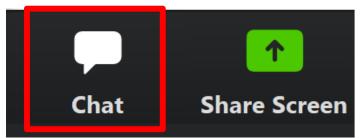
Welcome to the Hastings Wastewater Treatment Plant Facility Plan Open House





during the Q & A session.



651.302.2908 or email comment@hastingswwtp.com

The open house will begin at 6 p.m.

- You are muted and your video is disabled upon entry.
- Please utilize the chat (between the 'participants' and 'share screen' buttons) to send in comments and questions throughout the meeting. Questions will be answered after the presentation
- If you experience any technical difficulties, please call or text









MCES Hastings Wastewater Treatment Plant Facility Plan Open House

Wendy Wulff, Metropolitan Council Member & Environment Committee Vice Chair, Host Tim O'Donnell, Project Citizen Liaison, Facilitator

<u>Presenters</u>

Rene Heflin, Manager, Wastewater Plant Engineering Seth Chmelik, Principal Engineer, Project Manager Renewal Project Heidi Hutter, Principal Engineer, Project Manager Wastewater Treatment Plant Chad Davison, Principal Engineer, Project Manager Collection System and Roadway Improvements

Open House December 15, 2021





Open House Objective: Share information about the Hastings Wastewater Treatment Plant Facility Plan







Open House Agenda

Presentation

30 Min

- Introduction to MCES and the Hastings WWTP
- **Relocation Drivers**
 - Growth
 - Potential Permit
 - **Condition Assessment**
- Renewal Project
- New WWTP Site
- Haul Routes
- **Outfall Easements**
- Lift Station and Conveyance
- Decommissioning Existing WWTP Site
- **Program Summary and Next Steps**
- How to Engage





Rene Heflin



Heidi Hutter



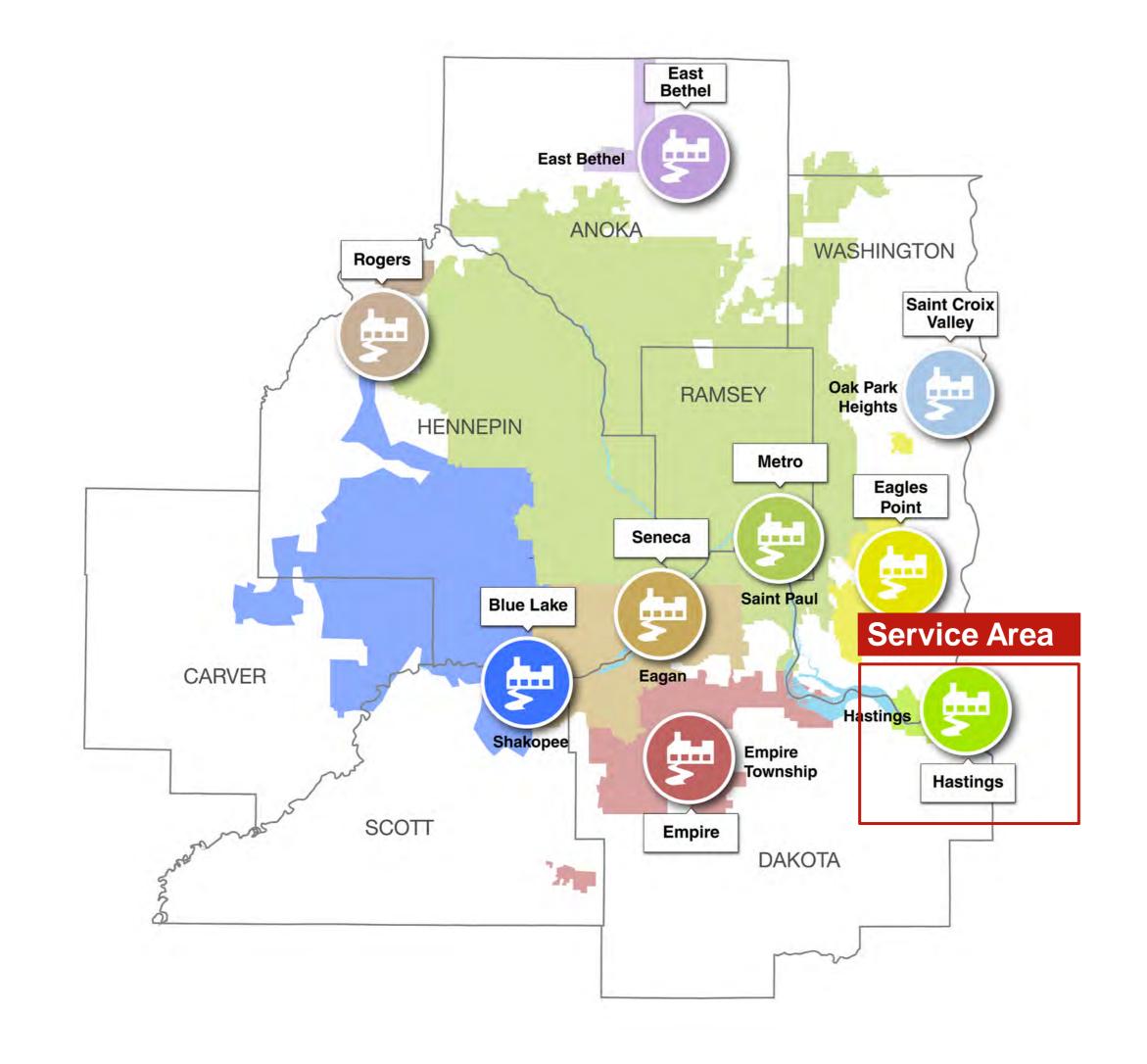
Seth Chmelik



Chad **Davison**



Service Area and Facilities Wastewater Treatment Plant Locations







WHO WE SERVE

7-county Twin Cities Metro Area **111** communities 3,000 square miles 2,700,000+ people

OUR FACILITIES

9 wastewater treatment plants 640 miles of interceptors **61** lift stations (pumping stations) **250 million** gallons per day (average)

