MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

Antidegradation assessment

Water Quality Certification Applicants

401 Certification

Doc Type: 401 Certification

Instructions: This form provides general guidance on information that may be necessary for antidegradation review. The Minnesota Pollution Control Agency (MPCA) reserves the right to request information from the applicant in addition to that provided in this form.

Section 401 of the Clean Water Act requires any applicant for a federal license or permit that authorizes an activity that may result in a discharge to Waters of the United States to obtain certification from the state or tribe in which the discharge originates to ensure compliance with applicable water quality standards. In addition to completing the Joint Application Form, https://bwsr.state.mn.us/joint-application-form, applicants whose proposed projects may require an MPCA Individual 401 Water Quality Certification for work in aquatic resources must also provide the information necessary to demonstrate compliance with the Minnesota antidegradation water quality standards (Minn. R. 7050.0265, https://www.revisor.mn.gov/rules/7050.0265/). Applicants should review the antidegradation requirements in Minn. R. 7050.0285 (https://www.revisor.mn.gov/rules/7050.0285/) prior to completing this form.

The purpose of the antidegradation requirements is to achieve and maintain the highest possible quality in surface waters of the state. To accomplish this purpose, antidegradation requires:

A. The protection of existing uses and the level of water quality necessary to protect existing uses;
B. The minimization of degradation of high water quality, and only to extent necessary to accommodate important economic or social development;
C. The protection of outstanding resource value waters; and
D. Consideration of thermal discharges.

Applicant information

Applicant name/Project name/USACE ID number: MVP-2025-00512-MMP

Date submitted (mm/dd/yyyy): 04/20/2026

1. Environmental Assessment Worksheet (EAW)/Environmental Impact Statement (EIS)

Note: The MPCA cannot make any certification decision until the Environmental Review process is complete.

Is environmental review (Environmental Assessment Worksheet or Environmental Impact Statement required for this project? ☐ Yes ☒ No

If yes, include the date it was completed and the decision: _____

2. Analysis of alternatives to project design that avoid or minimize degradation

(This does not include the Preferred Alternative discussed below)

Describe your analysis of at least two prudent and feasible alternative project designs that would avoid or minimize degradation and avoid or minimize net increases in loading of pollutants or other causes of degradation to surface water (such as wetlands, lakes, stream, etc.). The analysis of each alternative must include a description of how impacts to surface waters are avoided and/or minimized; information on any design considerations and constraints; expected performance, construction, operation, and maintenance costs; and reliability for each alternative. Minn. R. 7050.0280, subp. 2

Alternative 1 – No Build Alternative: The no build alternative was considered to avoid impacts to wetlands at the site. The no build alternative does not provide a safe trail on 18th Avenue SW that connects existing trails. It also does not prevent erosion which is proposed to be fixed by the project, including sections of road and private driveways that are endangered. The no build alternative does not fix the box culvert below Mayowood Rd SW that is not up to current standards. The no build alternative does not improve the aging and deteriorated streets with curb and gutter and improve drainage. The no build alternative is not considered feasible for those reasons.
Alternative 2 – Mill and Overlay Only, no Trail:
It was considered to only mill and overlay the existing streets to avoid impacts to wetlands at the site. This alternative is very similar to the no build alternative as it does not provide a safe trail on 18th Avenue SW that connects existing trails, does not prevent erosion which is proposed to be fixed by the project, including sections of road and private driveways that are endangered. The mill and overlay only option does not fix the box culvert below Mayowood Rd SW that is not up to current standards. This alternative does not improve the aging and deteriorated streets with curb and gutter and improve drainage. The mill and overlay only alternative is not considered feasible for those reasons.

3. Preferred alternative project design

Describe the analysis of your preferred alternative project design that avoids or minimizes net increases in loading of pollutants or other causes of degradation. The analysis must include a description of how impacts to surface waters are avoided and/or minimized; information on any design considerations and constraints; expected performance, construction, operation, and maintenance costs; and reliability for each alternative. In addition, the analysis must verify that the preferred alternative is the least degrading prudent and feasible alternative for surface water. Minn. R. 7050.0280, subp.2

The preferred alternative would reconstruct the existing two-lane rural section to a two- or three-lane urban section, include pedestrian and bike facilities, and stormwater management improvements to the drainage system within the project area. The project includes converting the intersection of Mayowood Rd SW at 18th Ave SW to a single lane roundabout. A shared Use Path on the west side will run the full length of the corridor and connect users to the existing trail network along the Zumbro River. An additional trail along a portion of the east side is also planned.

4. Water quality parameters of concern

List the water quality parameters of concern for the project.
Examples: Total Suspended Solids (TSS), Dissolved Oxygen (DO), Mercury (Hg), Temperature, PCBs, etc.

Potential for temporary turbidity increase would be prevented by proper sediment and erosion control.

5. Existing uses and level of water quality necessary to protect uses

Antidegradation requires the protection of existing uses and the protection of the water quality necessary to protect those uses (Minn. R. 7050.0265, subp. 2). Existing use is defined as *those uses actually attained in the surface water on or after November 8, 1975* (Minn. R. 7050.0255 subp. 15).

Example 1: A surface water is in pristine condition on November 28, 1975, but development or other impacts have degraded that same water and it is no longer a high quality surface water. The existing use is the pristine water.

Example 2: A stream is highly degraded for several decades until it is restored to a trout stream in 1990. The existing use is the restored trout stream.

