Minutes Silver Lake City Council Regular Meeting 6:30pm, February 20, 2024 Silver Lake Auditorium

Mayor Bebo called the meeting to order at 6:30pm.

Members Present: Mayor Bruce Bebo, Councilor Sandie Adams-Bruins, Councilor Joanna Jacobs, Councilor Chris Penaz

Members Absent: Councilor Josh Mason

Staff Present: Diane Pedersen, Dale Kosek, Jerrod Weckman, Wyatt Konen, Cory Behrendt, Kyle Wawrzyniak, Ashley Mason

Others Present: Jeremy Anderson, Sam Fink, Mccoy Zajicek, Tyler Kosek, Roxy Yurek, Ryan Hoffmann, John Marvan, Frank Koelfgrn, Miranda (Community Charities of MN)

Two additions to the agenda:

- 1. New Business: Music in the Park donation for pool.
- 2. Public Works Committee's recommendation for department head hire.

Moment of Silence for fallen service members in Burnsville. Appreciation expressed for all service members.

Motion by Councilor Adams-Bruins second by Councilor Jacobs to approve the agenda with the two additions. Vote for: Unanimous. Motion carried.

Consent Agenda:

- 1. Approve minutes from January 16, 2024, Regular Meeting
- 2. Approved minutes from January 22, 2024, SEH workshop
- 3. Approve Payroll 2 and 3 and January Ambulance
- 4. Approve Claims

Motion by Councilor Penaz second by Councilor Jacobs to approve the consent agenda. Vote for: Unanimous. Motion carried.

Public Comment - None

New Business

- 1. Music in the Park -> Pool repairs donation \$1,591.61.
 - a. Women's Club served food \$586.61.
 - b. Music in the Park Pola-Czesky Fund Polka Dance fundraiser for pool \$1005
- 2. Request for Action to approve Community Charities of Minnesota to run gambling (pull tabs, e-tabs, meat raffles, bingo) at Molly's Café with the charitable proceeds going to local non-profits such as the Fire Relief Association, school, Pool & Parks, and the city as long as it's not the police department.
 - a. Discussed gambling with the Lions and Fire Department in 2022, but neither wanted to take on the additional responsibility of another location.
 - b. Community Charities of Minnesota will allow Frank to select the local charity to donate the proceeds to if they are a 501c3. He will receive up to 85% of the profit. The funds can be donated monthly, quarterly or every six months, depending on the funds received.
 - c. They currently work with 30 sites throughout Minnesota. They gave over \$600,000 to each of the communities they were in, and the company has been around for 30 years.

d. The process is to get approval from the city and then the application will be sent to the state which will then verify the liquor license. The process can take 6-8 weeks.

Motion by Councilor Penaz second by Councilor Adams-Bruins to approve the gambling license at Molly's Café to be run by Minnesota Charities per all state regulations with the proceeds going to local non-profits. Vote for: Unanimous. Motion carried.

- 3. Resolution 24-08: Resolution Approving Local Board of Appeal and Equalization.
 - a. An open book meeting will be held on April 1, 2024, at 6:00pm in the Auditorium.

Motion by Councilor Jacobs second by Councilor Penaz to approve Resolution 24-08: Resolution Approving Local Board of Appeal and Equalization on April 1, 2024, at 6:00pm in the auditorium Vote for: Unanimous. Motion carried.

- 4. Resolution 24-09: Resolution Appointing Election Judges.
 - a. Appointing election judges for March 5, August 13, and November 5 elections.

Motion by Councilor Penaz second by Councilor Adams-Bruins to approve Resolution 24-09: Resolution appointing election judges for 2024 elections. Vote for: Unanimous. Motion carried.

- 5. Resolution 24-10: Resolution Reestablishing Unchanged Precincts and Polling Places. *Motion by Councilor Jacobs second by Councilor Penaz to approve Resolution 24-10: Resolution reestablishing unchanged precincts and polling places. Vote for: Unanimous. Motion carried.*
 - 6. Reviewed McLeod County resolution opposing the North Star Act.

Department Business

- 1. Public Works Liaison Report
 - a. The water main break on Center Street just west of Oliver. Discussion was held whether the curb should be replaced now or wait until infrastructure project is complete in that area as it is in phase 1 of the project. Public Works recommendation is that full replacement waits, and we tar the curb area at this time. The cost to replace the curb would be \$100 per linear foot or \$2100. The cost for the asphalt would be about \$7,000 for this curb, street patching and the city hall parking lot.
 - b. Public Works recommends fixing the city hall parking lot at the same time as the Center Street fix which has a budgeted cost of \$6,000.

Motion by Councilor Penaz second by Councilor Adams-Bruins to accept the bid not to exceed \$7,000 for the repair of the city hall parking lot, Center Street asphalt curb and street patching. Vote for: Unanimous. Motion carried.

- c. Camera work requested by SEH for the infrastructure project was completed on sewer and storm water services. There was one residence that had a sewer line that would fail inspection due to tiles being pulled apart and causing gaps.
 - i. Discussion was held regarding updating the sewer line ordinance. Ordinance readings will take place at the next three council meetings.
 - ii. If the work is completed by the city, it may be possible to assess the cost to the property taxes over a 5-year period at an interest rate of 4.75%. It cannot be assessed as part of the infrastructure project.
 - iii. Public Works is to talk to MN Rural Water regarding an ordinance.
- d. SDS sheets updated and hung in city buildings.
- e. Cab was installed on the John Deere tractor.
- f. Discussion was held regarding the city ordinance referring to sump pumps draining into the sanitary sewer line from November 1 through March 1.
 - No changes were made to the ordinance at this time. Public Works is to work on a way to track residences with sump pump connections to the city sewer and monitor sump pump drainage after March 1. Revisit this discussion after the infrastructure project and edge drains have been installed.
- g. A time was established with Horizon Pool to install pool heaters. They will be installed on April 24-25, weather permitting.
- h. Set up the calendar on the Public Works computer.
- i. Request for Action to hire Major Electrical to replace lighting, a fan and wiring in the auditorium upstairs storage.

Motion by Councilor Penaz second by Councilor Adams-Bruins to approve the request for Major Electrical to replace the lights, fan and wiring in the auditorium upstairs storage in the amount of \$1157. Vote for: Unanimous. Motion carried.

j. Request for Action to purchase the IS 700 60' 27HP Briggs motor zero-turn lawn mower from L&P for \$8800.

Motion by Councilor Penaz second by Councilor Adams-Bruins to approve the purchase of a Ferris IS 700 zero-turn mower from L&P for an amount not to exceed \$8800. Vote for: Unanimous. Motion carried.

k. Discussion was held regarding placing an 8x10 foot sign on the public works building with the address at a cost of \$300: 8x10 graphic for \$175; 8x10 white sheet aluminum for \$185.

Motion by Councilor Penaz second by Councilor Jacobs to approve the purchase and hanging of a sign on the public works building not to exceed a cost of \$300. Vote for: Unanimous. Motion carried.

- I. The hiring committee had a Request for Action to hire Jerrod Weckman as the new Public Works Supervisor to replace Dale Kosek when he retires on July 12, 2024. The effective date of his new position will be Monday, May 13, 2024, Grade 17 Step 5 at a rate of \$25.67.
- m. Begin advertising for Maintenance 3 position beginning of March, interview in April, anticipated start date of June 1.

Motion by Councilor Penaz second by Councilor Jacobs to approve the hire of Jerrod Weckman as Public Works Supervisor due to Dale Kosek's retirement. His position will be Level 17 Grade 5 \$25.67 per hour effective May 13, 2024. Vote for: Unanimous. Motion carried.

