



11333 N. Cedarburg Road
Mequon, WI 53092
Phone: 262-236-2934
Fax: 262-242-9655

www.ci.mequon.wi.us

Public Works/Engineering
Taped and Televised

SEWER UTILITY DISTRICT COMMISSION
Tuesday, January 11, 2022
7:15 PM or Immediately following the
Mequon Municipal Water Utility Commission Meeting
Christine Nuernberg Hall

Agenda

- 1) Call to Order, Roll Call
- 2) Approval of Meeting Minutes
Action requested: review and approve
 - a. December 14, 2021 Minutes
- 3) Resolutions
Action requested: review and recommend approval
 - a. **RESOLUTION 3911** A Resolution Approving Award of a Consulting Agreement for Revising the Sanitary Sewer Utility's Hydraulic Model and Preparing Cost Estimates for Improvements to the East Trunk System North of Mequon Road to Brown and Caldwell, Milwaukee, Wisconsin in the Amount of \$213,063
- 4) Adjourn

Dated: January 11, 2022

/s/ John Wirth, Mayor

Notice is hereby given that a quorum of other governmental bodies may be present at this meeting to present, discuss and/or gather information about a subject over which they have decision-making responsibility, although they will not take formal action thereto at this meeting.

Persons with disabilities requiring accommodations for attendance at this meeting should contact the City Clerk's Office at 262-236-2914, twenty-four (24) hours in advance of the meeting.

Any questions regarding this agenda may be directed to the City Administrator's Office at 262-236-2941, Monday through Friday, 8:00 AM – 4:30 PM



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SEWER UTILITY DISTRICT COMMISSION

Tuesday, December 14, 2021

7:30 PM

Christine Nuernberg Hall

Minutes

1) Call to Order, Roll Call

Commissioner Wirth called the meeting to order at 7:32 PM.

Present:

Commissioner John Wirth
Commissioner Robert Strzelczyk
Commissioner Glenn Bushee
Commissioner Dale Mayr
Commissioner Jeffrey Hansher
Commissioner Mark Gierl
Commissioner Brian Parrish
Commissioner Kathleen Schneider
Commissioner Andrew Nerbun

Also present were City Administrator Jones, City Attorney Sajdak, Director of Public Works/City Engineer Lundeen, Deputy Director of Utilities Driscoll, and Administrative Assistant Deuster.

2) Approval of Meeting Minutes

a. November 9, 2021 Minutes

RESULT: **Approved [Unanimous]**

MOVED BY: Commissioner Strzelczyk

SECONDED BY: Commissioner Schneider

AYES:	Wirth, Strzelczyk, Bushee, Mayr, Hansher, Gierl, Parrish, Schneider, Nerbun
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3) Resolutions

Action requested: review and recommend approval

- a. **RESOLUTION 3907** A Resolution Awarding a Contract to Rehabilitate Sanitary Sewer Mains in the Riverdale Park and Riverland Drive Lift Station Areas to Visu-Sewer, Inc. of Pewaukee, Wisconsin in the Amount of \$343,655

RESULT: **Approved [Unanimous]**

MOVED BY: Commissioner Strzelczyk

SECONDED BY: Commissioner Bushee

AYES: Wirth, Strzelczyk, Bushee, Mayr, Hansher, Gierl, Parrish, Schneider, Nerbun

- b. **RESOLUTION 3906** A Resolution Awarding a Contract for Inspection and Construction Management Services on the Rehabilitation of Sanitary Sewer Mains in the Riverdale Park and Riverland Drive Lift Station Areas to raSmith of Brookfield, Wisconsin in the Amount of \$60,620

RESULT: **Approved [Unanimous]**

MOVED BY: Commissioner Nerbun

SECONDED BY: Commissioner Schneider

AYES: Wirth, Strzelczyk, Bushee, Mayr, Hansher, Gierl, Parrish, Schneider, Nerbun

- c. **RESOLUTION 3908** A Resolution Awarding a Contract for the Rehabilitation of Seventy-One (71) Sanitary Sewer Manholes to National Power Rodding of Chicago, Illinois in the Amount of \$61,408

RESULT: **Approved [Unanimous]**

MOVED BY: Commissioner Hansher

SECONDED BY: Commissioner Bushee

AYES: Wirth, Strzelczyk, Bushee, Mayr, Hansher, Gierl, Parrish, Schneider, Nerbun

- d. **RESOLUTION 3905** A Resolution Awarding a Contract for the Preparation of Contract Documents Related to Sewer Lateral Work in the Riverland Drive and Riverdale Park Lift Station Areas to raSmith of Brookfield, Wisconsin in an Amount Not-to-Exceed \$65,000

RESULT: **Approved [Unanimous]**

MOVED BY: Commissioner Mayr

SECONDED BY: Commissioner Schneider

AYES: Wirth, Strzelczyk, Bushee, Mayr, Hansher, Gierl, Parrish, Schneider, Nerbun

4) Adjourn

a. Motion to Adjourn at 7:33 PM.