In the table below:

Identify streams, rivers, and lakes within a mile radius of the project location by Waterbody Identification Number (WID). WIDs, and other information, can be found by using the map at: EDA: Surface water data. Identify the use classification and existing use for **all** surface waters potentially impacted by this project. Include surface waters that are not directly within the project area, but may be *potentially impacted*. Review Minn. R. 7050.0415 – 7050.0430 for the use classification that fits the waters potentially impacted by your project. Use classifications are also located at https://www.revisor.mn.gov/rules/?id=7050.

Also, identify the existing water quality of each surface water for the water quality parameters of concern. The methods for determining existing water quality are found in Minn. R. 7050.0260.

Streams and rivers
If the waterbody is a stream/river and not listed in *Beneficial use designations for streams reaches* the beneficial uses are 2Bg, 3, 4A, 4B, 5 and 6.

Lakes and wetlands
To find beneficial use designations for lakes and wetlands, check Minn. R. 7050.0470. Waterbodies described in both documents are arranged by major watershed basins in this document. If the waterbody is a wetland and not listed in Minn. R. 7050.0470, the beneficial uses are 2D, 3, 4A, 4B, 5 and 6. If the waterbody is a lake and not listed in Minn. R. 7050.0470 the beneficial uses are 2B, 3, 4A, 4B, 5 and 6.

Exceptions: Water bodies in the Boundary Waters Canoe Area Wilderness and in Voyageurs National Park **that are not listed**, may have different Use Classifications (Beneficial use designations).

	Name of surface water/Waterbody and Waterbody Identification Number (AUID), if applicable.	**Use classification**	**Existing use (highest quality attained from November 28, 1975 to present)**	**Existing water quality**
ex.)	*Seelye Brook – Headwaters to Rum River 07010207-528*	*2Bg, 3, 4A, 4B, 5, 6*	*Livestock and wildlife watering, navigation*	*Dissolved Oxygen (DO) meets levels for existing use*
ex.)	*Wetland 1 (wetlands do not have WIDs)*	*2D, 3, 4A*	*Flood prevention, stormwater retention, wildlife habitat*	
	Willow Creek (07040004-986)	2Bg	3, 4A, 4B, 5, 6	not assessed/meets standards
	Zumbro River (07040004-536)	2Bg	3, 4A, 4B, 5, 6	TMDLs: FC, turb, AQL
	George Lake (55-0008-00)	2B	3, 4A, 4B, 5, 6	not assessed
	Bamber Lake (55-0006-00)	2B	3, 4A, 4B, 5, 6	not assessed

See attached Section 5 Table

6. Water quality comparison before and after project

For each surface water listed in Section 5, describe the anticipated water quality after the project is fully complete and operational. If any portion of the surface area of a water resource will be permanently impacted, a Mitigation Plan will be required (see Section 12).

Name of surface water/Waterbody and Waterbody Identification Number (AUID), if applicable.	Anticipated Water Quality
Willow Creek (07040004-986)	same as before
Zumbro River (07040004-536)	same as before
George and Bamber Lake (55-0008-00, 55-0006-00)	same as before

See attached Section 6 Table

7. Impaired waters and Total Maximum Daily Loads (TMDL)

Identify ALL surface waters listed in Section 5 that are listed on the Minnesota Impaired Waters List (https://www.pca.state.mn.us/water/minnesotas-impaired-waters-list). List the impairment for each surface water identified and state whether or not a total maximum daily load study (TMDL) has been completed for the waterbody.

Name of waterbody	Impairment	TMDL completed? (Y/N)
Zumbro River (07040004-536)	TMDLs: FC, turb, AQL	☒ Yes ☐ No
		☐ Yes ☒ No
		☐ Yes ☐ No

8. Physical alterations of surface waters

Identify ALL surface waters listed in Section 5 that are listed on the Minnesota Impaired Waters List (https://www.pca.state.mn.us/water/minnesotas-impaired-waters-list). List the physical alteration and the extent of the alteration, also state if the alteration will be permanent (longer than one year) or temporary.

Name of waterbody	Physical alteration	Extent of alteration	Temporary or permanent
See attached Section 8 Table			Choose one
			Choose one
			Choose one

9. Indirect impacts

For all surface waters where partial physical alteration of the function or acreage of the surface water will occur, describe the potential indirect impacts to the remaining surface water and the potential indirect impacts to nearby surface waters. For all surface waters where physical alteration will affect the entire function or acreage of the surface water, describe the potential indirect impacts to nearby surface waters. Indirect impacts may include changes in water source timing, water quality (including temperature), aquatic species health or population, vegetation or macroinvertebrate (bug) populations, etc.

Expected improvement or no change to water quality by decreasing sediment loss from erosion in upstream tributary reaches.

10. Loading and degradation to surface waters

For all surface waters where physical alterations are proposed, describe all anticipated net increases in loading and other causes of degradation expected in each surface water when your preferred alternative project design is fully implemented.

Example 1: Filling of a wetland that causes another wetland to backup and inundate, (the inundated wetland can be on or off the project site).

Example 2: A discharge from the project site that increases flow to another surface water on or off the project site.

Example 3: Impervious surface increases in a subwatershed to the extent water quality becomes degraded.

Site activities will impact unnamed tributaries to the Zumbro River. The site work will include bank stabilization, replacement of culverts, installation of a stormwater diversion system that will divert stormwater from >2yr storm events to prevent erosion to existing stream channels. Base flows of streams will be maintained. Riprap will be installed at culvert inlets/outlets to prevent erosion.

