East Range Water Board

Regular Meeting Wednesday, January 19, 2022 4:30 p.m.

City/Town Government Center

Board Members:

Clark Niemi, TOW Jon Skelton, TOW

Doug Gregor, COA David Skelton, COA Jim Gentilini, COA

Other Team Members:

Stefanie Dickinson, COA

Todd Koneczny, BR

Miles Jensen, SEH

Mia Thibodeau, Fryberger Law

Mike Larson, SEH

Wayne Thuringer, COA

Kevin Young, SEH

Dennis Schubbe, COA

- 1. Call to Order/Roll Call
- 2. Approval of Meeting Minutes from December 15, 2021
- 3. Treasurer Report
 - a. Payments
 - b. Receipts
 - c. Balances (including the "Biwabik Fund")
 - d. Invoices to Approve
 - 1 SCT Inspections: Invoice #21-003 \$6,960.00
 - 2 Others
- 4. Correspondence
 - a. Minnesota Pollution Control Agency
- 5. Legal Matters:
 - a. Scenic Acres Land and Facility Ownership Update Fryberger Law
 - b. SLC Lease for Intake Site Status Update
 - c. By-law Adoption
 - d. Responsible Authority
 - e. Data Practices
 - f. Adopting Records Retention Schedule
 - g. Status of Acquisition of Parcel 100-0047-00090 owned by the State of Minnesota
- 6. Community Comments
 - a. Scenic Acres Update
- 7. SEH Report
 - a. Engineering Work Status Update
 - b. Tech Committee Report
 - c. DIRRR Funding Status Update

- d. Funding Initiatives
 - i. 2022 CDBG
 - ii. Others
- 8. St. James Pit Status Update
 - a. LCCMR Project Status
 - b. Zebra Mussels Update if any
- 9. Insurance Status LMC Update
- 10. Other Business
- 11. Next Meeting Date: February 16, 2022
- 12. Adjournment

Minutes Regular Meeting of East Range Water Board City/Town Government Center Wednesday, December 15, 2021 4:30 p.m.

PRESENT: Chairman, Doug Gregor; Vice Chairman, Jon Skelton; Secretary/Treasurer, David Skelton; Board Member, Clark Niemi; Board Member, Jim Gentilini

ABSENT:

ALSO PRESENT: Stefanie Dickinson, City of Aurora Clerk-Treasurer; Lindsey Luke, Secretary; Miles Jensen, SEH; Mike Larson, SEH; Dennis Schubbe, City of Aurora

A board meeting was called to order by Chairman Gregor at 4:33 p.m.

- 1.) MOVED BY J. SKELTON SUPPORTED BY GENTILINI TO APPROVE THE MINUTES FROM NOVEMBER 17, 2021. MOTION CARRIED.
- 2.) Treasurer D. Skelton updated the board regarding the Biwabik Fund balance and the Interim Financing with a current balance of \$559,767.53
- 3.) MOVED BY J. SKELTON SUPPORTED BY NIEMI TO APPROVE THE SEH INVOICE #416244 IN THE AMOUNT OF \$119,032.00. MOTION CARRIED.

MOVED BY D. SKELTON SUPPORTED BY GENTILINI TO APPROVE THE SEH INVOICE #417568 IN THE AMOUNT OF \$128.884.00. MOTION CARRIED.

A discussion took place about the need for a re-organizational meeting of the East Range Water Board.

MOVED BY J. SKELTON SUPPPORTED BY NIEMI TO SCHEDULE THE RE-ORGANIZATION MEETING OF THE EAST RANGE WATER BOARD FOR 4:30 PM ON JANUARY 3, 2022. MOTION CARRIED.

D. Skelton discussed the need for a Secondary Treasurer for the East Range Water Board.

MOVED BY GREGOR SUPPORTED BY D. SKELTON TO DELEGATE J. SKELTON AS THE SECONDARY TREASURER FOR THE EAST RANGE WATER BOARD. MOTION CARRIED.

5.) Legal Matters:

Chairman Gregor talked with Board Member D. Skelton and Mia from Fryberger Law about the critical issues with the property ownership in the Scenic Acres area. As of now, Mia is still talking with land attorneys on this matter. An update will be given soon.

A discussion took place regarding the St. Louis County lease for intake site. SEH is moving forward with the assumption that the lease will go through.

Chairman Gregor and Board Member Gentilini had a meeting with Mia from Fryberger Law about the East Range Water Board by-law development. Gentilini sent a draft to Mia regarding some changes that need to be made.

Aurora City-Clerk Treasurer Dickinson updated the board on the necessity for designating a responsible authority, establishing a data practices plan, and the adoption of a record retention schedule. This all can be done at a future meeting with the provided paperwork.

Aurora Deputy Clerk Luke gave an update on the acquisition of parcel 100-0047-00090. Submissions have been completed. The board is currently waiting for St. Louis County to finalize acquisition.

7.) SEH Report:

Miles Jensen, SEH, gave an update regarding the planned schedule. SEH is currently moving forward with producing the 100% plans and specs. With prices of materials being uncertain at this point, job quotes are becoming harder and harder to obtain.

Mike Larson, SEH, reported on the latest submittals for the project. New opportunities for funding such as the Investment for Infrastructure Jobs and Acts of Minnesota will distribute \$687 Million over the next five years. The project will hopefully be one of the qualifying recipients of these funds.

Miles Jensen, SEH, inquired about ownership on the contracts for the project. A discussion took place. The issue will be discussed with the Board's attorney and reported upon at the next meeting.

8.) St James Pit Update:

Board Member, Gentilini updated the board on the LCCMR status. The contract with NTS has been established.

Board Member, Gentilini updated the board on the status of the Zebra Mussels in St. James Pit.

9.) 2022 Regular Meeting Schedule:

MOVED BY NIEMI SUPPORTED BY D. SKELTON TO ADOPT THE PROPOSED 2022 REGULAR MEETING SCHDULE FOR THE EAST RANGE WATER BOARD. MOTION CARRIED.

10.) Insurance Status – League of Minnesota Cities:

MOVED BY J. SKELTON SUPPORTED BY D. SKELTON TO TABLE VOTING ON INSURANCE FOR THE EAST RANGE WATER BOARD. MOTION CARRIED.

11.) Other Business:

A discussion took place regarding compensation payment for non-elected member of the East Range Water Board.

MOVED BY J. SKELTON SUPPORTED BY GREGOR TO COMPENSATE NON-ELECTED OR NON-PUBLICLY EMPLOYED MEMBERS OF THE EAST RANGE WATER BOARD \$30.00 PER MEETING. BOARD MEMBER D. SKELTON WILL BE PAID RETRO PAY BACK TO THE FIRST MEETING HE ATTENDED. MOTION CARRIED.

16.) Adjournment

MOVED BY GENTILINI SUPPORTED BY D. SKELTON TO ADJOURN THE MEETING AT 5:43 P.M. MOTION CARRIED

Next Regular East Range Water Board Meeting Date: January 19, 2022, at 4:30 p.m.

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0.00

RECEIVED

DEC 16 2021

SCT Inspections

RECEIVED

CITY OF AURORA

3170 Stark Road Harris MN 55032		651-788-2514			thorps00@msn.con	n
Bill To: Address:	City of Aurora 16 West 2nd Ave North Aurora MN 55705 Plan Review for East Range	218-229-2614 stefanie@ci.aurora.mn.us; Kimber	rly@ci.aurora.mn.us		Invoice #21-003 Invoice Date:	12/16/2021
	(Aurora) Water Treatment plan, 90% completion of plans		~			
Description Plan Review of WTP	Plan Review Fee \$11,600.00	Percent of fee charged 0 0.60	Total fee	6,960.00		
		0.00				
		0.00				
					Invoice Subtotal	\$ 6,960.00
					other	\$ -
Make all checks payable to Stev	re Thorp.				TOTAL	\$ 6 960 00



520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300 800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

December 29, 2021

JAN 01 2022 CITY OF AURORA

Lindsey Luke
Deputy City Clerk
City of Aurora
16 West 2nd Avenue North
Aurora, MN 55705

Re: East Range Joint Water Treatment Plant Project

Dear Lindsey Luke:

The Minnesota Pollution Control Agency (MPCA) Environmental Review Unit has reviewed the information in the letter and attachment dated November 23, 2021, regarding construction of a new water treatment plant, raw water intake system and installation of a new water main in the city of Aurora, Minnesota (the Project). Based on the limited information provided, and regarding matters for which the MPCA has regulatory responsibility or other interests, the MPCA staff has the following comments for your consideration.

- If the total Project area will disturb a total of one acre or more of land, a National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater Permit (CSW Permit) is required from the MPCA. The owner and operator (usually the general contractor) are jointly responsible for obtaining and complying with the conditions of the CSW Permit. A detailed Stormwater Pollution Prevention Plan (SWPPP), containing stormwater management requirements both during and post construction, as well as erosion control and sediment control requirements during construction, must be prepared prior to submitting a CSW Permit application. CSW Permit coverage is required prior to commencing land disturbing activities (i.e., clearing, grading, filling, or excavating) relating to the project. For an overview of this permit and program, please refer to the following fact sheet: http://www.pca.state.mn.us/publications/wq-strm2-05.pdf. Please direct questions regarding CSW Permit requirements to Roberta Getman at 507-206-2629 or Roberta-Getman@state.mn.us.
- It is not uncommon for public utility projects to encounter contamination, especially petroleum-contaminated soil from nearby storage tanks or spills. Efforts should be made prior to construction to determine if and where any petroleum or other contamination is likely to be encountered during the project. Utilization of the MPCA's database and mapping tool, What's In My Neighborhood? can be helpful in evaluating the project area or areas for potential contamination. This mapping tool can be found at: http://www.pca.state.mn.us/udgx680. It is the responsibility of the Project proposer to complete the Project safely through any areas of contamination and to properly manage any contaminated soil that is excavated during the Project. The factsheet, Managing Petroleum Contaminated Soil at Public Works Projects, is available to assist with this process, including how to identify potential sources of contamination. The fact sheet can be found at: http://www.pca.state.mn.us/publications/c-prp5-01.pdf. If contamination is found, it must be reported immediately to the State Duty Officer at 651-649-5451 or 800-422-0798.

• Please be aware that Wynne Lake the Embarrass River are listed on the MPCA Inventory of Impaired Waters located on the MPCA website at http://www.pca.state.mn.us/water/tmdl/tmdl-303dlist.html. We recommend you utilize the MPCA Special Waters and Impaired Waters Search mapping tool to identify special or impaired waters located near the proposed Project. The mapping tool is located on the MPCA website at: http://pca-gis02.pca.state.mn.us/CSW/index.html. The impairments will dictate additional increased stormwater treatment during construction and require additional increased permanent treatment post construction. These requirements will be included in the CSW Permit. The Project proposer should determine that compliance with these increased stormwater water quality treatments can be achieved on the Project site or elsewhere. Information regarding the MPCA's Construction Stormwater Program can be found on the MPCA's website at http://www.pca.state.mn.us/water/stormwater/stormwater-c.html. Questions regarding Construction Stormwater Permit requirements should be directed to Roberta Getman at 507-206-2629 or noise-test-mn.us.

In addition, any project that will result in over 50 acres of disturbed area and has a discharge point within one mile of a special or impaired water, is required to submit their SWPPP to the MPCA for a review at least 30 days prior to the commencement of land disturbing activities. If the SWPPP is found to be out of compliance with the terms and conditions of the General Permit, further delay may occur. The MPCA encourages the Project proposer to meet with staff at preliminary points to avoid this situation. Questions regarding SWPPPs should be directed to Todd Smith at 651-757-2732 or Todd.Smith@state.mn.us.

- Please note that any demolition activities must comply with state and federal regulations that require inspection of the structure for hazardous materials such as asbestos, lead based paint, light ballasts, thermostats, stored chemicals, ozone depleting chemicals, etc. Regulated asbestos-containing materials (RACM) must be abated prior to demolition activities. A "Notification of Asbestos Related Work" must be submitted to the Minnesota Department of Health by a licensed asbestos inspector 10 working days prior to conducting abatement activities, if abatement of 160 square feet, 260 linear feet, or 35 cubic feet of RACM is required. A "Notification of Intent to Perform a Demolition" must be submitted to the MPCA 10 working days prior to the start of demolition. Flaking lead based paint present on the structure must be encapsulated or removed and properly disposed of off-site at the appropriate disposal facility prior to demolition activities. Any lead based paint chips present on the ground following demolition must be removed and properly disposed of off-site at the appropriate disposal facility. A fact sheet regarding lead paint disposal is available on the MPCA website at: http://www.pca.state.mn.us/index.php/view-document.html?gid=9049. The project proposer should also consider recycling as much of the structure materials as possible to reduce the volume of material disposed of in the landfill. If you have any questions regarding demolition issues or asbestos and lead paint abatement, please contact Colin Boysen at 507-206-2644 or Colin.Boysen@state.mn.us.
- The installation of the intake to Embarrass Mine Pit and associated piping to the new facility may encounter wetlands. If so, the Project may require a Clean Water Act Section 401 Water Quality Certification or waiver from the MPCA to verify compliance with state water quality standards.

Lindsey Luke Page 3 December 29, 2021

• The Project will need to conform with state noise standards during construction and operation. Any operation noise levels would need to meet the Noise Area Classification (NAC) 1 standards by the time sound reaches the neighboring residential properties. For residential locations (NAC 1), the limits are L10 = 65 dBA and L50 = 60 dBA during the daytime (7:00 a.m. – 10:00 p.m.) and L10 = 55 dBA and L50 = 50 dBA during the nighttime (10:00 p.m. – 7:00 a.m.) (Minn. R. 7030.0040). This means that during a one-hour period of monitoring, daytime noise levels cannot exceed 65 dBA for more than 10 percent of the time (six minutes) and cannot exceed 60 dBA more than 50 percent of the time (30 minutes). Construction noise may be inevitable, but construction equipment should have mufflers or other noise control measures as appropriate.

We appreciate the opportunity to review the Project. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of the Project, please contact me by email at Karen.kromar@state.mn.us or by telephone at 651-757-2508.

Sincerely,

Karen Kromar

This document has been electronically signed.

Karen Kromar Project Manager Environmental Review Unit Resource Management and Assistance Division

KK:rs

cc: Dan Card, MPCA, St. Paul Roberta Getman, MPCA, Rochester Todd Smith, MPCA, St. Paul Colin Boysen, MPCA, St. Paul Tom Estabrooks, MPCA, Duluth Jeff Udd, MPCA, Duluth

Lindsey Luke

From: Mia E. Thibodeau <mthibodeau@fryberger.com>

Sent: Thursday, January 13, 2022 11:13 AM

To: Doug Gregor; Lindsey Luke **Subject:** RE: Bylaws, etc.--ERWB

Attachments: Bylaws (11 16 21 MET) redline.DOC; Bylaws (11.16.21).DOCX; Bylaw with Board comments.DOCX

Follow Up Flag: Follow up Flag Status: Completed

Caution: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Morning:

Attached please find revised Bylaws for your review and consideration. Please note the following:

- I increased the Surety Bond limit to match the policy amount of \$50,000;
- I incorporated some of Jim's comments (please see 3rd attachment discussing my responses); and
- The Board should discuss/confirm whether an August budget date provides the City/Town with sufficient time to incorporate any necessary rate increases.

Please let me know if you have any comments or questions on the Bylaws.

Doug—would you like me to wait until after the meeting next week to confirm with the County regarding who should be the lessee on the intake site lease? I assume so and will wait to respond until after next week's meeting unless I hear otherwise from you.

Happy New Year!

Thank you, Mia

Mia Thibodeau

Attorney

Fryberger, Buchanan, Smith & Frederick, P.A.

302 West Superior Street, Suite 700 | Duluth, MN 55802 ph: 218-725-6873 | fx: 218-725-6800 mthibodeau@fryberger.com | www.fryberger.com

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BYLAWS OF EAST RANGE WATER BOARD

PREAMBLE

These Bylaws are enacted, approved and adopted by the East Range Water Board (the "Water **Board**"), which was created pursuant to Minnesota Statutes, Section 471.59, as the same may be amended from time to time (the "Act") and the provisions of the Joint Powers Agreement (as it may be further amended and supplemented from time to time, the "Agreement") which was entered into on July 22, 2021 by and between the City of Aurora, Minnesota, a municipal corporation under the laws of the State of Minnesota ("Aurora") and the Town of White, a Township duly organized in St. Louis County, Minnesota ("White", and collectively the "Governmental Units"). It is the intent and desire of the Board that the Act and the Agreement be referenced to determine the basic purposes of the Board and the Water Board. These Bylaws are adopted for the purpose of outlining the operational procedures to be followed by the Board, its officers and employees in carrying out the purposes set forth in the Act and the Agreement. If at any time a conflict should arise between the provisions of these Bylaws and the provisions and directives of the Act or the Agreement, the provisions and directives of the Act will to the extent applicable be controlling and otherwise the provisions and directives of the Agreement will be controlling. Capitalized terms used herein but not defined shall have the meaning set forth in the Agreement.

ARTICLE I GENERAL

- 1.1 NAME AND STATUS.
- a. *Name*. The East Range Water Board is referred to in these Bylaws as the "Water Board".
- b. *Status*. Pursuant to the Act the Water Board is a joint powers board with those powers specified in the Act and the Agreement.
- 1.2 MAILING ADDRESS. The mailing address of the Water Board is and will be located at:

16 West 2nd Avenue North

P.O. Box 160

Aurora, Minnesota 55705

The Board may designate other locations for the transaction of business from time to time.

1.3 SERVICE AREA. The Water Board serves those areas comprising a Project within the Governmental Units (the "Service Area").

1.4 **INTENTIONALLY OMITTED**

- 1.5 OFFICIAL NEWSPAPER. The official newspaper of the Water Board is the Mesabi Tribune.
 - 1.6 OFFICIAL SEAL. The Board has not adopted an official seal.

ARTICLE II BOARD OF DIRECTORS

- 2.1 NUMBER, QUALIFICATIONS AND REPRESENTATION.
- a. *Number and Qualifications*. The Board shall be composed of five (5) members, consisting of three members appointed by the governing body of Aurora and two members appointed by the governing body of White. At least one appointee from Aurora shall be a sitting City Council member and at least one appointee from White shall be a sitting town Board Supervisor.
- b. Alternates. Each Party shall appoint one (1) alternate who may serve in place of a member appointed by such Party if the member is absent.
- c. Term. Each Board member serves until their successor has been appointed by the governing body of the Party appointing the Board member.
- d. Vacancies Must be Filled. Any vacancy in the membership of the Board must be filled promptly by the appropriate appointing authority.
- e. Appointing Authorities Responsible. The appointing Party is responsible for the actions of and attendance by the members it appoints to the Board.
- 2.2. OATH OF OFFICE. Each Board member must take and subscribe the oath defined in the Constitution of the State of Minnesota, Article V, Section 6.

ARTICLE III MEETINGS OF THE BOARD

- 3.1 MEETINGS MUST BE OPEN. Except as provided in Minnesota Statutes, Section 13D.04, all meetings of the Board must be open to the public. The Board must keep minutes of its proceedings as a public record.
- 3.2 ANNUAL MEETING. The Board must hold an annual meeting on or as soon as practicable after the first business day in January of each year, to elect the officers to serve until the first business day in January of the following year. Each officer serves until a successor is appointed and has qualified. At the annual meeting, the Board will also review the membership and duties of any standing and temporary committees created under Section 9.1 of these Bylaws and make such changes as it deems advisable.

3.3 REGULAR MEETINGS. The regular meetings of the Board will be held at the date, time and location established by the Board from time to time. Notice of any change in meeting date, time or location must be given in accordance with the requirements for special meetings, Section 3.4 below.