RESULT: **Approved by Voice Acclamation [Unanimous]**

MOVED BY: Commissioner Schneider

SECONDED BY: Commissioner Mayr

AYES: Wirth, Strzelczyk, Bushee, Mayr, Hansher, Gierl, Parrish, Schneider,
Nerbun

Respectfully Submitted,

Casey Deuster
Administrative Assistant

Attachment: 12-14-21 Mins_Sewer Utility District Commission (6951 : December 14, 2021 Minutes)



11333 N. Cedarburg Road
Mequon, WI 53092
Phone: 262-236-2913
Fax: 262-242-9655

www.ci.mequon.wi.us

Office of Sewer Utility District Commission

TO: Sewer Utility District Commission
FROM: Kevin Driscoll, Deputy Director of Utilities
DATE: January 3, 2022
SUBJECT: RESOLUTION 3911 A Resolution Approving Award of a Consulting Agreement for Revising the Sanitary Sewer Utility's Hydraulic Model and Preparing Cost Estimates for Improvements to the East Trunk System North of Mequon Road to Brown and Caldwell, Milwaukee, Wisconsin in the Amount of \$213,063

Background

On April 10, 2018, the Sewer Utility District Commission authorized a contract to construct the East Trunk relief sewer south of Mequon Road to address system capacity and wet weather flow management. This work included a 2-mile relief sewer that was completed under budget and ahead of schedule. This construction has been successful as no sanitary overflows have occurred in this area following project completion. The engineering efforts to model and design that part of Mequon's system can also be considered a success, where those efforts were focused on the area south of Mequon Road (STH 167), connected to the metropolitan interceptor owned by the Milwaukee Metropolitan Sewerage District near County Line Road. The 2022 Sewer Utility Budget included an item to complete additional hydraulic modeling efforts for the East Trunk System north of Mequon Road (STH 167), and this area includes the Ranch Road Lift Station E area. Attached is a map (Exhibit A) that depicts the East Trunk Sewer area, which encompasses more than 3,700 acres, or nearly six square miles, north of Mequon Road.

Analysis

Requests for Proposals were transmitted to consultants with experience and qualifications to complete this specialized type of work. Staff received 5 proposals to prepare a model this winter, evaluate alternatives in Summer 2022 and prepare capital improvement conceptual design estimates by Fall 2022.

Firm(s)	Hours	Fees
Brown and Caldwell	1,407	\$202,917
S.E.H.	1,713	\$219,920
AECOM	1,454	\$228,200
Applied Technologies-RJN	1,724	\$254,480
AE2S	1,526	\$270,744

City staff checked references and Brown and Caldwell is highly recommended for this type of modeling work by the Racine Water and Wastewater Utilities, Madison Metropolitan Sewerage District, and Milwaukee Metropolitan Sewerage District. In addition, Brown and Caldwell staff,

while at a previous firm, also worked on the modeling efforts and design alternatives for the East Trunk System in Mequon.

The schedule for this work allows for recommendations to be included in the 2023 budget for capital improvements. This work includes modeling the replacement of the Ranch Road Lift Station “E”, and capacity improvements to Fieldwood Drive Lift Station “G” and Riverdale Park Lift Station “F”. Staff anticipates presenting these report findings to address eventual financing of these anticipated improvements.

In 2011, a hydraulic model and report were delivered by a consultant to the City as the basis for capital improvement projects. This report included recommendations supporting construction of the East Trunk Relief Sewer (completed in 2019), replacement of Parkview Drive Lift Station A along Mequon Road (completed in 2014), and the sanitary flow equalization in Cedarburg Road at Donges Bay Road that is scheduled for later this year during road reconstruction (2022). In 2019, staff installed additional flow meters in the sanitary collection system, and that data will be used to update and revise the hydraulic model as part of the evaluation for capital improvements to address system capacity and wet weather flow management.

Fiscal Impact

The 2022 Budget for this effort was estimated at \$200,000. An additional 5% contingency to the proposed amount of \$202,917, is \$10,145, and that results in a revised total to \$213,063. The Sewer Utility has adequate funds available in capital account 610669-740002 to completely finance this work.

Recommendation

It is staff’s recommendation that the Sewer Utility District Commission favorably endorse and the Common Council authorize a contract to Brown and Caldwell of Milwaukee, Wisconsin in the amount of \$213,063 to update hydraulic modeling efforts, evaluate alternatives for additional capacity and wet weather management of the East Trunk system with a focus north of Mequon Road, and provide a report with capital improvement recommendations.

Attachments:

Exhibit A - Map (PDF)

Exhibit B - Agreement (PDF)

COMMON COUNCIL
OF THE
CITY OF MEQUON

RESOLUTION 3911

A Resolution Approving Award of a Consulting Agreement for Revising the Sanitary Sewer Utility's Hydraulic Model and Preparing Cost Estimates for Improvements to the East Trunk System North of Mequon Road to Brown and Caldwell, Milwaukee, Wisconsin in the Amount of \$213,063

RECITALS

A. In 2011, a Sanitary Sewer System Evaluation and report with a hydraulic model were delivered by a consultant to the City as the basis for capital improvement projects, and these recommendations were completed or programmed for implementation.

B. On April 10, 2018, the Sewer Utility District Commission authorized a contract to construct the East Trunk Relief Sewer south of Mequon Road to address system capacity and wet weather flow management.

C. In November 2021, the 2022 Sewer Utility Budget was approved and included an item to complete additional hydraulic modeling efforts for the East Trunk System north of Mequon Road, and this area includes the Ranch Road Lift Station E area.

D. In November 2021, staff requested proposals from qualified consultants to revise the City's model, with additional flow meter data collected since 2019, and prepare a recommendations report for the 2023 Sewer Utility budget.