11. Comparison of existing and expected economic conditions and social services

Provide a comparison of existing and expected economic conditions and social services when the proposed project (preferred alternative) is fully implemented. Include a description of economic gains or losses attributable to the proposed activity; contribution to social services; prevention/remediation of environmental or public health threats; trade-offs between environmental media; the value of the water resources; and other relevant environmental, social, and economic impacts of the proposed activity. Minn. R. 7050.0265, subp. 5(B)

The project includes a new trail that connects existing trails. The project also eliminates very steep and eroded road banks. Stream banks will be stabilized near the south end of Brook Ln SW where erosion is threatening the public road and a private driveway.

12. Description of the Compensatory Mitigation Plan Minn. R. 7050.0285, subp. 2 (A-E)

The applicant may propose to mitigate the project's permanent wetland impacts through an approved wetland bank if the proposed mitigation is for the same resource quality type surface water ("type-for-type") AND the proposed mitigation is located in the same major watershed (https://www.pca.state.mn.us/water/watersheds). The applicant may propose to mitigate other surface water resource types with on-site, project-specific mitigation if the mitigation is of the same resource type as the impacted water resource.

Describe any proposed permanent surface water impacts. Include the name of the surface water and AUID if appropriate, the type of impact, and the extent of the impact.

Unnamed tributaries to the Zumbro River

Describe mitigation proposed for permanent surface water impacts.

None. Impacts are considered stream improvements and do not require a PCN or wetland repl.

For each surface water listed above, describe how the proposed compensatory mitigation will replace existing uses and maintain the current level of water quality at the proposed project site (e.g., wetland types, replacement ratio, water monitoring data if available).

NA

Describe how the compensatory mitigation will be maintained and the monitoring activities that will be conducted to ensure the proposed mitigation is viable over the long-term. Include a timeline for reporting progress and an intervention/remediation plan to be implemented if the mitigation fails.

NA

Applicant signature

Print name: Chad Ponce Title: Natural Resources Specialist

Phone: (843) 286-3631 Email: chad.ponce@bolton-menk.com Date: 04/20/26

Signature: _____

Section 5 - Existing Uses and Level of Water Quality Necessary to Protect Uses

Name of Surface Water	AUID	Use Classification	Existing Use	Existing Water Quality
On Site				
Tributary 1A	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 1B	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 2A	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 2B	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 2C	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 2D	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 2E	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 2F	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 2G	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 2G-2	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 2H	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 4A	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 4B	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 5A	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 5B	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Tributary 5C	None	2Bg	3, 4A, 4B, 5, 6	not assessed
Wetland 1	None	2D	3, 4A, 4B, 5, 6	not assessed
Wetland 2	None	2D	3, 4A, 4B, 5, 6	not assessed
Wetland 3	None	2D	3, 4A, 4B, 5, 6	not assessed
Wetland 4	None	2D	3, 4A, 4B, 5, 6	not assessed
Wetland 5 (Incidental)	None	2D	3, 4A, 4B, 5, 6	not assessed
Within One Mile				
Willow Creek	07040004-986	2Bg	3, 4A, 4B, 5, 6	not assessed/meets standards
Zumbro River	07040004-536	2Bg	3, 4A, 4B, 5, 6	TMDLs: FC, turb, AQL
George Lake	55-0008-00	2B	3, 4A, 4B, 5, 6	not assessed
Bamber Lake	55-0006-00	2B	3, 4A, 4B, 5, 6	not assessed

Section 6 - Water Quality Comparison Before and After Project

Name of Surface Water	Anticipated Water Quality
On Site	
Tributary 1A	Piped
Tributary 1B	Improved- decreased erosion
Tributary 2A	Same as before
Tributary 2B	Same as before
Tributary 2C	Same as before
Tributary 2D	Same as before
Tributary 2E	Improved- decreased erosion
Tributary 2F	Improved- decreased erosion
Tributary 2G	Same as before
Tributary 2G-2	Same as before
Tributary 2H	Same as before
Tributary 4A	Same as before
Tributary 4B	Same as before
Tributary 5A	Same as before
Tributary 5B	Stream Piped
Tributary 5C	Improved- decreased erosion
Wetland 1	Same as before
Wetland 2	Wetland Removed/Piped
Wetland 3	Same as before
Wetland 4	Same as before
Wetland 5 (Incidental)	Wetland Removed/Stormwater Pond
Within One Mile	
Willow Creek	Same as before
Zumbro River	Same as before
George Lake	Same as before
Bamber Lake	Same as before

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

Section 401 Water Quality Certification Required Submittal Information

401 Water Quality Certification Program

Water Quality Permit Program

Doc Type: Permit Application

This form provides general guidance on information that is needed for a Section 401 Water Quality Certification Request. The Minnesota Pollution Control Agency (MPCA) reserves the right to request information from the applicant in addition to that provided in this form.

Section 401 of the Clean Water Act (CWA) requires any applicant for a federal license or permit that authorizes an activity that may result in a discharge to Waters of the United States to obtain certification from the state or tribe in which the discharge originates to ensure compliance with applicable water quality standards. In addition to completing the Joint Application Form https://bwsr.state.mn.us/joint-application-form and Antidegradation Form https://www.pca.state.mn.us/sites/default/files/wq-wwprm1-35.pdf, applicants whose proposed projects may require a MPCA Individual 401 Water Quality Certification for work in aquatic resources must also provide the information requested in this form.

