



Requesting State Capital Investment Bonds for Water Treatment Plant

June 3, 2025 Supplemental No.2

Capital Bonding Requirements (6.3.2025)



- 6.13.25 -Local Units of Government Final Requests
 - July 2025 Legislative Bonding Tours Begin
- 10.17.25 -Local Units of Government Final Edits
 - System closed but staff can email modifications
- City Council Resolution of Support
 - Requires ranking if more than 1 (currently Water Plant #1 and NCRC #2) as well as financial commitment and city ownership
 - Does NOT require in resolution amount of project or state bonding request. But, needs to be submitted at least in the application materials per deadlines. Staff is recommending council direction at least by deadlines for amount and bond match request

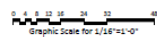
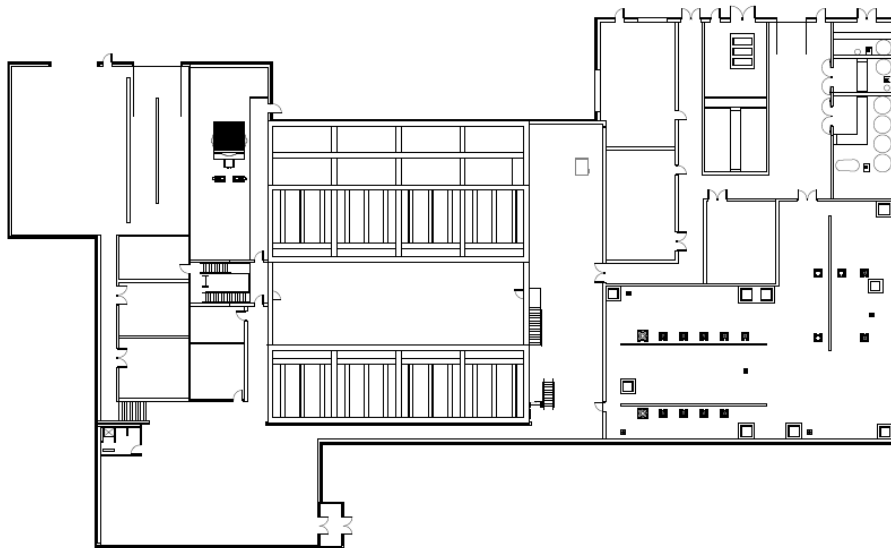
Project
Assumptions
Background



Water Treatment Plant Design



- Gravity Filtration water treatment plant to remove manganese
- No Reverse Osmosis but could be added in future for water softening and also protection against future contaminants
- No Garage except JetVac stall, and small garage for 2 additional staff vehicles and small work area. Garage could be added in the future
- No staff space except small area for 2-3 staff members and critical areas for plant operation (office, laboratory, SCADA, restroom, breakroom). Office could be added in the future
- Building reduced by approximately 28,815 sq. ft. from previous design
- Utilities staff and equipment stays in current locations except JetVac goes to WTP



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NORTHFIELD, MINNESOTA
WATER TREATMENT FACILITY
OPTION NO. 2
BUILDING LAYOUT