E. On December 30, 2021, staff received and evaluated proposals from consultants to revise the sanitary hydraulic model contract and prepare capital improvement recommendations, and City staff recommends that a contract in the amount of \$213,063, be awarded to Brown and Caldwell of Milwaukee, Wisconsin to update the City's Sanitary System Hydraulic Model and Prepare Cost Estimates for Improvements.

BASED UPON THE FOREGOING RECITALS, IT IS RESOLVED by the Common Council of the City of Mequon, Wisconsin that:

1. The Contract for Consultant Services to update the Revise the Sewer Utility's Sanitary Hydraulic Model and Prepare Cost Estimates for Improvements to the East Trunk System north of Mequon Road is awarded to Brown and Caldwell of Milwaukee, Wisconsin, in an amount not-to-exceed \$213,063, subject to any clerical, technical and/or legal changes deemed necessary and appropriate by the City Attorney.

2. The Mayor and the City Clerk are authorized and directed to execute and deliver the same.

Approved by: John Wirth, Mayor

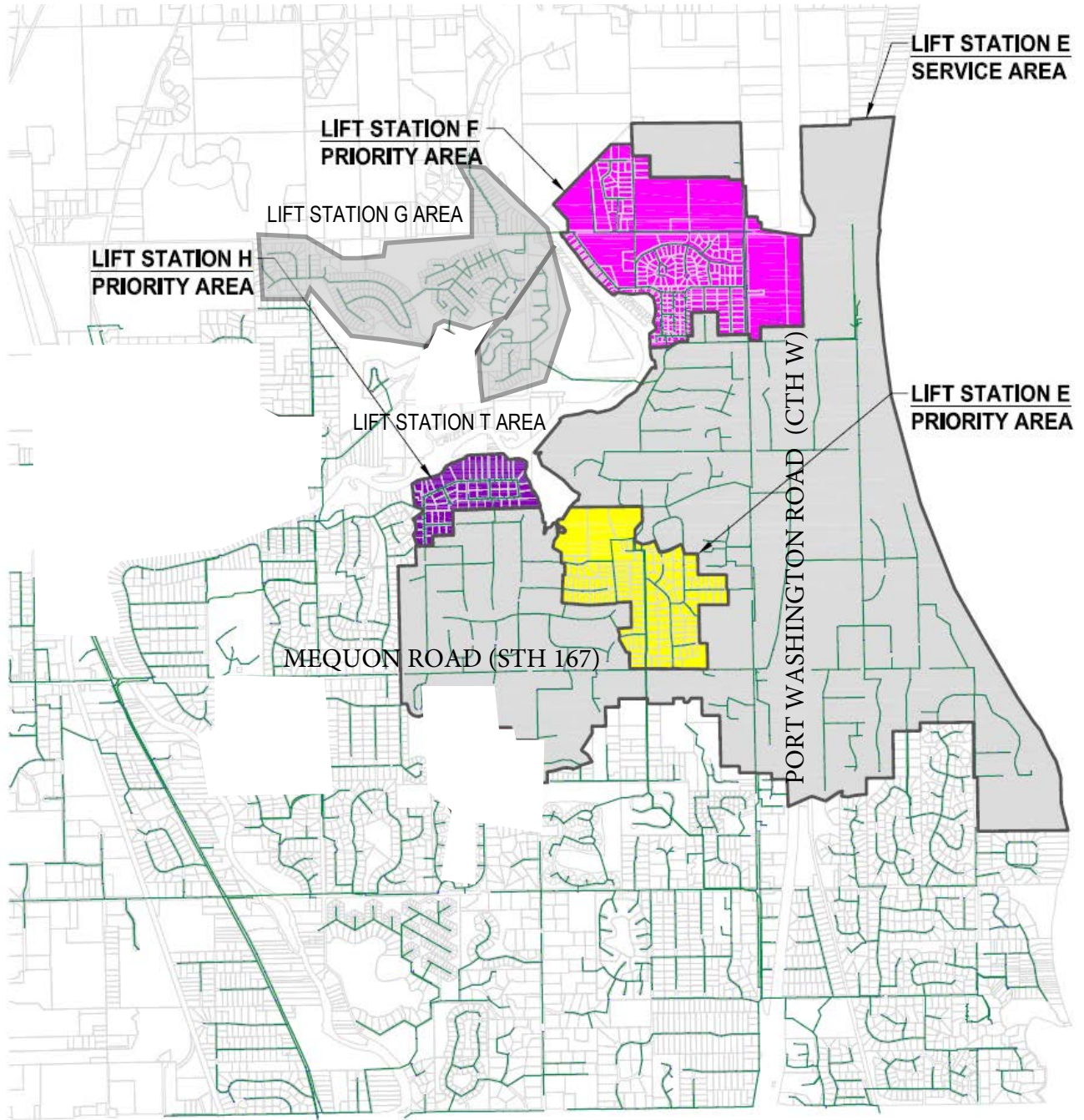
Date Approved: January 11, 2022

I certify that the foregoing Resolution was adopted by the Common Council of the City of Mequon, Wisconsin, at a meeting held on January 11, 2022.

Caroline Fochs, City Clerk

Exhibit A

**East Trunk Sanitary Sewer Service Lift Station Areas
north of Mequon Road
including Lift Stations E, F, G, H & T**



Prism Project _____

AGREEMENT FOR CONSULTING SERVICES
 BETWEEN CITY OF MEQUON
 AND BROWN AND CALDWELL FOR
PROJECT #3744-22: SANITARY SEWER SYSTEM HYDRAULIC MODEL WITH
 RECOMMENDATIONS REPORT THAT INCLUDES COST ESTIMATES FOR CAPITAL
 IMPROVEMENTS

THIS AGREEMENT is made and entered into on this 12th day of January, 2022 by and between the City of Mequon, hereinafter referred to as "Client," and Brown and Caldwell, a California corporation, its affiliates and subsidiaries, hereinafter referred to as "Consultant."