Instructions: Submit this form, a completed Antidegradation Assessment Form, and the Joint Application to the MPCA 401 Certification inbox 401Certification.pca@state.mn.us with the subject line of your 401 WQC request for project name and USACE project number (format will look like MVP-XXXX-XXXXX-XXX).

Applicant information

Applicant name: Dillon Dombrovski, PE, City Engineer, City of Rochester

Mailing address: 4001 West River Parkway, Suite 100, Rochester, MN 55901

Phone: (507) 328-2421 Email: ddombrovski@rochestermn.gov

Authorized contact *(Do not complete if same as above.)*

Name: Chad Ponce

Mailing address: 116 N Markley Street, Suite 101, Greenville, SC 29601

Phone: (843) 286-3631 Email: chad.ponce@bolton-menk.com

Project information

Project description:

The proposed project would reconstruct the existing two-lane rural section on 18th Ave SW in Rochester to a two- or three-lane urban section, include pedestrian and bike facilities, and stormwater management improvements to the drainage system within the project area. The project includes converting the intersection of Mayowood Rd SW at 18th Ave SW to a single lane roundabout.

Applicable federal license or permit: _____

Include a list below of all other federal, interstate, tribal, state, territorial, or local agency authorizations required for the proposed project, including all approvals or denials already received.

WCA Permit, Corps 404 Permit, MPCA 401 Permit

Project location

☒ Attach a map that identifies project location including the location of receiving waters and any potential discharge(s) that may result from the proposed project.

Include a description below of any methods and means proposed to monitor the discharge and the equipment or measures planned to treat, control, or manage the discharge.

Sediment and erosion control procedures will be followed per the attached plan set. See the Joint Application for Project Figure Set including Project Location.

☒ Documentation of pre-filing meeting. Attach a copy of the email or calendar appointment confirming you have requested or waived a pre-filing meeting with MPCA at least 30 days in advance of submitting a completed Water Quality Certification Request.

Check the box and type your name to acknowledge reading both statements.

The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief

☒ Please type name below to acknowledge you read the above statement.

Chad Ponce

The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request with the applicable reasonable period of time.

☒ Please type name below to acknowledge you read the above statement.

Chad Ponce

Section 8 - Physical Alterations of Surface Waters

Impact #	Exhibit	Name of Surface Water	Physical Alteration	Extent of Alternation	Temporary or Permanent
On Site					
#1A	D-1 (lower frame)	Tributary 4A	Piping	See Culvert 1	Permanent
#1B	D-1 (lower frame)	Tributary 4B	Riprap	20 LF (0.007 AC)	Permanent
Culvert 1	D-1 (lower frame)	Tributary 4A/4B	Remove Old/ Install New Pipe	Old = 140 LF New = 180 LF	Permanent
#2A	D-2 (upper frame)	Tributary 2A	Riprap	7 LF (0.0003 AC)	Permanent
#2B	D-2 (upper frame)	Tributary 2B	Riprap/Grading	39 LF (0.002 AC)	Permanent
Culvert 2A	D-2 (upper frame)	Tributary 2A	Pipe Removal	32 LF	Permanent
Culvert 2	D-2 (upper frame)	Tributary 2A/2B	Remove Old/ Install New Pipe	Old = 78 LF New = 100 LF	Permanent
#3A	D-2 (lower frame)	Tributary 2E	Riprap	15 LF (0.002 AC)	Permanent
#3B	D-2 (lower frame)	Tributary 2D	Riprap	16 LF (0.001 AC)	Permanent
Culvert 3	D-2 (lower frame)	Tributary 2D/2E	Remove Old/ Install New Pipe	Old = 82 LF New = 217 LF	Permanent
#4	D-2 (lower frame)	Tributary 5A	Riprap	19 LF (0.004 AC)	Permanent
#4	D-2 (lower frame)	Tributary 5B	Pipe	See Culvert 4	Permanent
#4	D-2 (lower frame)	Tributary 5C	Riprap	12 LF (0.001 AC)	Permanent
Culvert 4	D-2 (lower frame)	Tributary 5A/5B/5C	Remove Old/ Install New Pipe	Old = 65 LF New = 218 LF	Permanent
#5A	D-2 (lower frame)	Tributary 1B	Riprap	23 LF (0.006 AC)	Permanent
#5B	D-2 (lower frame)	Wetland 2	Grading	2095 SQ FT	Permanent
#5C	D-2 (lower frame)	Tributary 1A	Pipe	See Culvert 5	Permanent
Culvert 5	D-2 (lower frame)	Tributary 1A/1B/Wetland 2	Remove Old/ Install New Pipe	Old = 65 LF New = 182 LF	Permanent
#6	D-3	Tributary 2F	Riprap	41 LF (0.010 AC)	Permanent
#7A	D-3	Tributary 2G	Riprap	21 LF (0.003 AC)	Permanent
#7B	D-3	Tributary 2G-2	Riprap	31 LF (0.017 AC)	Permanent
#7C	D-3	Tributary 2H	Riprap	20 LF (0.004 AC)	Permanent
Culvert 6	D-3	Tributary 2G/2G-2	Remove Old/ Install New Pipe	Old = 30 LF New = 99 LF	Permanent
Culvert 7	D-3	Tributary 2G-2/2H	Remove Old/ Install New Pipe	Old = 45 LF New = 99 LF	Permanent
#8	D-3	Wetland 5 (Incidental)	Grading	0.10 AC	Permanent
-	D-2 (lower frame)	Tributary 2C	-	-	-
-	D-2 (upper frame)	Wetland 1	-	-	-
-	D-2 (upper frame)	Wetland 3	-	-	-
-	D-3	Wetland 4	-	-	-
Within One Mile					
-	-	Willow Creek	-	-	-
-	-	Zumbro River	-	-	-
-	-	George Lake	-	-	-
-	-	Bamber Lake	-	-	-