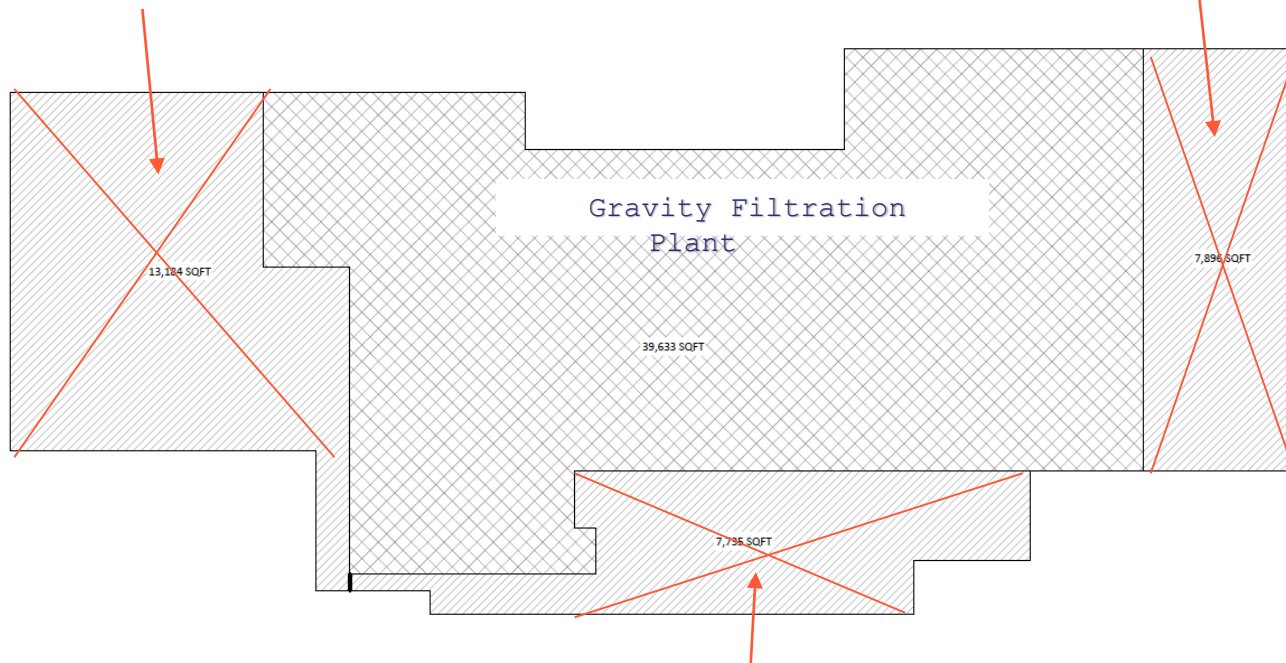
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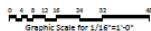


Removed Garage, could
be added in future

Removed RO, could be
added in future



Removed Office, could
be added in future



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NORTHFIELD, MINNESOTA
WATER TREATMENT FACILITY
OPTION NO. 2
BUILDING SQFT

SHEET
C2

Water Treatment Plant Cost



- December 2024 bid resulted in project cost per square foot is around \$490 for office area and \$385 for garage space
- Value engineered the facility to lower cost as much as possible
- Project costs are increasing 0.4% - 1.0% per month
- \$64 million estimate based on Dec. 2024 figures and project construction in 2028
- Redesign of projects is estimated to take 9-12

State Capital Investment Bonding Request – WTP



- \$64 million project (2028 project estimate)
 - \$32 million – State bonding request
 - \$32 million – City share
- Gravity Filtration Water Treatment Plant
 - Lowers level of manganese in the drinking water

Why \$33 million project is not an option



- \$33 million project is the same project that bid out in Dec. 2024 at ~\$62 million
- \$33 million was a conceptual design from summer 2021, 3.5 years prior to bid of project
- Reverse osmosis cost was substantially underestimated and required a larger footprint
- Construction costs have been increasing 10% per year
- Booster Station for Southeast area was added to the facility to serve future growth
- Office and garage were slightly larger

Exploration of Small Scale City Treated Water System



- Feedback from Individuals on City Council Related to Potential Free (or Reduced Cost) Solutions for Treated Water Targeted In Particular to Infants under 1 year old
- Staff Response: Potential Small Scale Reverse Osmosis Water Filling System
 - Self-Service Water dispensers/refill stations (similar to those in grocery)
- Potential Northfield Community Resource Center (NCRC) and Northfield Community Education Center (NCEC)
 - NCRC First Option with Addition of NCEC Addition
- Keep in Place Until New Plant or Council Action to End, Whichever First
- Staff is Exploring Cost and Details to Bring Back at Future Date