3.4 SPECIAL MEETINGS.

- a. *How Called*. Special meetings may be held at any time subject to the call of the Chair or of any two Board members.
- b. *Notice to Board Members*. Special meetings are called by written notice, sent by regular mail or electronic transmission, to each member of the Board at least three (3) business days prior to the meeting, or upon such other notice as the Board may by resolution provide.
- c. *Notice to Public*. Pursuant to Minnesota Statutes, Section 13D.04, the following notices must be given for a special meeting:
 - i. The Board must post written notice of the date, time, place, and purpose of the meeting on the principal bulletin board of the City of Aurora, or if no principal bulletin board exists, on the door of its usual meeting room.
 - ii. The notice must also be mailed or otherwise delivered to each person who has filed a written request for notice of special meetings with the Board. This notice must be posted and mailed or delivered at least three business days before the date of the meeting.
 - iii. As an alternative to mailing or otherwise delivering notice to persons who have filed a written request for notice of special meetings, the Board may publish the notice once, at least three days before the meeting, in the official newspaper of the Water Board.
- 3.5 EMERGENCY MEETINGS. An "emergency" meeting is a special meeting of the Board called because of circumstances that, in the judgment of the Board, require immediate consideration by the Board. Pursuant to Minnesota Statutes, Section 13D.04, the following notices must be given for an emergency meeting:
 - a. *Notice to News Media*. The Board must make good faith efforts to provide notice of the meeting to each news medium that has filed a written request for notice (if the request includes the news medium's telephone number) as soon as reasonably practicable after notice has been given to the Board members.
 - b. *Manner of Notice*. Notice of the emergency meeting may be given by telephone or by any other method used to notify the members of the Board.
 - c. Content of Notice. The notice must include the subject of the meeting. If matters not directly related to the emergency are discussed or acted upon at an emergency meeting, the minutes of the meeting must include a specific description of the matters.

- d. *Posted or Published Notice not Required*. Posted or published notice of an emergency meeting is not required but may be given.
- 3.6 COMPENSATION. Members of the Board must serve without compensation but may be paid their actual expenses while engaged in performing the duties of their office or otherwise engaged in the business of the Board, upon submission of vouchers and/or receipts therefor. The Board will establish per diem rates for the conduct of official business and attendance at meetings on behalf of the Board. Members of the Board will be reimbursed for their mileage expenses at the federal mileage reimbursement rate then in effect.

ARTICLE IV OFFICERS

4.1 OFFICERS.

- a. *Officers*. The officers of the Water Board are a Chair and one or more Vice-Chairs (who shall be designated in order, first and second) who must be members of the Board, and a Secretary and a Treasurer who may but need not be members of the Board.
- b. When Elected. The Board must elect the officers initially within sixty (60) days of adoption of the Agreement and thereafter at the annual meeting for terms expiring on the first business day in January next following.
 - c. Term. Each officer serves until a successor is elected and has qualified.
- d. Offices may be Combined. The offices of Secretary and Treasurer may be combined.
- e. *Powers and Duties*. Except as otherwise provided, the Chair, Vice-Chair, Secretary, and Treasurer of the Water Board have like powers and duties, respectively, as the mayor, acting mayor, clerk, and treasurer of a statutory city.

4.2 CHAIR.

- a. *Presiding Officer*. The Chair presides at all meetings of the Board, except as otherwise authorized by resolution of the Board.
- b. *Recommendations*. At each meeting, the Chair may submit recommendations and information concerning the business, affairs and policies of the Board.
- 4.3 VICE-CHAIR. A Vice-Chair shall perform the duties of the Chair in the absence or incapacity of the Chair, and in the case of the resignation or death of the Chair, a Vice Chair performs the Chair's duties until such time as a new Chair is elected or appointed.

4.4 TREASURER.

- a. Custody of Water Board Funds. The Treasurer has the care and custody of all funds of the Water Board and must deposit same in the name of the Water Board in such depository as the Board may direct, subject to the requirements of these Bylaws.
- b. *Orders and Checks*. Except as may otherwise be provided in these Bylaws, the Treasurer and one other officer of the Water Board must (i) sign all orders and checks for the payment or withdrawal of funds and (ii) pay out and disburse the Water Board's funds or make arrangements for banking accounts, pursuant to the direction of the Board.
- c. Record Keeping and Reporting. The Treasurer shall keep regular books of accounts showing all receipts and disbursements and render to the Board an account of the transactions and the current financial standing of the Board in the forms and at the times required by Article VIII of these Bylaws.

4.5 SECRETARY.

- a. *Record Keeping*. The Secretary shall keep the records of the Board, acts as secretary of the meetings of the Board, record all votes, keep a record of the proceedings to be kept for such purpose, and perform other duties incident to the office.
- b. *Notices*. The Secretary must notify the Minnesota Secretary of State, the Saint Louis County Auditor, and the clerk of each of the Governmental Units of the locations and post office addresses of the meeting place and offices of the Water Board and any changes therein.

ARTICLE V POWERS OF THE BOARD

5.1 GENERAL.

- a. *Exercised by Board*. All powers of the Water Board are exercised by its Board, except as may be expressly required by law or the Agreement.
- b. *Statutory Powers*. The Board has charge and control of all the funds, property, and affairs of the Water Board. With respect thereto, the Board has the powers and duties provided by the Act and the Agreement. Except as otherwise provided, the exercise of the powers and the performance of the duties of the Board and officers of the Water Board and all other activities, transactions, and procedures of the Water Board or any of its officers, agents, or employees, respectively, are governed by the Act and the Agreement.
- 5.2 BOARD ACTIONS. To the extent permitted by the terms of the Agreement, the Act or otherwise by law, the Board may enact ordinances, prescribe regulations, adopt resolutions, and take other appropriate action relating to any matter within the powers and purposes of the Water Board, and may do and perform all other acts and things necessary or proper for the effectuation of said powers and the accomplishment of said purposes.

ARTICLE VI WATER BOARD EMPLOYEES

6.1 UTILITY SUPERINTENDENT.

- a. Appointment of Utility Superintendent. The Water Board may employ a utility superintendent which may be a natural person or business entity whose duties are set forth in this Section.
 - b. *Duties*. The utility superintendent must:
 - i. Communicate with the Board, state and federal agencies to allow proper planning of all matters pertaining to public health and safety of the residents within the Service Area.
 - ii. Maintain the potable water extraction, treatment and distribution systems for the Water Board.
 - iii. Maintain adequate records of all tests and parameters as set by local, state and federal regulatory agencies and report any concerns relating to public health or environmental quality to the Board.
 - iv. If a natural person occupies this position, such person shall have and maintain at all times a valid Minnesota driver's license.
 - v. Maintain a safe working environment and observe and enforce appropriate safety precautions in the exercise of the duties of the position and by those supervised.
 - vi. Make those tests and observations required for the proper operation of the Joint System and to satisfy the appropriate reporting agency regulations.
 - vii. Have the ability to interpret laboratory tests and apply their results to the operational control of the Joint System.
 - viii. Notify the Board as to the need for tools, parts, and supplies.
 - ix. Become fully acquainted with the system and plant and the operational and treatment processes used, and take advantage of relevant training offered by the regulatory agency, manufacturer-supplier, or post-secondary educational institutions located in the area.
 - x. Maintain small auxiliary-powered equipment and tools associated with the different categories of the Joint System operation, including electrical pumps, emergency gen-set (generator) and tools of sufficient power to accomplish preventative and corrective maintenance.
- 6.2 OTHER POSITIONS. The Board may, by resolution, create such other positions as it deems necessary and may further establish the position description by resolution.

ARTICLE VII SURETY BONDS

- 7.1 COVERAGE. The following officers and employees of the Board must be covered by surety bonds in the following amounts:
 - a. Chair \$50,000.00
 - b. Vice-Chair \$50,000.00
 - c. Treasurer \$50,000.00
 - d. Secretary \$50,000.00
- 7.2 BOND REQUIREMENTS AMENDMENT. The Board may, by resolution, establish surety bond requirements for other employees in the amounts it deems advisable and may increase the amount of surety bond required in Section 7.1 by resolution. However, any decrease in the amount of bonds required in Section 7.1 must be provided for by an appropriate amendment to these Bylaws.

ARTICLE VIII FINANCIAL MATTERS

- 8.1. GENERAL. Except as otherwise provided in the Agreement, the Board has complete authority over all financial affairs of the Water Board and is responsible for determining all expenses of the Water Board, auditing and settlement of accounts, and in the collection, safekeeping and disbursements of all public monies coming into its possession.
 - 8.2. DISBURSEMENTS.
 - a. *Authorization and Payment.*
 - i. All disbursements over \$1,000.00 must be duly authorized by the Board. Board authorization must indicate the account out of which the disbursement is to be made.
 - ii. No checks may be issued until there is an amount of money to the credit of the fund out of which the voucher is to be paid which is sufficient to pay the voucher and all then outstanding vouchers against and encumbrances upon such fund.
- b. *Violations*. Any check for the payment of money violating any provision of this Section will be void.
- c. *Claims*. All claims against the Water Board must be accompanied by an itemized, verified statement, payroll, or time sheet, signed by the officer who has personal knowledge of the facts of the claim and vouches for the correctness and the reasonableness of the claim.
- d. *Additional Requirements*. The Board, by resolution, may make further regulations for the safekeeping and disbursement of Water Board funds.

8.3. BUDGET.

- a. *Committee*. The Board shall, each year appoint members to a committee for the purpose of developing the budget for the following fiscal year (the "**Budget Committee**"). The Budget Committee is responsible for preparing the budget for the Board for the following fiscal year, and for such other duties as may be prescribed by the Board.
- b. *Committee Duties*. Not later than the first meeting in August in the first year of operation of a Project and thereafter by August of each year, the Budget Committee will prepare and submit to the Board a budget for the ensuing fiscal year. The budget must be based upon detailed estimates and must present the following information:
 - i. An itemized statement of the appropriations recommended by the Budget Committee for current expenses and for permanent improvements for the ensuing fiscal year, with comparative statements of the appropriations and expenditures for the current and past preceding fiscal year.
 - ii. Such other information as may be required by the Board.
- c. Consideration by Board. The budget must be the principal item of business at the first regular meeting of the Board in September of the first year of operations and thereafter in September and of all subsequent regular meetings until passed and adopted.
- d. *Public Meeting Optional*. All interested residents within the Service Area must have a reasonable opportunity to be heard at any meeting at which the budget is considered. Prior to the adoption of the budget, the Board may hold a public meeting at which time interested residents within the Service Area of the Water Board may be heard. The meeting may be held in conjunction with a regular or special meeting of the Board.
- 8.4 DEPOSITORIES AND INVESTMENTS. Minnesota Statutes, Chapter 118A governs all depositories and investment of Water Board funds.
- 8.5 DEPOSIT OF FUNDS REQUIRED. The proceeds of all service, use, or rental charges, and other income of the Water Board must be deposited in the Water Board treasury and held and disposed of as the Board may direct for Water Board purposes, subject to any pledges or dedications made by the Board for the use of particular funds for the payment of bonds or interest thereon or expenses incident thereto or for other specific purposes.
- 8.6 FISCAL YEAR. The fiscal year of the Water Board is the same as the calendar year.
- 8.7 ACCOUNTING METHODS. The Board may prescribe and enforce such accounting methods, forms, blanks, and other devices as are consistent with the law and the standards of the Governmental Accounting Standards Board.
- 8.8 FINANCIAL STATEMENTS. The Treasurer or other qualified person acting on behalf of or at the direction of the Treasurer must submit to the Board a statement each month showing the amount of money in the Board Treasury, the status of the Water Board funds, the

amount expended or chargeable against each of the annual budget allowances and the balance left in each fund and such other information relative to the finances of the Water Board as the Board may require.

8.9 AUDIT. The books of the Board must be audited regularly at least once each year by either (i) a reliable firm of certified public accountants employed by the Board or (ii) the Office of the State Auditor.

ARTICLE IX COMMITTEES

- 9.1 COMMITTEES APPOINTED. Standing or temporary committees may be appointed by the Board from time to time, the membership and duties of which shall be reviewed as provided in Section 3.1 of these Bylaws.
- 9.2 DUTIES OF COMMITTEES. The Board may invest the committees with the duties it deems necessary and may subject the committees to conditions prescribed by the Board.
- 9.3 COMMITTEE REPORTS. All committees must report to the Board at the time or times the Board designates. If the Board does not designate a time to report, all committees appointed must report to the Board at the next regular meeting of the Board following the committee's appointment.

ARTICLE X EXECUTION OF DOCUMENTS

Unless otherwise provided in law, these Bylaws, or a resolution of the Board, all contracts, bonds, certificates of indebtedness and all instruments of every kind to which the Board is a party, must be executed in the name of the Board by the Chair and countersigned by the Secretary.

ARTICLE XI POWERS OF THE WATER BOARD

- 11.1 Powers. The Board has the powers set forth in the Act and the Agreement and also those powers necessary and incidental to carrying out the purposes set forth in these Bylaws, including but not limited to the following:
- a. The Board may make and enter into contracts in its own name subject to Minnesota Statutes 471.345, including contracts for providing services to other governmental units.
- b. The Board may, upon approved job descriptions, employ agents and employees and the necessary personnel for the operation and maintenance of the Joint System.
- c. The Board may acquire, purchase, lease, hold and dispose of property, both real and personal.
- d. The Board may incur debts and liabilities as necessary for the accomplishment of its purposes in accordance with the Act, except as limited by the Agreement.

- e. The Board may sue in its own name.
- f. The Board may recommend the establishment of a fee schedule for its services which must be approved as provided in the Agreement.
- g. The Board may enter into contracts to provide operational services to the Board on an interim basis.
- h. The Board may propose ordinances and regulations for approval by the Governmental Units, adopt resolutions, and take other appropriate action relating to any matter within the powers and purposes of the Board, and may do and perform all other acts and things necessary or proper for the effectuation of said powers and the accomplishment of said purposes, all as provided in the Agreement.
- i. The Board shall have such other powers as may be delegated by the Governmental Units from time to time.
- 11.2 Duties. In addition to the duties of the Board provided for elsewhere in the Agreement, the duties of the Board include, but are not limited to the following:
- a. The Board shall determine general policy of Board and policies applicable to the Joint System.
- b. The Board shall hire auditors to annually audit the financial affairs of the Board as of the end of each fiscal year and deliver the final audit report to the Governmental Units, if required by State law.
- c. The Board shall authorize by resolution any officer or agent to sign checks, drafts or other orders for the payment of money, notes or other evidences of indebtedness issued in the name of Board.
- d. The Board shall annually select banks as depositories by resolution and its official newspaper.
- e. The Board may set a per diem rate for members of the Board for attendance at any required meeting for conducting business or other work required on behalf of Board.
- f. The Board shall authorize reimbursement of appropriate expenses for members of the Board.
- g. The Board shall determine official posting places for official notification by motion.

ARTICLE XII [INTENTIONALLY OMITTED]

ARTICLE XIII [INTENTIONALLY OMITTED]

ARTICLE XIV [INTENTIONALLY OMITTED]

ARTICLE XV WATER BOARD ORDINANCES [SEE ARTICLE VII OF THE AGREEMENT]

- 15.1 Adoption of Ordinances. Pursuant to Article VII of the Agreement, ordinances of the Board are adopted as follows:
- a. *Recommendation*. The Board shall make recommendations to the governing bodies of the Governmental Units regarding the adoption or amendment of ordinances and rates for the use and availability of the Joint System. The intent of the Board is to ensure that the ordinances of each Governmental Unit are no less restrictive than the Board intends or allows.
- b. Adoption of Ordinances by Governmental Units. Each of the Governmental Units has agreed under the terms of the Agreement to adopt and enforce within its jurisdiction ordinances that are in substantial conformity with the terms of Board's recommendations regarding ordinances relating to the Joint System, including but not limited to provisions regarding rates and charges, new connection fees, penalties for ordinance violations, right of entry, permits and licenses, variances and connection specifications. The governing bodies for each Governmental Unit have agreed that no new connections to the Joint System may be made unless the engineer for the Board confirms the Joint System has sufficient capacity to permit the new connection.
- c. *Extraterritorial Service*. No properties located outside the municipal boundaries of the Service Area may be served by the Joint System except pursuant to written agreement of the governing bodies of the Governmental Unit; provided that in the event of an emergency, service outside the municipal boundaries of the Service Area may be authorized by unanimous vote of the Board.
- 15.2 Enforcement of Ordinances. Each Governmental Unit will enforce its ordinances within its jurisdiction as necessary to comply with the requirements of these Bylaws and the Agreement.

ARTICLE XVI AMENDMENT AND REVOCATION

These Bylaws n	nay be amende	d or revoked by	y resolution	approved by	four-fifths	(4/5) of
the members of the Boa	ard.					

These B	vlaws	were orig	ginally ac	dopted	on	. 20)2	22.
	<i>J</i> ====		5J			 , —		

	Chair	
ATTEST:		
Secretary		

 $M: \label{eq:main_model} M: \label{eq:model} M: \label{eq:model}$

ATTACHMENT A **SERVICE AREA**



STATUS REPORT EAST RANGE WATER PROJECT

TASK 2 – FINAL DESIGN
EAST RANGE WATER BOARD
CITY OF AURORA & TOWN OF WHITE
SEH Project No. 159723

DATE: Thursday, January 13, 2022

ATTACHMENTS TO THIS DOCUMENT

- 1) MDH Plan Review Submittal Form (blank)
- 2) Final OPC
- 3) SEH Agreement for Task 3 & 4 Services

DISCUSSION ITEMS

The following provides a brief discussion of the project status to date. The items in **BOLD** are new since the 12/09/2021 status report.

- 1) Task 2 Final Design
 - a) WTP, Raw Water Intake Building, and Raw and Finished Water Main:
 - 1. Two (2) sets of 100% signed construction documents for each of these three (3) projects are expected to be submitted to the MDH on Monday, January 17, 2022.
 - 2. The ERWB will need to submit three (3) checks to the MDH \$1,000.00, \$150.00, and \$150.00 to cover the plan review fees of the WTP, Raw Water Intake Building, and Raw and Finished Water Main projects, respectively. Refer to the attached MDH submittal form indicating the review fees required.
 - 3. The documents that will be submitted to the MDH will not be construction-ready, but still need to be signed in order for the MDH to conduct their review.
 - 4. Subsequent to the submittals being sent, SEH will meet with the MDH review staff to go over the project documents and provide orientation to what has been submitted. This is a standard SEH practice.
 - 5. SEH QC efforts will continue through the month of January 2022 and up until the MDH review comments are received.
 - b) Project Bid Dates:
 - 1. For the MDH submittals, the proposed project bid dates will be set as February 24, 2022 as discussed with the Technical Committee.
 - 2. This date is just a placeholder. Please refer to the discussion on the status of the geotechnical investigations and reporting under Line Item 10 below.
 - 3. It is likely that the earliest bid dates will be in mid-March 2022.
 - 4. SEH also understands that the final determination for bid dates will be made after the funding matters are settled.
 - c) Opinion of Probable Cost:
 - 1. See the attached OPC documents.
 - 2. Obtaining updated pricing has been quite a challenge with manufacturers and vendors consistently voicing concerns for uncertainty in the market relative to product availability, lead times, and prices.
- 2) Appropriations Permit
 - a) SEH has submitted the draft the permit application.
 - b) 12/17/2021 SEH received the following questions and information request from the DNR that SEH will respond to following discussions with the ERWB:
 - 1. Amount of groundwater to be appropriated for constructing the caisson/water intake. Include dewatering details, such as proposed receiving water (will it be pumped directly into the Embarrass Pit?). SEH to respond.
 - 2. Provide evidence of ownership, or control of, or a license to use, the riparian property where the water intake will be located. A copy of the SLC lease agreement should suffice here.
 - 3. Water Supply Contingency Plans (or other agreements) for the City of Biwabik and Giants Ridge that address potential impacts to their existing water supplies and mitigation for impacts. The ERWB will likely need to meet with both the City of Biwabik and Giant's Ridge to build consensus for the plan.