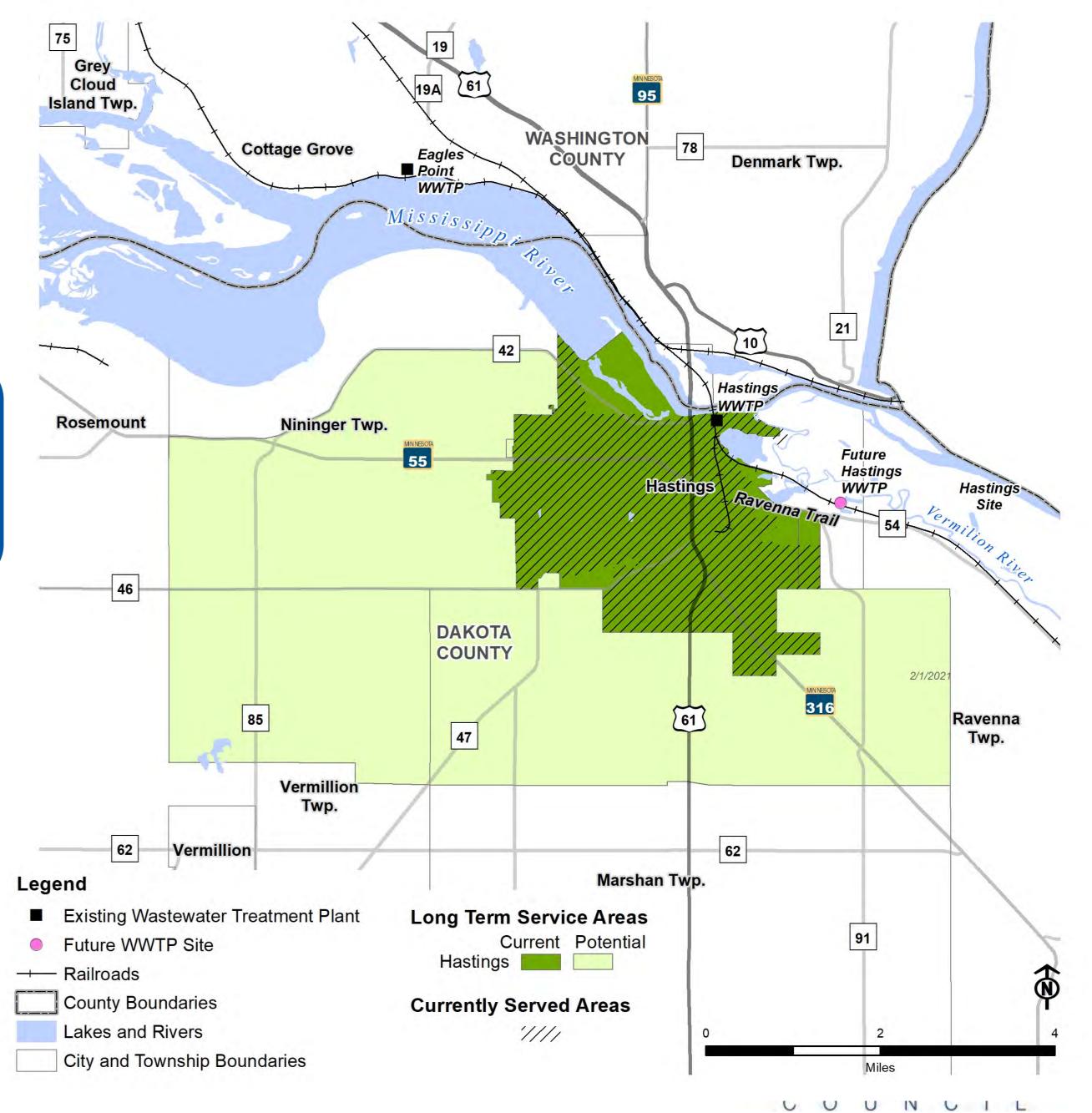
Hastings WWTP Service Area

Long Term Service Area

<u>10M</u> gallons/day long-term planned capacity* <u>29,000</u> residents served (in 2040) *MCES 2040 Water Resources Policy Plan – Post 2040

Existing Service Area

2.3M gallons/day plant capacity 23,000 residents served



Hastings WWTP Overview



30 Consecutive Years of Perfect Permit Compliance



- **1952 Constructed**
- **1970 MCES Acquired**
- 1985 Last Expansion
- **Existing Site**
 - Major Renewal Challenging
 - Non-Compatible Land Use ____
 - Plant Expansion Limited

Project Need

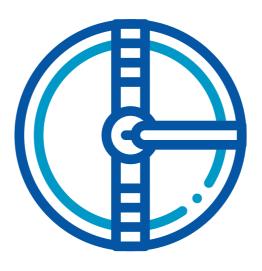


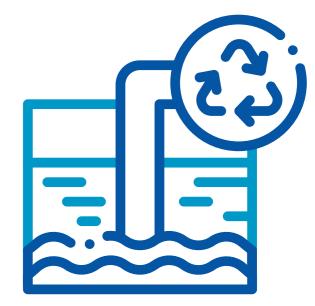
The plant needs to expand to serve population growth in the service area.

Additional wastewater treatment is needed to meet future environmental regulations.

The Hastings Wastewater Treatment Plant is projected to exceed its existing capacity of 2.34 million gallons per day of wastewater in 2050 due to growth within the service area.

The MPCA's 2014 Nutrient Reduction Strategy calls for 45% reduction in nitrogen loads to the Mississippi River by 2040.





Existing facilities that are near end of service life need to be renewed.

A 2020 condition assessment documented need for major investment in the existing facility.





Hastings WWTP **Condition Assessment & Renewal Project**

Condition Assessment - \$26M to Renew through 2040*

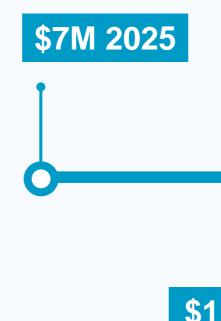
*Does not include cost to expand beyond existing 2.3 MGD capacity. *Does not include administration, engineering, contingency, or inflation. *Status quo renewal.

Renewal Project Scope

- Plant Outfall
- Aeration Tanks
- Mechanical HVAC
- Security for new plant site

Objectives/Goals

- Maintain reliability
- Preserve assets
- Improve operational flexibility, efficiency and safety
- Protect environment, health, safety and welfare of customers