RECITALS:

WHEREAS, Client is authorized to and desires to retain Consultant for Project #3744-22: Prepare Sanitary Sewer System Hydraulic Model with Recommendations Report that includes Cost Estimates for Capital Improvements;

WHEREAS, Consultant has available and offers to provide personnel and facilities necessary to perform the desired services within the required time; and

WHEREAS, Client desires to retain Consultant to perform the services in the manner, at the time, and for the compensation set forth herein;

NOW, THEREFORE, Client and Consultant agree as follows:

I. DESCRIPTION OF PROJECT

Client and Consultant agree that Project is as described in Exhibit A, entitled "Description of Project," dated January 4, 2022. If, during the course of Project, Client and Consultant agree to changes in Project, such changes shall be incorporated in this Agreement by written amendment.

II. SCOPE OF CONSULTANT SERVICES

Consultant agrees to perform those services described hereafter. Unless modified in writing by both parties, duties of Consultant shall not be construed to exceed those services specifically set forth herein.

A. Basic Services

Consultant agrees to perform those basic services described in Exhibit B entitled "Scope of Services," dated January 4, 2022 (the "Services"). Any tasks not specifically described in Exhibit B are Additional Services.

[For California Public Works construction projects only: If BC will review deep trenching plans, then add the following to either Exhibit B or the body of the agreement (check local laws in other states for similar requirements):]

Review of Trenching Plans. Pursuant to Section 6705 of the California Labor Code, Client delegates its authority to review trenching plans submitted by contractor. Client agrees that for the purpose of performing these services, Consultant shall be an agent of Client, entitled to all rights of defense and indemnification provided by law and statute, including but not limited to, those rights contained in the California Government Code.

B. Additional Services

Client shall pay Consultant all fees and costs incurred in performing Additional Services provided the services were either (a) authorized by Client, or (b) required to be performed due to emergency conditions at the project site. Client will be deemed to have authorized the Additional Services if Consultant provides Client with notification that the Additional Services will be performed and Client does not object within five (5) working days after notification. Unless otherwise agreed in writing, Additional Services shall be performed in accordance with Consultant's standard billing rates at the time the Additional Services are performed.

C. Litigation Assistance

Unless specifically stated therein, the Scope of Services does not include assistance to support, prepare, document, bring, defend, or assist in litigation undertaken or defended by Client. All such services required or requested of the Consultant by Client or any third party (except claims between Client and Consultant) will be reimbursed at Consultant's applicable rates for such litigation services.

D. Document Productions

In the event Brown and Caldwell is requested pursuant to subpoena or other legal process to produce its documents or any other information relating to Brown and Caldwell's services under this agreement in judicial or administrative proceedings to which Brown and Caldwell is not a party, Client shall reimburse Brown and Caldwell at standard billing rates for its time and expenses incurred in responding to such requests.

III. RESPONSIBILITIES OF CLIENT

In addition to payment for the Services performed under this Agreement, Client shall:

1. Assist and cooperate with Consultant in any manner necessary and within its ability to facilitate Consultant's performance under this Agreement.
2. Designate in writing a person to act as Client's representative with respect to this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define Client's policies, make decisions and execute documents on Client's behalf.

3. Furnish Consultant with all technical data in Client's possession including, but not limited to, maps, surveys, drawings, soils or geotechnical reports, and any other information required by, or useful to, Consultant in performance of its Services under this Agreement. Consultant shall be entitled to rely upon the information supplied by Client.
4. Notify Consultant of any known or potential health or safety hazards existing at or near the project site.
5. Provide access to and/or obtain permission for Consultant to enter upon all property, whether or not owned by Client, as required to perform and complete the Services.
6. If Consultant's scope of work includes services during construction, Client will require the construction contractor to indemnify and hold harmless Consultant, its officers, employees, agents, and consultants against claims, suits, demands, liabilities, losses, damages, and costs, including reasonable attorneys' fees and all other costs of defense, arising out of the performance of the work of the contractor, breach of contract, or willful misconduct of the contractor or its subcontractors, employees, and agents.

Client will require the contractor to name Consultant, its directors, officers and employees as additional insureds on the contractor's general liability insurance and/or Owner's and Contractor's Protective policy (OCP), and any builder's risk, or other property insurance purchased by Client or the contractor to protect work in progress or any materials, supplies, or equipment purchased for installation therein.

Client will furnish contractor's certificates of insurance evidencing that Consultant, its officers, employees, agents, and consultants are named as additional insureds on contractor's general liability and property insurance applicable to the Project. Contractor's policies shall be primary and any such insurance carried by the Consultant shall be excess and noncontributory. The certificates shall provide that Consultant be given 30 days' written notice prior to any cancellation thereof.

IV. AMERICANS WITH DISABILITIES ACT

Any other provision of this Agreement to the contrary notwithstanding, unless otherwise specified in the Scope of Services, Client shall have sole responsibility as between Client and Consultant for compliance with the Americans With Disabilities Act ("ADA") 42 U.S.C. 12101 et. Seq. and the related regulations.