- 4. Details regarding impacts to the existing public access, such as if the plan is to alter/close the access and inform the public of changes. We will need to discuss a response to this item.
- 5. Changes that would be needed to the system if other municipalities are added on to the same system. SEH Response: There will be no physical changes needed to the Raw Water Pump Station should Biwabik and/or Hoyt Lakes request service in the future. The Raw Water Pump Station and Intake have been physically sized to support service to Biwabik and Hoyt Lakes.

3) Environmental Review:

- a) Minnesota State Historic Preservation Office (SHPO):
 - 1. SEH received a review letter on 12/27/2021 which amounted to a request for more information.
 - 2. SEH issued the additional information on 1/6/2022.
 - 3. SEH will continue to follow up on any comments received from SHPO.
- b) MPCA:
 - 1. The ERWB received a response letter on 1/3/2022. The letter provides guidance for storm water runoff that SEH is following in our preparing the project SWMPP.
 - 2. No further comments are needed.
- c) US Fish and Wildlife:
 - 1. SEH received email comments on 12/22/2021.
 - 2. According to the comments received, SEH was directed to utilize the USFW Information for Planning and Consultation (IPaC) system to create an "official species list" of federally listed species and designated critical habitat that may be impacted by this project. Specifically, for the:
 - (1) Rusty patched bumble bee, and the
 - (2) Northern Long Eared Bat (NLEB):
 - 3. SEH completed this response on 1/11/2022.
- d) Once all comments are received, SEH will prepare a summary letter to the MDH indicating the Environmental Review is complete.
- 4) Building Official Review:
 - a) SEH submitted the 90% review documents to the BO on 11/17/2021.
 - b) SEH received a review letter from the BO on 11/18/2021.
 - c) None of the comments were concerning or scope-changing and have been incorporated into the project documents.
 - d) SEH issued responses to the BO's 90% review comments on 1/5/2022.
 - e) SEH will submit the 100% bid-ready (MDH set) to the BO with concurrent timing.
- 5) MDH Communications and Review:
 - a) SEH spoke with Chad Kolstad on Tuesday, 11/9/2021.
 - b) With the signing of the American Infrastructure bill by President Biden on November 15, 2021, Kolstad indicated that the project will have 180 days from that signature date to submit plans for approval where only the American Iron and Steel (AIS) requirements pertain. After 180 days, or May 14, 2022, other more stringent and costly, "Buy American" requirements will come into play for PFA (DWRF) funded projects.
 - c) Two (2) sets of 100% signed construction documents for the WTP, Raw Water Intake Building, and Raw and Finished Water Main projects are expected to be submitted to the MDH on Monday, January 17, 2022.
- 6) Project Schedule
 - a) Task 3 Permitting and Regulatory Approvals
 - b) Task 4 Bidding & Project Award Services

March 2020 – February 2022 February 2022 – April 2022, or as the ERWB may direct

- 7) SEH Agreement for project Tasks 3 & 4:
 - a) To keep the project moving, SEH has prepared the attached Agreement for Tasks 3 and 4.
- 8) Scenic Acres:
 - a) Service agreement and connection fees between East Range Water Board and ScenicAcres yet to be determined.
- 9) Pineville and Scenic Acres Water Main
 - a) An easement was presented to Rosa for the Scenic Acres water main section in the vicinity of the intersection of HWY 135 and Scenic Acres Road. No response back, yet. A copy of this easement agreement was conveyed to the COA/TOW this past week.
 - b) Task 2A Pineville Chlorination System:
 - 1. At the request of the Technical Committee, a dedicated piping system with automated valves, analyzer and chlorine feed system to automatically boost the chlorine residual in the Pineville and Scenic Acres water line was added to the project.
 - 2. Plan sheets and specifications were added to and changed to support this request.
 - 3. Compensation for this work has been included in the Task 3 & 4 agreement attached to this project status report.
 - c) Task 2B:
 - Additional surveying was completed and the water main plans were changed and modified as requested by the Technical Committee to have the Pineville water main tied at north and south ends of Pineville system and bypass the community to the east along Carl Avenue and Ryan Street.
 - 2. This request was made to reduce project cost of main and service connections associated with the "through-Pineville" route that was contemplated and designed through all previous project and task efforts.
 - 3. Compensation for this work has been included in the Task 3 & 4 agreement attached to this project status report.
- 10) Geotechnical Investigations & Reporting (Soil Borings):
 - a) SEH is still waiting for Soil Boring 100, which is the raw water intake boring as well as Boring 101 which is the first boring on the raw water line just north of the raw water intake site.
 - b) Once these borings are completed, then the Raw water Main & Raw Water Intake geotechnical reports can be prepared.
 - c) SEH finally connected with NTS last week.
 - d) Apparently, NTS' drilling rig had a breakdown in October that SEH (Miles) just learned about last week from Michael Heiman.
 - e) Mr Heiman will now be handling the remaining work.
 - f) Mr Heiman indicated that the borings will be done in the next couple of weeks and the reports will be completed a couple of weeks after that.
 - g) So, the final Geotech reports are still likely to be 4 week out (mid-February).
 - h) This schedule will inevitably push the potential bid dates out into mid-March 2022.
- 11) Tech Meetings:
 - a) On 1/11/2022 SEH and COA/TOW plant operations staff met virtually to cover:
 - 1. Project status & news, and
 - 2. Receive the final OPC.
 - b) The next Tech Meeting has not been scheduled, yet.

END.



Plan Review Fee Sheet

- Watermains
 - 1 set of plan and specifications are required
- Wells, storage, booster stations, and water treatment plants
 - 2 sets of plans and specifications are required
- Interconnections
 - 1 interconnection plan and hydraulic analysis are required

Plans and Specifications Must Be Signed by a Professional Engineer registered in the State of Minnesota

How to Submit Plans

By U.S. Mail

Minnesota Department of Health Drinking Water Protection-Plan Review P.O. Box 64975 St. Paul, Minnesota 55164-0975 By Courier service, etc.

Minnesota Department of Health Drinking Water Protection-Plan Review 625 North Robert Street St. Paul, Minnesota 55155

This application must be completed and fee submitted before the plans will be reviewed. **Note:** Multiple fees are required if more than one project type is included on one set of plans.

Review Fee by Project Type(s)

☐ Watermains \$150	Interconnection
☐ Pumphouse \$150	☐ Well \$250
☐ Treatment Plant \$1,000	☐ Chemical Feed \$150
Storage (Installation) \$300	\square Treatment Plant (Renovation) \$250
☐ Booster Station \$150	Storage (Coating) \$100
Total Fee Submitted \$	
(Payable to Minnesota Department of Health)	

PLAN REVIEW FEE SHEET

Required Information

Is this a drinking wate	r revolving fund loan p	roject? 🗌 Yes 🗌 No	1		
Name of Project					
Project Location					
	City (If not incorporat	ed, Township)	County		
Owner's Name					
Owner's Address					
	Street	City	State	ZIP	
Submitter's Name					
Submitter's Address					
	Street	City	State	ZIP	
Submitter's Telephone	Number ()				
Submitter's Email					

Minnesota Department of Health PO Box 64975 St. Paul, MN 55164-0975 651-201-4700 Fax 651-201-4701 health.drinkingwater@state.mn.us www.health.state.mn.us

11/27/2017

To obtain this information in a different format, call: 651-201-4700. Printed on recycled paper.



Summary of Opinion of Probable Cost East Range Joint Water Project, Aurora and Town of White City of Aurora & Town of White SEH Project No. 159723 January 10, 2022

Project Component	<u>Estir</u>	mated Cost
Water Treatment Plant	\$	11,362,914
Water Main Scenic Acres	\$	985,220
Water Main Pineville	\$	505,730
Raw Water Intake Facility	\$	5,688,931
Raw Water Transmission Main	\$	1,852,720
Construction Subtotal	\$	20,395,515
Contingencies and Market Conditions (10%)	\$	2,039,552
Soil Borings & Testing	\$	163,895
Legal (0.05%)	\$	101,978
Fiscal (0.05%)	\$	101,978
Administrative (0.05%)	\$	101,978
Engineering		
w/ Lower Construction Admin/Observation Range	\$	1,278,680
w/ Higher Construction Admin/Observation Range	\$	1,394,950
Total Project Cost w/ Lower Range Engineering Fees w/ Higher Range Engineering Fees	_	24,183,574 24,299,844



East Range Joint Water Project,
Project Name: Aurora and Town of White

SEH Project No: AUROR 159723

Date: January 10, 2022

Estimator: Ellen Lemke

Checked By: Dan Hinzmann

100% Pineville Water Transmission Mains

Description: Cost Estimate

PINEVILLE AREA ALTERNATE PRELIMINARY OPINION OF COST

SITE	UNIT	EST. QUANTITY	UNIT PRICE	AMOUNT
CLEAR AND GRUB	ACRES	0.20	\$ 20,000.00	\$ 4,000.00
DIRECTIONAL DRILLING OBSTRUCTION	EACH	3	\$ 3,500.00	\$ 10,500.00
BORING PIT (ROAD AREA)	EACH	3	\$ 7,600.00	\$ 22,800.00
OPEN CUT PIPE INSTALLATION (NON-ROAD AREA)	LIN FT	381	\$ 20.00	\$ 7,620.00
OPEN CUT PIPE INSTALLATION (ROAD AREA)	LIN FT	51	\$ 150.00	\$ 7,650.00
POTABLE WATER DISTRIBUTION	UNIT	EST. QUANTITY	UNIT PRICE	AMOUNT
12" HDPE WATER MAIN	LIN FT	2989	\$ 50.00	\$ 149,450.00
12" HDPE HDD PIPE INSTALLATION	LIN FT	2557	\$ 30.00	\$ 76,710.00
4" INSULATION	SQ YD	50	\$ 50.00	\$ 2,500.00
CONNECT TO EXISTING WATER MAIN	EACH	3	\$ 2,000.00	\$ 6,000.00
FINISHED WATER MAIN HYDRANT ASSEMBLY	EACH	2	\$ 7,500.00	\$ 15,000.00
12" GATE VALVE AND BOX	EACH	3	\$ 4,500.00	\$ 13,500.00
PRESSURE REDUCING VALVE ASSEMBLY	EACH	1	\$ 90,000.00	\$ 90,000.00
SUB TOTAL				\$ 405,730.00
TRAFFIC CONTROL			1%	\$ 5,000.00
MOBILIZATION	15%	\$ 61,000.00		
EROSION CONTROL	3%	\$ 13,000.00		
MISCELLANEOUS CONSTRUCTION			5%	\$ 21,000.00
TOTAL CONSTRUCTION				\$ 505,730.00

ASSUMPTIONS:

- 1. 12" HDPE WATER MAIN TO BE DIRECTIONALLY DRILLED, ASSUMES OBSTRUCTION ONCE EVERY 1000'
- 2. HYDRANT ASSEMBLY INCLUDES TEE, LEAD, VALVE, AND HYDRANT
- 3. TURF RESTORATION IS ASSUMED TO INCLUDE 4" OF SALVAGED TOPSOIL AND SEEDING
- 4. ROADWAY RESTORATION IS ASSUMED TO PER PLAN TYPICAL SECTIONS



East Range Joint Water Project,

Project Name:	Aurora and Town of White
SEH Project No:	AUROR 159723
Date:	January 10, 2022
Estimator:	Ellen Lemke
Checked By:	Dan Hinzmann
	100% Raw and Finished Water Transmission Mains
Descriptions	Cost Estimate

RAW WATER MAIN PRELIMINARY OPINION OF COST

SITE	UNIT	EST. QUANTITY	L	JNIT PRICE	AMOUNT
CLEAR AND GRUB	ACRES	0.10	\$	20,000.00	\$ 2,000.00
DIRECTIONAL DRILLING OBSTRUCTION	EACH	10	\$	3,500.00	\$ 35,000.00
BORING PIT (NON-ROAD AREA)	EACH	12	\$	2,400.00	\$ 28,800.00
OPEN CUT PIPE INSTALLATION (NON-ROAD AREA)	LIN FT	301	\$	20.00	\$ 6,020.00
OPEN CUT PIPE INSTALLATION (ROAD AREA)	LIN FT	10	\$	150.00	\$ 1,500.00
POTABLE WATER DISTRIBUTION	UNIT	EST. QUANTITY	L	JNIT PRICE	AMOUNT
16" HDPE WATER MAIN	LIN FT	9680	\$	90.00	\$ 871,200.00
24" STEEL JACK AND BORE CASING PIPE	LIN FT	74	\$	750.00	\$ 55,500.00
16" HDPE HDD PIPE INSTALLATION	LIN FT	9369	\$	50.00	\$ 468,450.00
4" INSULATION	SQ YD	25	\$	50.00	\$ 1,250.00
RAW WATER MAIN HYDRANT ASSEMBLY	EACH	5	\$	10,000.00	\$ 50,000.00
16" BUTTERFLY VALVE AND BOX	EACH	6	\$	6,000.00	\$ 36,000.00
SUB TOTAL					\$ 1,555,720.00
TRAFFIC CONTROL				1%	\$ 16,000.00
MOBILIZATION					\$ 156,000.00
EROSION CONTROL					\$ 47,000.00
MISCELLANEOUS CONSTRUCTION				5%	\$ 78,000.00
TOTAL CONSTRUCTION					\$ 1,852,720.00

ASSUMPTIONS:

- 1. 16" HDPE WATER MAIN TO BE DIRECTIONALLY DRILLED, ASSUMED OBSTRUCTION ONCE EVERY 1000'
- 2. HYDRANT ASSEMBLY INCLUDES TEE, LEAD, VALVE, AND HYDRANT
- 3. TURF RESTORATION IS ASSUMED TO INCLUDE 4" OF SALVAGED TOPSOIL AND SEEDING
- 4. ROADWAY RESTORATION IS ASSUMED TO BE PER PLAN TYPICAL SECTIONS



East Range Joint Water Project, Aurora and Town of White

Project Name: Aurora and Town of White

SEH Project No: AUROR 159723

Date: January 10, 2022

Estimator: Ellen Lemke

Checked By: Dan Hinzmann

100% Scenic Acres Water Transmission Mains

Description: Cost Estimate

SCENIC ACRES AREA PRELIMINARY OPINION OF COST

SCENIC ACRES AREA I RELIMINARY OF MICH OF COST						
SITE	UNIT	EST. QUANTITY		JNIT PRICE		AMOUNT
CLEAR AND GRUB	ACRES	0.15	\$	20,000.00	\$	3,000.00
REPLACE PIPE CULVERT & APRON	LIN FT	57	\$	40.00	\$	2,280.00
REPLACE GUARD RAIL	LIN FT	115	\$	45.00	\$	5,175.00
DIRECTIONAL DRILLING OBSTRUCTION	EACH	7	\$	3,500.00	\$	24,500.00
BORING PIT (NON-ROAD AREA)	EACH	6	\$	2,400.00	\$	14,400.00
BORING PIT (ROAD AREA)	EACH	3	\$	7,600.00	\$	22,800.00
EXPLORATORY DIG (NON-ROAD AREA)	LIN FT	100	\$	20.00	\$	2,000.00
EXPLORATORY DIG (ROAD AREA)	LIN FT	200	\$	150.00	\$	30,000.00
POTABLE WATER DISTRIBUTION	UNIT	EST. QUANTITY	L	JNIT PRICE		AMOUNT
12" HDPE WATER MAIN	LIN FT	6653	\$	50.00	\$	332,650.00
20" STEEL JACK AND BORE CASING PIPE	LIN FT	193	\$	500.00	\$	96,500.00
12" HDPE HDD PIPE INSTALLATION	LIN FT	6653	\$	30.00	\$	199,590.00
16" HDPE HDD PIPE INSTALLATION	LIN FT	2	\$	50.00	\$	100.00
4" INSULATION	SQ YD	25	\$	50.00	\$	1,250.00
CONNECT TO EXISTING WATER MAIN	EACH	1	\$	2,000.00	\$	2,000.00
CONNECT TO EXISTING WATER SERVICE	EACH	1	\$	1,500.00	\$	1,500.00
1" TAPPING TEE WITH ELECTROFUSION SADDLE	EACH	1	\$	1,000.00	\$	1,000.00
1" CURB STOP AND BOX	EACH	1	\$	1,350.00	\$	1,350.00
1" HDPE WATER SERVICE PIPE	LIN FT	65	\$	30.00	\$	1,950.00
TRACER WIRE BOX	EACH	1	\$	175.00	\$	175.00
FINISHED WATER MAIN HYDRANT ASSEMBLY	EACH	7	\$	7,500.00	\$	52,500.00
12" GATE VALVE AND BOX	EACH	7	\$	4,500.00	\$	31,500.00
SUB TOTAL					\$	826,220.00
TRAFFIC CONTROL				1%	\$	9,000.00
MOBILIZATION 10					\$	83,000.00
EROSION CONTROL				3%	\$	25,000.00
MISCELLANEOUS CONSTRUCTION				5%	\$	42,000.00
TOTAL CONSTRUCTION					\$	985,220.00

 $\label{thm:comparation} $$\shinc.com\paraira$

ASSUMPTIONS:

- 1. 12" HDPE WATER MAIN TO BE DIRECTIONALLY DRILLED, ASSUMES OBSTRUCTION ONCE EVERY 1000'
- 2. HYDRANT ASSEMBLY INCLUDES TEE, LEAD, VALVE, AND HYDRANT
- 3. TURF RESTORATION IS ASSUMED TO INCLUDE 4" OF SALVAGED TOPSOIL AND SEEDING
- 4. ROADWAY RESTORATION IS ASSUMED TO PER PLAN TYPICAL SECTIONS