Questions for Council



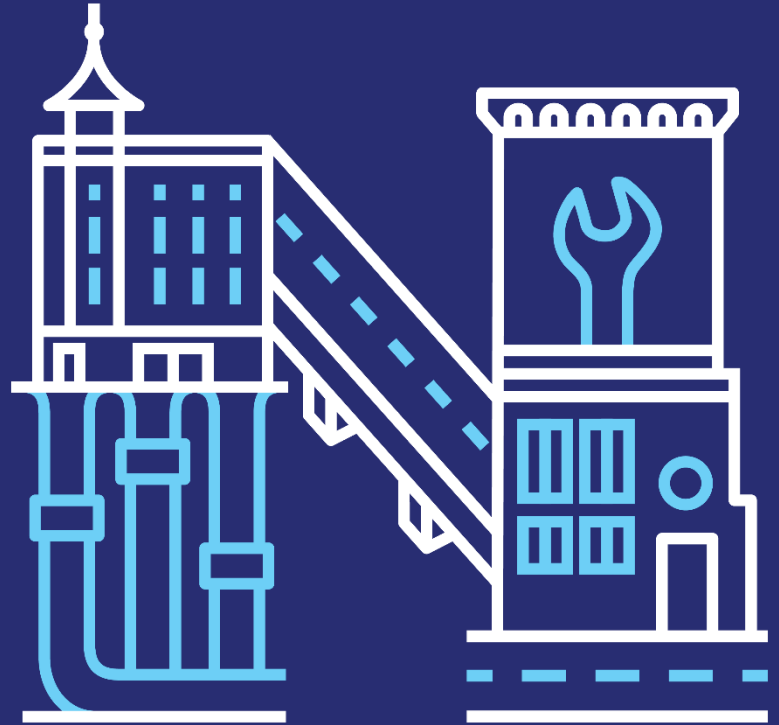
- Do you support a gravity filtration water treatment plant based on current estimate?
- **Alternative Option:** Do you want to start redesign sooner to move project forward sooner?
 - Note: currently using 2028 estimate versus 2027. Allow for more time for evaluation if funded by State before re-design work. This would be a motion to amend to change the grant amount to \$28.5 Million amount and estimate cost of \$58 Million."
- Do You Support Staff Continuing Exploration of Small Scale Commercial Grade RO Filtration units at NCRC and NCEC?
 - If yes, then:
 - And pursue grant funding as well for the plant? OR
 - Fully "pause" for now and not explore grant funding.
 - ***This could be discussed in more detail next week at worksession***

State Capital Investment Bonding Request – WTP Options



- Pursue 50% cost share for water treatment plant (staff Resolution)
 - Alternative option see last slide
- Not to pursue state capital investment bonding request for water treatment plant

Consider Resolution
Requesting State
Capital Investment
Bonds for Water
Treatment Plant in
the City of
Northfield



MDH Manganese Water Health Risk Limit



Infants

100 $\mu\text{g/L}$

3 of 5 Northfield wells above 100 $\mu\text{g/L}$



Everyone Else

300 $\mu\text{g/L}$

Manganese in Northfield's Tap Water



- City conducted testing in 5 locations throughout 2020 at taps where people drank water
 - No documentation on what type of treatment, if any, took place prior to the tap
- 4 of 5 sites had tests over 100 ug/L.

NEW INFORMATION SLIDE 5.13.2025 (FROM FEBRUARY 2025 WORKSESSION)

Water Plant Option

February 2025 Updated Cost Estimate (including other added cost reductions):

<u>Estimated Water Treatment Plant Costs by Option and Year</u>		
Treatment Type	2027	2028
Gravity Filtration Only	\$53M - \$57M	\$56M - \$63M
Gravity Filtration, Office/Garage	\$62M - \$70M	\$65M - \$77M
Gravity Filtration, RO and Office/Garage	\$68M - \$77M	\$71M - \$85M

A. Request \$57M Total Cost Gravity Filtration: \$28.5M State Request/\$28.5M Local Match

B. \$70M Total Project : \$35M State Bond, \$35M Local Match

Would propose to include a participatory process on redesign with council/community or other input with phases. IF costs came lower could adjust down the bonding request (October or after).