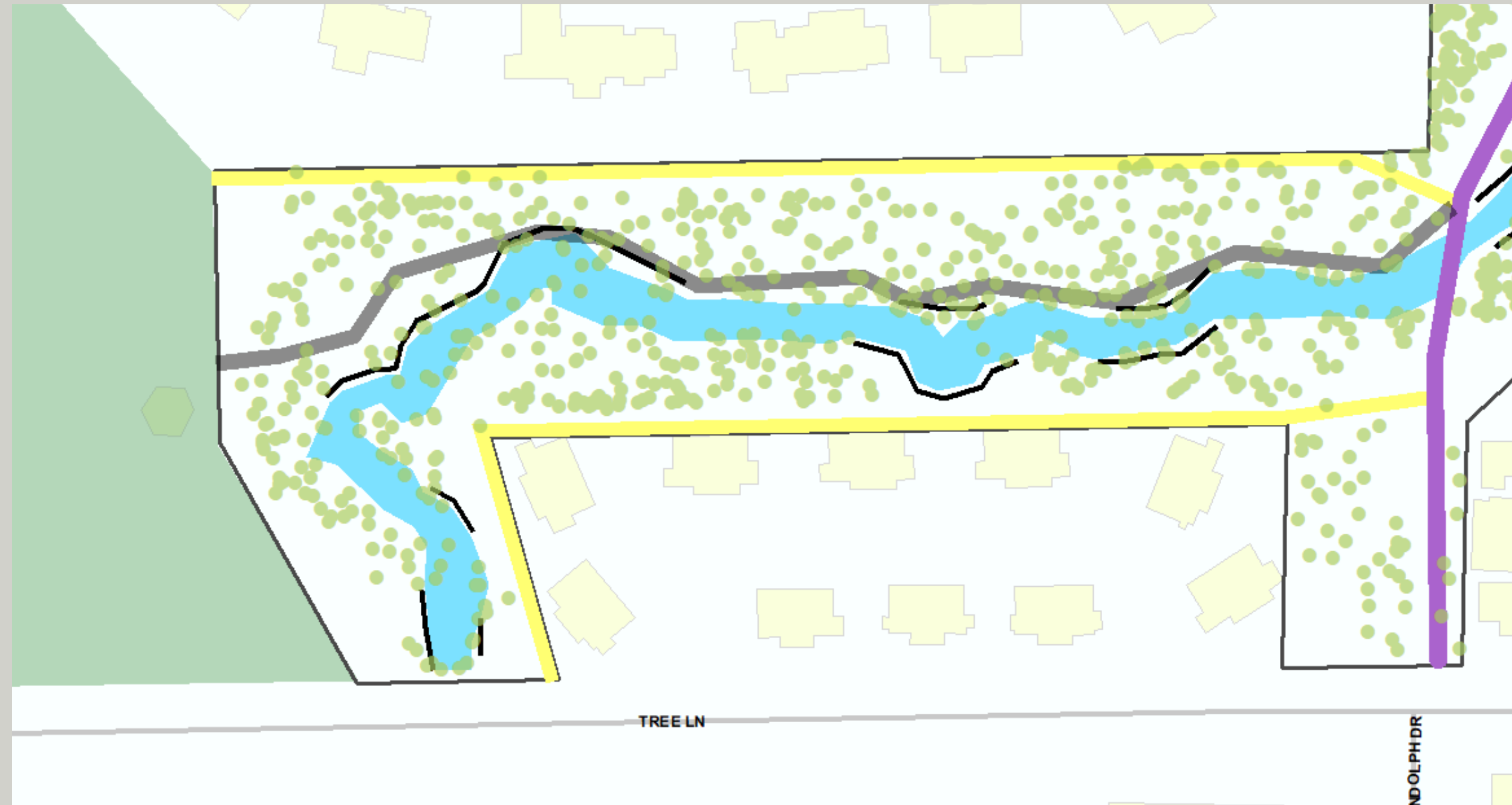


# Preventing Dead/Down Trees on Neighbor's Fences/Yards



Trees within 20' of property line

**Will be opportunity to  
provide input on this  
proposal during the  
location-based breakout  
groups after presentation**