Project Name: East Range Joint Water Project, Aurora and Town of White

SEH Project No: AUROR 159723

Date: January 11, 2022

Estimator: SEH

Description: 100% Intake Cost Estimate

DIVISION 1 - GENERAL REQUIREMENTS	UNIT	EST. QUANTITY	UNIT PRICE		AMOUNT
GENERAL CONDITIONS	LS	1	\$ 563,767.94	\$	563,767.94
SUBTOTAL DIVISION 0 AND 01				\$	563,767.94
DIVISION 2 - EXISTING CONDITIONS	UNIT	EST. QUANTITY	UNIT PRICE		AMOUNT
SUBTOTAL DIVISION 2				\$	-
DIVISION 3 - CONCRETE	UNIT	EST. QUANTITY	UNIT PRICE		AMOUNT
CIP CONCRETE- INTAKE STRUCT	CY	80	\$ 1,200.00	\$	96,000.00
EXTERIOR WALLS - 12" INSULATED PC WALL PANELS	SQ FT	968	\$ 45.00	\$	43,560.00
SUBTOTAL DIVISION 3				\$	139,560.00
DIVISION 4 - MASONRY	UNIT	EST. QUANTITY	UNIT PRICE		AMOUNT
INTERIOR 8" CMU WALLS	SQ FT	204	\$ 18.00	\$	3,672.00
SUBTOTAL DIVISION 4				\$	3,672.00
DIVISION 5 - METALS	UNIT	EST. QUANTITY	UNIT PRICE		AMOUNT
SUBTOTAL DIVISION 5					
DIVISION 6 - WOOD, PLASTICS & COMPOSITES	UNIT	EST. QUANTITY	UNIT PRICE		AMOUNT
WOOD - ROOF TRUSSES	SQ FT	729	\$ 12.84	\$	9,360.36
ROUGH CARPENTRY / WOODWORK SQ I	FT (BLDG)	514	\$ 0.30	\$	154.20
INTERLOCKING PVC PANEL (CEILING)	SQ FT	415	\$ 7.50	\$	3,112.50
SUBTOTAL DIVISION 6				\$	12,627.06
DIVISION 7 - THERMAL & MOISTURE PROTECTION	UNIT	EST. QUANTITY	UNIT PRICE		AMOUNT
FOUNDATION INSULATION (4' DEPTH) - 2" THICKNESS	SQ FT	363	\$ 2.50	\$	907.50
PREFINISHED STANDING SEAM METAL ROOF SYSTEM (PANEL, ICE & WATER, ROOF BOARD)	SQ FT	731	\$ 25.00	\$	18,275.00
PREFINISHED METAL WALL PANEL (GABLED ENDS AND CURB FOR SKYLIGHT)	SQ FT	290	\$ 10.00	\$	2,900.00
PREFINISHED VENTED METAL SOFFIT PANEL, FASCIA AND TRIM	LF	108	\$ 12.00	\$	1,296.00
DAMPPROOFING	SQ FT	1410	\$ 3.75	\$	5,287.50
JOINT SEALANTS	LF	350	\$ 3.00	\$	1,050.00
GUTTERS / DOWNSPOUTS / SNOW GUARDS	LF	54	\$ 15.00	\$	810.00
SUBTOTAL DIVISION 7				\$	30,526.00
DIVISION 8 - OPENINGS	UNIT	EST. QUANTITY	UNIT PRICE		AMOUNT
REMOVABLE TRANSLUCENT SKYLIGHT OVER HSP'S	SF	80	\$ 55.00	\$	4,400.00
FRP DOORS (SINGLE LEAF) INCLUDING HW	EACH	1	\$ 3,000.00	\$	3,000.00
FRP DOORS (DOUBLE LEAF) INCLUDING HW	EACH	1	\$ 4,500.00	\$	4,500.00
ACCESS HATCH OVER CIP CONCRETE CAISSON	EACH	1	\$ 4,000.00	\$	4,000.00
SUBTOTAL DIVISION 8				\$	15,900.00
DIVISION 9 - FINISHES	UNIT	EST. QUANTITY	UNIT PRICE		AMOUNT
CMU AND INTERIOR PC WALL PAINTING	SF	1230	\$ 3.00	\$	3,690.00
CONCRETE FLOOR SEALER	SF	430	\$ 2.00	\$	860.00
EQUIPMENT/PROCESS PIPING PAINTING LU	JMP SUM	1	\$ 5,000.00	\$	5,000.00
SUBTOTAL DIVISION 9				\$	9,550.00
DIVISION 10 - SPECIALTIES	UNIT	EST. QUANTITY	UNIT PRICE		AMOUNT
INTERIOR ROOM SIGNAGE	EA	1	\$ 50.00	\$	50.00
DIMENSIONAL LETTER SIGNAGE (ADDRESS ONLY)	IMB SUM	1	\$ 500.00	\$	500.00
FIRE EXTINGUISHERS	EA	1	\$ 200.00	\$	200.00
SUBTOTAL DIVISON 10				\$	750.00
DIVISION 11 - EQUIPMENT	UNIT	EST. QUANTITY	UNIT PRICE		AMOUNT
SUBTOTAL DIVISION 11					
DIVISION 12 - FURNISHINGS	UNIT	EST. QUANTITY	UNIT PRICE		AMOUNT
SUBTOTAL DIVISION 12					
DIVISION 13 - SPECIAL CONSTRUCTION	UNIT	EST. QUANTITY	UNIT PRICE		AMOUNT
12 FOOT STEEL INTAKE CAISSON	UNIT	1	\$ 1,550,000.00	\$	1,550,000.00
18 INCH HDPE INTAKE/SCREEN STRUCTURE WITH MARINE SUPPO				\$	2,689,355.00
OTHER	UNIT	1	\$ 2,689,355.00	ş	2,003,033.00
SUBTOTAL DIVISION 13		1 0	\$ 2,689,355.00	\$	-
DU 1000 111 000 1100 100 100 100 100 100	UNIT		2,689,355.00	_	4,239,355.00
DIVISION 14 - CONVEYING EQUIPMENT	UNIT		2,689,355.00 - UNIT PRICE	\$	-
SUBTOTAL DIVISION 14	UNIT UNIT	0	-	\$	- 4,239,355.00
SUBTOTAL DIVISION 14	UNIT UNIT	0	-	\$	- 4,239,355.00
SUBTOTAL DIVISION 14 DIVISION 21 - FIRE SUPPRESSION	UNIT UNIT UNIT	0 EST. QUANTITY	- UNIT PRICE	\$	4,239,355.00 AMOUNT
SUBTOTAL DIVISION 14 DIVISION 21 - FIRE SUPPRESSION OTHER	UNIT UNIT UNIT UNIT	EST. QUANTITY EST. QUANTITY	\$ UNIT PRICE	\$	4,239,355.00 AMOUNT



Project Name: East Range Joint Water Project, Aurora and Town of White

SEH Project No: AUROR 159723

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DIVISION 22 - PLUMBING	UNIT	EST. QUANTITY		UNIT PRICE		AMOUNT
FCO FLOOR CLEANOUT	UNIT	3	\$	2,190.00	\$	6,570.00
WALL HYDRANT	UNIT	2	\$	2,300.00	\$	4,600.00
FLOOR DRAIN	UNIT	3	\$	1,000.00	\$	3,000.00
HOSE BIBB	UNIT	2	\$	340.00	\$	680.00
DOMESTIC WATER PIPING 1"	LF	75	\$	47.00	\$	3,525.00
SANITARY WASTE AND VENT PIPING 3" SCH 40 PVC	LF	80	\$	86.00	\$	6,880.00
VENT THRU ROOF	UNIT	3	\$	142.00	\$	426.00
SUBTOTAL DIVISION 22	_				\$	25,681.00
DIVISION 23 - HVAC	UNIT	EST. QUANTITY		UNIT PRICE		AMOUNT
FCU-1 AND HP-1 FAN COIL AND HEAT PUMP 4 TONS COOLING	EA	1	Ś	4,968.00	Ś	4,968.00
FCU-2 AND HP-2 FAN COIL AND HEAT PUMP 2.5 TONS COOLING	EA	1	\$	4,666.00	\$	4,666.00
EUH-1 3 KW	EA	1	\$	906.00	\$	906.00
EUH-2 10 KW	EA	1	\$	1,218.00	\$	1,218.00
			\$	-	\$	-
SUBTOTAL DIVISION 23					\$	11,758.00
DIVISION 25 - INTEGRATED AUTOMATION	UNIT	EST. QUANTITY		UNIT PRICE		AMOUNT
OTHER	UNIT	0	\$	-	\$	-
OTHER	UNIT	0	\$	-	\$	-
SUBTOTAL DIVISION 25					\$	-
DIVISION 26 - ELECTRICAL	UNIT	EST. QUANTITY		UNIT PRICE		AMOUNT
POWER TO SITE AND GENERATOR	LUMP SUM	1	\$	90,000.00	\$	90,000.00
SUBTOTAL DIVISION 26		_			\$	90,000.00
DIVISION 27 - COMMUNICATIONS	UNIT	EST. QUANTITY		UNIT PRICE	7	AMOUNT
SUBTOTAL DIVISION 27						
DIVISION 28 - ELECTRONIC SAFETY & SECURITY	UNIT	EST. QUANTITY		UNIT PRICE		AMOUNT
SUBTOTAL DIVISION 28						
DIVISION 31 - EARTHWORK	UNIT	EST. QUANTITY		UNIT PRICE		AMOUNT
CLEARING AND GRUBBING	ACRES	1.97	\$	20,000.00	\$	39,400.00
COMMON EXCAVATION	CU YD	4348	\$	15.00	\$	65,220.00
	1					
SUBGRADE EXCAVATION	CU YD	435	\$	18.00	\$	7,830.00
SUBGRADE EXCAVATION DEWATERING	CU YD LUMP SUM	435 1	\$ \$	18.00 3,000.00	\$	7,830.00 3,000.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC	CU YD	435	\$	18.00	\$	7,830.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT	CU YD LUMP SUM	435 1	\$ \$	18.00 3,000.00	\$ \$	7,830.00 3,000.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC	CU YD LUMP SUM	435 1	\$ \$	18.00 3,000.00	\$ \$ \$ \$	7,830.00 3,000.00 4,208.00 -
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31	CU YD LUMP SUM SQ YD	435 1 1052	\$ \$	18.00 3,000.00 4.00	\$ \$ \$ \$	7,830.00 3,000.00 4,208.00 - - 119,658.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING	CU YD LUMP SUM	435 1	\$ \$	18.00 3,000.00	\$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00 -
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5	CU YD LUMP SUM SQ YD CU YD	435 1 1052	\$ \$ \$	18.00 3,000.00 4.00 35.00	\$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00 - - 119,658.00 7,735.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV)	CU YD LUMP SUM SQ YD CU YD CU YD	435 1 1052 221 332	\$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00	\$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00 - - - 119,658.00 7,735.00 5,976.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT	435 1 1052 221 332 158	\$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00	\$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00 - - - 119,658.00 7,735.00 5,976.00 1,264.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT	435 1 1052 221 332 158 419	\$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00	\$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00 - - - 119,658.00 7,735.00 5,976.00 1,264.00 25,140.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE VEHICLE GATE	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH	435 1 1052 221 332 158 419	\$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00 20,000.00	\$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00 - - - 119,658.00 7,735.00 5,976.00 1,264.00 25,140.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH EACH	221 332 158 419 1	\$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00 20,000.00 2,750.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE SILT FENCE	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH LIN FT	221 332 158 419 1 2696	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00 20,000.00 2,750.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE SILT FENCE OPEN CUT PIPE INSTALLATION RESTORATION (TURF AREA)	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH LIN FT LIN FT	435 1 1052 221 332 158 419 1 1 2696 264	\$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00 20,000.00 2,750.00 5.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE SILT FENCE OPEN CUT PIPE INSTALLATION RESTORATION (TURF AREA) EROSION CONTROL BLANKETS CATEGORY 3N	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH EACH LIN FT LIN FT SQ YD	435 1 1052 221 332 158 419 1 1 2696 264 1706	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00 20,000.00 2,750.00 5.00 15.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE SILT FENCE OPEN CUT PIPE INSTALLATION RESTORATION (TURF AREA) EROSION CONTROL BLANKETS CATEGORY 3N SEED MIXTURE 25-14	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH EACH LIN FT LIN FT SQ YD LBS	435 1 1052 221 332 158 419 1 1 2696 264 1706 122	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00 20,000.00 2,750.00 5.00 15.00 2.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE SILT FENCE OPEN CUT PIPE INSTALLATION RESTORATION (TURF AREA) EROSION CONTROL BLANKETS CATEGORY 3N SEED MIXTURE 25-14 EROSION CONTROL	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH EACH LIN FT LIN FT SQ YD LBS	435 1 1052 221 332 158 419 1 1 2696 264 1706 122	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00 20,000.00 2,750.00 5.00 15.00 2.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE SILT FENCE OPEN CUT PIPE INSTALLATION RESTORATION (TURF AREA) EROSION CONTROL BLANKETS CATEGORY 3N SEED MIXTURE 25-14 EROSION CONTROL SUBTOTAL DIVISION 32	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH EACH LIN FT LIN FT SQ YD LBS LUMP SUM	435 1 1052 221 332 158 419 1 1 2696 264 1706 122 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 60.00 20,000.00 2,750.00 15.00 2.00 4.50 8,000.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00 119,658.00 7,735.00 5,976.00 1,264.00 25,140.00 20,000.00 13,480.00 3,960.00 3,412.00 549.00 8,000.00 92,266.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE SILT FENCE OPEN CUT PIPE INSTALLATION RESTORATION (TURF AREA) EROSION CONTROL BLANKETS CATEGORY 3N SEED MIXTURE 25-14 EROSION CONTROL SUBTOTAL DIVISION 32 DIVISION 33 - UTILITIES	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH EACH LIN FT SQ YD LIS SQ YD LIN FT UIN FT	435 1 1052 221 332 158 419 1 1 2696 264 1706 122 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 60.00 20,000.00 2,750.00 5.00 15.00 4.50 8,000.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00 119,658.00 7,735.00 5,976.00 1,264.00 25,140.00 20,000.00 13,480.00 3,960.00 3,412.00 549.00 8,000.00 92,266.00 AMOUNT
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE SILT FENCE OPEN CUT PIPE INSTALLATION RESTORATION (TURF AREA) EROSION CONTROL BLANKETS CATEGORY 3N SEED MIXTURE 25-14 EROSION CONTROL SUBTOTAL DIVISION 32 DIVISION 33 - UTILITIES 6" SANITARY SERVICE	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH LIN FT LIN FT SQ YD LBS LUMP SUM UNIT LIN FT	435 1 1052 221 332 158 419 1 1 2696 264 1706 122 1 EST. QUANTITY 20.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00 20,000.00 2,750.00 5.00 15.00 4.50 8,000.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00 119,658.00 7,735.00 5,976.00 1,264.00 25,140.00 20,000.00 13,480.00 3,960.00 3,412.00 549.00 8,000.00 92,266.00 AMOUNT
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE SILT FENCE OPEN CUT PIPE INSTALLATION RESTORATION (TURF AREA) EROSION CONTROL BLANKETS CATEGORY 3N SEED MIXTURE 25-14 EROSION CONTROL SUBTOTAL DIVISION 32 DIVISION 33 - UTILITIES 6" SANITARY SERVICE 16" HDPE RAW WATER MAIN	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH LIN FT LIN FT SQ YD LBS LUMP SUM UNIT LIN FT	435 1 1052 221 332 158 419 1 1 2696 264 1706 122 1 EST. QUANTITY 20.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00 20,000.00 2,750.00 5.00 15.00 4.50 8,000.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00 119,658.00 7,735.00 5,976.00 1,264.00 25,140.00 20,000.00 2,750.00 13,480.00 3,960.00 3,412.00 549.00 8,000.00 92,266.00 AMOUNT 900.00 36,960.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE SILT FENCE OPEN CUT PIPE INSTALLATION RESTORATION (TURF AREA) EROSION CONTROL BLANKETS CATEGORY 3N SEED MIXTURE 25-14 EROSION CONTROL SUBTOTAL DIVISION 32 DIVISION 33 - UTILITIES 6" SANITARY SERVICE 16" HDPE RAW WATER MAIN SUBTOTAL DIVISION 33	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH EACH LIN FT LIN FT SQ YD LBS LUMP SUM UNIT LIN FT LIN FT	435 1 1052 221 332 158 419 1 1 2696 264 1706 122 1 EST. QUANTITY 20.0 264.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00 20,000.00 2,750.00 15.00 15.00 4.50 8,000.00 UNIT PRICE 45.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE SILT FENCE OPEN CUT PIPE INSTALLATION RESTORATION (TURF AREA) EROSION CONTROL BLANKETS CATEGORY 3N SEED MIXTURE 25-14 EROSION CONTROL SUBTOTAL DIVISION 32 DIVISION 33 - UTILITIES 6" SANITARY SERVICE 16" HDPE RAW WATER MAIN SUBTOTAL DIVISION 33 DIVISION 34 - TRANSPORTATION	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH EACH LIN FT LIN FT SQ YD LBS LUMP SUM UNIT LIN FT LIN FT	435 1 1052 221 332 158 419 1 1 2696 264 1706 122 1 EST. QUANTITY 20.0 264.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00 20,000.00 2,750.00 15.00 15.00 4.50 8,000.00 UNIT PRICE 45.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6" GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE SILT FENCE OPEN CUT PIPE INSTALLATION RESTORATION (TURF AREA) EROSION CONTROL BLANKETS CATEGORY 3N SEED MIXTURE 25-14 EROSION CONTROL SUBTOTAL DIVISION 32 DIVISION 33 - UTILITIES 6" SANITARY SERVICE 16" HDPE RAW WATER MAIN SUBTOTAL DIVISION 33 DIVISION 34 - TRANSPORTATION SUBTOTAL DIVISION 34	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH EACH LIN FT LIN FT LIN FT UNIT LIN FT LIN FT UNIT LIN FT LIN FT UNIT LIN FT	435 1 1052 221 332 158 419 1 1 2696 264 1706 122 1 EST. QUANTITY 20.0 264.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00 20,000.00 2,750.00 5.00 15.00 4.50 8,000.00 UNIT PRICE 45.00 140.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6" GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE SILT FENCE OPEN CUT PIPE INSTALLATION RESTORATION (TURF AREA) EROSION CONTROL BLANKETS CATEGORY 3N SEED MIXTURE 25-14 EROSION CONTROL SUBTOTAL DIVISION 32 DIVISION 33 - UTILITIES 6" SANITARY SERVICE 16" HDPE RAW WATER MAIN SUBTOTAL DIVISION 33 DIVISION 34 - TRANSPORTATION SUBTOTAL DIVISION 34 DIVISION 35 - WATERWAY & MARINE CONSTRUCTION	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH EACH LIN FT LIN FT LIN FT LIN FT UNIT UNIT UNIT	435 1 1052 21 332 158 419 1 1 2696 264 1706 122 1 EST. QUANTITY 20.0 264.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00 20,000.00 2,750.00 5.00 15.00 4.50 8,000.00 UNIT PRICE 45.00 140.00 UNIT PRICE	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00
SUBGRADE EXCAVATION DEWATERING GEOTEXTILE FABRIC STORMWATER MANAGEMENT TEMPORARY SHORING SUBTOTAL DIVISION 31 AGGREGATE SURFACING (CV) CLASS 5 GRANULAR BORROW (CV) 6" CONCRETE PADS 6' GALVANIZED CHAIN LINK FENCE VEHICLE GATE PEDESTRIAN GATE SILT FENCE OPEN CUT PIPE INSTALLATION RESTORATION (TURF AREA) EROSION CONTROL BLANKETS CATEGORY 3N SEED MIXTURE 25-14 EROSION CONTROL SUBTOTAL DIVISION 32 DIVISION 33 - UTILITIES 6" SANITARY SERVICE 16" HDPE RAW WATER MAIN SUBTOTAL DIVISION 33 DIVISION 34 - TRANSPORTATION SUBTOTAL DIVISION 34 DIVISION 35 - WATERWAY & MARINE CONSTRUCTION OTHER	CU YD LUMP SUM SQ YD CU YD CU YD SQ FT LIN FT EACH EACH LIN FT LIN FT LIN FT LIN FT UNIT UNIT UNIT	435 1 1052 221 332 158 419 1 1 2696 264 1706 122 1 EST. QUANTITY 20.0 264.0 EST. QUANTITY 0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18.00 3,000.00 4.00 35.00 18.00 8.00 60.00 20,000.00 2,750.00 5.00 15.00 4.50 8,000.00 UNIT PRICE 45.00 140.00 UNIT PRICE	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	7,830.00 3,000.00 4,208.00 119,658.00 7,735.00 5,976.00 1,264.00 25,140.00 20,000.00 3,480.00 3,960.00 3,412.00 549.00 8,000.00 92,266.00 AMOUNT 900.00 AMOUNT



Project Name: East Range Joint Water Project, Aurora and Town of White

SEH Project No: AUROR 159723

Date: January 11, 2022

Estimator: SEH

Description: 100% Intake Cost Estimate

DIVISION 40 - PROCESS INTEGRATION (VALVES, PIPING)	UNIT	EST. QUANTITY	UNIT PRICE	AMOUNT
DIP PROCESS PIPING	LUMP SUM	1	\$ 50,000.00	\$ 50,000.00
PROCESS VALVES	LUMP SUM	1	\$ 50,000.00	\$ 50,000.00
PIPE SUPPORTS & HANGERS	LUMP SUM	1	\$ 5,000.00	\$ 5,000.00
SUBTOTAL DIVISION 40				\$ 105,000.00
DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT	UNIT	EST. QUANTITY	UNIT PRICE	AMOUNT
OTHER	UNIT	0	\$ -	\$ -
OTHER	UNIT	0	\$ -	\$ -
SUBTOTAL DIVISION 41				\$ -
DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT	UNIT	EST. QUANTITY	UNIT PRICE	AMOUNT
HIGH SERVICE PUMPS	EACH	2	\$ 90,000.00	\$ 180,000.00
10" MAG METER (RAW)	EACH	1	\$ 11,000.00	\$ 11,000.00
SUBTOTAL DIVISION 43				\$ 191,000.00
DIVISION 44 - PROCESS EQUIPMENT	UNIT	EST. QUANTITY	UNIT PRICE	AMOUNT
OTHER	UNIT	0	\$ -	\$ -
OTHER	UNIT	0	\$ -	\$ -
SUBTOTAL DIVISION 44				\$ -
SUB TOTAL				\$ 5,688,931.00