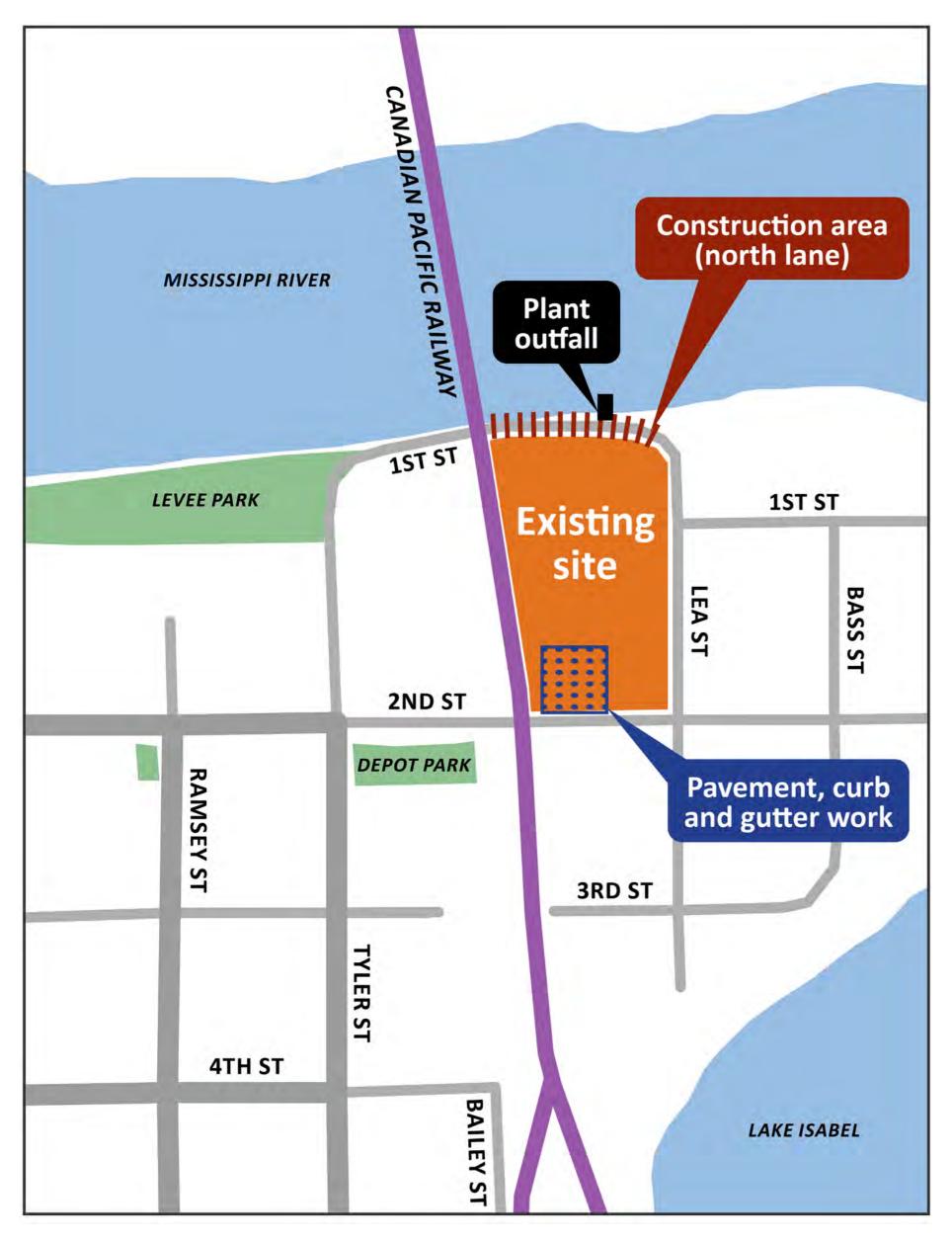
\$7M 2040



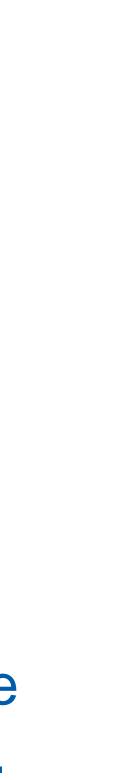




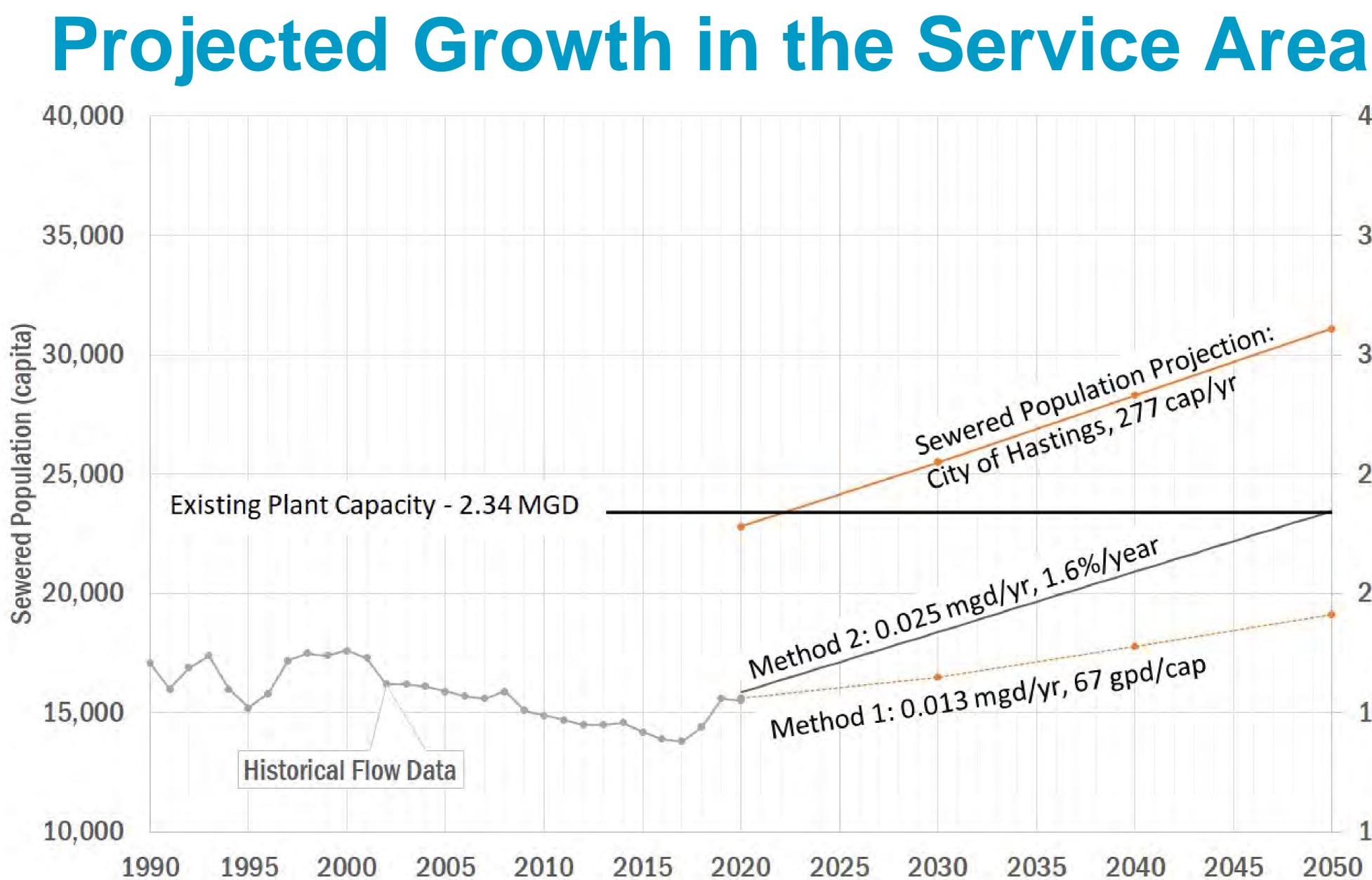
Renewal Project – Outfall Repair



- The plant outfall is located north of the plant Near 1st Street.
- Repair work will include:
 - Replacement of the outfall pipe,
 - Repair of manhole structure,
 - Replacement of rip-rap over the outfall
- Construction and flow bypass will require the temporary use of the north lane of 1st Street.
- Traffic control will allow for two-way vehicular access on the south lane of 1st Street for the duration of this work.