**Photo #1** Photo point 1, view north along Sauk Creek at southern extent of Study Area



**Photo #3** Photo point 2, view northeast along Sauk Creek in Area 1



**Photo #7** Photo point 4, view east along Sauk Creek with eroded banks and downed woody material



**Photo #2** Photo point 2, view south in Area 1 with eroded channels and buckthorn-dominated shrub layer



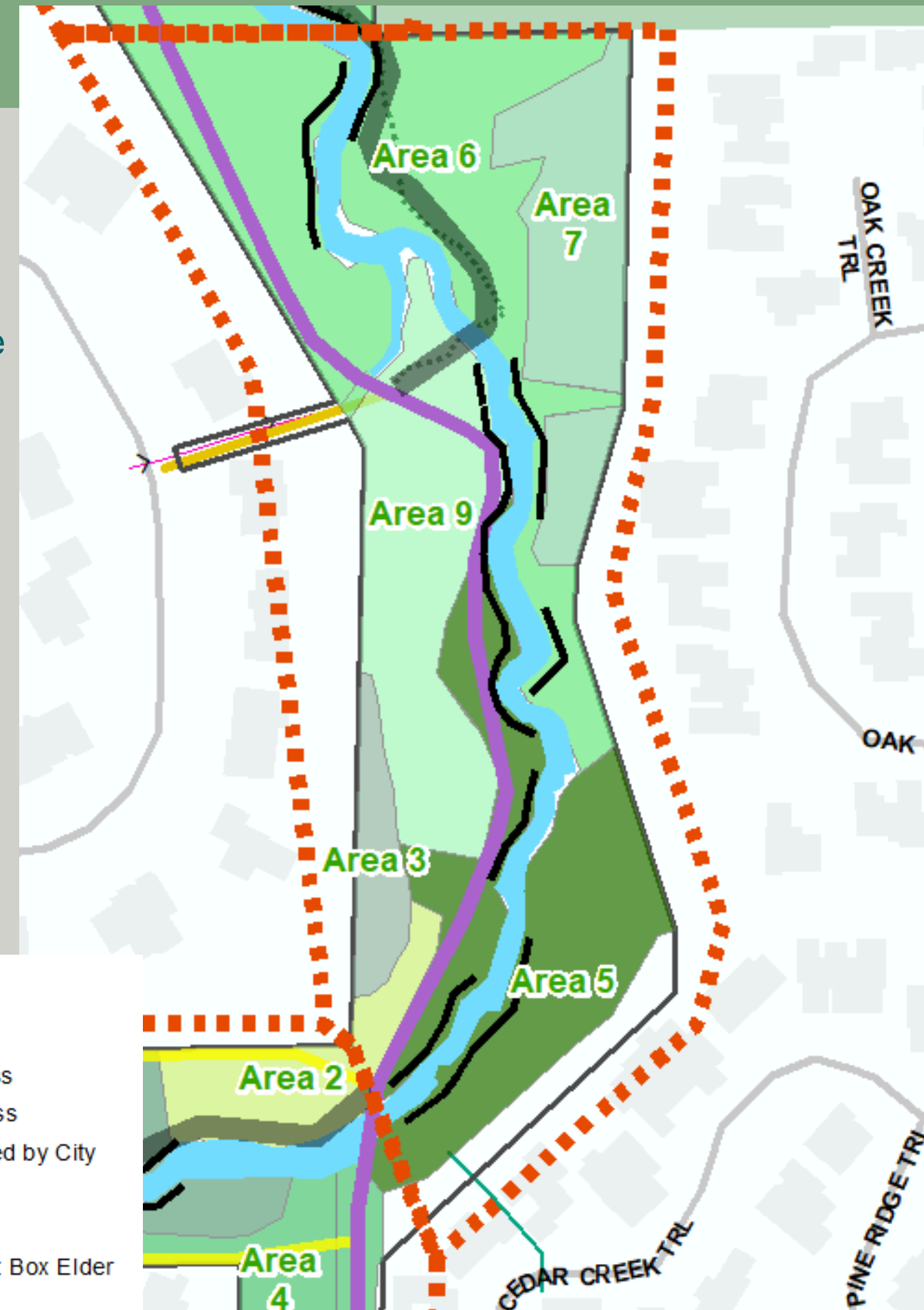
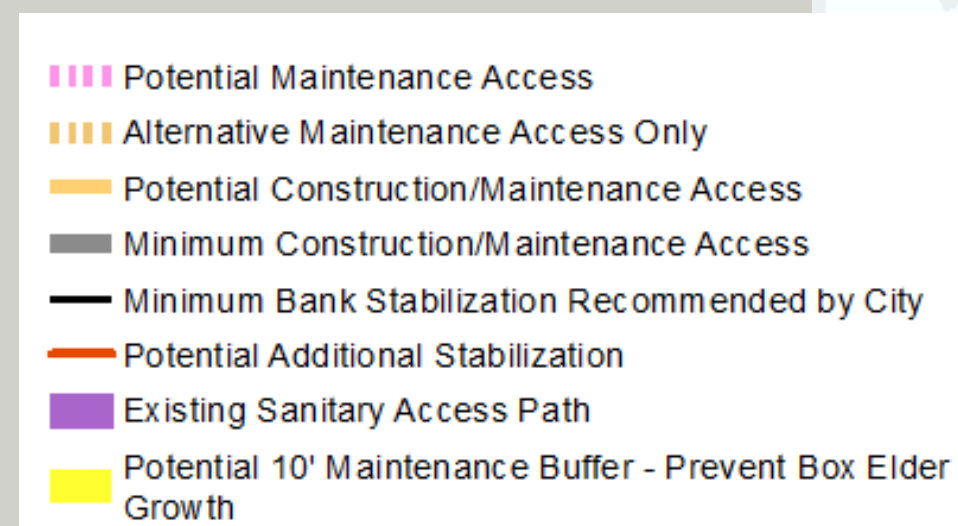
**Photo #4** Photo point 3, view east in Area 1 with multiple eroded channels along wooded slope