X:\AE\A\AUROR\159723\2-proj-mgmt\25-cost-est\100% Cost Estimate\1.10.2022 Final Combined\[AUROR 159723_100% WTP Cost Estimate.xlsx]Cost Summary



Project Name:	East Range Joint Water Project, Aurora and Town of White
SEH Project No:	AUROR 159723
Date:	January 11, 2022
Estimator:	SEH
Description:	100% WTP Cost Estimate

DIVISION 1 - GENERAL REQUIREMENTS	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
GENERAL CONDITIONS	LUMP SUM	1	Ś	1,126,054.55	INSTALLATION	\$	1,126,054.55
SUBTOTAL DIVISION 0 AND 01	LOWIF SOW	1	ڔ	1,120,034.33		\$	1,126,054.55
DIVISION 2 - EXISTING CONDITIONS	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION	٧	AMOUNT
REMOVE CHAIN LINK FENCE	LIN FT	618	Ś	10.00	INSTALLATION	\$	6,180.00
SUBTOTAL DIVISION 2	LIIN FI	018	ې	10.00		\$	6,180.00
DIVISION 3 - CONCRETE	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION	٧	AMOUNT
CIP CONCRETE: WTP	CU YD	1225	\$	1,300.00	INSTALLATION	\$	1,592,500.00
CIP CONCRETE: CLEARWELL	CU YD	392	\$	·		\$	
CIP CONCRETE: CLEARWELL CIP CONCRETE: BWT	CU YD	205	\$	1,300.00 1,300.00		\$	509,600.00
			_	600.00			266,500.00
CIP CONCRETE: GROUT	CU YD	20	\$			\$	12,000.00
PRECAST STRUCTURAL CONCRETE	CU YD		_	1,100.00			-
CONCRETE FORMING	CU YD		\$	1,100.00		\$	-
CONCRETE REINFORCING	CU YD	44247	\$	1,100.00		\$	-
INSULATED PRECAST WALL PANELS	SQ FT	11247	\$	45.00		\$	506,115.00
CAST-IN SIGNAGE AT INSULATED PC WALL PANELS "EAST RANGE	LUMP SUM	1	\$	6,000.00		\$	6,000.00
WATER TREATMENT PLANT"			_				
PRECAST CEILING PLANKS	SQ FT	10407	\$	39.59		\$	412,013.13
SUBTOTAL DIVISION 3						\$	3,304,728.13
DIVISION 4 - MASONRY	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
INTERIOR 8" CMU WALL (BURNISHED)	SQ FT	2500	\$	24.00		\$	60,000.00
INTERIOR 12" CMU WALL (BURNISHED)	SQ FT	2168	\$	30.00		\$	65,040.00
SUBTOTAL DIVISION 4						\$	125,040.00
DIVISION 5 - METALS	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
STAIRS, ALUMINUM (OPEN GRATE) - INCLUDES GUARDRAIL/HANDRAIL	RISER	78	\$	700.00		\$	54,600.00
OF STAIRS				700.00		·	3 1,000.00
GUARDRAILS AT BASINS/FILTERS	LIN FT	244	\$	122.00		\$	29,768.00
GUARDRAILS AT BWT (POTENTIALLY WILL NEED TO ADD 145 LF	LIN FT	145	\$	122.00		\$	17,690.00
AROUND BWT, DEPENDING ON FINAL HEIGHT)	LIIVII	143	7	122.00		7	17,030.00
GUARDRAILS AT CLEARWELL (POTENTIALLY WILL NEED TO ADD 180 LF	LIN FT	180	\$	122.00		\$	21,960.00
AROUND CW, DEPENDING ON FINAL HEIGHT)	LIIN FI	180	۲	122.00		Ą	21,900.00
ALUMINUM SOLID COVER	SQ FT	57	\$	42.80		\$	2,439.60
3" METAL ROOF DECK	SQ FT	730	\$	6.42		\$	4,686.60
COLD FORMED METAL FRAMING						\$	-
STRUCTURAL STEEL	LB	18636	\$	4.28		\$	79,762.08
MISCELLANEOUS METALS	LUMP SUM	1	\$	15,000.00		\$	15,000.00
SUBTOTAL DIVISION 5						\$	225,906.28
DIVISION 6 - WOOD, PLASTICS & COMPOSITES	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
ROUGH CARPENTRY / WOODWORK	LUMP SUM	1	\$	5,000.00		\$	5,000.00
FINISH CARPENTRY						\$	-
FRP LADDERS	LF	160	\$	100.00		\$	16,000.00
SUBTOTAL DIVISION 6						\$	21,000.00
DIVISION 7 - THERMAL & MOISTURE PROTECTION	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
FOUNDATION INSULATION (TO T.O. FOOTING) - 2" THICKNESS	SQ FT	2917	\$	2.50		\$	7,292.50
INSULATED STANDING SEAM METAL ROOF SYSTEM (INSUL. METLA			Ė				,
PANEL, METAL FURRING AND ICE/WATER SHEILD)	SQ FT	5124	\$	30.00		\$	153,720.00
INSULATED METAL WALL PANEL (WEST WALL)	SQ FT	3544	\$	13.00		\$	46,072.00
INSULATED METAL WALL PANEL FOR FASCIA AND SOFFIT	SQ FT	1275	\$	20.00		\$	25,500.00
DAMPPROOFING	SQ FT	2849	\$	2.00		\$	5,698.00
FIRESTOPPING	LF	550	۲	2.00		\$	3,098.00
JOINT SEALANTS	LUMP SUM		\$	11 000 00		\$	11 000 00
		1	\$	11,000.00		-	11,000.00
GUTTERS / DOWNSPOUTS / SNOW GUARDS	LF	120	Ş	15.00		\$	1,800.00
SUBTOTAL DIVISION 7	LINUT	ECT OLIANTITY		LINIT DRICE	INICTALLATION	\$	251,082.50
DIVISION 8 - OPENINGS	UNIT	EST. QUANTITY	_	UNIT PRICE	INSTALLATION	ć	AMOUNT
FRP DOORS (SINGLE LEAF) INCLUDING HW	EACH	21	\$	3,000.00		\$	63,000.00
FRP DOORS (DOUBLE LEAF) INCLUDING HW	EACH	3	\$	6,000.00		\$	18,000.00
ALUMINUM DOOR / FRAME - WIDE STILE (SINGLE LEAF) INCLUDING	EACH	1	\$	2,400.00		\$	2,400.00
HARDWARE			l	,			, ,



Project Name: East Range Joint Water Project, Aurora and Town of White

SEH Project No: AUROR 159723

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INTERIOR FLOOR HATCH (AINCI) CECOND LEVEL (MTR)	54611		_	2 222 22			2 000 00
INTERIOR FLOOR HATCH (4'X6') - SECOND LEVEL (WTP)	EACH	1	\$	3,000.00		\$	3,000.00
INTERIOR FLOOR HATCH (3'X3') - HSP ROOM (WTP)	EACH	1	\$	3,000.00		\$	3,000.00
INSULATED ROOF HATCHES - OVER HSP ROOM ONLY (WTP)	EACH	4	\$	5,000.00		\$	20,000.00
EXTERIOR ACCESS HATCHES (3'X3') (BWT AND CWT)	EACH	6	\$	5,000.00		\$	30,000.00
POTABLE WATER TANK HATCHES	EACH	8	\$	4,000.00		\$	32,000.00
ALUM. STOREFRONT WINDOWS	SF	400	\$	60.00		\$	24,000.00
OVERHEAD SECTIONAL DOOR AT GARAGE	EACH	11	\$	5,000.00		\$	5,000.00
SUBTOTAL DIVISION 8						\$	200,400.00
DIVISION 9 - FINISHES	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
ACOUSTICAL CEILING	SF	950	\$	5.00		\$	4,750.00
CMU WALL PAINTING	SF		\$	3.00		\$	-
CONCRETE FLOOR SEALER	SF	7210	\$	2.00		\$	14,420.00
EPOXY FLOOR (DECORATIVE MOSAIC)	SF	970	\$	5.00		\$	4,850.00
EQUIPMENT/PROCESS PIPING PAINTING	LUMP SUM	1	\$	30,000.00		\$	30,000.00
GYP BD PAINTING	SF	120	\$	1.50		\$	180.00
NON-STRUCTURAL METAL FRAMING AND GYP (FURRING) AT	SF	120	\$	2.00		\$	240.00
BREAKROOM CASEWORK WALL	J.		_	2.00			
SUBTOTAL DIVISION 9						\$	54,440.00
DIVISION 10 - SPECIALTIES	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
INTERIOR ROOM SIGNAGE	EA	15	\$	50.00		\$	750.00
TOILET ACCESSORIES (SINGLE-USE)	LUMP SUM	2	\$	2,500.00		\$	5,000.00
DIMENSIONAL LETTER SIGNAGE (ADDRESS ONLY)	LUMP SUM	1	\$	500.00		\$	500.00
FIRE EXTINGUISHERS	EA	6	\$	200.00		\$	1,200.00
LOCKERS	EA	4	\$	300.00		\$	1,200.00
ADA BENCH	EA	1	\$	400.00		\$	400.00
SUBTOTAL DIVISON 10						\$	9,050.00
DIVISION 11 - EQUIPMENT	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
SUBTOTAL DIVISION 11						\$	•
DIVISION 12 - FURNISHINGS	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
BASE CABINETS - PLAM	LF	48	\$	400.00		\$	19,200.00
UPPER CABINETS - PLAM	LF	37	\$	250.00		\$	9,250.00
SOLID SURFACE COUNTERTOP (BREAKROOM)	LF	14	\$	120.00		\$	1,680.00
PLAM COUNTERTOP (GARAGE)	LF	27	\$	40.00		\$	1,080.00
EPOXY RESIN COUNTERTOP	SF	66	\$	80.00		\$	5,280.00
WINDOW BLINDS	EA	8	\$	100.00		\$	800.00
SUBTOTAL DIVISION 12						\$	37,290.00
DIVISION 13 - SPECIAL CONSTRUCTION	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
SUBTOTAL DIVISION 13						\$	-
DIVISION 14 - CONVEYING EQUIPMENT	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
SUBTOTAL DIVISION 14						\$	-
DIVISION 21 - FIRE SUPPRESSION	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
FIRE PROTECTION WET SYSTEM	SF	7650	\$	6.79		\$	51,947.33
FIRE PROTECTION DRY SYSTEM	SF	500	\$	13.00		\$	6,500.25
						4	58,447.58
SUBTOTAL DIVISION 21			Ť			\$	•
SUBTOTAL DIVISION 21 DIVISION 22 - PLUMBING	UNIT	EST. QUANTITY	_	UNIT PRICE	INSTALLATION	\$	AMOUNT
	UNIT EA	EST. QUANTITY		UNIT PRICE 2,190.00	INSTALLATION	7	2,190.00
DIVISION 22 - PLUMBING GAS WATER HEATER	EA	1	\$	2,190.00	INSTALLATION	\$	2,190.00
DIVISION 22 - PLUMBING GAS WATER HEATER RECIRC PUMP	EA EA	1 1	\$	2,190.00 800.00	INSTALLATION	\$	2,190.00 800.00
DIVISION 22 - PLUMBING GAS WATER HEATER RECIRC PUMP PVC WASTE/VENT PIPING 2"	EA EA FT	1 1 657	\$	2,190.00 800.00 64.00	INSTALLATION	\$	2,190.00 800.00 42,048.00
DIVISION 22 - PLUMBING GAS WATER HEATER RECIRC PUMP PVC WASTE/VENT PIPING 2" PVC WASTE/VENT PIPING 3"	EA EA FT FT	1 1 657 208	\$ \$	2,190.00 800.00 64.00 86.00	INSTALLATION	\$ \$ \$	2,190.00 800.00 42,048.00 17,888.00
DIVISION 22 - PLUMBING GAS WATER HEATER RECIRC PUMP PVC WASTE/VENT PIPING 2" PVC WASTE/VENT PIPING 3" PVC SANITARY PIPING 4"	EA EA FT FT	1 1 657 208 194	\$ \$ \$	2,190.00 800.00 64.00 86.00 78.00	INSTALLATION	\$ \$ \$	2,190.00 800.00 42,048.00 17,888.00 15,132.00
DIVISION 22 - PLUMBING GAS WATER HEATER RECIRC PUMP PVC WASTE/VENT PIPING 2" PVC WASTE/VENT PIPING 3" PVC SANITARY PIPING 4" PVC STORM PIPING 6"	EA EA FT FT FT	1 1 657 208 194 263	\$ \$ \$ \$ \$	2,190.00 800.00 64.00 86.00 78.00 125.00	INSTALLATION	\$ \$ \$	2,190.00 800.00 42,048.00 17,888.00 15,132.00 32,875.00
DIVISION 22 - PLUMBING GAS WATER HEATER RECIRC PUMP PVC WASTE/VENT PIPING 2" PVC WASTE/VENT PIPING 3" PVC SANITARY PIPING 4" PVC STORM PIPING 6" PVC STORM PIPING 8"	EA EA FT FT FT FT FT	1 1 657 208 194 263 106	\$ \$ \$ \$ \$	2,190.00 800.00 64.00 86.00 78.00 125.00 154.00	INSTALLATION	\$ \$ \$ \$ \$	2,190.00 800.00 42,048.00 17,888.00 15,132.00 32,875.00 16,324.00
DIVISION 22 - PLUMBING GAS WATER HEATER RECIRC PUMP PVC WASTE/VENT PIPING 2" PVC WASTE/VENT PIPING 3" PVC SANITARY PIPING 4" PVC STORM PIPING 6" PVC STORM PIPING 8" VENTS THROUGH ROOF 4"	EA EA FT FT FT FT FT EA	1 1 657 208 194 263 106 5	\$ \$ \$ \$ \$ \$	2,190.00 800.00 64.00 86.00 78.00 125.00 154.00 142.00	INSTALLATION	\$ \$ \$ \$ \$	2,190.00 800.00 42,048.00 17,888.00 15,132.00 32,875.00 16,324.00 710.00
DIVISION 22 - PLUMBING GAS WATER HEATER RECIRC PUMP PVC WASTE/VENT PIPING 2" PVC WASTE/VENT PIPING 3" PVC SANITARY PIPING 4" PVC STORM PIPING 6" PVC STORM PIPING 8" VENTS THROUGH ROOF 4" DOMESTIC WATER PIPING 1/2"	EA EA FT	1 1 657 208 194 263 106 5	\$ \$ \$ \$ \$ \$	2,190.00 800.00 64.00 86.00 78.00 125.00 154.00 142.00 22.00	INSTALLATION	\$ \$ \$ \$ \$ \$ \$	2,190.00 800.00 42,048.00 17,888.00 15,132.00 32,875.00 16,324.00 710.00 3,586.00
DIVISION 22 - PLUMBING GAS WATER HEATER RECIRC PUMP PVC WASTE/VENT PIPING 2" PVC WASTE/VENT PIPING 3" PVC SANITARY PIPING 4" PVC STORM PIPING 6" PVC STORM PIPING 8" VENTS THROUGH ROOF 4" DOMESTIC WATER PIPING 1/2" DOMESTIC WATER PIPING 3/4"	EA EA FT	1 1 657 208 194 263 106 5 163 777	\$ \$ \$ \$ \$ \$ \$	2,190.00 800.00 64.00 86.00 78.00 125.00 154.00 142.00 22.00 27.00	INSTALLATION	\$ \$ \$ \$ \$ \$ \$ \$ \$	2,190.00 800.00 42,048.00 17,888.00 15,132.00 32,875.00 16,324.00 710.00 3,586.00 20,979.00
DIVISION 22 - PLUMBING GAS WATER HEATER RECIRC PUMP PVC WASTE/VENT PIPING 2" PVC WASTE/VENT PIPING 3" PVC SANITARY PIPING 4" PVC STORM PIPING 6" PVC STORM PIPING 8" VENTS THROUGH ROOF 4" DOMESTIC WATER PIPING 1/2" DOMESTIC WATER PIPING 3/4" DOMESTIC WATER PIPING 1"	EA EA FT	1 1 657 208 194 263 106 5 163 777 362	\$ \$ \$ \$ \$ \$ \$	2,190.00 800.00 64.00 86.00 78.00 125.00 154.00 142.00 22.00 27.00 47.00	INSTALLATION	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2,190.00 800.00 42,048.00 17,888.00 15,132.00 32,875.00 16,324.00 710.00 3,586.00 20,979.00 17,014.00
DIVISION 22 - PLUMBING GAS WATER HEATER RECIRC PUMP PVC WASTE/VENT PIPING 2" PVC WASTE/VENT PIPING 3" PVC SANITARY PIPING 4" PVC STORM PIPING 6" PVC STORM PIPING 8" VENTS THROUGH ROOF 4" DOMESTIC WATER PIPING 1/2" DOMESTIC WATER PIPING 3/4"	EA EA FT	1 1 657 208 194 263 106 5 163 777	\$ \$ \$ \$ \$ \$ \$	2,190.00 800.00 64.00 86.00 78.00 125.00 154.00 142.00 22.00 27.00	INSTALLATION	\$ \$ \$ \$ \$ \$ \$ \$ \$	2,190.00 800.00 42,048.00 17,888.00 15,132.00 32,875.00 16,324.00 710.00 3,586.00 20,979.00