- n. SEH infrastructure update
 - i. MPCA Pond Optimization Grant in the amount of \$25,000 (maximum allowed) applied for in May 2023, awarded in September 2023 for a control structure between ponds 1 and 2 to control overflow. It was part of the preliminary engineering report for the ponds but was ultimately eliminated from the pond scope. Since it is no longer part of the infrastructure project because the MPCA did not require it at this time because we are close to our limits but are not quite there on a consistent basis, the cost will now be closer to \$50,000 since the cost cannot be included in the lump sum price.
 - 1. This control structure would increase retention time and volume which will decrease phosphorus and nitrogen levels will decrease.
 - 2. Current permit limits are 2 mg per liter from June-September and Silver Lake's ponds average 2.23 year-round and is currently at risk of going over the current MPCA limit and the limits will continue to get more stringent. If we do not bring the limits down, the city will be fined. Ponds 1 & 2 are basically running as one pond currently, so we are running the system as two ponds rather than three. Other options:
 - a. Chemical treatment which costs about \$20.000 per year.
 - b. Pursuing a long-term loan through Rural Development, but there is no guarantee we will receive that.
 - 3. MPCA wants plans and specifications by May, bids by June and construction completed by the end of this year. The current permit is good for three years. At the end of this permit, something will need to be done to meet the new limits and it is unknown if another pond optimization grant will be available later.
 - 4. SEH Supplemental Letter Agreement to put together a bid package and plans and specifications for the MPCA Ponds Optimization Grant project at a cost of \$9,000.

Motion by Councilor Penaz second by Councilor Jacobs to approve the Supplemental Letter Agreement for the pond optimization presented by SEH for a cost not to exceed \$9,000. Vote for: Unanimous. Motion carried.

- ii. SEH Watermain Looping for the infrastructure project.
 - 1. It has been determined that the water main does not need to be upsized as previously discussed. This is a savings of \$45,000.
- iii. Open House #2 is set for Thursday, March 14th from 12-1pm and 6-7pm in the auditorium. Overview maps and preliminary assessment and easement information will be available.
- iv. Easements
 - 1. Had a meeting with the City Attorney on February 5th regarding easement information. There are about 80 easements in the project, about 40 permanent and 40 temporaries. Three items will be sent to the residents affected by the easements:

- a. A mailer explaining the easement and why we need it.
- b. Easement paperwork prepared by the city attorney. That will need to be signed by the owner and notarized by the city clerk.
- c. The exhibit showing the easement.
 - i. This will be sent to the city attorney by the end of the month. He should have them completed by the end of March so they can be sent out to the residents beginning of April and finalized by June.
 - ii. Personal delivery and collection by city staff, SEH and elected officials may be the best way to collect easements.

v. SEH Assessment Policy

- 1. Residential Equivalent Unit Basis (REU) everyone with property adjacent to the project will be assessed the same. Residents with <150 feet of property are assessed one unit, those with >150 feet of property will be assessed for two units.
- 2. There is a statement at the bottom of the policy that gives the city the right to make individual adjustments if necessary.
- 3. Preliminary assessment rolls totaled \$2.175 million based on projects on Grove in 2013 and Cleveland in 2016. If that is the minimum of assessments, the project is affordable for the city. Assessments will include everything that is not eligible for sanitary and water funds for the street, storm drainage, curb and gutter, sidewalk drain tile and sump pump services.
- 4. The city council recommends the assessment policy be set at 15%, which is \$11,600 per household for a total assessment of \$2.45 million which is above the preliminary \$2.175. This increase in the assessments will result in lower tax rates or lower utility rates. A resolution will be prepared for the next council meeting.

vi. Timeline Review

- 1. Open House in March
- 2. Easements sent out in April
- 3. Utility meeting in May
- 4. Collect easements by June
- 5. Submit 100% plans to USDA in September
- vii. Request a meeting with Shannon Sweeney to review financials for the project.
- o. Review of PeopleService reports

2. Public Safety

- a. Fire Department
 - i. Liaison report
 - 1. Reviewed runs
 - 2. February 7 meeting to review SCBA bids.
 - 3. Three individuals taking EMR classes.
 - 4. The township meeting is scheduled for Wednesday, February 21, at 7pm.
 - ii. Review of SCBA proposal award.
 - 1. Received a FEMA grant in the amount of \$224.000. At the time of the grant, the city contribution was calculated at \$11,200, for a total cost of \$235,200.
 - 2. Four vendors brought their equipment out for the department to review. Two separate Requests for Proposal were created, one for SCBA and one for a compressor unit. Only two sealed bids were submitted for the Requests for Proposal Alex Air(Draeger) and McQueen Group(MSA).
 - 3. The department's preference is for MSA equipment.
 - 4. Sealed bids were opened on February 7, with the Fire Department committee, Council Liaison and City Clerk present.
 - 5. After reviewing the bids, the non-federal (grant) portion of the cost is looking to be more in the amount of \$52,567.12 due to cost increases from 13-21%.

iii. Request for Action to use Public Safety Aid in the amount of \$5,951.33 + any funds not used by the ambulance to purchase LED lights for fire trucks.

Motion by Councilor Jacobs second by Councilor Penaz to approve the installation of LED on fire trucks using Public Safety Aid in the amount of \$5,951.33. Vote for: Unanimous. Motion carried.

- b. Sheriff's Report
 - i. Reviewed Event Totals report
 - ii. Reviewed Police Hours
 - iii. Discussion regarding the sheriff's responsibilities when conducting home visits to approving an application for a permit for more than two cats/dogs.
 - 1. Resident completes application, animal control completes on site inspection. Records maintained in city files.

c. Ambulance

- i. An ambulance meeting was held on February 15th.
- ii. Staffing was discussed, including stand-by requirements.
- iii. January calls were discussed.
- iv. Annual Med Variance training was completed with Allina on 2/8/2024.
- v. Annual Blood Borne Pathogens training was completed with the fire department on 2/12/2024.
- vi. Chief Ashley is preparing for the meeting with townships on 2/21/2024.
- vii. Council Liaison Jacobs will work with the ambulance staff to make the on-call space more comfortable.
- viii. Request for Action to hire Connor Stepka as an EMT. He will work under a three-person crew of EMT and EMR until his training period is completed and it is decided that he is able to work as a two-person crew. He has successfully completed his background and drug screening.

Motion by Councilor Jacobs second by Councilor Adams-Bruins to approve the hire of Connor Stepka as an EMT, working on a three-person crew until training in complete.. Vote for: Unanimous. Motion carried.

ix. Request for Action to use Public Safety Aid to have LED lights put on the ambulance by Cops on Patrol at a cost of \$2500-\$3300.

Motion by Councilor Jacobs second by Councilor Penaz to approve the installation of LED lights on the ambulance using Public Safety Aid in the amount of \$2,323. Vote for: Unanimous. Motion carried.

9:13 -> 2-minute break

- 2. Municipal Liquor Store/Auditorium
 - a. Getting quotes for bathroom updates but feels the roof is currently more important.
 - b. Redesigned off sale for a more efficient layout.
 - c. Planning to bring back Trivia Night every other Tuesday beginning on March 12th.
 - d. Booked four bands for entertainment for the spring months.
 - e. Started training new employees. Hearing good comments about them.
 - f. Implementing new daily specials.
 - g. Reviewed financials
 - i. Monthly net gain of \$4,539.32.
 - ii. YTD Net Income \$4,539.32.
 - 1. YE payroll reversal entry has not been completed.
 - h. Request for Action to approve the hire of Isabella Conn at Grade 11 \$14.07/hour with a start date effective February 2, 2024. Bella has successfully completed a background check and drug testing.

Motion by Councilor Adams-Bruins second by Councilor Penaz to approve the hire of Isabella Conn as a part-time bartender Grade 11 \$14.07/hour. Vote for: Unanimous. Motion carried.

i. Request for Action to approve the hire of Maxwell Petersen at Grade 11 \$14.07/hour with a start date effective February 1, 2024. Max has successfully completed a background check and drug testing.

Motion by Councilor Adams-Bruins second by Councilor Penaz to approve the hire of Maxwell Petersen as a part-time bartender Grade 11 \$14.07/hour. Vote for: Unanimous. Motion carried.

j. Request for Action to approve the hire of Amanda Sathre at Grade 11 \$14.07/hour with a start date effective February 20, 2024. Amanda has successfully completed a background check and drug testing.