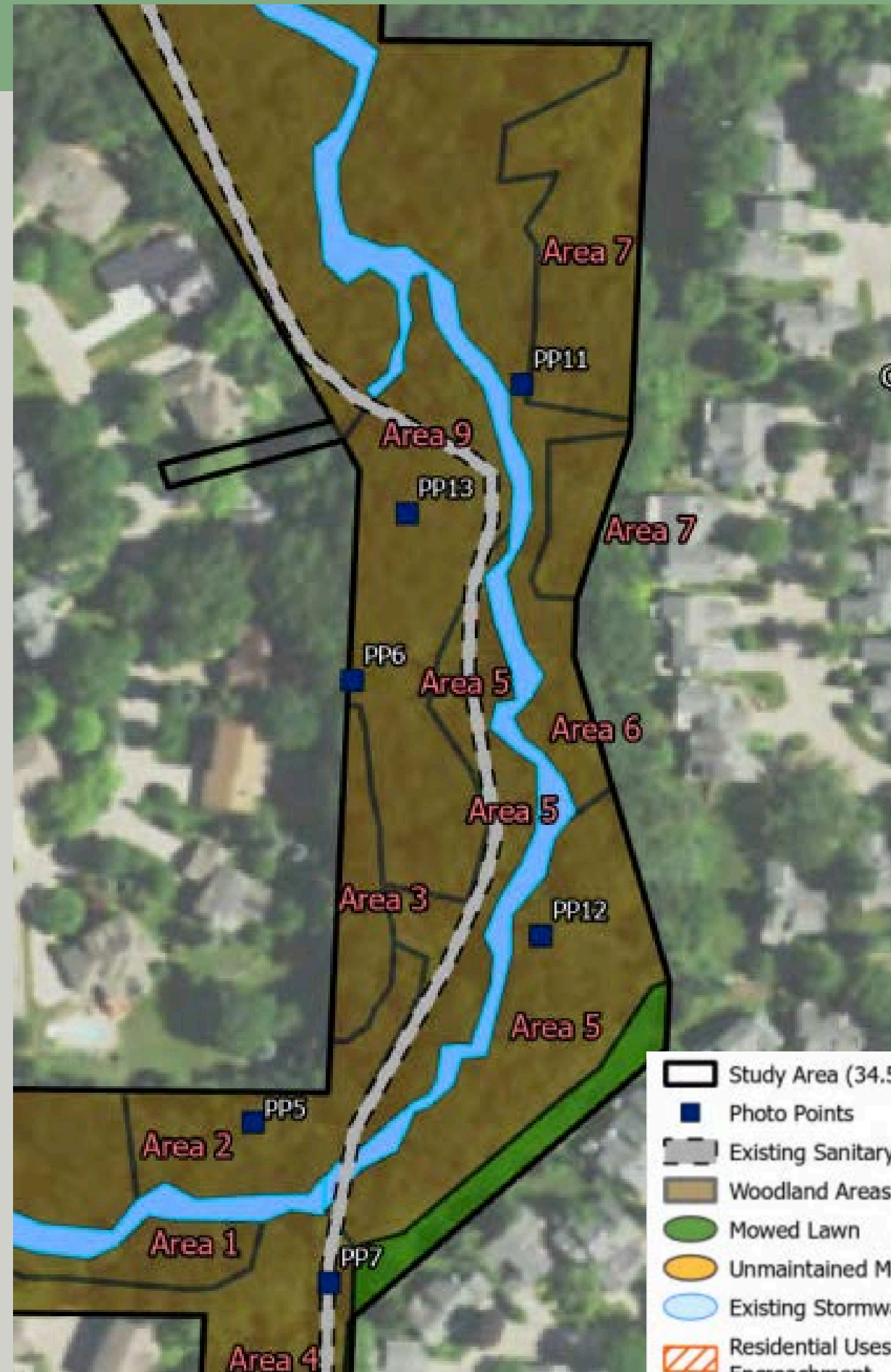
**Photo #8** Photo point 5, view west in Area 2 of red oak and black cherry canopy with buckthorn in shrub layer

# Ecological Breakout Groups - Group B

- Area 2: Degraded southern dry-mesic forest. Contains more dry mesic and mesic canopy trees than Area 1 and with oak species besides bur oak. Some healthy canopy trees remain but understory is degraded.
- Area 3: Pine plantation of red and white pine. Red pine is generally in poor health - many have died and fallen over and have self-pruned below 50 feet.
- Area 5: Degraded lowland hardwood/floodplain forest associated with channel. Large cottonwood trees and box elder dominate canopy with dead/dying green ash. Eroded channels and sedimentation from flooding.
- Area 6: Degraded southern dry-mesic forest. Canopy comprised of various large oaks (white, bur, red) with shagbark hickory, black cherry, and hackberry. Mesic tree species are becoming more common and the understory is degraded. Some areas may have historically been oak woodland before canopy closure. Some buckthorn clearing occurring.
- Area 7: Low quality woodland with few desirable canopy trees and a degraded understory.
- Area 9: Southern dry-mesic forest dominated by red oak with other large oaks and black cherry common. Shrub layer degraded and herb layer sparse with dense oak leaf litter.