CITY OF ROCHESTER MINNESOTA

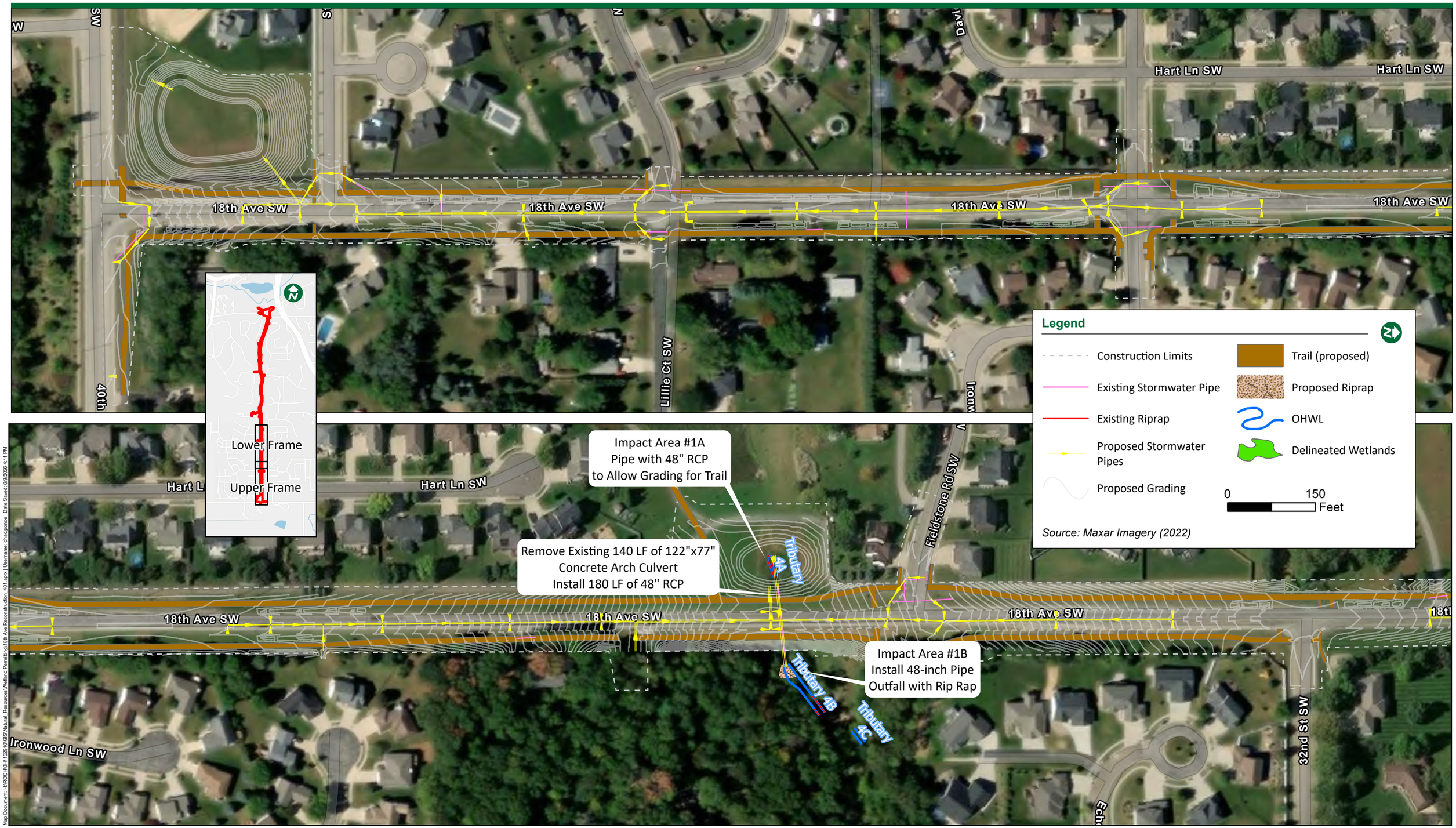
18th Avenue SW Reconstruction

Rochester, Olmsted County, MN

Exhibit C-1: Proposed Layout Map

June 2026

BOLTON & MENK



CITY OF ROCHESTER MINNESOTA

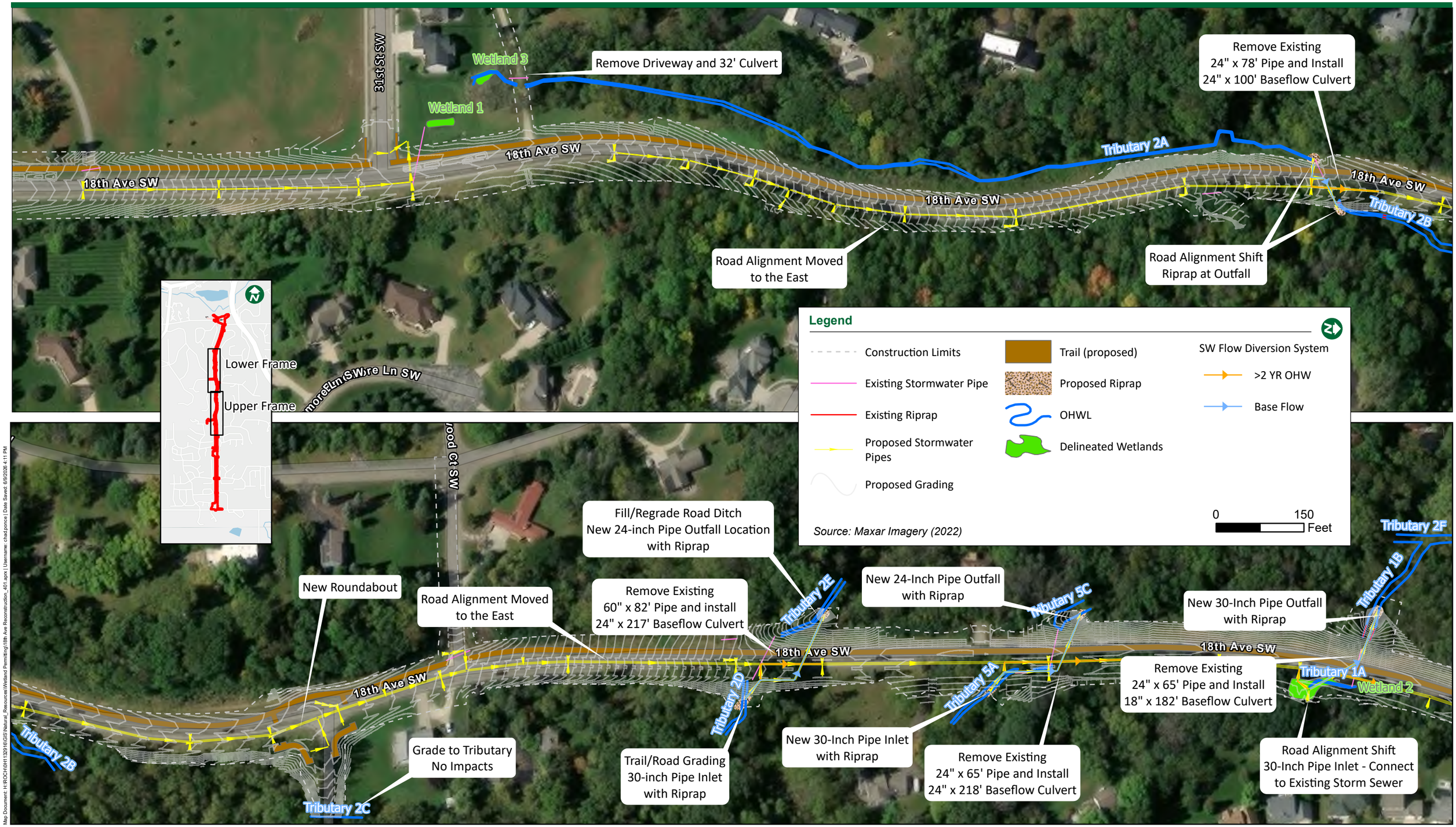
18th Avenue SW Reconstruction

Rochester, Olmsted County, MN