Motion by Councilor Adams-Bruins second by Councilor Jacobs to approve the hire of Amanda Sathre as a part-time bartender Grade 11 \$14.07/hour. Vote for: Unanimous. Motion carried.

- 3. Community Development
 - a. Main Street lot discussion.
 - b. Current mural proposal reviewed.
 - i. Council asked for the following changes;
 - 1. Make the corner flowers smaller.
 - 2. Change the size of the banner and toilet bowl racers proportionally with the changed size of the flowers.
 - 3. Add color such as gold to the church tower and a farmer with a red tractor being as this is a farming community.
 - c. Proposed a second mural depicting the history of Silver Lake.
 - i. Contact Brian at the McLeod County Historical Society.
- 3. Administration
 - a. Clerk's Report
 - i. January Treasurer's Report
 - ii. Request for the city to pay the city portion of PERA while Dale Kosek was out on work comp during 2023. Being as it was a work-related injury, it is not unusual for a city to pay their portion.

Motion by Councilor Penaz second by Councilor Adams-Bruins to approve the request to pay the city portion of PERA for the time while Dale Kosek was out on work comp during 2023 in the amount of \$854.46+\$13.10 interest for a total of \$867.56. Vote for: Unanimous. Motion carried.

iii. Review of the Department of Homeland Security (DHS) evaluation tool regarding the Language Access Plan.

Motion by Councilor Penaz second by Councilor Jacobs to approve the Language Access Plan for the DHS evaluation tool for the fire department FEMA grant. Vote for: Unanimous. Motion carried.

iv. Review of the Department of Homeland Security (DHS) evaluation tool regarding providing Reasonable Accommodation.

Motion by Councilor Penaz second by Councilor Jacobs to approve the Reasonable Accommodation policy for the DHS evaluation tool for the Fire Department FEMA grant. Vote for: Unanimous. Motion carried.

- v. Request for action to approve a five-year extension of trash hauling service with Waste Management through 12/31/2028.
 - 1. The council wants verification that the amounts presented are monthly amounts.
- vi. Request for Action to approve the purchase of a new updated handheld system from Neptune Water Meters. The current system is three versions outdated and does not work for history reads on new meters. Our current Neptune program that bridges the utility billing into our utility software on the computer is not compatible with windows 11, which is why the deputy clerk's new computer has not been installed. Tech support for our current handheld ends June 30, 2024. The new Neptune program is web based online with automatic updates. The mapping services are optional, but if we don't get that we will not be able to determine what addresses did not pull when meters are read.

Motion by Councilor Penaz second by Councilor Jacobs to approve the purchase of a new belt clip handheld system from Neptune in the amount not to exceed \$10,000.00. Vote for: Unanimous. Motion carried.

- vii. Reviewed Potentia Solar savings: 2023 \$8,299.49; 2022 \$5,149.27; 2017-2023 \$24,005.47.
- viii. Discussion was held regarding council room microphones. It was decided to wait to purchase a new system until the current system no longer works.
- ix. Discussion was held regarding the yard waste program. In 2023 the city received 50% of the cost in the amount of \$1714.18. The funding will be reduced by 50% in 2024, preparing to end the program in 2025.

Old Business - None

- 1. Civics pickleball nets for auditorium
- LED sign background color and font
 Public Works cleaning up the outside yard
 Department head meetings

Motion by Councilor Penaz second by Councilor Jacobs to adjoi	urn the meeting Vote for: Unanimous. Motion carried.
Meeting adjourned at 10:10 pm.	
Diane E. Pedersen, Clerk/Treasurer	Seal of the City:



CITY COUNCIL MEETING MINUTES

RE: Silver Lake Infrastructure Improvement Project Date of Meeting: February 20, 2024

Silver Lake, Minnesota

Project Manager: John Rodeberg, PE (Lic. MN) Time of Meeting: 6:30 p.m.

SEH No.: SILAK 171969 16.03 Location of Meeting: Silver Lake Auditorum

Attendees: City Council

City Staff

Sam Fink, SEH

Jeremy Anderson, PeopleService

I. MPCA Pond Optimization Grant

A. PeopleService submitted original application in May 2023

- 1. Scope: Replacement the water level control structure between Ponds 1 and 2
- B. City of Silver Lake was awarded grant in September 2023
 - 1. Grant amount: \$25,000
- C. PER construction cost estimate was \$25,000. However, since this is a one-time specialty item (and not part of a larger project), we are anticipating construction cost to be on the order of \$50,000.
- D. We recommend pursuing the project for the following reasons:
 - 1. Substantial results for similar approaches in Baudette and Gaylord (Handout 1 from Minnesota Rural Water Association).
 - 2. Potential for change in phosphorous limits in the near future. Silver Lake's phosphorous levels currently average 2.23 mg/L, and the current permit limits are 2 mg/L from June to September.
 - 3. Likelihood of future savings by avoiding need for chemical treatment.
 - 4. About half of the project cost is grant. If we wait for other funding sources, the majority of the costs would be long-term loans.
- E. SEH's Supplemental Letter Agreement to develop a quote package is attached (Handout 2).
 - 1. City council approved SLA
 - 2. Plans to be reviewed by MPCA in May
 - 3. Quote packages to be sent out to potential contractors following MPCA's review

II. Watermain Looping

- A. See attached Watermain Looping Memorandum (Handout 3).
- B. We are *not* recommending increasing various proposed watermains from 6" to 8" for looping purposes.

III. Open House No. 2

- A. Items to be available:
 - 1. Overview maps of the project (similar to the last open house)
 - 2. Preliminary assessment maps utilizing newly adopted assessment policy
 - 3. Preliminary easement exhibits
- B. Schedule for lunch hour and evening sessions on March 13th or March 14th
 - 1. City council set Open House No. 2 on March 14th from 12pm to 1pm, and 6pm to 7pm

IV. Easements

- A. We met with City Attorney (Ken Janssen) on February 5
 - 1. Diane has meeting minutes and handouts available for council upon request
 - See attached Preliminary Easement Exhibit Examples (Handout 4).
- B. Proposed timeline
 - 1. Provide majority of exhibits to Ken's team by the end of February to mid-March
 - 2. Have preliminary exhibits available at Open House No. 2
 - 3. Start mailing easements to residents in early April
 - 4. Finalize easements by the end of June
- C. Each letter will include the following:
 - 1. Mailer describing the need for the easement
 - 2. The easement documentation to be filed at City Hall
 - 3. Exhibit to the easement with schematic overview of the easement
- D. Open discussion about delivering and collecting easements
 - 1. Mail easements to residents starting in April
 - 2. Give them a few weeks to respond
 - 3. City staff, SEH staff, and/or elected officials hand deliver a second letter
 - 4. Set up on-site meetings, if necessary

V. Assessment Policy

- A. Proposed assessment policy attached (Handout 5).
 - 1. City Council decided to pursue the proposed assessment policy except for assessing 20% of the City Costs for reconstructed streets. Council decided to assess 15% of the City Costs instead.
 - 2. SEH to work with Ken Janssen to finalize resolution to adopt project-specific policy.
 - 3. It should be noted the estimated assessment rates are preliminary. Final determination and approval of the assessment rates will be made by City Council prior to the assessment hearing.
- B. Shannon Sweeny assumed a minimum of \$2,175,000 would be assessed to benefited properties. He determined that this amount would make the project affordable for the City.
 - 1. SEH to coordinate with Shannon Sweeny to set up another affordability meeting for City Council following Open House No. 2
- C. A summary of policy options is presented below:

	Policy Options				
Estimated Assessment Rates	Assess 10% of City Costs for Reconstructed Streets	Assess 15% of City Costs for Reconstructed Streets	Assess 20% of City Costs for Reconstructed Streets	Assess 25% of City Costs for Reconstructed Streets	1994 City Policy
Reconstructed Streets	\$3,600 per REU	\$5,400 per REU	\$7,200 per REU	\$9,000 per REU	\$471 per LF
Water Services (Open Cut)	\$3,400 each	\$3,400 each	\$3,400 each	\$3,400 each	\$3,400 each
Sanitary Services (Open Cut)	\$2,800 each	\$2,800 each	\$2,800 each	\$2,800 each	\$2,800 each
Sanitary Services (Lined)	\$4,200 each	\$4,200 each	\$4,200 each	\$4,200 each	\$8,500 each
Sanitary Sewer Main (Lined)	N/A	N/A	N/A	N/A	\$41 per LF
Preliminary Median Assessment	\$9,800	\$11,600	\$13,400	\$15,200	\$37,286
Preliminary Total Assessments	\$2.09 M	\$2.45 M	\$2.81 M	\$3.17 M	\$10.75 M

Meeting Minutes Page 3

VI. Timeline Review

- A. Open House No. 2 on March 13th or March 14th
- B. Send out easements in April
- C. Utility Meeting No. 2 in May
- D. Collect easements by June
- E. Submit 100% plans to USDA-RD in early September.