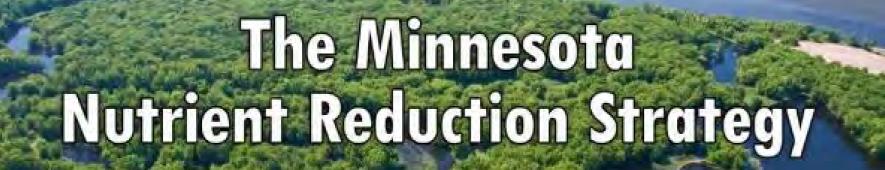


4.0 3.5 Sewered Population Projection: 3.0 City of Hastings, 277 cap/vr nfluent Flow (mgd) 2.5 Method 2: 0.025 mgd/yr, 1.6%/year 2.0 Method 1: 0.013 mgd/yr, 67 gpd/cap 1.5

2025 2030 2035 2040 2050 2045

1.0

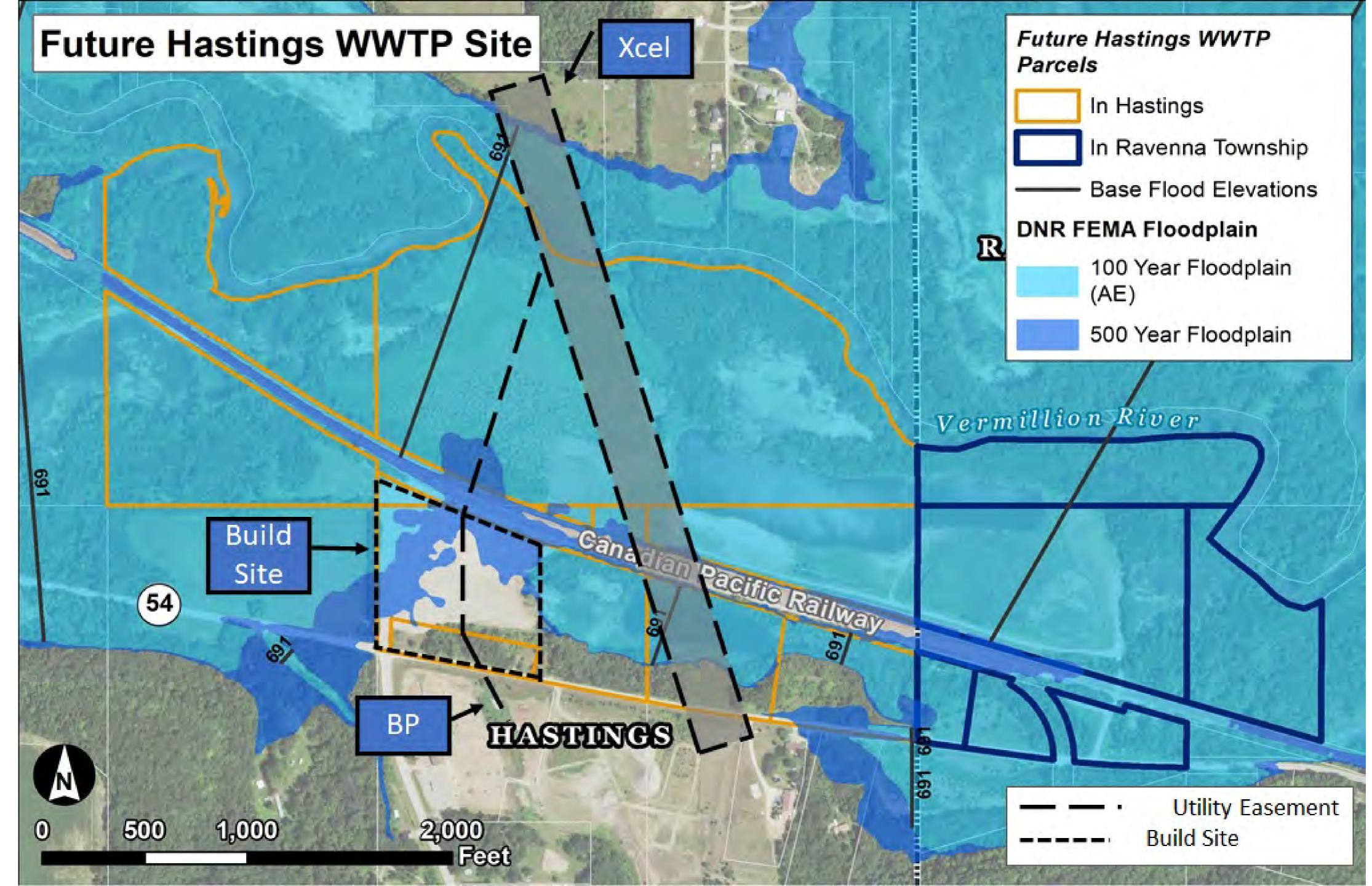
Minnesota Nutrient Reduction Strategy

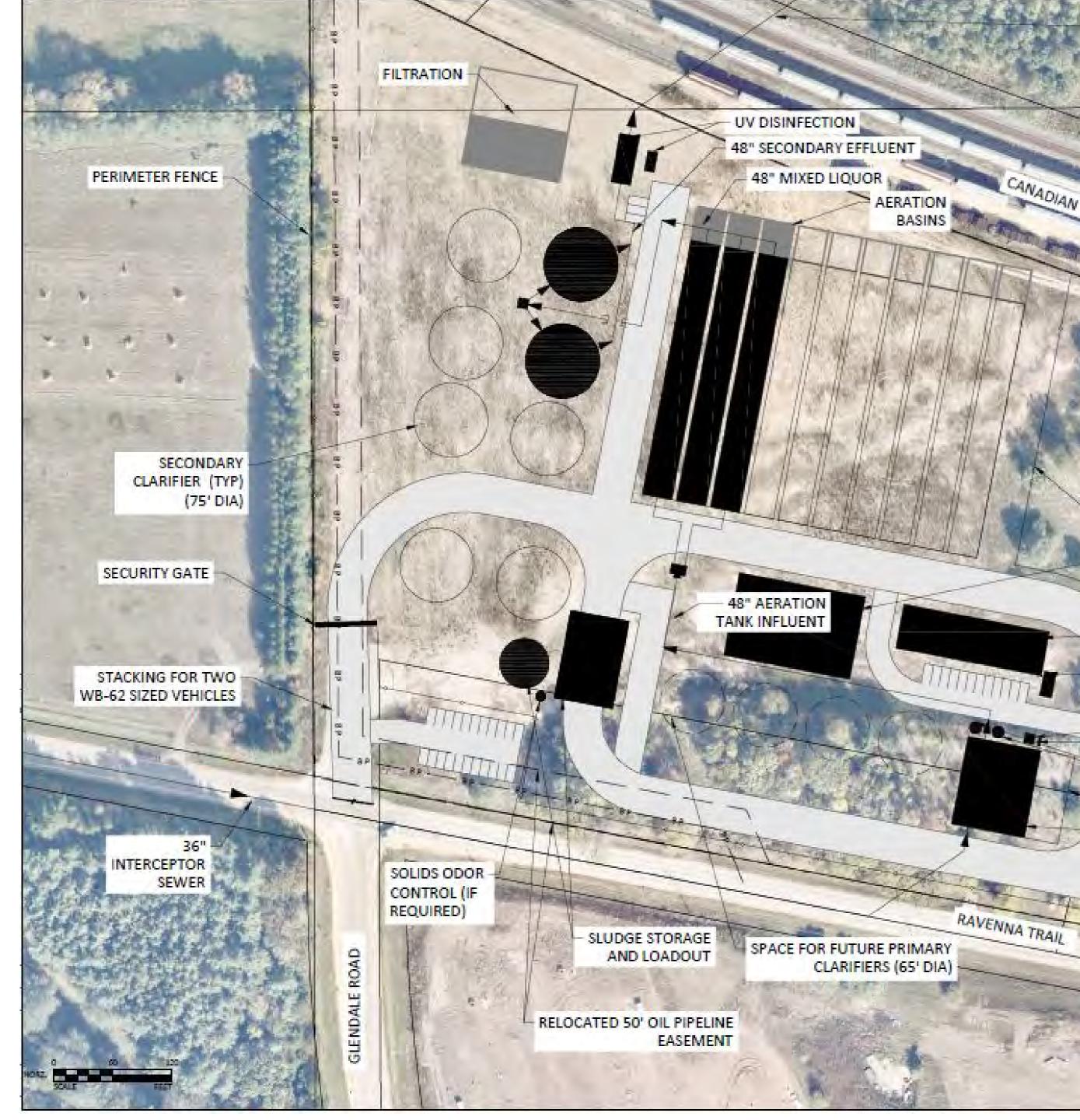


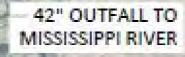


- 45% Reduction in Nitrogen Loads to the Mississippi by 2040
- Load Reductions at Wastewater Treatment Plants will be necessary
 - Hastings area is prioritized by the MPCA for future nutrient reduction
 - Plant expansion at the current Hastings WWTP would be required