	1	_					
ROOF DRAINS	EA	8	\$	1,230.00		\$	9,840.00
PLBG FIXT EWC	EA	1	\$	3,200.00		\$	3,200.00
PLBG FIXT ESW-1	EA	4	\$	1,600.00		\$	6,400.00
PLBG FIXT TMV-1	EA	1	\$	3,100.00		\$	3,100.00
PLBG FIXT SK-1	EA	2	\$	1,067.00		\$	2,134.00
PLBG FIXT LAV-1	EA	3	\$	2,500.00		\$	7,500.00
PLBG FIXT WC-1	EA	2	\$	4,300.00		\$	8,600.00
PLBG FIXT SH-1	EA	1	\$	3,200.00		\$	3,200.00
PLBG FIXT UR-1	EA	1	\$	2,500.00		\$	2,500.00
PLBG FIXT MB-1	EA	2	\$	3,200.00		\$	6,400.00
PLBG FIXT 3" FD	EA	16	\$	1,000.00		\$	16,000.00
PLBG FIXT HD-1	EA	4	\$	325.00		\$	1,300.00
PLBG FIXT WH-1	EA	3	\$	2,300.00		\$	6,900.00
PLBG FIXT HB-1	EA	12	\$	60.00		\$	720.00
TRENCH DRAIN 6" POLYMER	LF	33	\$	424.00		\$	13,992.00
CLEANOUTS	EA	7	\$	930.00		\$	6,510.00
REDUCED PRESSURE BACKFLOW ASSEMBLY	EA	1	\$	3,600.00		\$	3,600.00
SUMP PUMPS	EA	1	\$	2,200.00		\$	2,200.00
SUBTOTAL DIVISION 22						\$	299,058.00
DIVISION 23 - HVAC	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
ENERGY RECOVERY UNIT RTU-1,2	EA	2	\$	55,000.00		\$	110,000.00
MAU-1 2000 CFM DIRECT FIRED	EA	1	\$	20,070.00		\$	20,070.00
MINI SPLIT AC 1.5 TON	EA	1	\$	4,245.80		\$	4,245.80
PRV-1 58000 CFM	EA	1	\$	14,600.00		\$	14,600.00
EF-1 INLINE EXHAUST 1600 CFM	EA	1	\$	2,800.00		\$	2,800.00
EF-2 INLINE EXHAUST 750 CFM	EA	1	\$	2,600.00		\$	2,600.00
EF-3 INLINE EXHAUST 1600 CFM	EA	1	\$	2,800.00		\$	2,800.00
EF-4 WALL MOUNT CENTRIFUGAL 2000 CFM	EA	1	\$	2,653.00		\$	2,653.00
EF-5 WALL MOUNT PROPELLOR 9000 CFM	EA	1	\$	3,900.00		\$	3,900.00
EF-6, -7, -8 TOILET RM EXH	EA	3	\$	412.00		\$	1,236.00
ELECTRIC UNIT HEATER 3KW WASHDOWN	EA	3	\$	1,758.00		\$	5,274.00
ELECTRIC UNIT HEATER 3KW	EA	2	\$	879.00		\$	1,758.00
ELECTRIC UNIT HEATER 5KW WASHDOWN	EA	1	\$	1,758.00		\$	1,758.00
ELECTRIC UNIT HEATER 7.5KW WASHDOWN	EA	1	\$	2,220.00		\$	2,220.00
ELECTRIC UNIT HEATER 10KW	EA	1	\$	1,181.00		\$	1,181.00
GAS UNIT HEATER 30 MBH	EA	3	\$	1,200.00		\$	3,600.00
3" DIA VENT	FT	22	\$	38.87		\$	855.14
CONCENTRIC VENT TERMINATIONS	EA	2	\$	78.65		\$	157.30
GAS FURNACE WITH DX COIL AND ACCU 3 TON	EA	1	\$	4,900.00		\$	4,900.00
ERV FOR FURNACE	EA	1	\$	1,200.00		\$	1,200.00
DESTRAT FANS	EA	4	\$	860.00		\$	3,440.00
LOUVERS	SF	180	\$	79.30		\$	14,274.00
MOTORIZED DAMPER - GENERATOR	EA	1	\$	11,636.00		\$	11,636.00
MOTORIZED DAMPERS - OTHER	EA	2	\$	892.00		\$	1,784.00
GRILLES, REGISTERS, DIFFUSERS	EA	24	\$	50.00		\$	1,200.00
DUCTWORK GALVANIZED	LB	3200	\$	12.08		\$	38,640.00
DUCTWORK FRP	LF	80	\$	30.10		\$	2,408.00
DUCT INSULATION	SF	600	\$	3.55		\$	2,130.00
SUBTOTAL DIVISION 23					100001	\$	263,320.24
DIVISION 25 - INTEGRATED AUTOMATION	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
SUBTOTAL DIVISION 25						\$	-
DIVISION 26 - ELECTRICAL	UNIT	EST. QUANTITY	_	UNIT PRICE	INSTALLATION	4	AMOUNT
ELECTRICAL (INCL. GENERATOR)	LUMP SUM	1	\$	800,000.00		\$	900,000.00
INSTRUMENTATION AND CONTROL	LUMP SUM	1	\$	600,000.00		\$	700,000.00
SUBTOTAL DIVISION 26						\$	1,600,000.00
DIVISION 27 - COMMUNICATIONS	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
COMMUNICATION RACKS, FRAMES, AND ENCLOSURES	UNIT	0	\$	-		\$	
SUBTOTAL DIVISION 27						\$	-
DIVISION 28 - ELECTRONIC SAFETY & SECURITY	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT



SUBTOTAL DIVISION 28						\$	_
DIVISION 31 - EARTHWORK	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION	7	AMOUNT
CLEARING AND GRUBBING	ACRES	1.09	\$	20,000.00		\$	21,800.00
COMMON EXCAVATION (PARKING LOT)	CU YD	1870	\$	15.00		\$	28,050.00
SUBGRADE EXCAVATION (PARKING LOT)	CU YD	187	\$	18.00		\$	3,366.00
EXCAVATION: WTP	CU YD	4438	\$	10.70		\$	47,486.60
EXCAVATION: CLEARWELL	CU YD	4345	Ś	10.70		Ś	46,491.50
EXCAVATION: BWT	CU YD	3215	\$	10.70		\$	34,400.50
BACKFILLING AND COMPACTING: WTP	CU YD	3847	\$	32.10		\$	123,488.70
BACKFILLING AND COMPACTING: CLEARWELL	CU YD	3216	\$	32.10		\$	103,233.60
BACKFILLING AND COMPACTING: BWT	CU YD	2449	\$	32.10		\$	78,612.90
DEWATERING	LUMP SUM	1	\$	6,000.00		\$	6,000.00
GEOTEXTILE FABRIC	SQ YD	5281	Ś	4.00		\$	21,124.00
STORMWATER MANAGEMENT						\$	-
TEMPORARY SHORING						\$	_
SUBTOTAL DIVISION 31						\$	514,053.80
DIVISION 32 - EXTERIOR IMPROVEMENTS	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION	7	AMOUNT
COMMON BORROW (PARKING LOT)	CU YD	900	\$	20.00		\$	18,000.00
TYPE SP 9.5 WEARING COURSE MIX (2,B)	TON	148	\$	80.00		\$	11,840.00
TYPE SP 12.5 WEARING COURSE MIX (2,B)	TON	148	\$	75.00		\$	11,100.00
BITUMINOUS MATERIAL FOR TACK COAT	GALLON	61	\$	3.00		\$	183.00
AGGREGATE BASE (CV) CLASS 5	CU YD	895	\$	40.00		\$	35,800.00
GRANULAR BORROW (CV)	CU YD	1360	\$	18.00		\$	24,480.00
CURB AND GUTTER (B618)	LIN FT	146	\$	25.00		\$	3,650.00
6" CONCRETE SIDEWALK	SQ FT	1998	\$	8.00		\$	15,984.00
6' GALVANIZED CHAIN LINK FENCE	LIN FT	1498	\$	60.00		\$	89,880.00
VEHICLE GATE	EACH	1	\$	20,000.00		\$	20,000.00
PEDESTRIAN GATE	EACH	1	\$	2,750.00		\$	2,750.00
SILT FENCE	LIN FT	2337	\$	5.00		\$	11.685.00
DIRECTIONAL DRILLING OBSTRUCTION	EACH	1	\$	3,500.00		\$	3,500.00
BORING PIT RESTORATION (TURF AREA)	EACH	1	\$	200.00		\$	200.00
OPEN CUT PIPE INSTALLATION RESTORATION (TURF AREA)	LIN FT	774	\$	15.00		\$	11,610.00
SEED MIXTURE 25-131	LBS	54	\$	3.00		\$	162.00
EROSION CONTROL	LUMP SUM	1	\$	18,000.00		\$	18,000.00
SUBTOTAL DIVISION 32	EGIVII SGIVI	<u> </u>	7	10,000.00		\$	278,824.00
DIVISION 33 - UTILITIES	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION	٧	AMOUNT
8" SANITARY MAIN	LIN FT	244.0	\$	75.00	INSTALLATION	\$	18,300.00
SANITARY SEWER MANHOLE	EACH	2.0	\$	3,500.00		\$	7,000.00
3" SANITARY SERVICE	LIN FT	24.0	\$	30.00		\$	720.00
6" SANITARY SERVICE	LIN FT	204.0	\$	45.00		\$	9,180.00
10" FINISHED WATER MAIN	LIN FT	791.0	\$	75.00		\$	59,325.00
16" FINISHED WATER MAIN	LIN FT	198.0	\$	100.00		\$	19,800.00
16" HDPE WATER MAIN	LIN FT	284.0	\$	140.00		\$	39,760.00
CONNECT TO EXISTING WATER MAIN	EACH	2.0	\$	2,000.00		\$	4,000.00
RAW WATER MAIN HYDRANT ASSEMBLY	EACH	2.0	\$	10,000.00		\$	20,000.00
16" GATE VALVE AND BOX	EACH	2.0	\$	6,000.00		\$	12,000.00
PROCESS PIPING	LIN FT	498.0	\$	100.00		\$	49,800.00
SUBTOTAL DIVISION 33	LINFI	436.0	ې	100.00		\$	239,885.00
DIVISION 34 - TRANSPORTATION	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION	Ş	AMOUNT
TRAFFIC CONTROL	LUMP SUM	1	Ś	1,000.00	INSTALLATION	\$	
SUBTOTAL DIVISION 34	LUIVIP SUIVI	1	۶	1,000.00		\$	1,000.00 1,000.00
DIVISION 35 - WATERWAY & MARINE CONSTRUCTION	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION	Y	AMOUNT
SUBTOTAL DIVISION 35	UNIT	LST. QUANTITY		JIVIT PRICE	INSTALLATION	Ś	AIVIOUNT
DIVISION 40 - PROCESS INTEGRATION (VALVES, PIPING)	UNIT	EST OLIANITITY		LINIT DDICE	INSTALLATION	Ş	AMOUNT
, , ,		EST. QUANTITY	4	UNIT PRICE	INSTALLATION	ċ	12 400 00
3" DIP FLANGE	EA	32	\$	155.00	2.50	\$	12,400.00
4" DIP FLANGE	EA	41	\$	181.50	2.50	\$	18,603.75
6" DIP FLANGE	EA	35		231.00	2.50	\$	20,212.50
8" DIP FLANGE	EA	46	\$	350.50	2.50	\$	40,307.50
10" DIP FLANGE	EA	21	\$	448.00	2.50	\$	23,520.00



431 DID FLANCE		50	l é	610.00	2.50	l é	76 250 00
12" DIP FLANGE	EA	50	\$	610.00	2.50	\$	76,250.00
16" DIP FLANGE	EA	16	\$	1,057.00	2.50	\$	42,280.00
3" DIP BLIND FLANGE	EA	1	\$	88.08	2.50	\$	220.20
4" DIP BLIND FLANGE	EA	1	\$	88.08	2.50	\$	220.20
6" DIP BLIND FLANGE	EA	1	\$	151.15	2.50	\$	377.88
8" DIP BLIND FLANGE	EA	3	\$	226.17	2.50	\$	1,696.28
10" DIP BLIND FLANGE	EA	1	\$	337.07	2.50	\$	842.68
12" DIP BLIND FLANGE	EA	2	\$	416.45	2.50	\$	2,082.25
4" DIP MJ FLANGE	EA	17	\$	57.00	2.00	\$	1,938.00
10" DIP MJ FLANGE	EA	8	\$	171.00	2.00	\$	2,736.00
12" DIP MJ FLANGE	EA	25	\$	257.00	2.00	\$	12,850.00
3" DIP FLANGED ELBOW	EA	9	\$	254.44	2.50	\$	5,724.90
4" DIP FLANGED ELBOW	EA	8	\$	254.44	2.50	\$	5,088.80
6" DIP FLANGED ELBOW	EA	4	\$	375.13	2.50	\$	3,751.30
8" DIP FLANGED ELBOW	EA	12	\$	680.66	2.50	\$	20,419.80
10" DIP FLANGED ELBOW	EA	12	\$	1,284.12	2.50	\$	38,523.60
12" DIP FLANGED ELBOW	EA	12	\$	1,838.64	2.50	\$	55,159.20
16" DIP FLANGED ELBOW	EA	3	\$	5,660.50	2.50	\$	42,453.75
12" X 6" DIP FLANGED ELBOW	EA	1	\$	1,478.00	2.50	\$	3,695.00
4" DIP MJ ELBOW	EA	3	\$	123.96	2.00	\$	743.76
10" DIP MJ ELBOW	EA	1	\$	494.73	2.00	\$	989.46
12" DIP MJ ELBOW	EA	5	\$	715.46	2.00	\$	7,154.58
3" DIP FLANGED TEE	EA	2	\$	366.43	2.50	\$	1,832.15
4" DIP FLANGED TEE	EA	4	\$	366.43	2.50	\$	3,664.30
6" DIP FLANGED TEE	EA	2	\$	549.09	2.50	\$	2,745.45
8" DIP FLANGED TEE	EA	3	\$	1,313.47	2.50	\$	9,851.03
10" DIP FLANGED TEE	EA	2	\$	2,066.97	2.50	\$	10,334.85
12" DIP FLANGED TEE	EA	2	\$	5,880.27	2.50	\$	29,401.35
16" DIP FLANGED TEE	EA	2	\$	7,330.59	2.50	\$	36,652.95
8" X 6" DIP FLANGED TEE	EA	6	\$	1,319.99	2.50	\$	19,799.85
12" X 4" DIP FLANGED TEE	EA	2	\$	2,348.58	2.50	\$	11,742.90
12" X 6" DIP FLANGED TEE	EA	3	\$	2,315.96	2.50	\$	17,369.70
16" X 4" DIP FLANGED TEE	EA	1	\$	5,429.99	2.50	\$	13,574.98
16" X 6" DIP FLANGED TEE	EA	4	\$	6,224.82	2.50	\$	62,248.20
16" X 8" DIP FLANGED TEE	EA	1	\$	6,733.67	2.50	\$	16,834.18
16" X 12" DIP FLANGED TEE	EA	1	\$	6,884.80	2.50	\$	17,212.00
4" DIP MJ TEE	EA	1	\$	165.28	2.00	\$	330.56
12" DIP MJ TEE	EA	2	\$	919.87	2.00	\$	3,679.48
10" X 4" DIP MJ TEE	EA	1	\$	453.42	2.00	\$	906.84
4" X 3" DIP FLANGED REDUCER	EA	4	\$	284.88	2.50	\$	2,848.80
8" X 6" DIP FLANGED REDUCER	EA	1	\$	444.72	2.50	\$	1,111.80
16" X 8" DIP FLANGED REDUCER	EA	1	\$	1,809.28	2.50	\$	4,523.20
18"PE X 12"MJ REDUCER	EA	1	\$	1,237.36	2.00	\$	2,474.72
4" DIP MJ WYE	EA	1	\$	256.00	2.00	\$	512.00
4" DIP MJ 45 DEGREE	EA	1	\$	103.00	2.00	\$	206.00
6" FLEXIBLE EXPANSION JOINT	EA	2	\$	19,844.45	2.00	\$	79,377.80
8" FLEXIBLE EXPANSION JOINT	EA	1	\$	2,222.23	2.00	\$	4,444.46
18" JOINT RESTRAINT	EA	1	\$	333.42	2.50	\$	833.55
10" COUPLING ADAPTER	EA	1	\$	407.00	2.00	\$	814.00
16" ORIFICE PLATE	EA	1	\$	7,000.00	2.50	\$	17,500.00
24" FILTER INSPECTION MANWAY	EA	2	\$	5,000.00	2.00	\$	20,000.00
PIPE SCREENS	LUMP SUM	1	\$	2,000.00	2.00	\$	4,000.00
3" MANUAL BFV	EA	1	\$	1,400.00	2.00	\$	2,800.00
4" MANUAL BFV	EA	1	\$	1,600.00	2.50	\$	4,000.00
6" MANUAL BFV	EA	3	\$	1,800.00	2.50	\$	13,500.00
8" MANUAL BFV	EA	2	\$	2,200.00	2.50	\$	11,000.00
12" MANUAL BFV	EA	2	\$	3,500.00	2.50	\$	17,500.00
16" MANUAL BFV	EA	3	\$	6,000.00	2.50	\$	45,000.00
6" ELECTRIC BFV	EA	4	\$	9,000.00	2.50	\$	90,000.00
		·	7	2,300.00		, r	,000.00