SEH believes that this document accurately reflects the business transacted during the meeting. If any attendee believes that there are any inconsistencies, omissions or errors in the minutes, they should notify the writer at once. Unless objections are raised within seven (7) days, we will consider this account accurate and acceptable to all.

If there are errors contained in this document, or if relevant information has been omitted, please contact Sam Fink at 320.204.0217.

swf

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University of Minnesota Minnesota

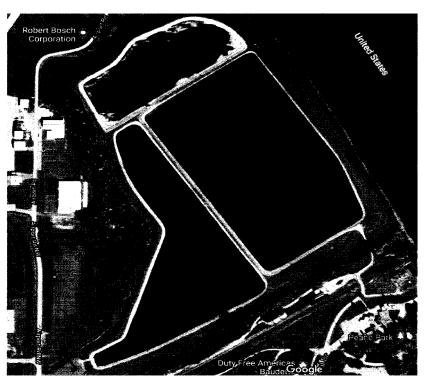
Driven to Discover™





Boosting Wastewater Pond Phosphorus and Nitrogen Treatment in Baudette, MN.





Results

Phosphorus: 4.2 mg/L → .4 mg/L

Nitrogen: 2.5 mg/L → 1.2 mg/L

Ferric Chloride: 6,600 gal → 0 gal

\$22,000 Annual Savings

Challenge

Achieving cleaner water is the goal of all wastewater treatment professionals. Until recently, the City of Baudette MN was resigned to the idea that chemical treatment for phosphorus was the only option for meeting their effluent phosphorus permit limits. The pond operations team changed in 2019, and the new team decided to look for improvements. The new operators partnered with Frank Stuemke with MRWA and the LCCMR Nutrient Optimization Project Team to look for strategies to improve treatment. As a result, Charlie Cook and Jake Fish implemented several new operational strategies bringing their pond nutrient treatment to the next level, and eliminating the need for chemical treatment.

CONTACT TO DISCUSS WASTEWATER OPTIMIZATION

MINNESOTA TECHNICAL ASSISTANCE PROGRAM

612-624-1300 MNTAP@UMN.EDU

MINNESOTA RURAL WATER ASSOCIATION

800-367-6792 MRWA@MRWA.COM

Approach

'Flow Through' Pond Operation

The 'Flow Through' operational strategy serves to increase pond hydraulic retention times while maintaining steady treatment conditions in a deep first pond. The project team believes this is the best general operational change to boost pond efficiency. Here's the method:

- Keep Pond 1 as deep as possible.
- Allow water to flow into pond 1, while water continuously flows out to fill pond 2.
 - This is most easily accomplished with a slide gate that will maintain a full depth in pond 1.
- When pond 2 is full, discharge the secondary (pond 3), and transfer water from pond 2 to the secondary.
- Repeat

This method keeps pond 1 and pond 3 full. Influent water flowing into the full pond 1 provides the pond 1 ecosystem with a steady supply of carbon and nutrients which it adapts to treat.

In Baudette specifically, the operations team held their large pond 1 at 4.5′ depth using a slide gate. Water was then allowed to cascade over the slide gate to fill pond 2. It is worth noting that this cascade of water provides some additional aeration as it is transferred, which may also have a positive impact on treatment. This method was implemented over the summer of 2020. Prior to this change, the average pre-discharge phosphorus concentration was 4.2 mg/L. The post project pre-discharge phosphorus concentration was .4 mg/L! This meant that the city had no need to add the typical 10-12 totes of ferric chloride prior to discharge in the fall of 2020, saving \$11,000, with similar savings expected after spring discharge.

Results

As a result of implementing 'Flow Through' Operation in 2020 and a series of other changes since 2019, the Baudette operations team has seen their nutrient treatment improve dramatically. The results are shown below.

Baudette MN Pond Optimization Project Savings

Category	Amount Before	Amount After	Annual Savings
Dhosphorus	4.2 mg/L (pre-ferric)		200 10
Phosphorus	.73 mg/L (post-ferric)	0.4 mg/L (no ferric)) 200 lb Phosphorus
Nitrogen	2.5 mg/L	1.2 mg/L	800 lb Nitrogen
Ferric Chloride 6,600 g	6,600 gallons per year	0 gal per year	\$22,000
			2500 lb Chloride

Approach (continued)

While 'Flow Through' Operation is believed to be the core improvement, the wastewater operators were hard at work optimizing the many optimization opportunities.

Utilizing Full Pond System Volume

Increasing hydraulic retention time within Minnesota pond systems has a positive correlation with phosphorus treatment efficiency. Because of design changes over time in the Baudette pond system, pond 2 is at a much lower elevation than pond 1, and similar elevation to pond 3. This means that to operate in series, water must be pumped from pond 2 to pond 3. In the past, turning on the pump was considered a waste of energy, and pond 2 was often bypassed as water was transferred from pond 1 to pond 3 directly. This bypass reduced the system HRT by 17.4%. The new operational strategy is to use the full series, and to simply pump water from pond 2 to pond 3 when it is time to transfer water, maintaining larger HRTs to achieve better treatment.

Allowing Beneficial Aquatic Plant Growth to Uptake Nutrients

Coontail is an aquatic plant that naturally grows in many Minnesota wastewater pond systems. It is known to uptake nutrients as it grows, and can therefore be a useful tool in achieving better treatment in the pond system. In Baudette, the operators used to use chemical to thin out the coontail growing in the pond system. In 2020, they decided to try not thinning the coontail, and let it grow instead. Letting the coontail grow was another factor contributing to this better nutrient treatment.

The Baudette wastewater operators have started doing their fall discharge in September instead of October. This idea behind this change is to discharge water before coontail starts to die off, ensuring that when water is being discharged it is as clean as possible.



"Coontail. Susquehanna Flats" by chesbayprogram is licensed under CC BY-NC 2.0

Keep Wastewater Flowing and Avoid Holdup in Pipes

In the past, operators allowed the wet well to build to a depth of 8' before pumping it to the pond system. In doing so, wastewater would submerge the influent pipe, and backup for 7 structures, allowing them all to fill before the structures would all be pumped out at once. The main treatment concern with this operational choice is that holding raw wastewater underground and in pipes for long periods of time may cause it to turn septic, making it more difficult to aerate and treat later.

The new operational strategy is to discharge the wet well as it approaches the influent pipe depth, and to pump it down to 2' under the influent pipe depth. This results in much more

frequent transfers to pond 1, allowing it to reach the aerobic conditions in the wastewater pond more quickly.

The Baudette Wastewater Pond System accepts wastewater from a school which was in reduced operations in 2020 due to COVID-19. This school has a very large, 6000', 6'' force main. The operators calculated that wastewater takes three days to pass through the large pipe system. It is possible that after three days of sitting in the pipes, this waste stream turns septic and adds additional loading burden on the pond system. The operators are investigating possible long term solutions to this issue. For 2020, accepting reduced loading from this source may have also contributed to better pond treatment.