# Ecological Breakout Groups - Group B



**Photo #19** Photo point 11, view south of degraded woodland and Sauk Creek



**Photo #21** Photo point 12, view east in Area 5 of degraded understory and channel erosion



**Photo #20** Photo point 12, view south in Area 5 dominated by cottonwood with sediment on ground surface



**Photo #22** Photo point 13, view south in Area 9 dominated by red oak with buckthorn understory

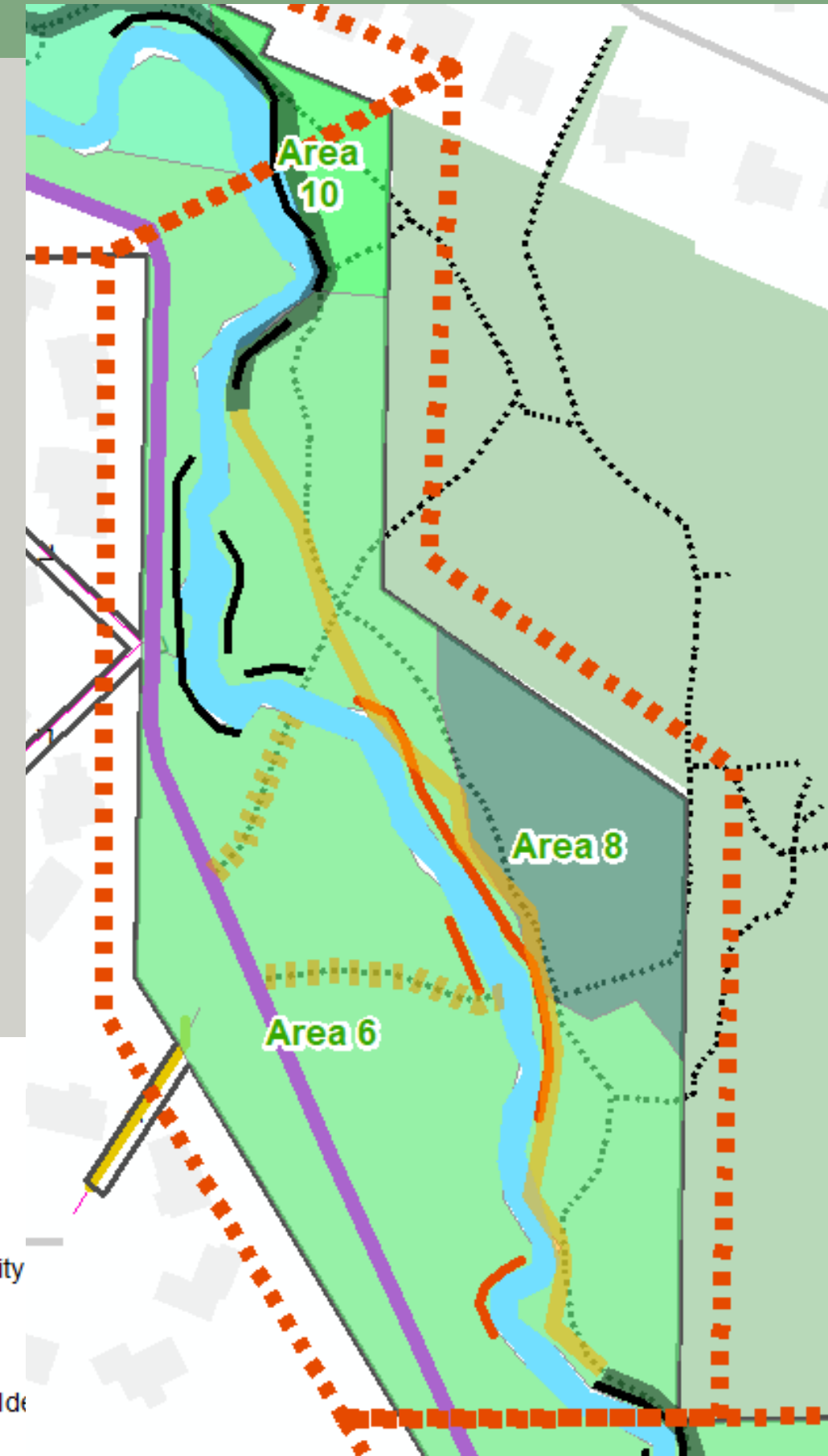
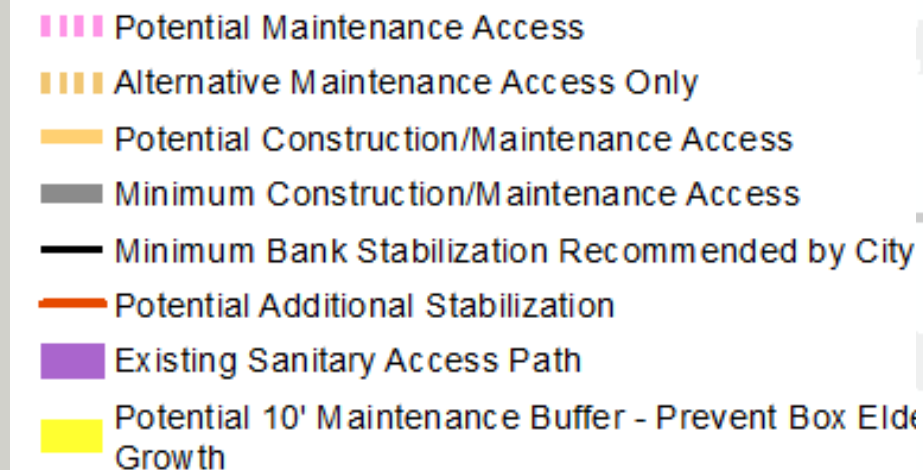