V. AUTHORIZATION AND COMPLETION

In signing this Agreement, Client grants Consultant specific authorization to proceed with work specified in Exhibit B. The estimated time for completion is within 365 calendar days of the date Consultant receives authorization to proceed with the work from Client. Consultant shall use its best efforts to perform the work specified in Exhibit B within the estimated time.

VI. COMPENSATION

A. Amount

For the Services described in Exhibit B, Client agrees to pay, and Consultant agrees to accept compensation in accordance with Exhibit C. Where Consultant has provided Client with a breakdown of the total compensation into subtasks, such breakdowns are estimates only. Consultant may reallocate compensation between tasks, provided total compensation is not exceeded without the approval of Client.

B. Payment

As long as Consultant has not defaulted under this Agreement, Client shall pay Consultant within 30 days of the date of Consultant's invoices for services performed and reimbursable expenses incurred under this Agreement. If Client has reason to question or contest any portion of any such invoice, amounts questioned or contested shall be identified and notice given to Consultant, within 15 days of the date of the invoice. Any portion of any invoice not contested shall be deemed to be accepted and approved for payment and shall be paid to Consultant within 30 days of the date of the invoice. Client agrees to cooperate with Consultant in a mutual effort to resolve promptly any contested portions of Consultant's invoices.

In the event any uncontested portions of any invoice are not paid within 30 days of the date of Consultant's invoice, interest on the unpaid balance shall accrue beginning with the 31st day at the maximum interest rate permitted by law, and Consultant shall have the right to suspend work per Article XV, Suspension of Work.

VII. RESPONSIBILITY OF CONSULTANT

A. Standard of Care Professional Services

Subject to the express provisions of the agreed scope of work as to the degree of care, amount of time and expenses to be incurred, and subject to any other limitations contained in this Agreement, Consultant shall perform its Services in accordance with generally accepted standards and practices customarily utilized by competent engineering firms in effect at the time Consultant's Services are rendered. Consultant does not expressly or impliedly warrant or guarantee its Services.

B. Reliance upon Information Provided by Others

If Consultant's performance of services hereunder requires Consultant to rely on information provided by other parties (excepting Consultant's subcontractors), Consultant shall not independently verify the validity, completeness, or accuracy of such information unless otherwise expressly engaged to do so in writing by Client.

C. Consultant's Opinion of Probable Costs (Cost Estimate)

Client acknowledges that construction cost estimates, financial analyses and feasibility projections are subject to many influences including, but not limited to, price of labor and materials, unknown or latent conditions of existing equipment or structures, and time or quality of performance by third parties. Client acknowledges that such influences may not be precisely forecasted and are beyond the control of Consultant and that actual costs incurred may vary substantially from the estimates prepared by Consultant. Consultant does not warrant or guarantee the accuracy of construction or development cost estimates.

D. Construction Phase Services

1. Consultant's Activities at Construction Site. The presence of Consultant's personnel at a construction site, whether as on-site representative, resident engineer, construction manager, or otherwise, does not make Consultant responsible for those duties that belong to Client and/or construction contractors or others, and does not relieve construction contractors or others of their obligations, duties, and responsibilities, including, but not limited to, construction methods, means, techniques, sequences, and procedures necessary for completing all portions of the construction work in accordance with the contract documents, any health or safety programs and precautions required by such construction work, and any compliance with applicable laws and regulations. Any inspection or observation of the contractor's work is solely for the purpose of determining that the work is generally proceeding in conformance with the intent of the project specifications and contract documents. Consultant makes no warranty or guarantee with respect to the performance of a contractor. Consultant has no authority to exercise control over any construction contractor in connection with their work or health or safety programs and precautions. Except to protect Consultant's own personnel and except as may be expressly required elsewhere in the scope of services, Consultant has no duty to inspect, observe, correct, or report on health or safety deficiencies of the construction contractor.
2. Shop Drawing and Submittal Review. If required by Consultant's Scope of Services, Consultant shall review shop drawings or other contractor submittals for general conformance with the intent of the contract documents. Consultant shall not be required to verify dimensions, to engineer contractor's shop drawings or submittals, nor to coordinate shop drawings or other submittals with other shop drawings or submittals provided by contractor.
3. Record Drawings. Record drawings, if required, will be prepared, in part, on the basis of information compiled and furnished by others, and may not always represent the exact location, type of various components, or exact manner in which the Project was finally constructed. Consultant is not responsible for any errors or omissions in the information from others that are incorporated into the record drawings.

VIII. ASSIGNMENT OF TASKS TO AFFILIATES

- A. If the authorized scope of work includes construction activities or the oversight of construction, Consultant may, at its discretion and upon notice to Client, assign all of its

contractual rights and obligations with respect to such activities or services to Brown and Caldwell Constructors, its wholly owned affiliate.

- B. If the authorized scope of work requires professional services to be performed in a jurisdiction in which Consultant renders professional services solely through a locally registered engineering affiliate for purposes of compliance with professional licensing requirements in that jurisdiction, Consultant may, in its discretion, upon notice to Client, assign its contractual rights and obligations with respect to such activities or services to such locally registered engineering affiliate.

IX. ASBESTOS/HAZARDOUS MATERIALS

Consultant and Consultant's subcontractors shall have no responsibility for the discovery, handling, removal, or disposal of or exposure of persons to asbestos or hazardous or toxic materials that are present in any form at the Project site. Professional services related to or in any way connected with the investigation, detection, abatement, replacement, use, specification, or removal of products, materials, or processes containing asbestos or hazardous or toxic materials are beyond the scope of this Agreement. Client shall be solely responsible for notifying all appropriate governmental agencies, including the potentially effected public, of the existence of any hazardous or toxic materials located on or in the project site at any time.