Reduced Inflow and Infiltration and Less Flow

Reducing inflow and infiltration effectively increases the hydraulic retention time of the wastewater we are trying to treat. Sure, incoming clean rainwater does dilute the waste stream, but it hurts the overall treatment by reducing the treatment time available to clean the water that is dirty. Even if I&I has an immediate impact of slightly reducing nutrient concentrations, it does not reduce the total mass of

Baudette Average Influent Flow

Year	Average Flow (MGD)
2017	0.20
2018	0.20
2019	0.25
2020	0.17

phosphorus in the system. The operators with Baudette were able to address some I&I issues like replacing some leaky clay tile pipes and replacing leaky manholes in order to better keep the storm water and wastewater separated. This along with a dryer year helped to reduce their average flow to .17 MGD, helping them to increase their hydraulic retention times and overall phosphorus treatment.

Winter Bioaugmentation

While the Baudette pond system has historically added microorganisms during warm weather operation, the winter of 2020 was the first year they also added microbes over the winter. Specifically, they added TeamLabs T195 Mega Bugs Plus Powder. The product is specifically marketed for pond sludge reduction. Sludge depth data collected by Frank Stuemke with MRWA suggests that between 2009 and 2011, the warm weather bio augmentation microbes were able to bring sludge depths from roughly 11" down to 5". Reducing sludge depth serves to increase hydraulic retention time within the pond systems, as the volume previously displaced by the sludge is now available to be utilized to treat the wastewater.

Technical Clarifications

The nutrient reductions highlighted are based on data from one discharge in the fall of 2020. Because the 'flow through' strategy was implemented over the spring and summer of 2020, this is the only discharge so far following that implementation. Future discharges will serve to solidify these findings. Pre-ferric refers to the testing value before adding ferric chloride for phosphorus treatment, while post-ferric refers to the testing value after adding ferric chloride for phosphorus treatment. The pre-ferric 'before' value for phosphorus was calculated from test values provided by Wastewater Pond Operator Charlie Cook, in turn provided to him by his chemical supplier. The values were 4.6 mg/L in October 2018 and 3.8 mg/L in June of 2019.

The post-ferric 'before' value is an average of the recorded DMR phosphorus data from the spring of 2014 through the spring of 2020. Prior to spring 2014, values were much higher and it appears that the spring of 2014 is when ferric addition began. The 'before' nitrogen value is an average of the sum of TKN and Nitrate + Nitrite values recorded in the DMR from spring 2014 through spring 2020. The ferric chloride amount before was calculated based on an operator estimate of requiring 22 totes of ferric chloride per year on average, and a confirmed tote size of 330 gallons each.











Optimizing Nutrient Treatment Wastewater Ponds: Gaylord, M N





Making Water Cleaner

Wastewater nutrient optimization is a challenge faced by pond treatment systems throughout Minnesota. In the case of Gaylord MN, wastewater treatment has been enhanced significantly thanks to the collaboration between Gaylord's plant operator, Robert Kloeckl and the LCCMR wastewater nutrient optimization team. Achieving effective wastewater treatment starts with the people who operate the facility, and Robert has been more than willing to explore new ways to attain the best possible treatment. Together with the field and technical support of Tim Hagemeier and Frank Stuemke with the Minnesota Rural Water Association, Gaylord's treatment is better than ever. As of fall 2019 Gaylord is

<u>IMPROVEMENTS</u>

Phosphorus

1.0 >> 0.52 mg/L

Nitrogen

4.7 >> 3.1 mg/L

Coontail Growth +45%

CONTACT

MINNESOTA TECHNICAL ASSISTANCE PROGRAM

612-624-1300

MNTAP@UMN.EDU

MINNESOTA RURAL WATER ASSOCIATION

800-367-6792

MRWA@MRWA.COM

achieving excellent phosphorus treatment with a most recent effluent sample of .285 mg/L and average effluent of .52 mg/L since October 2019. Gaylord's approach to wastewater treatment involves strategies that the project team have found to be best practices in ponds throughout Minnesota with great success at achieving better nutrient removal.

Approach

To understand how Gaylord achieved effluent phosphorus down to 0.285 mg/L, MnTAP's wastewater team investigated previous operational strategies taken by the pond operator. The timeline below shows the various stages of operation within the past few years, along with a table showing nutrient treatment.

Timeline of Gaylord's Operation and Phosphorus Effluents

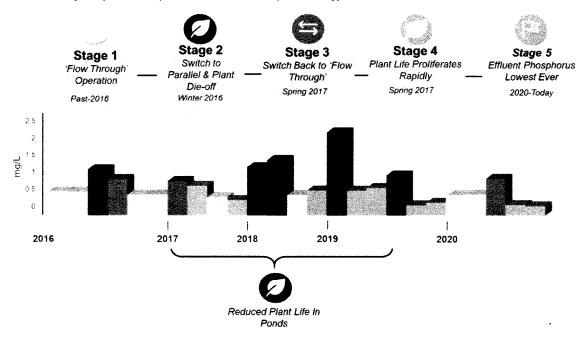


Table: Improvements of Nutrient Effluents

(Oct 2016-Jun 2019) (Sept 2019-Nov 2020) Phosphorus Effluent AVG. 1.0 mg/L 0.522 mg Phosphorus Removal 69% 81		0.325 mg/L	0.285 mg/L
(Oct 2016-Jun 2019) (Sept 2019-Nov 2020) Phosphorus Effluent AVG. 1.0 mg/L 0.522 mg Phosphorus Removal 69% 81	Most Recent Phosphorus Effluent:	Oct 2020	Nov 2020
(Oct 2016-Jun 2019) (Sept 2019-Nov 2020) Phosphorus Effluent AVG. 1.0 mg/L 0.522 mg	Nitrogen Effluent AVG.	4.6 mg/L	3.1 mg/L
(Oct 2016-Jun 2019) (Sept 2019-Nov 2020	Phosphorus Removal	69%	81%
	Phosphorus Effluent AVG.	1.0 mg/L	0.522 mg/L
Parallel Flow and Flow Through and	Type of Operation ->	Reduced Plant Life	Flow Through and Proliferating Plant Life (Sept 2019-Nov 2020)

• 2016- 'Flow Through' Pond Operation

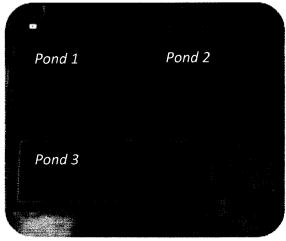
Prior to 2016, Robert has commonly stuck to one operation. MnTAP refers to this strategy as the 'Flow Through' pond operation. Robert has been taking advantage of this strategy even before MnTAP recommended it to Gaylord. The 'Flow Through' operational strategy serves to increase pond hydraulic retention time while maintaining steady treatment conditions in a deep first pond (method described below).

2017- A Test to Parallel Flow → Giving Way to a Plant Life Catastrophe

During the winter of 2016 and early spring of 2017, Robert decided to try switching his operation by testing parallel flow into both Ponds 1 and 2. When Robert tried parallel flow, all plant life in Ponds 2 and 3 went down significantly, and treatment of parameters, such as phosphorus, TSS, and BOD were above average. Robert observed this reduction of plant life, and quickly switched the operation back to a 'Flow Through' operation in series.

2018 to 2020- Switching Back to a 'Flow through' Method

Since 2018 Robert has kept his ponds operational utilizing the 'Flow Through' method. After testing parallel flow, plant life primarily consisting of coontail died off and did not make a comeback until late summer of 2019. Surprisingly, by the summer of 2020, plant life made a full recovery and even grew into Gaylord's Pond 3 where it did not grow previously. Now Gaylord is receiving far better treatment for phosphorus than it ever has in the past.



Aerial View of the Ponds

How did Gaylord Attain Low Effluent Nutrients?

Utilizing Full Pond System Volume

By using the full volume of Pond 1 and the majority of Pond 2, Robert was able to maximize the HRT of his ponds while slowly transferring water.

Here's the method:

- 1. Keep Pond 1 as deep as possible.
- 2. Allow water to flow into Pond 1, while water continuously flows out to fill Pond 2 at a very slow rate.
 - a. This is most easily accomplished with a slide gate that will maintain a full depth in Pond 1.
- 3. When Pond 2 is full, discharge Pond 3 and transfer water from Pond 2 to Pond 3.
- 4. Repeat

This method keeps all ponds relatively full for the majority of the year. Influent water flowing into Pond 1 creates an ecosystem with a steady supply of carbon and nutrients which it will adapt to treat within Pond 1.