**Photo #10** Photo point 6, view south towards planted red and white pine in Area 3

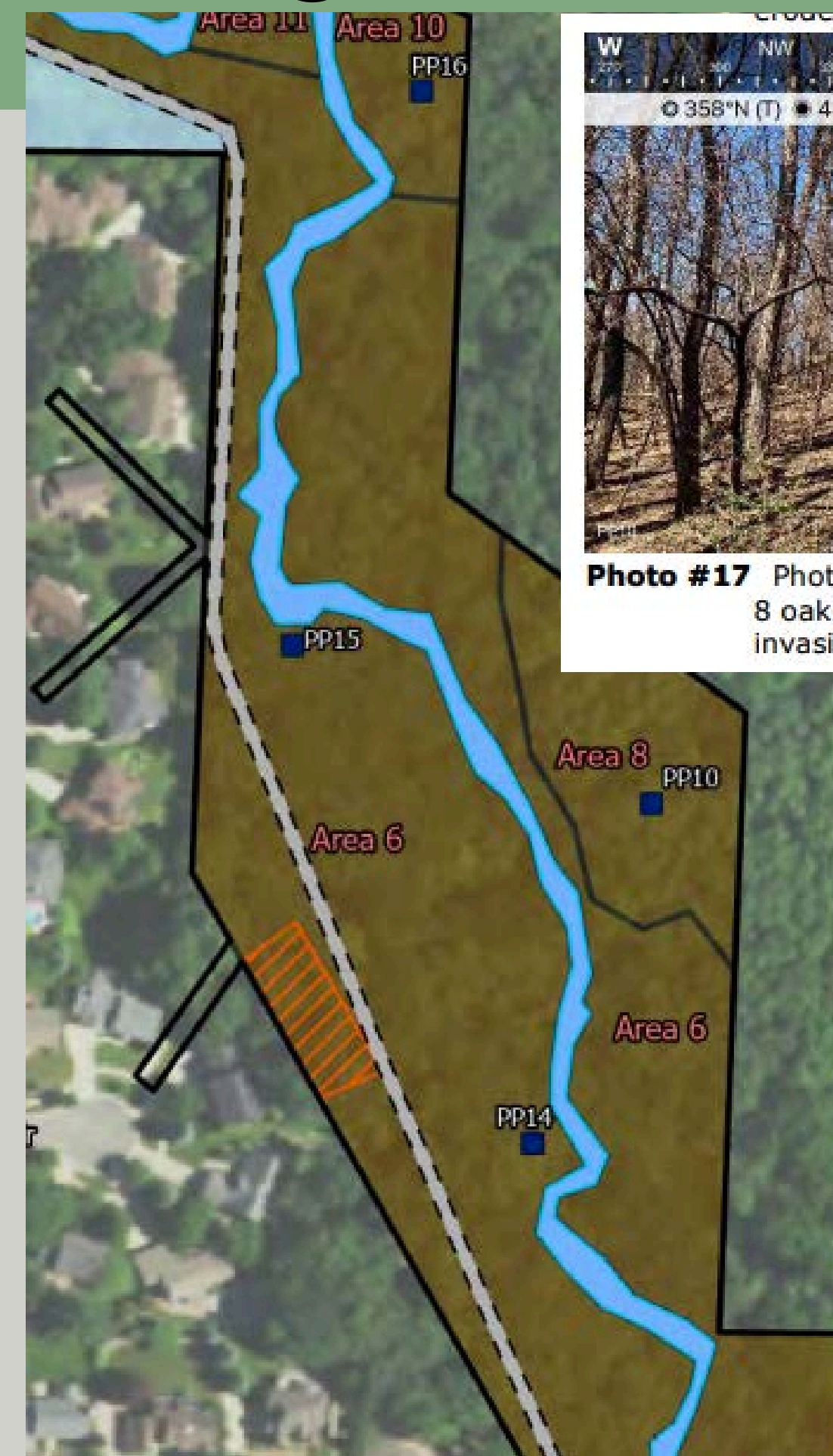
- Study Area (34.54 ac)**
- Photo Points
  - Existing Sanitary Access Path
  - Woodland Areas
  - Mowed Lawn
  - Unmaintained Meadow
  - Existing Stormwater Basins
  - Residential Uses & Encroachment
- Wetlands & Waterways - Delineated By Others**
- Waterway
  - Wetland
  - Wetland - Artificial