In the event Consultant encounters asbestos or hazardous materials at the jobsite, Consultant may, at its option and without liability for damages, suspend the performance of services on the Project until such time as Client and Consultant mutually agree on an amendment to this Agreement to address the issue, or Client retains another specialist consultant or contractor to identify, classify, abate and/or remove the asbestos and/or hazardous materials.

X. CONSULTANT'S WORK PRODUCT

A. Scope

Consultant's work product which is prepared solely for the purposes of this Agreement, including, but not limited to, drawings, test results, recommendations and technical specifications, whether in hard copy or electronic form, shall become the property of Client when Consultant has been fully compensated as set forth herein. Consultant may keep copies of all work product for its records.

Consultant and Client recognize that Consultant's work product submitted in performance of this Agreement is intended only for the project described in this Agreement. Client's alteration of Consultant's work product or its use by Client for any other purpose shall be at Client's sole risk, and Client shall hold harmless and indemnify Consultant against all losses, damages, costs and expense, including attorneys' fees, arising out of or related to any such alteration or unauthorized use.

B. Electronic Copies

If requested, solely as an aid and accommodation to Client, Consultant may provide copies of its work product documents in computer-readable media ("electronic copies," "CADD"). These documents will duplicate the documents provided as work product, but will not bear the signature and professional seals of the registered professionals responsible for the work. Client is cautioned that the accuracy of electronic copies and CADD documents may be compromised by electronic media degradation, errors in format translation, file corruption, printing errors and incompatibilities, operator inexperience and file modification. Consultant will maintain the original copy, which shall serve as the official, archived record of the electronic and CADD documents. Client agrees to hold harmless, indemnify and defend Consultant from any claims arising out of or relating to any unauthorized change or alteration of electronic copies and CADD documents.

XI. INDEMNIFICATION

A. Indemnification of Client

Consultant agrees to indemnify and hold Client harmless from and against any liability to the extent arising out of the negligent errors or negligent omissions of Consultant, its agents, employees, or representatives, in the performance of Consultant's duties under this Agreement.

B. Consequential Damages

Regardless of any other term of this Agreement, in no event shall either party be responsible or liable to the other for any incidental, consequential, or other indirect damages.

XII. CONSULTANT'S INSURANCE

Consultant shall procure and maintain the following minimum insurance:

1. Commercial general liability insurance, including personal injury liability, blanket contractual liability and broad-form property damage liability coverage. The combined single limit for bodily injury and property damage shall be not less than \$1,000,000.
2. Automobile bodily injury and property damage liability insurance covering owned, non-owned, rented, and hired cars. The combined single limit for bodily injury and property damage shall be not less than \$1,000,000.
3. Statutory workers' compensation and employer's liability insurance as required by state law.
4. Professional liability insurance. The policy limit shall be not less than \$1,000,000.

Client shall be named as additional insured on policies 1 and 2 above. Upon request, a certificate of insurance will be provided to Client with a 30-day written notice in the event the above policies are cancelled.

XIII. CONFIDENTIALITY

Consultant agrees it will maintain the confidentiality of material it receives from Client which Client has clearly identified as "Confidential" and will not disclose, distribute, or publish to any third party such confidential information without the prior permission of Client. Notwithstanding the foregoing, Consultant shall have no confidentiality obligation with respect to information that:

- 1) becomes generally available to the public other than as a result of disclosure by Consultant or its agents or employees;
- 2) was available to Consultant on a non-confidential basis prior to its disclosure by Client;
- 3) becomes available to Consultant from a third party who is not, to the knowledge of Consultant, bound to retain such information in confidence.

In the event Consultant is compelled by subpoena, court order, or administrative order to disclose any confidential information, Consultant shall promptly notify Client and shall cooperate with Client prior to disclosure so that Client may take necessary actions to protect such confidential information from disclosure.

XIV. SUBCONTRACTS

Consultant shall be entitled, to the extent determined appropriate by Consultant, to subcontract any portion of the services to be performed under this Agreement.

XV. SUSPENSION OF WORK

Work under this Agreement may be suspended as follows:

1. By Client. By written notice to Consultant, Client may suspend all or a portion of the Work under this Agreement if unforeseen circumstances beyond Client's control make normal progress of the Work impracticable. Consultant shall be compensated for its reasonable expenses resulting from such suspension including mobilization and demobilization. If suspension is greater than 30 days, then Consultant shall have the right to terminate this Agreement in accordance with Article XVI, Termination of Work.
2. By Consultant. By written notice to Client, Consultant may suspend the Work if Consultant reasonably determines that working conditions at the Site (outside Consultant's control) are unsafe, or in violation of applicable laws, or in the event Client has not made timely payment in accordance with Article VI, Compensation, or for other circumstances not caused by Consultant that are interfering with the normal progress of the Work. Consultant's suspension of Work hereunder shall be without prejudice to any other remedy of Consultant at law or equity.

XVI. TERMINATION OF WORK

- A. This Agreement may be terminated by Client as follows: (1) for its convenience on 30 days' notice to Consultant, or (2) for cause, if Consultant materially breaches this Agreement through no fault of Client and Consultant neither cures such material breach nor makes reasonable progress toward cure within 15 days after Client has given written notice of the alleged breach to Consultant.