Exhibit C-2: Proposed Layout Map

June 2026

BOLTON & MENK



CITY OF ROCHESTER MINNESOTA

18th Avenue SW Reconstruction

Rochester, Olmsted County, MN

Exhibit C-3: Proposed Layout Map

June 2026

BOLTON & MENK

CITY OF ROCHESTER MINNESOTA

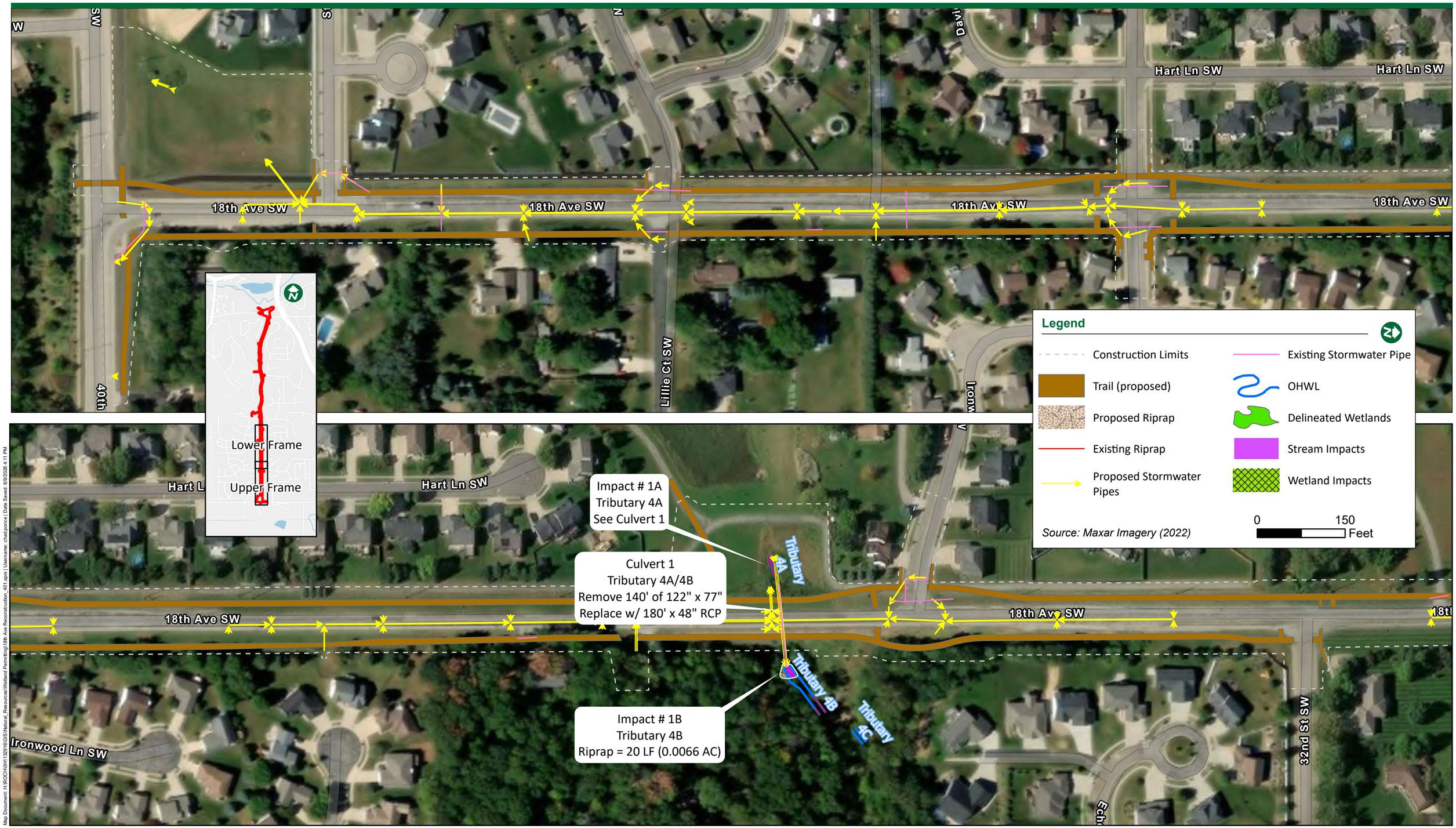
18th Avenue SW Reconstruction

Rochester, Olmsted County, MN