 - Expansion is challenging and limited.
 - Derating capacity is not an option for MCES.









NADIAN PACIFIC RAILROAD

PERIMETER FENCE AERATION BLOWER/ RAS AND WAS PUMPING BUILDING

ADMIN/ MAINTENANCE/ LAB BUILDING

STANDBY GENERATOR

TRANSFORMER

BREAKER

- HEADWORKS ODOR CONTROL (IF REQUIRED)

HEADWORKS/INFLUENT

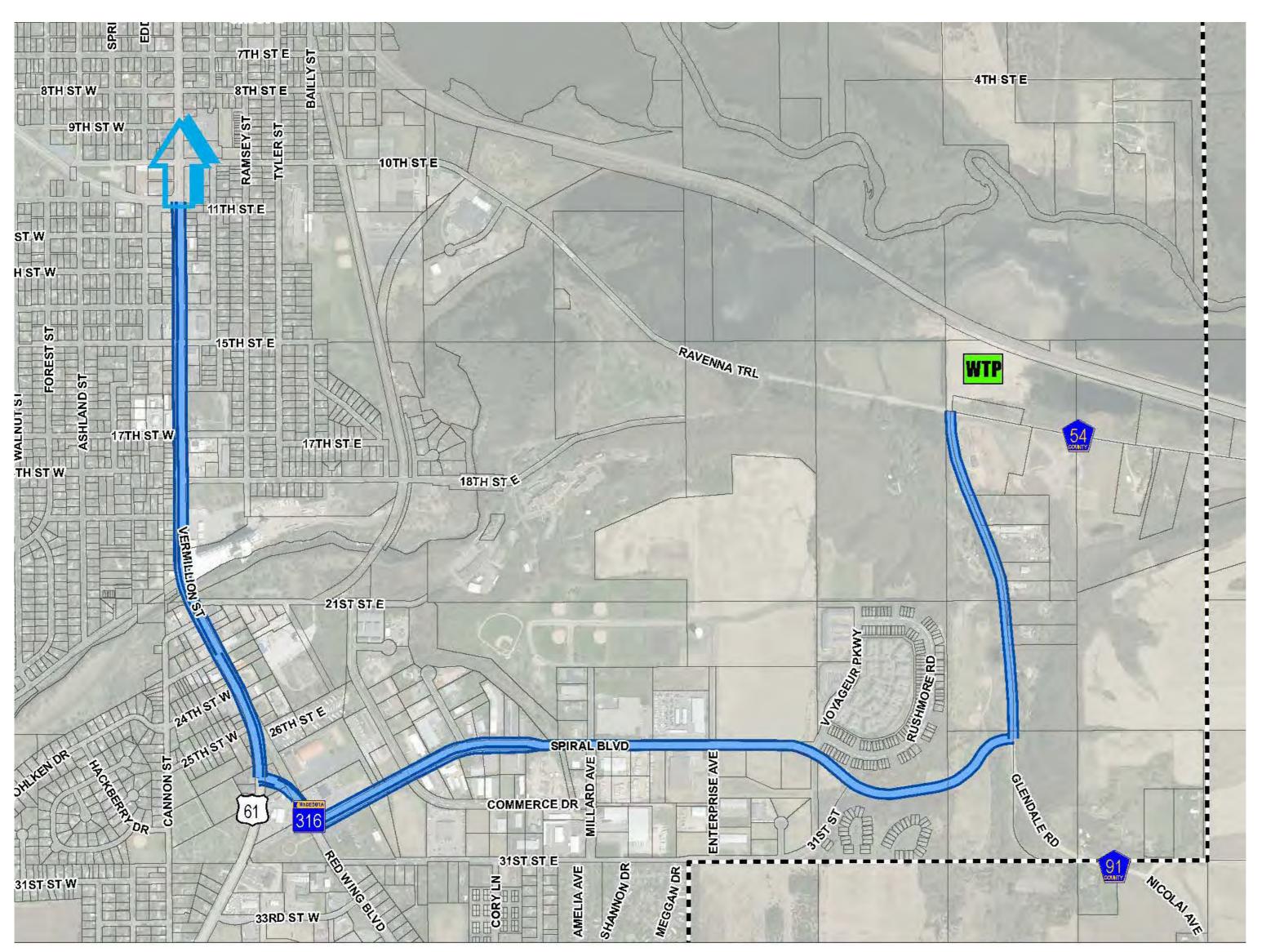
PERIMETER FENCE

and the state of the

SECURITY GATE



WWTP Proposed Haul Route



- Estimated 3 to 4 truck trips per day, hauling sludge to the Metro WWTP for processing
- We propose crossing County Road
 54/Ravenna Trail. No turn lanes are planned at this time.