- B. This Agreement may be terminated by Consultant as follows: (1) for cause, if Client materially breaches this Agreement through no fault of Consultant and Client neither cures such material breach nor makes reasonable progress toward cure within 15 days after Consultant has given written notice of the alleged breach to Client, or (2) upon five days' notice if work under this Agreement has been suspended by either Client or Consultant for more than 30 days in the aggregate.

C. Payment upon Termination

In the event of termination, Consultant shall perform such additional work as is reasonably necessary for the orderly closing of the Work. Consultant shall be compensated for all work performed prior to the effective date of termination, plus work required for the orderly closing of the Work, including: (1) authorized work performed up to the termination date plus termination expenses, including all labor and expenses, at Consultant's standard billing rates, directly attributable to termination; (2) all efforts necessary to document the work completed or in progress; and (3) any termination reports requested by Client.

Except for termination of Consultant by Client for cause, Consultant shall also receive a termination fee equal to 15 percent of the total compensation yet to be earned under existing authorizations at the time of termination to account for Consultant's rescheduling adjustments, reassignment of personnel, and related costs incurred due to termination.

XVII. ASSIGNMENT

This Agreement is binding on the heirs, successors, and assigns of the parties hereto. Except as otherwise set forth under Article VIII, Assignment of Tasks to Affiliates, this Agreement may not be assigned by Client or Consultant without prior, written consent of the other.

XVIII. NO BENEFIT FOR THIRD PARTIES

The services to be performed by Consultant are intended solely for the benefit of Client, and no benefit is conferred on, nor contractual relationship established with any person or entity not a party to this Agreement. No such person or entity shall be entitled to rely on Consultant's services, opinions, recommendations, plans, or specifications without the express written consent of Consultant. No right to assert a claim against the Consultant, its officers, employees, agents, or consultants shall accrue to the construction Contractor or to any subcontractor, supplier, manufacturer, lender, insurer, surety, or any other third party as a result of this Agreement or the performance or nonperformance of the Consultant's services hereunder.

XIX. FORCE MAJEURE

Consultant shall not be responsible for delays caused by circumstances beyond its reasonable control, including, but not limited to (1) strikes, lockouts, work slowdowns or stoppages, or accidents, (2) acts of God, (3) failure of Client to furnish timely information or to approve or disapprove Consultant's instruments of service promptly, and (4) faulty performance or nonperformance by Client, Client's independent consultants or contractors, or governmental agencies. Consultant shall not be liable for damages arising out of any such delay, nor shall the Consultant be deemed to be in breach of this Agreement as a result thereof.

XX. INTEGRATION

This Agreement represents the entire understanding of Client and Consultant as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered herein. This Agreement may not be modified or altered except in writing signed by both parties. Any purchase order issued by Client, whether or not signed by Consultant, and any terms and conditions contained in such purchase order which are inconsistent with this Agreement shall be of no force and effect.

XXI. SEVERABILITY

If any part of this Agreement is found unenforceable under applicable laws, such part shall be inoperative, null, and void insofar as it conflicts with said laws, but the remainder of this Agreement shall be in full force and effect.

XXII. CHOICE OF LAW/JURISDICTION

This Agreement shall be administered and interpreted under the laws of the state in which the BC office responsible for the project is located. Jurisdiction of litigation arising from the Agreement shall be in that state.

XXIII. ATTORNEYS' FEES

In the event either party commences legal proceedings against the other, then the prevailing party shall, in addition to any other recovery, be entitled to recover its reasonable attorneys' fees and all other costs of such proceeding.

XXIV. NOTICES

All notices required under this Agreement shall be delivered by facsimile, personal delivery or mail and shall be addressed to the following persons:

Julie McMullin]	[Name]
Project Manager	[Title]
Brown and Caldwell	[Client's Name]
250 E. Wisconsin Avenue, Suite 1600]	[Address]
Email: jmcnullin@brwncald.com	Fax: [number]

Notice shall be effective upon delivery to the above addresses. Either party may notify the other that a new person has been designated by it to receive notices, or that the address or Fax number for the delivery of such notices has been changed, provided that, until such time as the other party receives such notice in the manner provided for herein, any notice addressed to the previously-designated person and/or delivered to the previously-designated address or Fax number shall be effective.

XXV AUTHORIZATION

The persons executing this Agreement on behalf of the parties hereto represent and warrant that the parties have all legal authority and authorization necessary to enter into this Agreement, and that such persons have been duly authorized to execute this Agreement on their behalf.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

[Legal name of Brown and Caldwell]
[For contracts with the State of California, add:
Contract ID number 80160.]

[CLIENT]

Signature _____

Signature _____

Printed Name _____

Printed Name _____

Title _____

Title _____

Federal Tax ID number: 94-1446346

**PROJECT#3744-22:
Prepare Sanitary Sewer System Hydraulic Model with Recommendations
Report that includes Cost Estimates for Capital Improvements**

**Exhibit A
Description of Project
January 4, 2022**

This project will consist of providing a report with recommendations for system improvements for City of Mequon (City) planning of capital projects, based on a hydraulic model. The report deliverable will also include the corresponding sanitary hydraulic model of the East Trunk Sewer (ETS) system to the City for staff to build on in the future.