In Gaylord specifically, Robert held their large Pond 1 at 6' depth using a slide gate. Water was then allowed to cascade over the slide gate to fill Pond 2. Additionally, Robert had a second 'Flow Through' slide gate from Pond 2 to Pond 3 where water in Pond 2 was held at 4' before spilling over into Pond 3.

Gaylord's ponds can run the 'Flow Through' method year-round creating a deepwater environment in the ponds for most of the year. MnTAP's wastewater team believes that this 'Flow Through' operational strategy is the best general operational change that ponds can make to boost pond treatment efficiency.

Allowing Coontail Growth

Coontail is an aquatic plant that naturally grows in many Minnesota wastewater pond systems. It is known to uptake nutrients as it grows and can therefore be a useful tool in achieving better treatment in pond systems. In Gaylord, the switch to parallel flow in 2017 most likely disrupted growing conditions and killed off any coontail. As seen in the charts below, after two years of switching back to the recommended 'Flow Through' method, coontail made more than a full comeback and is now flourishing in ponds where there was previously no growth. Providing conditions for coontail growth was another factor contributing to better nutrient treatment.



"Coontail, Susquehanna Flats" by chesbayprogram is licensed

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Coontail Coverage of the Ponds over Time



Acres of Open Water
Acres of Plant Coverage

Reduced Inflow and Infiltration

Reducing inflow and infiltration effectively increases the hydraulic retention time of the wastewater that needs to be treated. Sure, incoming clean rainwater does dilute the waste stream, but it hurts the overall treatment by reducing the treatment time available to clean the water that is dirty. Even if I&I has an immediate impact of slightly reducing nutrient concentrations, it does not reduce the total mass of phosphorus in the system. The City of Gaylord was able to repair 6 blocks of downtown Gaylord, by relining the storm water pipes, as well as resealing leaky manhole covers. These improvements helped to reduce the amount of storm water in the pond, and therefore led to more treatment time allowing for improved nutrient removal.

Handout 2

Supplemental Letter Agreement

In accordance with the Master Agreement for Professional Services between City of Silver Lake ("Client"), and Short Elliott Hendrickson Inc. ("Consultant"), effective December 21, 2020, this Supplemental Letter Agreement dated February 5, 2024 authorizes and describes the scope, schedule, and payment conditions for Consultant's work on the Project described as: Primary WW Pond Control Structure Replacement.

Client's Auth	orized Representative:	Diane Pedersen, City Clerk/Treasurer			
Address:	308 Main St W, Silver Lake, Minnesota 55381, United States				
Telephone:	3203272412 email: cityclerk@cityofsilverlake.org				
Project Mana	ger: Colin Marcusen				
Project Mana Address:	<u></u>	208, P.O. Box 308, Hutchinson, Minnesota 55350			

Scope: The Services to be provided by Consultant:

Develop quote package for replacement of control structure between primary ponds 1 and 2. The general purpose of the control structure will be to hold the water level in Pond 1 at High-Water-Level. The new structure will have an overflow weir from Pond 1 and an outlet to Pond 2. The quote package will include plan drawings and technical specifications including the following:

- Title sheet/location plan
- General and construction notes
- Demolition of the existing structure and associated piping
- One new plan view of the structure and associated piping
- One new section view of the structure and associated piping
- One sheet of details for construction
- Technical specifications including: sanitary sewer, general process, piping, valves, specialties, manhole and accessories, testing, and excavation

A project manual will be developed and SEH will assist the City in obtaining quotes from up to three qualified contractors. Prior to sending the quote package, an opinion of probable cost will be developed. One meeting with City staff will be held at 90% design stage in order to discuss the final plans and specifications.

Schedule:

SEH will begin quote package preparation after authorization to proceed from the City. Following authorization, SEH proposes to hold the 90% design meeting within 6 weeks.

Payment:

The lump sum fee is \$9,000 including expenses and equipment.

The payment method, basis, frequency and other special conditions are set forth in attached Exhibit A-2.

Other Terms and Conditions: Other or additional terms contrary to the Master Agreement for Professional Services that apply solely to this project as specifically agreed to by signature of the Parties and set forth herein: None.

Short Elliott Hendrickson Inc.	City of Silver Lake
By: Justy Black	By:
Full Name: Justin Black	Full Name:
Title: Client Service Manager	Title:

Exhibit A-2 to Supplemental Letter Agreement Between City of Silver Lake (Client) and **Short Elliott Hendrickson Inc. (Consultant)** Dated February 5, 2024

Payments to Consultant for Services and Expenses Using the Lump Sum Basis Option

The Agreement for Professional Services is amended and supplemented to include the following agreement of the parties:

A. Lump Sum Basis Option

The Client and Consultant select the Lump Sum Basis for Payment for services provided by Consultant. During the course of providing its services, Consultant shall be paid monthly based on Consultant's estimate of the percentage of the work completed. Necessary expenses and equipment are provided as a part of Consultant's services and are included in the initial Lump Sum amount for the agreed upon Scope of Work. Total payments to Consultant for work covered by the Lump Sum Agreement shall not exceed the Lump Sum amount without written authorization from the Client.

The Lump Sum amount includes compensation for Consultant's services and the services of Consultant's Consultants, if any for the agreed upon Scope of Work. Appropriate amounts have been incorporated in the initial Lump Sum to account for labor, overhead, profit, expenses and equipment charges. The Client agrees to pay for other additional services, equipment, and expenses that may become necessary by amendment to complete Consultant's services at their normal charge out rates as published by Consultant or as available commercially.

B. Expenses Not Included in the Lump Sum

The following items involve expenditures made by Consultant employees or professional consultants on behalf of the Client and shall be paid for as described in this Agreement.

- Expense of overtime work requiring higher than regular rates, if authorized in advance by the Client.
- 2. Other special expenses required in connection with the Project.
- 3. The cost of special consultants or technical services as required. The cost of subconsultant services shall include actual expenditure plus 10% markup for the cost of administration and insurance.

The Client shall pay Consultant monthly for expenses not included in the Lump Sum amount.



Handout 3

WATERMAIN LOOPING MEMORANDUM

February 14, 2024

RE: Watermain Looping

Silver Lake Infrastructure Improvement Project

SEH No. SILAK 171969 50.55

Mayor Bebo and City Council Members 308 Main St W Silver Lake, MN 55381

Dear Mayor Bebo and City Council Members:

Executive Summary:

In response to discussions during the 60% City Council workshop on January 22, 2024, concerning the potential upsizing of various proposed watermains from 6" to 8" to possibly enhance fire flow, our water engineering team has completed an evaluation of the water distribution system. Our findings indicate that the anticipated increase in fire flow resulting from this adjustment wouldn't have an impactful increase in benefit to the fire protection needed for respective land uses. Therefore, we are *not* recommending increasing various proposed watermains from 6" to 8" for looping purposes.

Model and Analysis:

In formulating this recommendation, our water engineering team conducted a comprehensive analysis of the community's water distribution system for three scenarios:

- 1. Existing Conditions
- 2. Proposed Improvements
- 3. Upsizing Various Watermains for Looping

Enclosed are detailed maps illustrating the available fire flow for each scenario. Hydrants are color-coded based on the modeled flow available for fire protection. The following table outlines typical fire flow requirements for various land uses:

Land Use	Approximate Needed Fire Protection (gpm)
Single & Two-Family (Below)	
- Over 100 feet of Building Separation	500
- 31 to 100 feet of Building Separation	750
- 11 to 30 feet of Building Separation	1,000
- Less than 10 feet of Building Separation	1,500
Multiple Family Residential Complexes	2,000 to 3,000+
Average Density Commercial	1,500 to 2,500+
High Value Commercial	2,500 to 3,500+
Light Industrial (Industrial Park)	2,000 to 3,500+
Heavy Industrial (Mfg, Consumables)	2,500 to 3,500+
Other Commercial, Industrial & Public Buildings	Up to 12,000

The majority of buildings in the project area fall into the second or third category (Single & Two-Family Buildings with 11 to 100 feet of Building Separation), meaning the approximate minimum fire protection needed is 750-1000 gallons per minute (gpm) at each hydrant.