Lift Station Preliminary Layout





Similar size and configuration of lift station expected.





Forcemain Alignment





- Tyler Street full reconstruction
- Met Council will fund the repair or replacement of any City utilities impacted by the forcemain installation
- Opportunity for a cooperative construction project. We would need to negotiate an agreement for any improvements the City would want included

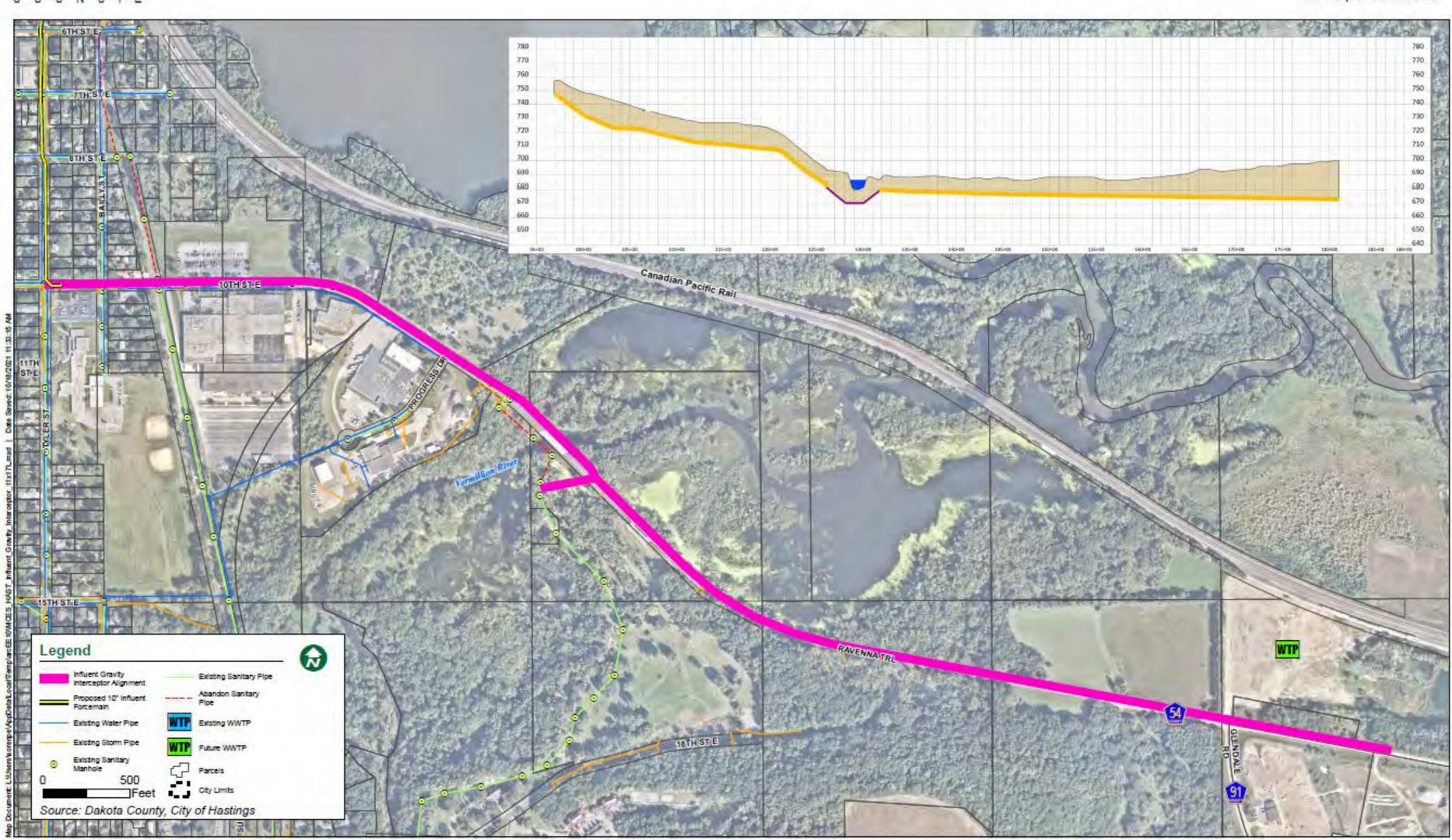


Gravity Alignment



Hastings WWTP Facility Plan

Hastings, MN



18



Figure 1: Influent Gravity - Tenth Street/Ravenna Trail

October 2021 Real People. Real Solutions.