# Ecological Breakout Groups - Group C

- Area 6: Degraded southern dry-mesic forest. Canopy comprised of various large oaks (white, bur, red) with shagbark hickory, black cherry, and hackberry. Mesic tree species are becoming more common and the understory is degraded. Some areas may have historically been oak woodland before canopy closure. Some buckthorn clearing occurring.
- Area 8: Southern dry-mesic/oak hickory forest invaded by mature black locust. Black locust dominated canopy with bur oak, white oak, and shagbark hickory.
- Area 10: Oak-hickory forest dominated by red oak, white oak, black cherry, shagbark hickory, box elder (scattered). Dense oak leaf litter. Less invasive herbs, soil erosion, and soil disturbance than other areas.



# Ecological Breakout Groups - Group C



**Photo #17** Photo point 10, view north in Area 8 oak-hickory forest dominated by invasive



**Photo #25** Photo point 15, view northwest in Area 6 and across Sauk Creek



**Photo #23** Photo point 14, view northwest in Area 6 with oak canopy and dead/downed woody material



**Photo #24** Photo point 14, view west in Area 6 with buckthorn removal



**Photo #26** Photo point 15, view northeast in Area 6 and across Sauk Creek

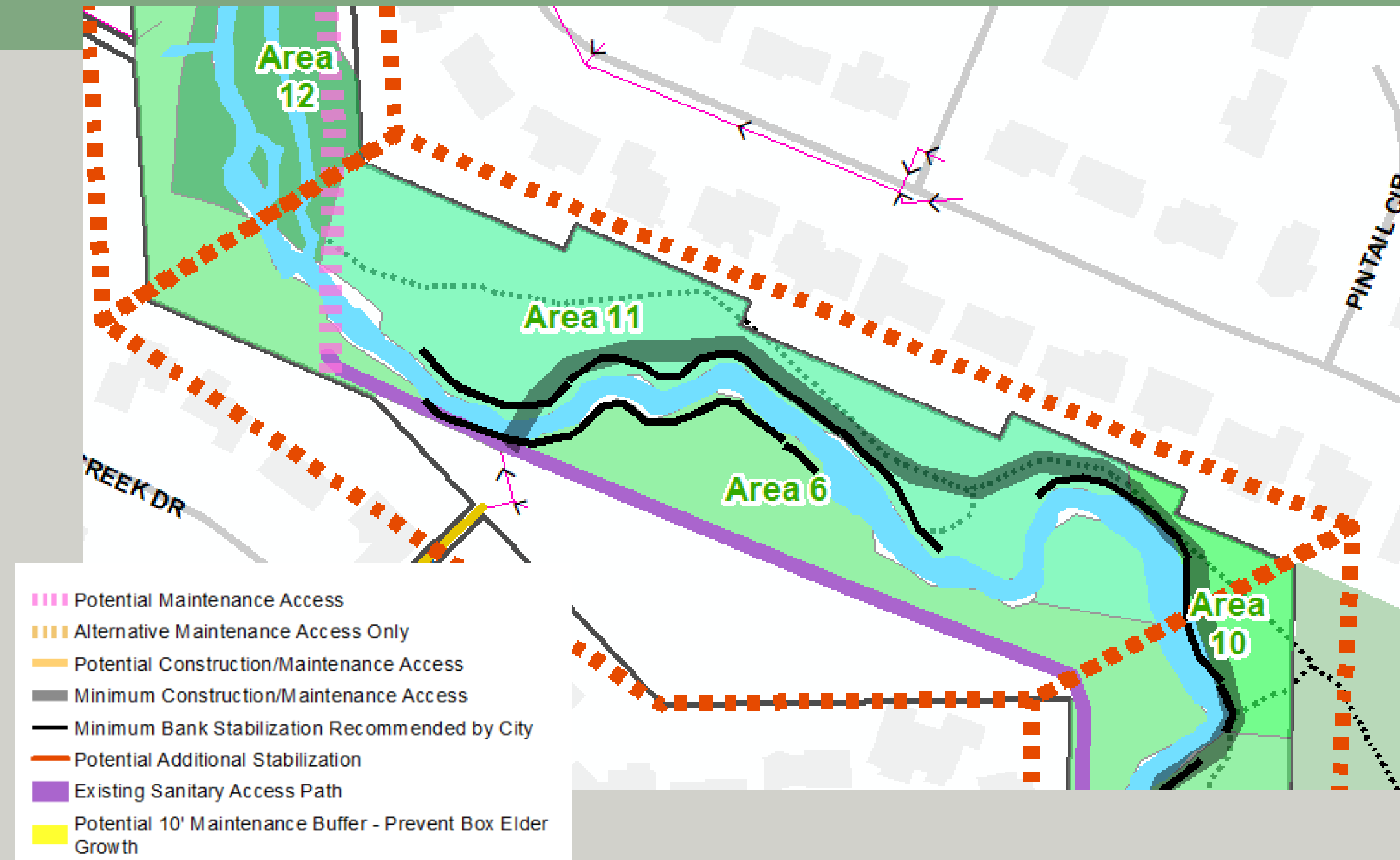


**Photo #27** Photo point 16, view west of oak-hickory forest in Area 10



# Ecological Breakout Groups - Group D

- Area 6: Degraded southern dry-mesic forest. Canopy comprised of various large oaks (white, bur, red) with shagbark hickory, black cherry, and hackberry. Mesic tree species are becoming more common and the understory is degraded. Some areas may have historically been oak woodland before canopy closure. Some buckthorn clearing occurring.
- Area 10: Oak-hickory forest dominated by red oak, white oak, black cherry, shagbark hickory, box elder (scattered). Dense oak leaf litter. Less invasive herbs, soil erosion, and soil disturbance than other areas.



- Area 11: Mesic forest dominated by elm, hackberry, box elder, and black walnut. Areas of residential encroachment and spread of horticultural plants.

# Ecological Breakout Groups - Group D



- Study Area (34.54 ac)
  - Photo Points
  - Existing Sanitary Access Path
  - Woodland Areas
  - Mowed Lawn
  - Unmaintained Meadow
  - Existing Stormwater Basins
  - Residential Uses & Encroachment
- Wetlands & Waterways - Delineated By Others**
- Waterway
  - Wetland
  - Wetland - Artificial