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10" ELECTRIC BFV	EA	2	\$	9,800.00	2.50	\$	49,000.00
6" PNEUMATIC BFV	EA	2	\$	6,000.00	2.50	\$	30,000.00
8" PNEUMATIC BFV	EA	2	\$	6,500.00	2.50	\$	32,500.00
3" CHECK VALVE	EA	1	\$	3,600.00	2.50	\$	9,000.00
6" CHECK VALVE	EA	2	\$	5,800.00	2.50	\$	29,000.00
8" CHECK VALVE	EA	1	\$	6,500.00	2.50	\$	16,250.00
12" CHECK VALVE	EA	1	\$	15,000.00	2.50	\$	37,500.00
4" ELECTRIC PLUG VALVE	EA	2	\$	8,300.00	2.50	\$	41,500.00
4" MANUAL PLUG VALVE	EA	2	\$	1,400.00	2.50	\$	7,000.00
4" MUD VALVE	EA	2	\$	1,700.00	2.50	\$	8,500.00
1" AIR RELEASE VALVE	EA	2	\$	950.00	2.50	\$	4,750.00
1" AIR/VACC VALVE	EA	3	\$	1,200.00	2.50	\$	9,000.00
6" PRESSURE RELIEF VALVE	EA	1	\$	7,600.00	2.50	\$	19,000.00
3" DIP PIPE	LF	75	\$	265.00	2.50	\$	49,521.88
4" DIP PIPE	LF	53	\$	141.00	2.50	\$	18,594.38
6" DIP PIPE	LF	29	\$	172.00	2.50	\$	12,255.00
8" DIP PIPE	LF	101	\$	235.00	2.50	\$	59,190.63
10" DIP PIPE	LF	22	\$	300.00	2.50	\$	16,312.50
12" DIP PIPE	LF	76	\$	374.00	2.50	\$	70,826.25
16" DIP PIPE	LF	29	\$	456.00	2.50	\$	32,775.00
			· ·				
18" DIP PIPE	LF LF	3	\$	523.00	2.50	\$	3,922.50
4" DIP PIPE (BARRIED)		66		35.75	2.00		4,683.25
10" DIP PIPE (BARRIED)	LF	167	\$	50.83	2.00	\$	16,977.22
12" DIP PIPE (BARRIED)	LF	331	\$	64.00	2.00	\$	42,304.00
4" PIPE SLEEVE	EA	1	\$	220.00	2.00	\$	440.00
10" PIPE SLEEVE	EA	4	\$	528.00	2.00	\$	4,224.00
12" PIPE SLEEVE	EA	4	\$	581.00	2.00	\$	4,648.00
16" PIPE SLEEVE	EA	1	\$	368.00	2.00	\$	736.00
PIPE SUPPORTS & HANGERS				10,000.00			10,000.00
	LUMP SUM	1	\$	10,000.00	1.00	\$	
SUBTOTAL DIVISION 40	LOIVIF 30IVI	1	Ş	10,000.00	1.00	\$	1,661,279.06
	UNIT	EST. QUANTITY	Ş	UNIT PRICE	INSTALLATION		
SUBTOTAL DIVISION 40			Ş				1,661,279.06
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT	UNIT	EST. QUANTITY	Ş	UNIT PRICE	INSTALLATION	\$	1,661,279.06 AMOUNT
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41			Ş.			\$	1,661,279.06
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION &	UNIT	EST. QUANTITY	\$	UNIT PRICE	INSTALLATION	\$	1,661,279.06 AMOUNT
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT	UNIT	EST. QUANTITY EST. QUANTITY		UNIT PRICE UNIT PRICE	INSTALLATION INSTALLATION	\$	1,661,279.06 AMOUNT - AMOUNT
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP	UNIT UNIT EACH	EST. QUANTITY EST. QUANTITY	\$	UNIT PRICE UNIT PRICE 51,000.00	INSTALLATION INSTALLATION 1.50	\$ \$	1,661,279.06 AMOUNT - AMOUNT 76,500.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP	UNIT UNIT EACH EACH	EST. QUANTITY EST. QUANTITY 1 2	\$	UNIT PRICE 51,000.00 44,000.00	INSTALLATION 1.50 1.50	\$ \$ \$ \$ \$	1,661,279.06 AMOUNT
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP	UNIT UNIT EACH EACH EACH	EST. QUANTITY EST. QUANTITY 1 2 1	\$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00	INSTALLATION 1.50 1.50 1.50	\$ \$ \$ \$ \$	1,661,279.06 AMOUNT
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING	UNIT UNIT EACH EACH EACH EACH	EST. QUANTITY EST. QUANTITY 1 2 1 5	\$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00	INSTALLATION 1.50 1.50 1.50 1.20	\$ \$ \$ \$ \$	1,661,279.06 AMOUNT
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED	UNIT EACH EACH EACH EACH EACH	EST. QUANTITY 1 2 1 5 1	\$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00	INSTALLATION 1.50 1.50 1.50 1.50 1.00	\$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED	UNIT EACH EACH EACH EACH EACH EACH EACH	EST. QUANTITY 1 2 1 5 1	\$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 4,500.00	INSTALLATION 1.50 1.50 1.50 1.50 1.00 1.00	\$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT AMOUNT 76,500.00 132,000.00 15,000.00 30,000.00 4,500.00 4,500.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 2 1 2 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 4,500.00 7,000.00	INSTALLATION 1.50 1.50 1.50 1.50 1.20 1.00 1.00	\$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT 76,500.00 132,000.00 15,000.00 30,000.00 4,500.00 4,500.00 14,000.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED 8" MAG METER (BACKWASH), INSTALLED	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 2 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 4,500.00 7,000.00 9,000.00 9,000.00	INSTALLATION 1.50 1.50 1.50 1.50 1.20 1.00 1.00 1.00 1.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT AMOUNT 76,500.00 132,000.00 15,000.00 4,500.00 4,500.00 14,000.00 9,000.00 9,000.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED 8" MAG METER (BACKWASH), INSTALLED 12" MAG METER (RAW), INSTALLED	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 2 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 4,500.00 7,000.00 9,000.00	INSTALLATION 1.50 1.50 1.50 1.50 1.20 1.00 1.00 1.00	\$ \$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT AMOUNT 76,500.00 132,000.00 15,000.00 4,500.00 4,500.00 14,000.00 9,000.00 9,000.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED 8" MAG METER (BACKWASH), INSTALLED	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 2 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 4,500.00 7,000.00 9,000.00 9,000.00	INSTALLATION 1.50 1.50 1.50 1.50 1.20 1.00 1.00 1.00 1.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT 76,500.00 132,000.00 15,000.00 4,500.00 4,500.00 14,000.00 9,000.00 9,000.00 9,000.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED 8" MAG METER (BACKWASH), INSTALLED 12" MAG METER (RAW), INSTALLED 16" MAG METER (FINISHED), INSTALLED	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 2 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 4,500.00 7,000.00 9,000.00 9,000.00	INSTALLATION 1.50 1.50 1.50 1.50 1.20 1.00 1.00 1.00 1.00 1.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT 76,500.00 132,000.00 15,000.00 4,500.00 4,500.00 14,000.00 9,000.00 9,000.00 9,000.00 303,500.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED 8" MAG METER (RAW), INSTALLED 12" MAG METER (RAW), INSTALLED 15" MAG METER (FINISHED), INSTALLED SUBTOTAL DIVISION 43 DIVISION 46 - WATER AND WASTEWATER EQUPMENT FLOCCULATOR & SEDIMENTATION EQUIPMENT	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 1 2 1 1 1 2 1 1 1 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 7,000.00 9,000.00 9,000.00 9,000.00 UNIT PRICE 325,000.00	INSTALLATION 1.50 1.50 1.50 1.50 1.20 1.00 1.00 1.00 1.00 1.00 1.00 1.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT 76,500.00 132,000.00 15,000.00 4,500.00 4,500.00 14,000.00 9,000.00 9,000.00 9,000.00 303,500.00 AMOUNT 325,000.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED 8" MAG METER (RAW), INSTALLED 12" MAG METER (RAW), INSTALLED 15" MAG METER (FINISHED), INSTALLED SUBTOTAL DIVISION 43 DIVISION 46 - WATER AND WASTEWATER EQUPMENT	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 2 1 1 1 2 1 1 EST. QUANTITY	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 7,000.00 9,000.00 9,000.00 9,000.00 UNIT PRICE 325,000.00 30,000.00	INSTALLATION 1.50 1.50 1.50 1.50 1.20 1.00 1.00 1.00 1.00 1.00 1.00 1.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT 76,500.00 132,000.00 15,000.00 4,500.00 4,500.00 14,000.00 9,000.00 9,000.00 9,000.00 303,500.00 AMOUNT 325,000.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED 8" MAG METER (RAW), INSTALLED 12" MAG METER (RAW), INSTALLED 15" MAG METER (FINISHED), INSTALLED SUBTOTAL DIVISION 43 DIVISION 46 - WATER AND WASTEWATER EQUPMENT FLOCCULATOR & SEDIMENTATION EQUIPMENT PLATE SETTLERS & SLUDGE COLLECTOR INSTALLATION	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 1 2 1 1 1 2 1 1 2 1 2 1 2 2 1 1 2 2 2 2 2 1 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 7,000.00 9,000.00 9,000.00 9,000.00 UNIT PRICE 325,000.00 30,000.00 20,000.00	INSTALLATION 1.50 1.50 1.50 1.50 1.20 1.00 1.00 1.00 1.00 1.00 1.00 1.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT 76,500.00 132,000.00 15,000.00 4,500.00 4,500.00 14,000.00 9,000.00 9,000.00 9,000.00 303,500.00 AMOUNT 325,000.00 20,000.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED 8" MAG METER (BACKWASH), INSTALLED 12" MAG METER (RAW), INSTALLED 15" MAG METER (FINISHED), INSTALLED 16" MAG METER (FINISHED), INSTALLED 16" MAG METER SEDIMENTALLED 16" MAG METER SETTLERS & SLUDGE COLLECTOR INSTALLATION RAPID MIXER BYPASS STATIC MIXER	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 1 2 1 1 2 1 2 1 1 2 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 7,000.00 9,000.00 9,000.00 9,000.00 10,000.00 10,000.00 10,000.00 10,000.00 10,000.00 10,000.00 10,000.00 10,000.00 10,000.00 10,000.00 10,000.00 10,000.00	INSTALLATION 1.50 1.50 1.50 1.50 1.20 1.00 1.00 1.00 1.00 1.00 1.00 1.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT 76,500.00 132,000.00 15,000.00 30,000.00 4,500.00 14,000.00 9,000.00 9,000.00 303,500.00 AMOUNT 325,000.00 60,000.00 20,000.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED 8" MAG METER (BACKWASH), INSTALLED 12" MAG METER (FINISHED), INSTALLED 15" MAG METER (FINISHED), INSTALLED 16" MAG METER (FINISHED), INSTALLED 5UBTOTAL DIVISION 43 DIVISION 46 - WATER AND WASTEWATER EQUIPMENT FLOCCULATOR & SEDIMENTATION EQUIPMENT PLATE SETTLERS & SLUDGE COLLECTOR INSTALLATION RAPID MIXER BYPASS STATIC MIXER FLOCCULATOR BASIN BAFFLE WALLS INSTALL	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 1 2 1 1 2 1 1 2 1 1 1 1 1 612	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 4,500.00 9,000.00 9,000.00 9,000.00 9,000.00 10,000.00 1	INSTALLATION 1.50 1.50 1.50 1.50 1.20 1.00 1.00 1.00 1.00 1.00 1.00 1.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT 76,500.00 132,000.00 15,000.00 4,500.00 4,500.00 9,000.00 9,000.00 9,000.00 303,500.00 AMOUNT 325,000.00 60,000.00 20,000.00 110,000.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED 8" MAG METER (BACKWASH), INSTALLED 12" MAG METER (RAW), INSTALLED 12" MAG METER (FINISHED), INSTALLED 15" MAG METER (FINISHED), INSTALLED 16" MAG METER (FINISHED), INSTALLED 16" MAG METER (SLUDGE) SUBTOTAL DIVISION 43 DIVISION 46 - WATER AND WASTEWATER EQUIPMENT FLOCCULATOR & SEDIMENTATION EQUIPMENT PLATE SETTLERS & SLUDGE COLLECTOR INSTALLATION RAPID MIXER BYPASS STATIC MIXER FLOCCULATOR BASIN BAFFLE WALLS INSTALL AIR COMPRESSOR PACKAGE	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 1 2 1 1 2 1 1 2 1 1 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 4,500.00 9,000.00 9,000.00 9,000.00 9,000.00 20,000.00 20,000.00 25,000.00 25,000.00	INSTALLATION 1.50 1.50 1.50 1.50 1.20 1.00 1.00 1.00 1.00 1.00 1.00 1.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT 76,500.00 132,000.00 15,000.00 4,500.00 4,500.00 9,000.00 9,000.00 9,000.00 303,500.00 AMOUNT 325,000.00 20,000.00 15,300.00 20,000.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED 8" MAG METER (BACKWASH), INSTALLED 12" MAG METER (FINISHED), INSTALLED 16" MAG METER (FINISHED), INSTALLED SUBTOTAL DIVISION 43 DIVISION 46 - WATER AND WASTEWATER EQUIPMENT FLOCCULATOR & SEDIMENTATION EQUIPMENT PLATE SETTLERS & SLUDGE COLLECTOR INSTALLATION RAPID MIXER BYPASS STATIC MIXER FLOCCULATOR BASIN BAFFLE WALLS INSTALL AIR COMPRESSOR PACKAGE AIR SCOUR BLOWER	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 1 2 1 1 2 1 1 2 1 1 1 1 2 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 4,500.00 7,000.00 9,000.00 9,000.00 9,000.00 20,000.00 20,000.00 25,000.00 25,000.00 20,000.00 25,000.00 29,723.00	INSTALLATION 1.50 1.50 1.50 1.50 1.20 1.00 1.00 1.00 1.00 1.00 1.00 1.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT 76,500.00 132,000.00 15,000.00 30,000.00 4,500.00 14,000.00 9,000.00 9,000.00 9,000.00 303,500.00 AMOUNT 325,000.00 60,000.00 20,000.00 15,300.00 20,000.00 29,723.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED 8" MAG METER (BACKWASH), INSTALLED 12" MAG METER (FINISHED), INSTALLED 15" MAG METER (FINISHED), INSTALLED 16" MAG METER (FINISHED), INSTALLED 16" MAG METER (FINISHED), INSTALLED SUBTOTAL DIVISION 43 DIVISION 46 - WATER AND WASTEWATER EQUIPMENT PLATE SETTLERS & SLUDGE COLLECTOR INSTALLATION RAPID MIXER BYPASS STATIC MIXER FLOCCULATOR BASIN BAFFLE WALLS INSTALL AIR COMPRESSOR PACKAGE AIR SCOUR BLOWER FILTER BACKWASH TROUGHS	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 1 2 1 1 2 1 1 2 1 1 1 1 2 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 4,500.00 9,000.00 9,000.00 9,000.00 20,000.00 20,000.00 25,000.00 25,000.00 25,000.00 25,000.00 25,000.00 27,000.00	INSTALLATION 1.50 1.50 1.50 1.50 1.00 1.00 1.00 1.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT 76,500.00 132,000.00 15,000.00 30,000.00 4,500.00 14,000.00 9,000.00 9,000.00 9,000.00 20,000.00 10,000.00 20,000.00 20,000.00 20,000.00 20,000.00 20,000.00 20,723.00 24,000.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED 8" MAG METER (BACKWASH), INSTALLED 12" MAG METER (RAW), INSTALLED 12" MAG METER (FINISHED), INSTALLED 16" MAG METER (FINISHED), INSTALLED SUBTOTAL DIVISION 43 DIVISION 46 - WATER AND WASTEWATER EQUPMENT PLATE SETTLERS & SLUDGE COLLECTOR INSTALLATION RAPID MIXER BYPASS STATIC MIXER FLOCCULATOR BASIN BAFFLE WALLS INSTALL AIR COMPRESSOR PACKAGE AIR SCOUR BLOWER FILTER BACKWASH TROUGHS FILTER MEDIA - 12" ANTHRACITE	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 1 2 1 1 2 1 1 2 1 1 1 1 2 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 4,500.00 9,000.00 9,000.00 9,000.00 20,000.00 20,000.00 25,000.00 25,000.00 25,000.00 29,723.00 750.00 30.00	INSTALLATION 1.50 1.50 1.50 1.50 1.50 1.00 1.00 1.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT 76,500.00 132,000.00 15,000.00 30,000.00 4,500.00 14,000.00 9,000.00 9,000.00 9,000.00 303,500.00 AMOUNT 325,000.00 60,000.00 20,000.00 15,300.00 20,000.00 29,723.00 24,000.00 5,184.00
SUBTOTAL DIVISION 40 DIVISION 41 - MATERIALS PROCESSING & HANDLING EQUIPMENT SUBTOTAL DIVISION 41 DIVISION 43 - PROCESS GAS & LIQUID HANDLING, PURIFICATION & STORAGE EQUIPMENT VT BACKWASH PUMP VT HIGH SERVICE PUMP SUBMERSIBLE SLUDGE PUMP SAMPLE PUMPS AND PIPING 2" MAG METER (PINEVILLE), INSTALLED 4" MAG METER (SLUDGE), INSTALLED 6" MAG METER (FILTER EFFLUENT), INSTALLED 8" MAG METER (BACKWASH), INSTALLED 12" MAG METER (FINISHED), INSTALLED 16" MAG METER (FINISHED), INSTALLED 16" MAG METER (FINISHED), INSTALLED 16" MAG METER (FINISHED), INSTALLED SUBTOTAL DIVISION 43 DIVISION 46 - WATER AND WASTEWATER EQUPMENT PLATE SETTLERS & SLUDGE COLLECTOR INSTALLATION RAPID MIXER BYPASS STATIC MIXER FLOCCULATOR BASIN BAFFLE WALLS INSTALL AIR COMPRESSOR PACKAGE AIR SCOUR BLOWER FILTER BACKWASH TROUGHS	UNIT EACH EACH EACH EACH EACH EACH EACH EAC	EST. QUANTITY 1 2 1 5 1 1 2 1 1 2 1 1 2 1 1 1 1 2 1 1 1 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	UNIT PRICE 51,000.00 44,000.00 10,000.00 5,000.00 4,500.00 4,500.00 9,000.00 9,000.00 9,000.00 20,000.00 20,000.00 25,000.00 25,000.00 25,000.00 25,000.00 25,000.00 27,000.00	INSTALLATION 1.50 1.50 1.50 1.50 1.00 1.00 1.00 1.0	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,661,279.06 AMOUNT 76,500.00 132,000.00 15,000.00 30,000.00 4,500.00 14,000.00 9,000.00 9,000.00 9,000.00 303,500.00 AMOUNT 325,000.00 60,000.00 20,000.00



Project Name:	East Range Joint Water Project, Aurora and Town of White
SEH Project No:	AUROR 159723
Date:	January 11, 2022
Estimator:	SEH
Description:	100% WTP Cost Estimate

FILTER UNDERDRAIN & AIR SCOUR PIPING	SF	160	\$	225.00	1.00	\$	36,000.00
CHEMICAL FEED PIPING	LUMP SUM	1	\$	10,000.00	1.00	\$	10,000.00
COAGULANT SYSTEM	LUMP SUM	1	\$	17,000.00	1.00	\$	17,000.00
PAC FEED SYSTEM	LUMP SUM	1	\$	95,000.00	1.00	\$	95,000.00
GAS CHLORINE FEED SYSTEM	LUMP SUM	1	\$	35,000.00	1.00	\$	35,000.00
FLUORIDE FEED SYSTEM	LUMP SUM	1	\$	17,000.00	1.00	\$	17,000.00
POLYMER FEED SYSTEM	LUMP SUM	1	\$	20,000.00	1.00	\$	20,000.00
LIQUID ANALYTICAL EQUIPMENT	LUMP SUM	1	\$	6,000.00	1.00	\$	6,000.00
PH ANALYZERS (2 SENSORS, 1 CONTROLLER, 1 HAND HELD)	LUMP SUM	1	\$	7,000.00	1.00	\$	7,000.00
CHLORINE ANALYZERS	EA	2	\$	4,500.00	1.00	\$	9,000.00
TURBIDITY ANALYZERS	EA	6	\$	1,200.00	1.00	\$	7,200.00
SUBTOTAL DIVISION 44						\$	782,375.00
DIVISION 45 - INDUSTRY-SPECIFIC MANUFACTURING EQUIP	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
SUBTOTAL DIVISION 45						\$	-
DIVISION 46 - WATER & WASTEWATER EQUIP	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
SUBTOTAL DIVISION 46						\$	-
DIVISION 48 - ELECTRICAL POWER GENERATION	UNIT	EST. QUANTITY		UNIT PRICE	INSTALLATION		AMOUNT
SUBTOTAL DIVISION 48						\$	-
	SUB TOTAL						

Agreement for Professional Services

This Agreement is effective as of January 17, 2022, between the East Range Water Board (Client) and Short Elliott Hendrickson Inc. (Consultant).

This Agreement authorizes and describes the scope, schedule, and payment conditions for Consultant's work on the Project described as: East Range Water Project, Aurora and Town of White, Task 3 - Permitting and Regulatory Approvals, and Task 4 – Bidding Services.

oresentative: Mr. Doug Gregor, Mayor	
2nd Avenue North	
MN 55705	
9.2614 email: gregor@ci.aurora.mn	.us
Miles B. Jensen, PE	
Street North	
MN 55792	
0.2020 email: _mjensen@sehinc.com	ı
MN 55705 9.2614 email: gregor@ci.aurora.mn Miles B. Jensen, PE Street North MN 55792	

PROJECT BACKGROUND:

Original Proposal:

As originally under the Consultant's letter proposal dated November 12, 2020, Consultant's scope of design and bidding services is generally defined as:

- Task 1 Preliminary Design to 30% Plan Level,
- Task 2 Final Design to 100% Plans and Specification Level,
- Task 3 Permitting and Regulatory Approvals, and
- Task 4 Bidding Services

Current Project Status:

- Task 1 Preliminary Design to 30% Plan Level Complete.
- Task 2 Final Design to 100% Plans and Specification Level:
 - 100% Plans and Specifications for Minnesota Department of Health (MDH) review completed on January 14, 2022.
 - Submittal to the MDH and East Range Water Board's (Client's) Building Official will be January 17, 2022.
 - SEH Quality Control to continue through the end of January 2022.

PROPOSED PROJECT:

Basic Services:

The Basic Services to be provided by the Consultant as set forth herein are provided subject to the attached General Conditions of the Agreement for Professional Services (General Conditions Rev. 07.14.16), which is incorporated by reference herein and subject to Exhibits attached to this Agreement.

For this Agreement, the Consultant is proposing services on four (4) separate elements:

- Task 2A Pineville Chlorination System,
- Task 2B Reconfigure the Scenic Acres Water Main extension through Pineville,
- · Task 3 Permitting and Regulatory Approvals, and
- Task 4 Bidding Services

Task 2A: Pineville Chlorination System

During Task 1, the Technical Committee noted that chlorine residuals drop off in the Pineville system. After further discussions and considerations, the Technical Committee decided to add a chlorine booster system to the WTP design scope. This system will utilize a dedicated piping system with automated valves, analyzer and

chlorine feed system to automatically boost the chlorine residual in the Pineville and Scenic Acres water line. For this Task, the Consultant will:

- a. Add one (1) civil plan sheet and update other Civil and Process plan sheets to create an automated chlorine booster system.
- b. Add specifications for the chlorine booster system, control valves, analyzer, and automation description to the bidding documents.

Task 2B: Reconfigure the Scenic Acres Water Main extension through Pineville

During Task 2, the Technical Committee requested that the finished water main plans be changed to route the Scenic Acres water main extension around the eastern side of Pineville rather than to go through Pineville. The request was made to reduce project cost of main and service connections associated with the "through-Pineville" route. For this Task, the Consultant will:

- a. Complete additional survey of Carl Avenue and Ryan Street.
- b. Change the civil water main design and associated plan sheets.

Task 3: Permitting and Regulatory Approvals

- 1. MNDNR Complete final appropriations permit application paperwork.
- 2. MDH:
 - a. Submit two (2) hardcopy sets of 100% Final construction documents to MDH for approval.
 - b. Finalize the Environmental Review for PFA (DWRF) funding.
- 3. Building Official Submit Final Construction documents for approval.