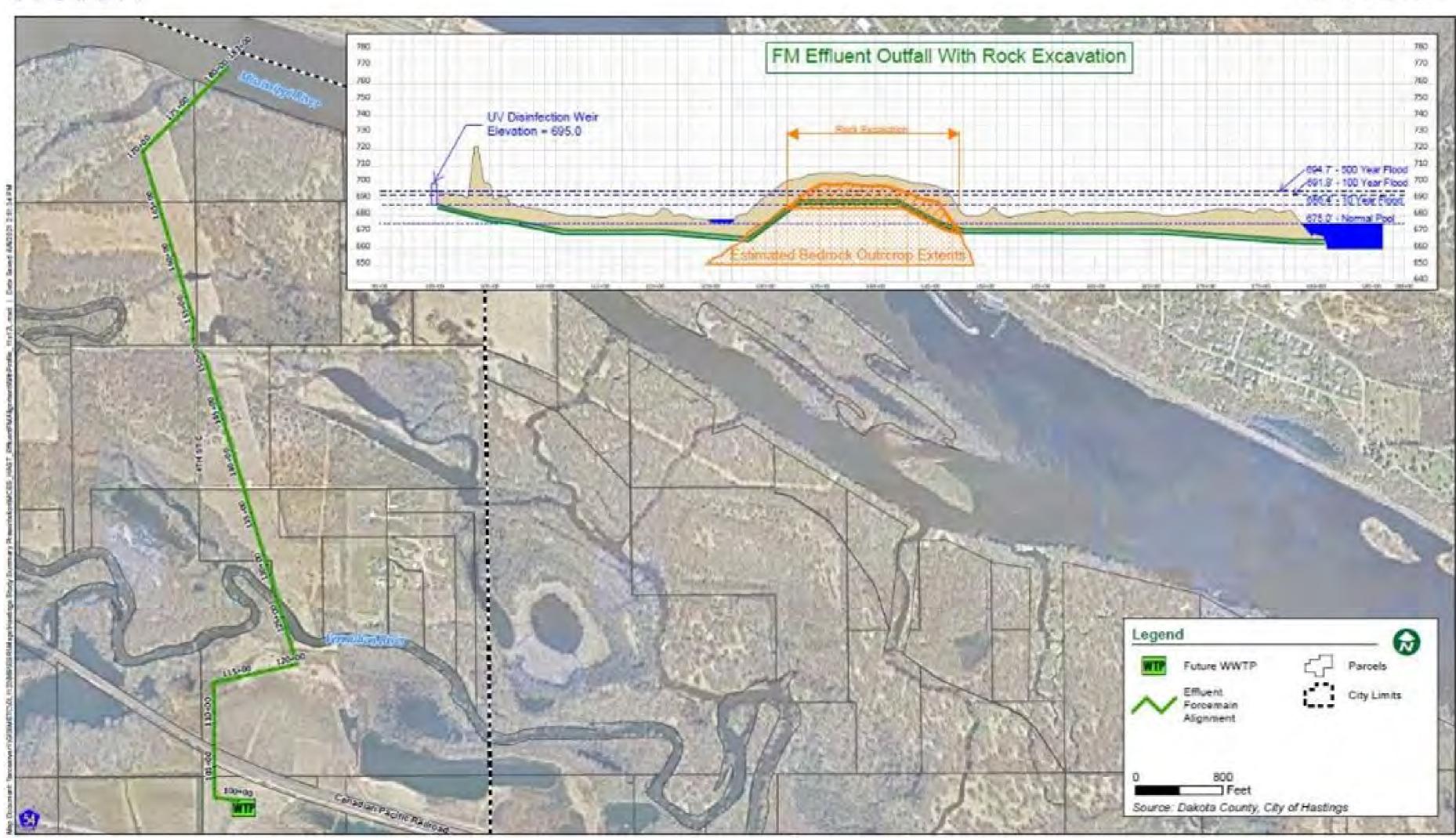


Treated Water Discharge Alignment



Hastings WWTP Facility Plan

Hastings, MN





Real People, Real Solutions

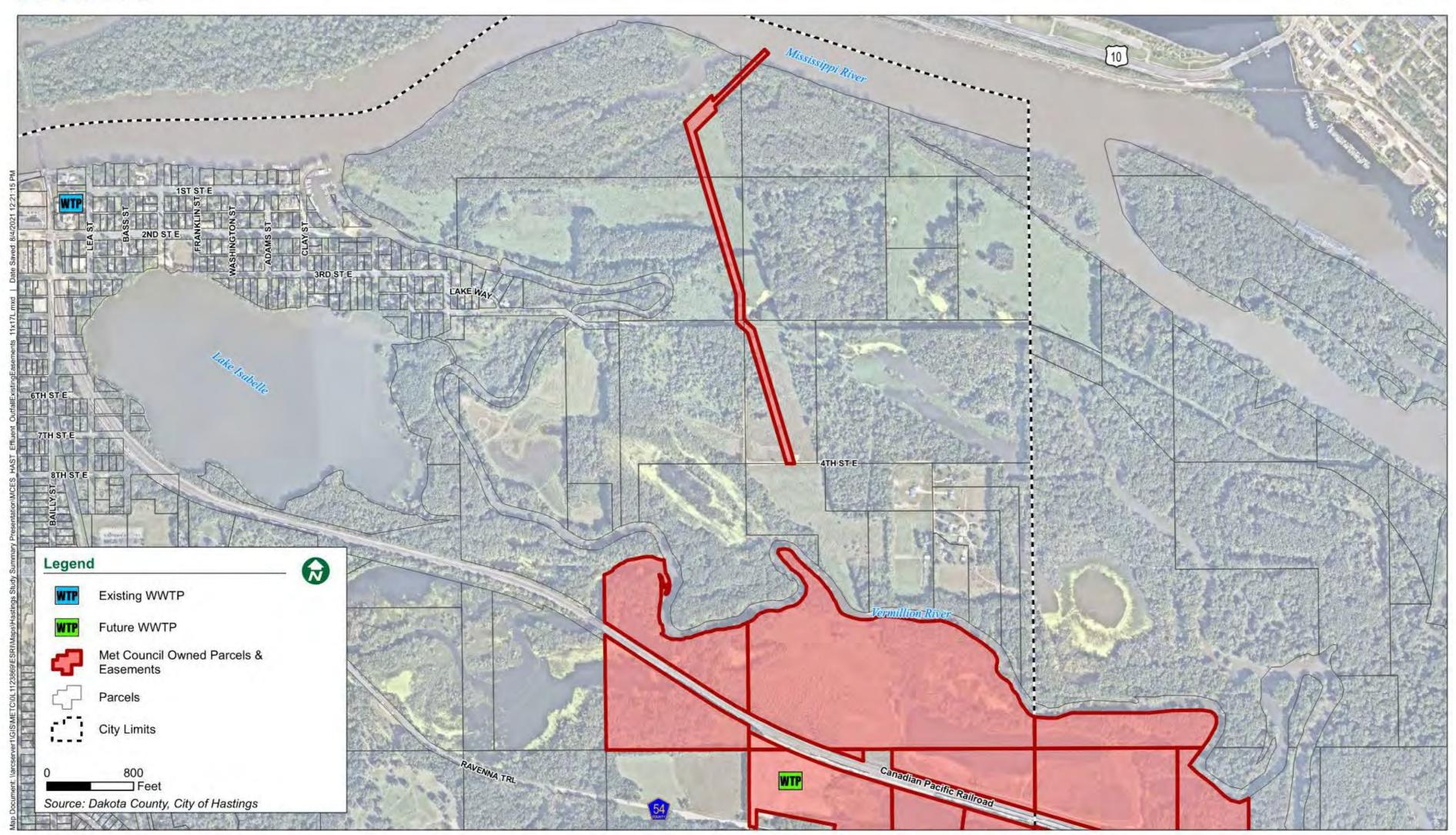


Discharge Alignment Existing Easements



Hastings WWTP Facility Plan

Hastings, MN



Outfall Existing Easements

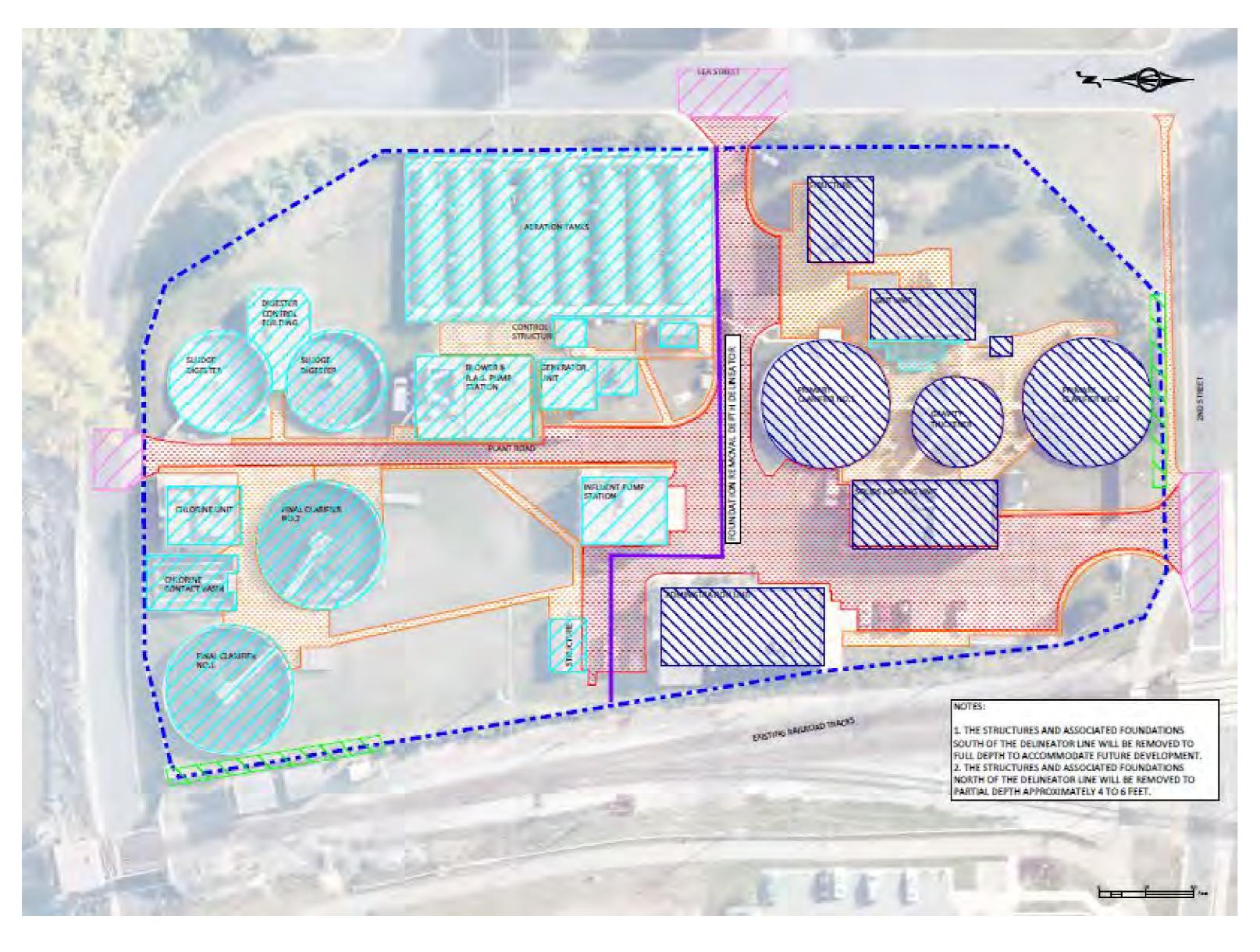
August 2021



Real People. Real Solutions.



Decommissioning Plan



- Concept to be used as a starting point for our intergovernmental agreement negotiations.
- South half of property shows removal of structures to bottom of footings.
- North half shows partial removal to 6 feet below ground elevation.



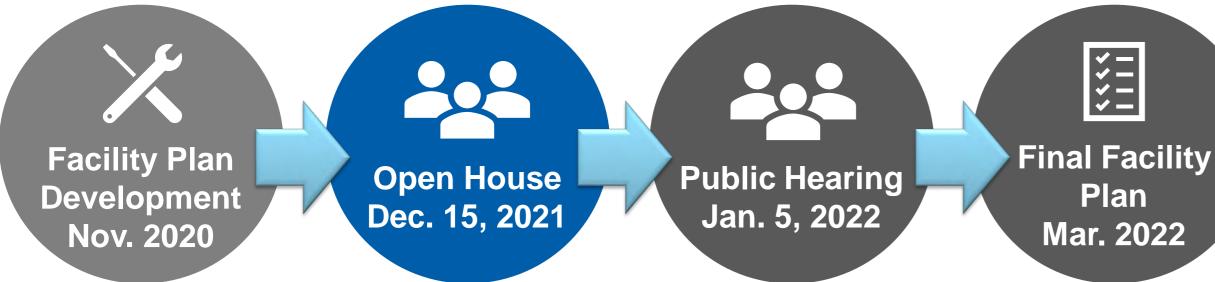




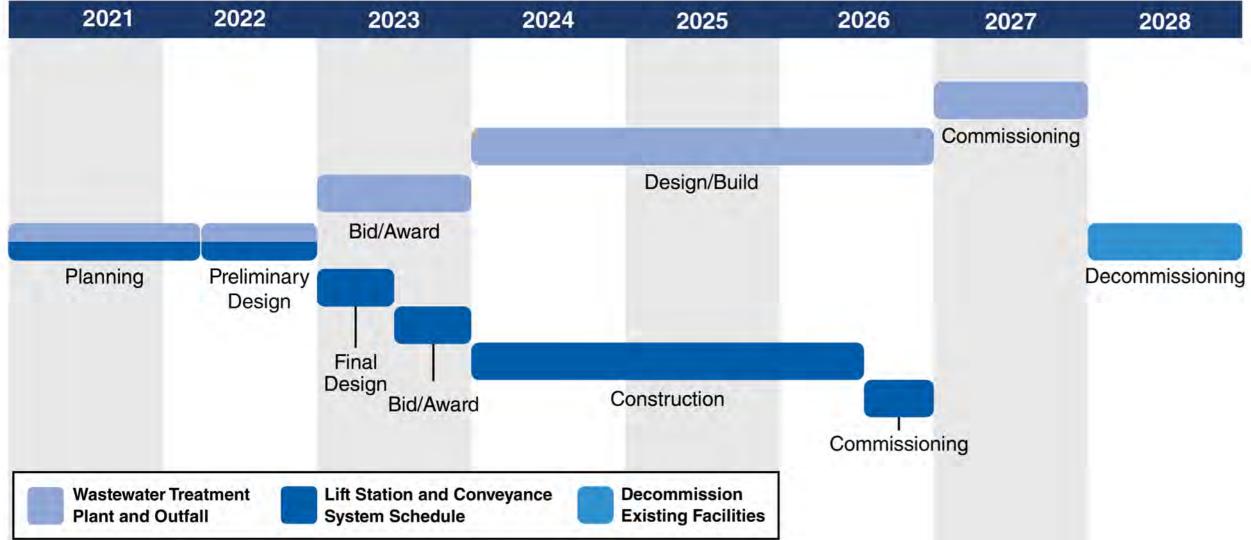


Program Summary & Next Steps





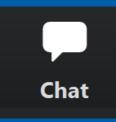




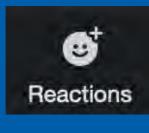


How to participate in Q&A:

Computer, Smartphone and Tablet Users:



Use the "Chat" box to type in questions and comments



Select the reactions button to use the raise hand function to be unmuted

and speak aloud



Email your question or comment to comment@hastingswwtp.com

Phone Users:

Call or text (651) 302 - 2908







Stay Informed

Share questions and comments

Email: comment@hastingswwtp.com

MetroCouncil.org/HastingsWWTPProject

- Call the Project Hotline: (651) 302 2908

Learn more about the project and review materials related to the January 5th Public Hearing





Thank you for joining us for this open house!