Exhibit D-1: Proposed Impacts Map

June 2026

BOLTON & MENK



CITY OF ROCHESTER MINNESOTA

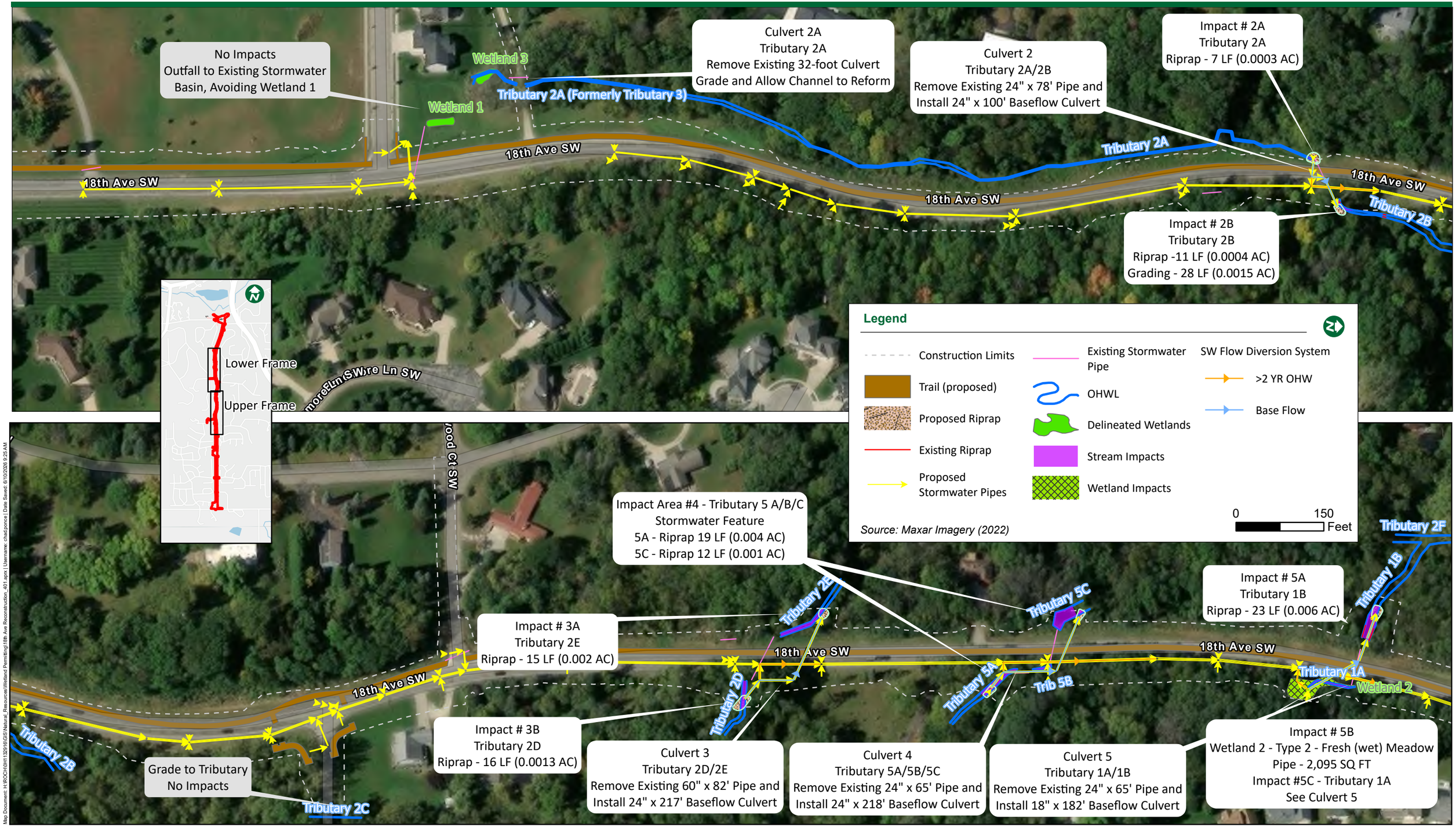
18th Avenue SW Reconstruction

Rochester, Olmsted County, MN

Exhibit D-2: Proposed Impacts Map

June 2026

BOLTON & MENK



CITY OF ROCHESTER MINNESOTA

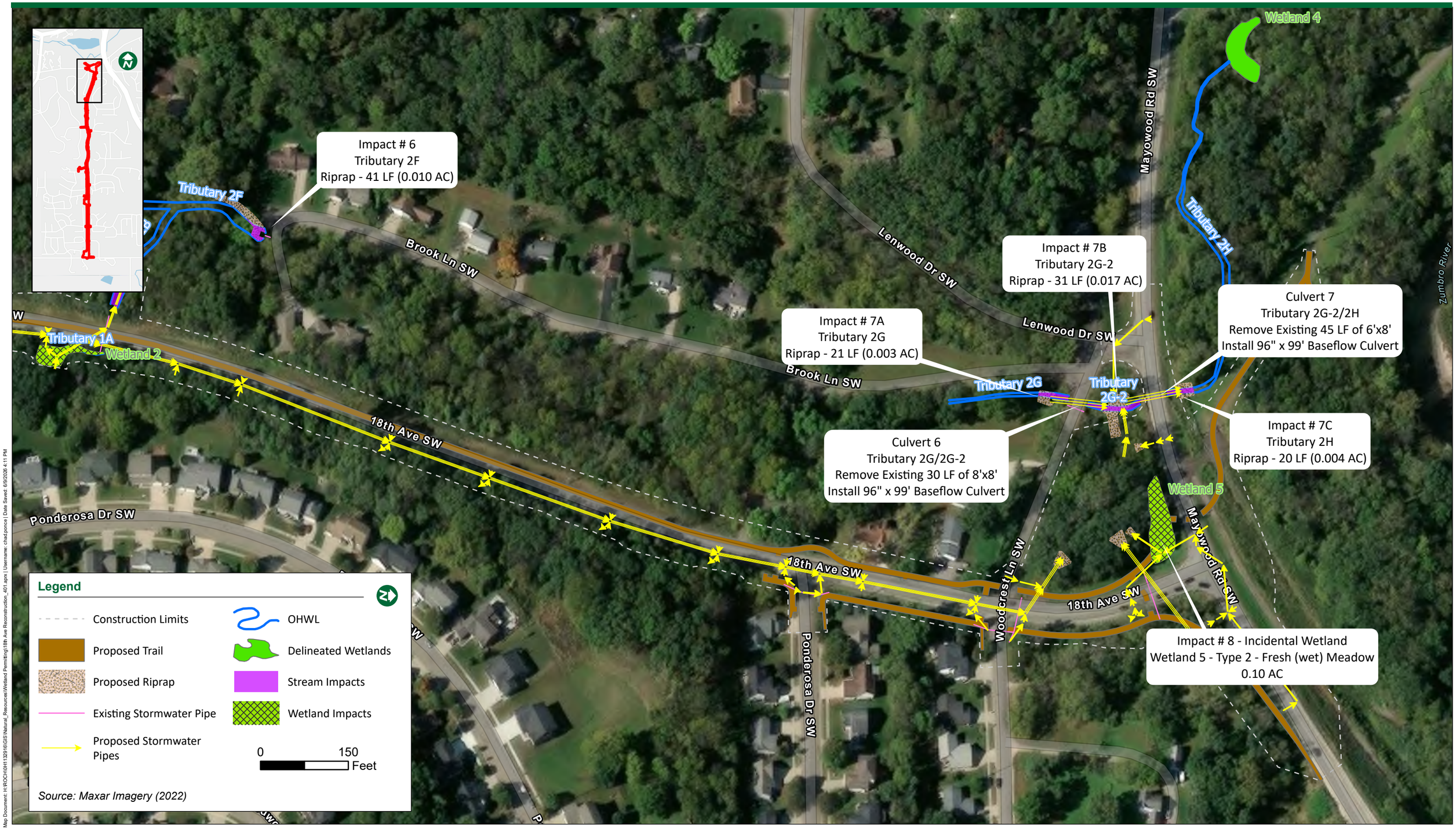
18th Avenue SW Reconstruction

Rochester, Olmsted County, MN

Exhibit D-3: Proposed Impacts Map

June 2026

BOLTON & MENK



Legend

- Construction Limits
- Proposed Trail
- Proposed Riprap
- Existing Stormwater Pipe
- Proposed Stormwater Pipes
- OHWL
- Delineated Wetlands
- Stream Impacts
- Wetland Impacts

0 150 Feet

Source: Maxar Imagery (2022)