Task 4: Bidding Services

- 1. The bidding services under this task have been modified from a single project bid under the original proposal to being performed for three (3) separate projects referred to as:
 - a. East Range Water Treatment Plant
 - b. East Range Raw Water Intake and Pump Station
 - c. East Range Raw and Finished Water Main
- 2. Prepare three (3) separate sets of bidding and contracting documents.
- 3. For each project:
 - a. Issue Advertisement for Bids in the Client's official newspaper, trade publications and builder's exchanges for each project.
 - b. Incorporate review changes to all documents from 100% submittal review by the MDH and Building Official.
 - c. Reproduce project bid documents for distribution to Client, COA/TOW, Building Official, and project team members.
 - d. Prepare bidding documents for electronic distribution to prospective bidders through QuestCDN and Builder's Exchanges.
 - e. Assist Client in conducting pre bid conferences with representatives of the Technical Team, Client, design engineering team, and interested contractors and equipment suppliers.
 - f. Respond to questions from prospective bidders.
 - g. Issue necessary addenda to Project Bid Documents including Pre-Bid attendance rosters.
 - h. Attend bid openings to receive bids.
 - i. Analyze bids, prepare bid tabulations, and prepare bid summary letter to Aurora/TOW for consideration of project construction contract award.

SCHEDULE:

Client and Consultant agree to strive to meet the following schedule goals:

- 1. Task 3 Permitting and Regulatory Approvals January 2022 February 2022
- 2. Task 4 Bidding Services February 2022 April 2022, or as the Client may direct

PAYMENT:

The payment method, basis, frequency and other special conditions are set forth in attached Exhibit A-2. The lump sum fee for each Task described above are as follows:

- Task 2A Pineville Chlorination System \$6,481.00.
- Task 2B Reconfigure the Scenic Acres Water Main extension through Pineville \$5,437.00,
- Task 3 Permitting and Regulatory Approvals \$12,750.00, and
- Task 4 Bidding Services \$45,300.00

This Agreement for Professional Services, attached General Conditions, Exhibits and any Attachments (collectively referred to as the "Agreement") supersedes all prior contemporaneous oral or written agreements and represents the entire understanding between Client and Consultant with respect to the services to be provided by Consultant hereunder. In the event of a conflict between the documents, this document and the attached General Conditions shall take precedence over all other Exhibits unless noted below under "Other Terms and Conditions". The Agreement for Professional Services and the General Conditions (including scope, schedule, fee and signatures) shall take precedence over attached Exhibits. This Agreement may not be amended except by written agreement signed by the authorized representatives of each party.

ASSUMPTIONS AND CLARIFICATIONS

- 1. The Client will pay all permitting and regulatory review fees.
- 2. Consultant will provide assistance with the State Drinking Water Revolving Fund regulatory review and permitting applications.
- Consultant will provide supporting documents and assistance to the Client's Representative with communications to the financial and legal service providers retained by the Client associated with the project.
- 4. This proposal does not include fees for water service assessments as the need for, or the extent of, the need has not yet been determined. Consultant will provide a request for project scope amendment in the event that any portion of the project is selected by the Client for special assessments.
- 5. The following services are not included in this proposal; however, Consultant can provide these supplemental services should circumstances drive the need:
 - a. Water rate analysis for the determination of cost sharing or project cost recovery.
 - b. Any efforts associated with preparation of an Environmental Assessment Worksheet (EAW) as may be determined by the MNDNR for provision of a raw water withdrawal appropriations permit, raw water intake or transmission main, or finished water transmission main.
 - c. Any efforts associated with preparation of an Environmental Impact Statement (EIS) as may be determined by the MNDNR for provision of a raw water withdrawal appropriations permit, raw water intake or transmission main, or finished water transmission main.
 - d. Efforts or fees associated with abandonment of any of the existing Scenic Acre's wells.
 - e. Efforts or fees associated with abandonment or demolition of the existing City of Aurora raw water intake/pump station and water treatment plant.

OTHER TERMS AND CONDITIONS:

Other or additional terms contrary to the General Conditions that apply solely to this project as specifically agreed to by signature of the Parties and set forth herein:

- 1. Remove the following from the General Conditions of the Agreement for Professional Services:
 - a. Paragraph C.1 under Section IV General Considerations
 - b. Paragraph A.1 under Section V Dispute Resolution

Short	Elliott Hendrickson Inc.	East Range Water Board
Ву:		By:
Title:	Miles B. Jensen, PE Principal/Water Market Leader	Title:
	- Thiopan Water Market Leader	East Range Water Board
		Ву:
		Title:

Exhibit A-2 to Agreement for Professional Services Between City of Aurora, Minnesota (Client) and Short Elliott Hendrickson Inc. (Consultant)

Dated January 17, 2022

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.

- 1. 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.

https://sehincazure-my.sharepoint.com/personal/mjensen_sehinc_com/documents/documents/mbj/aurora/wtp design & construction/task 2 & 3/tasks 2a, 2b, 3 & 4/exhibit a2.docx

General Conditions of the Agreement for Professional Services

SECTION I - SERVICES OF CONSULTANT

A. General

1. Consultant agrees to perform professional services as set forth in the Agreement for Professional Services or Supplemental Letter Agreement ("Basic Services"). Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Client or the Consultant. The Consultant's services under this Agreement are being performed solely for the Client's benefit, and no other party or entity shall have any claim against the Consultant because of this Agreement or the performance or nonperformance of services hereunder.

B. Schedule

- Unless specific periods of time or dates for providing services are specified, Consultant's obligation to render services hereunder will be for a period which may reasonably be required for the completion of said services.
- 2. If Client has requested changes in the scope, extent, or character of the Project or the services to be provided by Consultant, the time of performance and compensation for Consultant's services shall be adjusted equitably. The Client agrees that Consultant is not responsible for damages arising directly or indirectly from delays beyond Consultant's control. If the delays resulting from such causes increase the cost or the time required by Consultant to perform its services in accordance with professional skill and care, then Consultant shall be entitled to a equitable adjustment in schedule and compensation.

C. Additional Services

- 1. If Consultant determines that any services it has been directed or requested to perform are beyond the scope as set forth in the Agreement or that, due to changed conditions or changes in the method or manner of administration of the Project, Consultant's effort required to perform its services under this Agreement exceeds the stated fee for Basic Services, then Consultant shall promptly notify the Client regarding the need for additional services. Upon notification and in the absence of a written objection, Consultant shall be entitled to additional compensation for the additional services, and to an extension of time for completion of additional services absent written objection by Client.
- Additional services shall be billed in accord with agreed upon rates, or if not addressed, then at Consultant's standard rates.

D. Suspension and Termination

- If Consultant's services are delayed or suspended in whole or in part by Client, or if Consultant's services are delayed by actions or inactions of others for more than 60 days through no fault of Consultant, then Consultant shall be entitled to either terminate its agreement upon 7 days written notice or, at its option, accept an equitable adjustment of rates and amounts of compensation provided for elsewhere in this Agreement to reflect reasonable costs incurred by Consultant.
- This Agreement may be terminated by either party upon seven days written notice should the other party fail substantially to perform in accordance with its terms through no fault of the party initiating the termination.
- 3. This Agreement may be terminated by either party upon thirty days' written notice without cause. All provisions of this Agreement allocating responsibility or liability between the Client and Consultant shall survive the completion of the services hereunder and/or the termination of this Agreement.
- In the event of termination, Consultant shall be compensated for services performed prior to termination date, including charges for expenses and equipment costs then due and all termination expenses.

SECTION II - CLIENT RESPONSIBILITIES

A. General

- The Client shall, in proper time and sequence and where appropriate to the Project, at no expense to Consultant, provide full information as to Client's requirements for the services provided by Consultant and access to all public and private lands required for Consultant to perform its services.
- 2. The Consultant is not a municipal advisor and therefore Client shall provide its own legal, accounting, financial and insurance counseling and other special services as may be required for the Project. Client shall provide to Consultant all data (and professional interpretations thereof) prepared by or services performed by others pertinent to Consultant's services, including but not limited to, previous reports; sub-surface explorations; laboratory tests and inspection of samples; environmental assessment and impact statements, surveys, property descriptions; zoning, deed and other land use restrictions; asbuilt drawings, electronic data base and maps. The costs associated with correcting, creating or recreating any data that is provided by the Client that contains inaccurate or unusable information shall be the responsibility of the Client.
- 3. Client shall provide prompt written notice to Consultant whenever the Client observes or otherwise becomes aware of any changes in the Project or any defect in Consultant's services. Client shall promptly examine all studies, reports, sketches, opinions of construction costs, specifications, drawings, proposals, change orders, supplemental agreements and other documents presented by Consultant and render the necessary decisions and instructions so that Consultant may provide services in a timely manner.
- 4. Client shall require all utilities with facilities within the Client's Project site to locate and mark said utilities upon request, relocate and/or protect said utilities as determined necessary to accommodate work of the Project, submit a schedule of the necessary relocation/protection activities to the Client for review and comply with agreed upon schedule. Consultant shall not be liable for damages which arise out of Consultant's reasonable reliance on the information or services furnished by utilities to Client or others hired by Client.
- 5. Consultant shall be entitled to rely on the accuracy and completeness of information or services furnished by the Client or others employed by the Client and shall not be liable for damages arising from reasonable reliance on such materials. Consultant shall promptly notify the Client if Consultant discovers that any information or services furnished by the Client is in error or is inadequate for its purpose.

SECTION III - PAYMENTS

A. Invoices

- 1. Undisputed portions of invoices are due and payable within 30 days. Client must notify Consultant in writing of any disputed items within 15 days from receipt of invoice. Amounts due Consultant will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) for invoices 30 days past due. Consultant reserves the right to retain Instruments of Service until all invoices are paid in full. Consultant will not be liable for any claims of loss, delay, or damage by Client for reason of withholding services or Instruments of Service until all invoices are paid in full. Consultant shall be entitled to recover all reasonable costs and disbursements, including reasonable attorney's fees, incurred in connection with collecting amounts owed by Client.
- Should taxes, fees or costs be imposed, they shall be in addition to Consultant's agreed upon compensation.
- Notwithstanding anything to the contrary herein, Consultant may pursue collection of past due invoices without the necessity of any mediation proceedings.

SECTION IV - GENERAL CONSIDERATIONS

A. Standards of Performance

- The standard of care for all professional engineering and related services performed or furnished by Consultant under this Agreement will be the care and skill ordinarily exercised by members of Consultant's profession practicing under similar circumstances at the same time and in the same locality. Consultant makes no warranties, express or implied, under this Agreement or otherwise, in connection with its services.
- 2. Consultant neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform the work in accordance with its construction contract or the construction documents prepared by Consultant. Client acknowledges Consultant will not direct, supervise or control the work of construction contractors or their subcontractors at the site or otherwise. Consultant shall have no authority over or responsibility for the contractor's acts or omissions, nor for its means, methods or procedures of construction. Consultant's services do not include review or evaluation of the Client's, contractor's or subcontractor's safety measures, or job site safety or furnishing or performing any of the Contractor's work.
- 3. If requested in the scope of a Supplemental Letter Agreement, then Consultant may provide an Opinion of Probable Construction Cost. Consultant's Opinions of Probable Construction Cost provided for herein are to be made on the basis of Consultant's experience and qualifications and represent Consultant's best judgment as a professional generally familiar with the industry. However, since Consultant has no control over the cost of labor, materials, equipment or service furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions. Consultant cannot and does not guarantee that proposals, bids or actual construction cost will not vary from Opinions of Construction Cost prepared by Consultant. If Client wishes greater assurance as to probable Construction Cost, Client shall employ an independent cost estimator or negotiate additional services and fees with Consultant.

B. Indemnity for Environmental Issues

 Consultant is not a user, generator, handler, operator, arranger, storer, transporter or disposer of hazardous or toxic substances, therefore the Client agrees to hold harmless, indemnify and defend Consultant and Consultant's officers, directors, subconsultant(s), employees and agents from and against any and all claims, losses, damages, liability and costs, including but not limited to costs of defense, arising out of or in any way connected with, the presence, discharge, release, or escape of hazardous or toxic substances, pollutants or contaminants of any kind at the site.

C. Limitations on Consultant's Liability

- 1. The Client hereby agrees that to the fullest extent permitted by law, Consultant's total liability to the Client for any and all injuries, claims, losses, expenses, or damages whatsoever arising out of or in any way related to the Project or this Agreement from any cause or causes including, but not limited to, Consultant's negligence, errors, omissions, strict liability, breach of contract or breach of warranty shall not exceed five hundred thousand dollars (\$500,000). In the event Client desires limits of liability in excess of those provided in this paragraph, Client shall advise Consultant in writing and agree that Consultant's fee shall increase by 1% for each additional five hundred thousand dollars of liability limits, up to a maximum limit of liability of five million dollars (\$5,000,000).
- 2. Neither Party shall be liable to the other for consequential damages, including, without limitation, lost rentals, increased rental expenses, loss of use, loss of income, lost profit, financing, business and reputation and for loss of management or employee productivity, incurred by one another or their subsidiaries or successors, regardless of whether such damages are foreseeable and are caused by breach of contract, willful misconduct, negligent act or omission, or other wrongful act of either of them.
- It is intended by the parties to this Agreement that Consultant's services shall not subject Consultant's employees, officers or directors to any personal legal exposure for the risks associated

with this Agreement. The Client agrees that as the Client's sole and exclusive remedy, any claim, demand or suit shall be directed and/or asserted only against Consultant, and not against any of Consultant's individual employees, officers or directors, and Client knowingly waives all such claims against Consultant individual employees, officers or directors.

D. Assignment

 Neither party to this Agreement shall transfer, sublet or assign any rights under, or interests in, this Agreement or claims based on this Agreement without the prior written consent of the other party. Any assignment in violation of this subsection shall be null and void

SECTION V - DISPUTE RESOLUTION

A. Mediation

 Any dispute between Client and Consultant arising out of or relating to this Agreement or services provided under this Agreement, (except for unpaid invoices which are governed by Section III), shall be submitted to nonbinding mediation as a precondition to litigation unless the parties mutually agree otherwise. Mediation shall occur within 60 days of a written demand for mediation unless Consultant and Client mutually agree otherwise.

B. Litigation - Choice of Venue and Jurisdiction

 Any dispute not settled through mediation shall be settled through litigation in the state where the Project at issue is located.

SECTION VI - INTELLECTUAL PROPERTY

A. Proprietary Information

- All documents, including reports, drawings, calculations, specifications, CADD materials, computers software or hardware or other work product prepared by Consultant pursuant to this Agreement are Consultant's Instruments of Service ("Instruments of Service") and Consultant retains all ownership interests in Instruments of Service, including all available copyrights.
- 2. Consultant shall retain all of its rights in its proprietary information including, without limitation, its methodologies and methods of analysis, ideas, concepts, expressions, inventions, know how, methods, techniques, skills, knowledge and experience possessed by Consultant prior to, or acquired by Consultant during, the performance of this Agreement and the same shall not be deemed to be Work Product or Work for Hire and Consultant shall not be restricted in any way with respect thereto.

B. Client Use of Instruments of Service

- Provided that Consultant has been paid in full for its services,
 Client shall have the right in the form of a license to use
 Instruments of Service resulting from Consultant's efforts on the
 Project. Consultant shall retain full rights to electronic data and
 the drawings, specifications, including those in electronic form,
 prepared by Consultant and its subconsultants and the right to
 reuse component information contained in them in the normal
 course of Consultant's professional activities. Consultant shall be
 deemed to be the author of such Instruments of Service,
 electronic data or documents, and shall be given appropriate
 credit in any public display of such Instruments of Service.
- Records requests or requests for additional copies of Instruments of Services outside of the scope of services are available to Client subject to Consultant's current rate schedule.

C. Reuse of Documents

1. All Instruments of Service prepared by Consultant pursuant to this Agreement are not intended or represented to be suitable for reuse by the Client or others on extensions of the Project or on any other Project. Any reuse of the Instruments of Service without written consent or adaptation by Consultant for the specific purpose intended will be at the Client's sole risk and without liability or legal exposure to Consultant; and the Client shall release Consultant from all claims arising from such use. Client shall also defend, indemnify and hold harmless Consultant from all claims, damages, losses and expenses including attorneys' fees arising out of or resulting from reuse of Consultant documents without written consent.



St. Louis County PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT

Government Service Center 201 South 3rd Avenue West Virginia, MN 55792 Phone: (218) 749-7103

FY 2022 CDBG Initia	al Funding Recommendati	on
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1	2022 CDBG Initial Fun			Available Freeding
	2022 CDBG Applicants	CDBG Request	Initial Recommend	Available Funding
1	Access North Aging In Place	¢30,000	¢20,000	\$350,000
1	Access North: Aging In Place	\$20,000	\$20,000	
2	AEOA: Single Family Rehab	\$350,000	\$200,000	
3	Chisholm HRA: Rental Rehab	\$91,500	\$38,000	
4	Cook HRA: Rental Rehab	\$17,000	\$17,000	
5	Eveleth HRA: Rental Rehab	\$100,000	\$50,000	
6	Habitat for Humanity: Building Program	\$60,000	\$25,000	
	Housing Total	\$638,500	\$350,000	
	Economic Development			\$40,000
7	Entrepreneur Fund: Microenterprise and Consulting	\$40,000	\$20,000	
8	SOAR: Subsidized Employment Services	\$25,000	\$20,000	
	Economic Development Total	\$65,000	\$40,000	
	Community Facilities and Public Infrastructure			\$1,150,000
	Community Facilities			
9	AEOA: Community Donation Building	\$170,880	-	
10	Buhl: Buhl/Kinney Senior Center Improvements	\$48,000	\$48,000	
11	Chisholm: North Side Park Improvements	\$50,000	-	
12	Gilbert: Community Center/Library Improvements	\$110,000	\$50,000	
13	Tourist Center Senior Citizens: Senior Center Rehab	\$22,971	-	
14	Virginia Community Foundation: Building Improvements	\$39,000	-	
	Community Facilities Total	\$440,851	\$98,000	
	Public Infrastructure			
15	Aurora: Water Treatment Facility	\$300,000	\$150,000	
16	Breitung: Infrastructure	\$165,000	\$90,000	
17	Cook: Infrastructure	\$150,000	-	
18	Ely: Wastewater Treatment Facility	\$200,000	\$140,000	
19	Eveleth: Infrastructure	\$150,000	\$100,000	
20	Floodwood: Infrastructure	\$250,000	\$140,000	
21	Hibbing: Infrastructure	\$250,000	\$150,000	
22	Hibbing PUC: Infrastructure	\$200,000	\$77,000	
23	Orr: Infrastructure	\$150,000	\$90,000	
24	Virginia: Infrastructure	\$125,000	\$65,000	
25	Winton: Infrastructure	\$50,000	\$50,000	
26	St. Louis County: Neighborhood Revitalization Program	, , , , , , ,	-	
	Public Infrastructure Total	\$1,690,000	\$1,052,000	
	Community Facilities and Public Infrastructure Total	\$2,130,851	\$1,150,000	
	Public Service		. , ,	\$260,000
27	Advocates for Family Peace: Domestic Violence Prevention	\$18,500	\$18,000	
28	AEOA: Homeless Shelter Operations	\$54,000	\$43,000	
29	AEOA: Homeless Youth Services	\$28,200	\$23,000	
30	Legal Aid of NE MN: Housing Counseling Project	\$40,000	\$33,000	
31	Project Care Free Clinic: Clinic Operations	\$20,000	\$15,000	
32	Quad City Food Shelf: Food Shelf Operations	\$13,520	\$13,000	
33	Range Transitional Housing: Homeless Services	\$40,000	\$40,000	
34	Salvation Army: Melting Pot Meals Program	\$17,000	\$17,000	
35	Salvation Army: Virginia Supper Club	\$18,000	\$17,000	
36	Sexual Assault Program: Youth Outreach Services	\$23,500	\$23,000	
37	United Way: Buddy Backpack Program	\$30,000	\$18,000	
38	United Way: Comforts of Home Program	\$10,000	-	
50	Public Service Total	\$312,720	\$260,000	
	Grand Total	\$3,147,071	\$1,800,000	\$1,800,000
	Grand Total	J3,147,U/I	31,000,000	31,000,000