A summary of the modeled available fire flow at each hydrant for each scenario is provided below:

Available Fire Flow	Number of Hydrants		
(gpm)	Existing Conditions	Proposed Improvements	Upsizing Various Watermain
<500	6	0	0
500-1000	5	5	3
1000-1500	35	2	3
>1500	16	55	56

When comparing the existing conditions to the proposed improvements, there is an obvious improvement in available fire flow at each hydrant within the city, including those outside the project area. However, there is only a marginal improvement when comparing the proposed improvements to upsizing various watermains.

Cost Analysis:

The cost to upsize the proposed watermain size from 6" to 8" estimated at approximately \$10 per linear foot (LF), and would *not* be eligible for USDA-RD water funding. With nearly 4,500 LF requiring upsizing for looping purposes, this would result in an additional cost of ~\$45,000 to the city.

Other Considerations:

It should be noted that the available fire flow to the hydrants for the development stemming from Park Avenue on the north side of Highway 7 will remain near the minimum flow requirement, regardless of whether various watermains are upsized or not. This area may require new mains to be added and/or replaced as development interest occurs. The hydrants on Park Avenue, south of Highway 7 within the project area appear to meet typical fire flow requirements without upsizing watermain from 6" to 8".

Conclusion:

In summary, we are *not* recommending increasing various proposed watermains from 6" to 8" for looping purposes due to the increase in project cost with minimal increase of benefit to the fire protection needed for respective land uses. Please feel free to contact me at (763) 447-1341 or sfink@sehinc.com with any questions or if you need more information.

Sincerely,

Sam Fink, PE City Engineer (Lic. MN, NE)