**Photo #29** Photo point 18, view west facing the south pond (left) and sanitary access path (right)



**Photo #30** Photo point 18, view north towards Area 6 from the south pond



**Photo #28** Photo point 17, view northwest of Area 11 mesic forest dominated by black walnut, hackberry, and elm

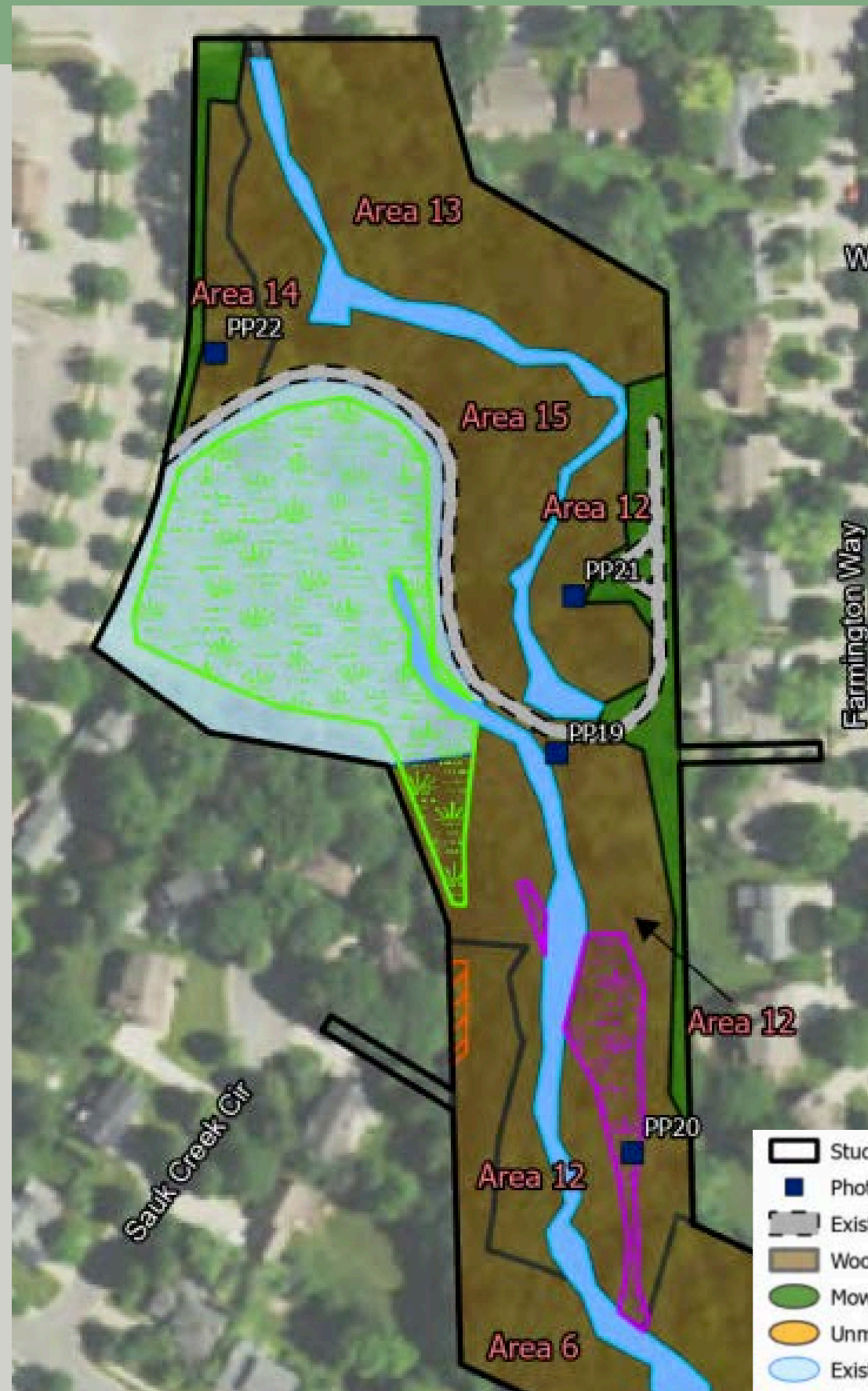
# Ecological Breakout Groups - Group E

- Area 12: Bur oak dominated woodland in significant decline from channel flooding and sediment deposition over ground surface. Secondary drainageway has formed in area of delineated wetland with no vegetation.
- Area 13: Degraded oak woodland with bur oak being replaced by more mesic species including box elder, black walnut, and elm. Northern portion near Old Sauk Road with less desirable tree composition. Relatively low invasive shrub cover, dead and downed trees common.
- Area 14: Oak savanna/prairie restoration. Small area along North High Point Road with bur oaks that have been opened up and a dense herb layer that may contain prairie vegetation (survey conducted before most herbs could be identified).
- Area 15: Degraded oak woodland dominated by bur oak with wet-mesic areas near channel. Several young bur oak present. Shrub

and herb layers consist of a mix of native and non-native species. Area of soil disturbance/eroded channels north of northern pond.

- 
- Potential Maintenance Access
  - Alternative Maintenance Access Only
  - Potential Construction/Maintenance Access
  - Minimum Construction/Maintenance Access
  - Minimum Bank Stabilization Recommended by City
  - Potential Additional Stabilization
  - Existing Sanitary Access Path
  - Potential 10' Maintenance Buffer - Prevent Box Elder Growth

# Ecological Breakout Groups - Group E



- Study Area (34.54 ac)
  - Photo Points
  - Existing Sanitary Access Path
  - Woodland Areas
  - Mowed Lawn
  - Unmaintained Meadow
  - Existing Stormwater Basins
  - Residential Uses & Encroachment
- Wetlands & Waterways - Delineated By Others**
  - Waterway
  - Wetland
  - Wetland - Artificial