swf

Enclosures

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Available Fire Flow

Red = <= 500 gpm

Orange = <= 1,000 gpm

Yellow = <= 1,500 gpm

Green = <= 2,000 gpm

Light Blue = <= 2,500 gpm

Blue = <= 3,000 gpm

Dark Blue = <= 3,500 gpm

Watermain Size

Red = 4-Inch

Green = 6-Inch

Blue = 8-Inch

Light Blue = 10-Inch

Demand = 126,000 gallons/day Tower Water Elevation = 1,205 Feet

Existing Conditions



Available Fire Flow

Red = <= 500 gpm

Orange = <= 1,000 gpm

Green = <= 2,000 gpm

Light Blue = <= 2,500 gpm

Blue = <= 3,000 gpm Dark Blue = <= 3,500 gpm

Watermain Size

Red = 4-Inch

Green = 6-Inch

Blue = 8-Inch

Light Blue = 10-Inch

Proposed Improvements

Demand = 126,000 gallons/day Tower Water Elevation = 1,205 Feet



Available Fire Flow

Red = <= 500 gpm

Orange = <= 1,000 gpm

Green = <= 2,000 gpm

Light Blue = <= 2,500 gpm

Blue = <= 3,000 gpm Dark Blue = <= 3,500 gpm

Watermain Size

Red = 4-Inch

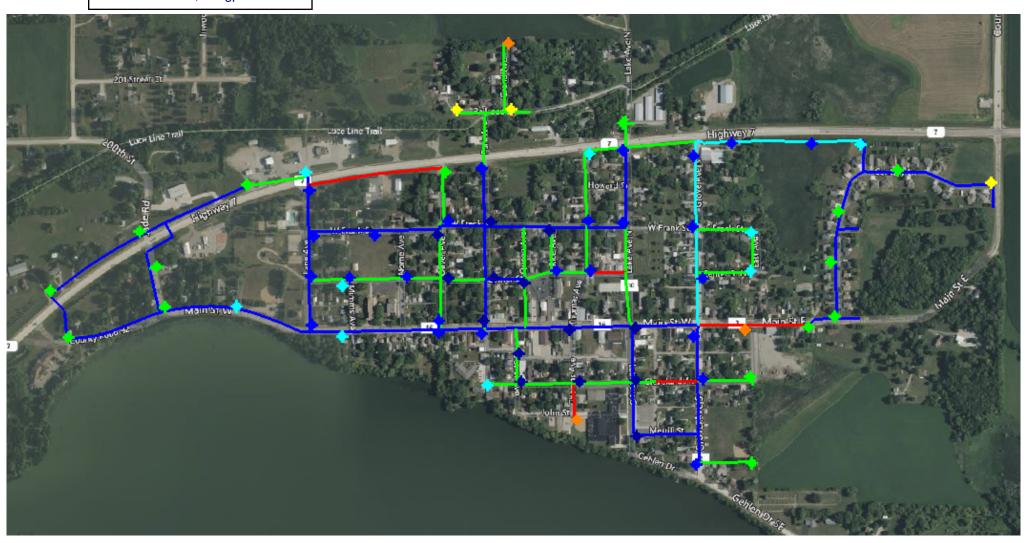
Green = 6-Inch

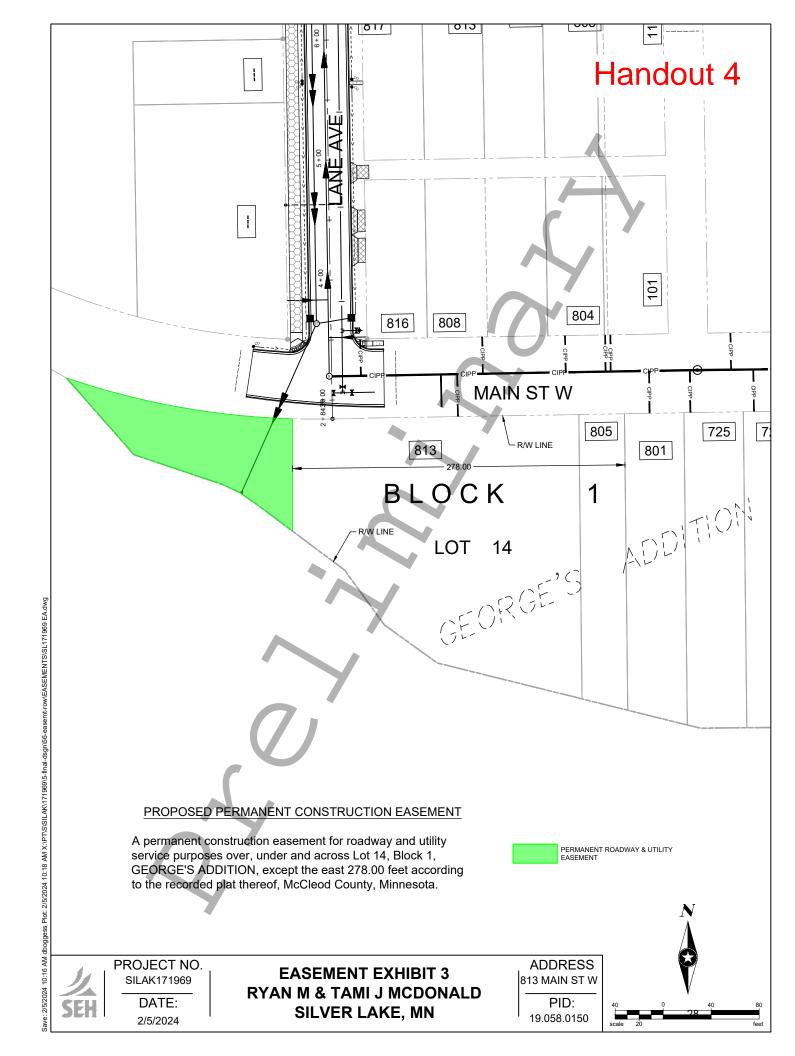
Blue = 8-Inch

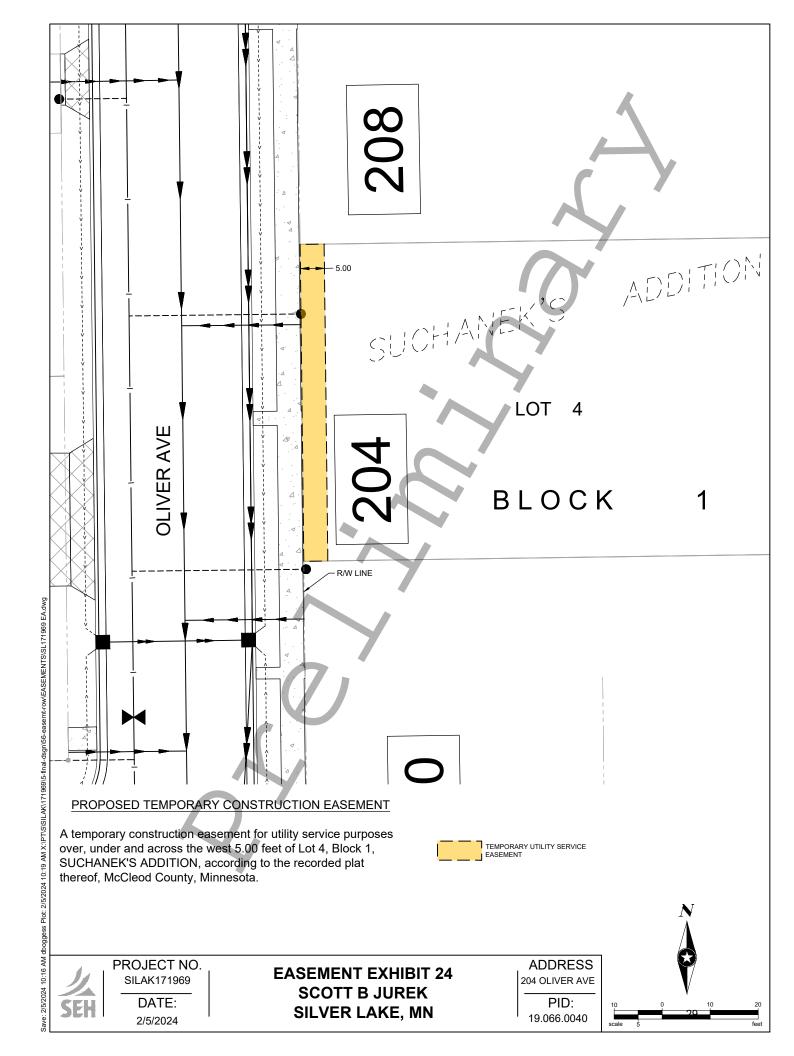
Light Blue = 10-Inch

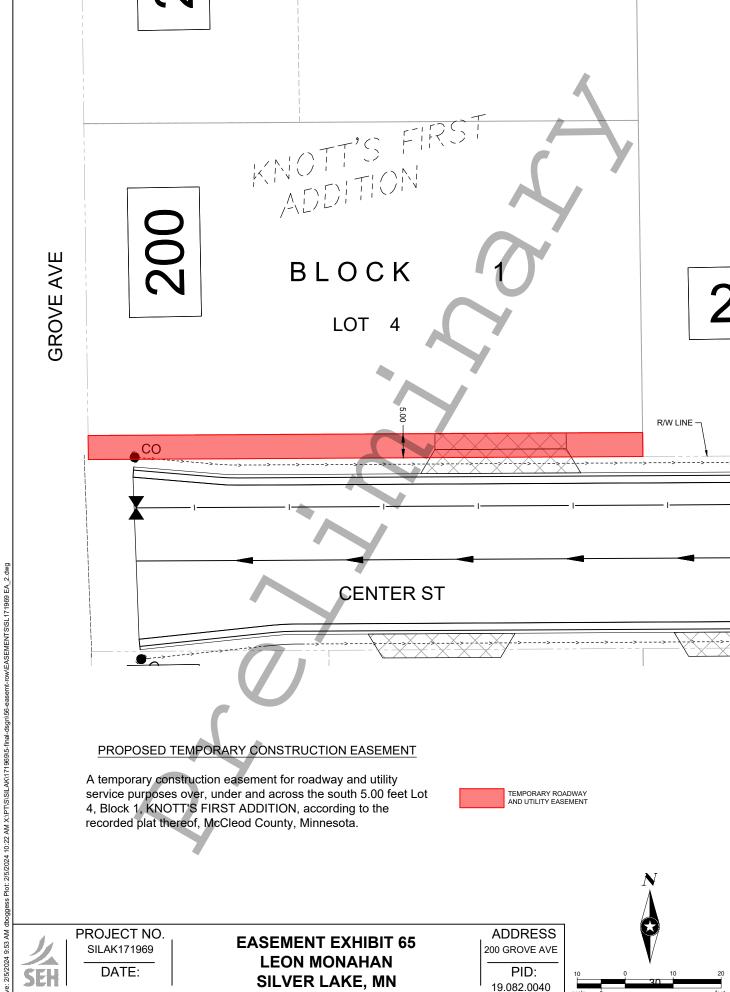
Demand = 126,000 gallons/day Tower Water Elevation = 1,205 Feet

Various Upsizing to 8" for Looping

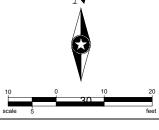








SILVER LAKE, MN



ESTIMATED ASSESSMENTS USDA-RD INFRASTRUCTURE IMPROVEMENT PROJECT SILVER LAKE, MINNESOTA **SEH NO. SILAK 171969 FEBRUARY 14, 2024**

ESTIMATED ASSESSMENT RATES*

Estimated Assessment Rate* Item Reconstructed Street \$7,200 per REU Water Service Line (Open Cut) \$3.400 Each Sanitary Sewer Service Line (Open Cut) \$2,800 Each Sanitary Sewer Service Line (Cured-in-Place Pipe Lining)

\$4,200 Each

ASSESSMENT POLICY

Residential Equivalent Unit (REU) Basis

Street and utility improvements shall be assessed by treating one parcel adjacent to the project as one Residential Equivalent Unit (REU).

For large, sub-dividable parcels, total REUs will be determined by dividing the front footage by 75 feet. The calculation shall be rounded down to the nearest whole number, unless a given frontage is less than 75 feet, in which case, round up to 1 REU.

For lots having two or more sides/frontages (corner lots and/or multi-sided lots), total assessed REUs will be determined by the following:

- 1. Individually divide each side's footage by 75 feet (the calculations shall be rounded down to the nearest whole number, unless a given frontage is less than 75 feet, in which case, round up to 1).
- 2. Determine each frontage's REU by multiplying the values determined in step 1 by 50%.
- 3. The total assessed REUs is the sum of each side's REU that is adjacent to the project.

Reconstructed Street

Twenty percent of the cost of the reconstructed street improvements (including associated contingency, administration, engineering, and financing costs) that is ineligible for United Stated Department of Agriculture -Rural Development (USDA-RD) sanitary sewer or water funding shall be divided by the total amount of Residential Equivalent Units (REUs) in the reconstructed areas. Each lot shall be assessed this amount multiplied by its total REUs.

Street improvements include street, storm drainage, curb and gutter, sidewalk, draintile, and sump pump services.

Water and Sanitary Sewer Service Lines (Open Cut)

One hundred percent of the actual cost (including associated contingency, administration, engineering, and financing costs) of providing service connections to the right-of-way shall be assessed to the parcel.

Sanitary Sewer Service Lines (Cured-in-Place Pipe Lining)

Fifty percent of the actual cost (including associated contingency, administration, engineering, and financing costs) of providing service connections to the right-of-way shall be assessed to the parcel.

**City Council reserves the right to adjust the assessment policy as deemed necessary to align with the intended principle of the policy on a case-by-case basis.

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^{*}Assessment rates presented here are preliminary. Final determination and approval of the assessment rates will be made by the City Council prior to the assessment hearing. The assessment rates are intended to bear a relationship to the perceived value of the benefits the property receives due to the project.