**Photo #33** Photo point 20, view west in Area 12 of sediment on ground surface



**Photo #35** Photo point 21, view northwest in Area 12 with disturbed ground surface



**Photo #34** Photo point 20, view north in Area 12 of secondary channel and poor tree health



**Photo #36** Photo point 21, view south in Area 12 with soil erosion and tree



**Photo #32** Photo point 20, view south in Area 12 of secondary channel and sediment around oak trees



**Photo #37** Photo point 22, view north along Area 14 oak savanna restoration



**Photo #38** Photo point 22, view northeast of Area 14 with Area 15 degraded oak woodland in background

# Ecological Resources

- **Native Landscaping**

- WDNR and UW-Extension [“Landscaping Alternatives for Terrestrial Invasive Flowers and Grasses”](#)
- Woody Invasives of the Great Lakes Collaborative (WIGL) [“Landscape Alternatives for Invasives Trees, Shrubs & Vines”](#)
- [Native and non-native root comparison chart](#)

- **Invasive Plants**

- [Dane County Invasive Tree & Brush Removal](#)
- [Woody Invasives of the Great Lakes Collaborative \(WIGL\)](#).
- [Invasive Plants Association of Wisconsin \(IPAW\)](#).

*Oak ecosystems are among the most highly productive ecosystems in the world but are rapidly declining and globally imperiled. Oaks are a keystone species, providing habitat structure and critical compositional features for 250+ species of birds, 500+ species of insects, and 500+ species of plants.*

- Natural Resources Conservation Service (**[NRCS](#)**)

**END OF BREAKOUT ROOM  
SLIDES**

# Thank you for coming!

## Please take our survey to:

- Provide input on how the meeting went
- Provide additional comments by category to make sure we can address them in upcoming meetings
- <https://www.surveymonkey.com/r/SKFJG2L>
  - We will email this out to everyone after the meeting

Scan QR code with  
phone photo app



# Contact Information & Resources

## Contacts

- Project Manager, Jojo O'Brien
  - Email: [jobrien@cityofmadison.com](mailto:jobrien@cityofmadison.com)

## Project website

- [www.cityofmadison.com/SaukCreekGwy](http://www.cityofmadison.com/SaukCreekGwy)
  - Sign-up for project email updates on the website
  - Updates on plan status will be posted to the project website
  - Recording for virtual meeting, and meeting slides will be posted

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