As a result of wet weather with intense precipitation and saturated soils, these heavy rains over a short period of time have caused surcharging in the sanitary collection system. As stated in forms 3400- 184: bypass pumps are set up when critical elevations in the manholes or wet wells are exceeded. Suction is set at levels to bypass at critical elevation to limit surcharging and avoid basement backups. These sanitary sewer overflows (SSOs) are reported to the WDNR. The City has 5 lift stations within the ETS (called E,F,G,H,T; see map for locations). Four locations have recurring SSOs: lift stations E, F, G, and H (6/2014; 4/2015; 8/2018; 5/2020; 8/2021). In 2020, the City completed a two mile 48- inch relief sewer from County Line Road to a point north of Donges Bay Road. This project refers to ETS improvements south of Mequon Road. In addition, the City has installed meters in these areas (both north and south of Mequon Rd in ETS), the City continues infiltration and inflow reduction efforts with grouting and lining to rehabilitate laterals and mains. The City has also completed lift station condition assessments and as a result is replacing the pumps at LS H, in the process of relocating LS E to increase its firm pumping capacity, and planning improvements to LS G and LS F.

The primary focus and the objective for this project is to model alternative scenarios for system improvements, then prepare cost estimates for those scenarios that alleviate surcharged conditions. These alternative scenarios are to be prioritized based on capacity improvements that reduce overflows (SSOs) in the LS E area. Options being considered include 1) re-routing LS G off of LS F, and 2) extending a relief sewer with inline storage leading up to LS E, and 3) a new lift station E. The modeling efforts will include alternatives with various alignments that reduce the risk of SSOs.

This model of alternatives will be accompanied by capital improvement scenarios with cost estimates in a series of memos and ultimately a final report. These cost estimates will be compared to identify a recommended scenario for design (fall 2022) and ultimately construction (anticipated 2023). City staff anticipates presenting the final recommendations to the Sewer Utility District Commission in October 2022 as part of the 2023 budget. Staff's expectation for this project is Consultant delivery of a model with a corresponding report in late summer 2022, with preliminary engineering analysis of alternatives that concludes with a recommendation for capital improvements.

PROJECT#3744-22:
Prepare Sanitary Sewer System Hydraulic Model with Recommendations
Report that includes Cost Estimates for Capital Improvements

Exhibit B
Scope of Services
January 4, 2022

Task 1 - Data Gathering and Background Analysis

- A. Obtain and review the existing Mike Urban model and documentation.
- B. Review existing data. City to provide selected consultant with
 - i. GIS access to view and download record drawings
 - ii. WDNR reports of SSOs history
 - iii. Lift station runtime records
 - iv. Flow meter data.
- C. City to provide selected consultant with ONE DRIVE access for
 - i. Review of 2011 Sanitary Sewer System Evaluation.
 - ii. Review of 2018 Forcemain Report.
 - iii. Review of Lift Station Condition Assessment Reports
 - Ranch Road LS E,
 - Riverdale Park LS F,
 - Ville du Parc LS G,
 - Riverland Drive LS H,
 - Fieldwood Drive LS T.
- D. Evaluate Lift Stations
 - i. Identify critical elevations
 - ii. Lift Station alarm elevations,
 - iii. Lift Station overflow elevations.
- E. Collect, Review, Process and Prepare Rainfall Data and Flow Meter Data for Modeling
 - i. Obtain and review data from 2 City rain gauges (request data from MMSD for their 1 gauge).
 - ii. Identify a minimum of two dry weather periods and a minimum of five wet weather periods (ideally of 2-inch or larger over a 24-hour period) for model calibration.
 - iii. Obtain and review data from 23 MMSD and 4 City flow meters (location, depth, velocity, flow values).

Task 2 - Develop PCSWMM model of East Trunk System

- A. Develop model schematic of system for evaluation
 - i. Use City GIS, Mike Urban model and other sources of information as needed, such as as-built records, to develop an adequate representation of the ETS in PCSWMM. The model will primarily consist of sanitary sewers 12-inches and above in diameter; however, the model will also include smaller diameter sewers to accommodate flow monitoring data, sewers needed for connectivity in the model, and areas of concern for sanitary sewer backwater and/or surcharging.
 - ii. Check model configuration data against as-built drawings.
 - iii. Delineate the flow meter tributary areas.
 - iv. Delineate branch sewer tributary areas that connect to the pipes in the model network
 - v. Check pump curves and operational setpoints. Refer to condition assessment reports and available drawdown information. City of Mequon Sewer Utility staff to perform draw testing info, as needed.
- B. Calibrate Existing System Model
 - i. Calibrate model to meter data.

- a. Calibrate dry weather flows.
- b. Calibrate I/I (using RTK and Aquifer-Groundwater infiltration method) to August 8, 2021 wet weather event. Allow for adjustment to reduce I/I based on post-rehabilitation implementation meter data to adjust modeling, as referred to in IF AUTHORIZED Tasks 8&9.
- c. Validate model to one dry weather period and one wet weather event.
- d. Simulate SSO locations and volumes.
- ii. Coordinate with the City to identify event for consistency with ETS design
 - a. 2-mile, 48-inch diameter relief sewer built in 2018 south of Mequon Road.
 - b. The focus of this Contract will be north of Mequon Road.
- iii. Hydraulic pipe network model calibration needs to represent historical
 - a. pump performance
 - b. surcharging manholes
 - c. SSOs
 - d. Adjust calibration against meter mapping of 8/2021 event (red/green coded SMHs)
- C. Update the Model for Future Conditions
 - i. Future condition inputs shall be provided by the City.
 - ii. One input shall be the flows corresponding to the build out of the 33-acre vacant parcel at the Northwest Corner of Port Washington Road and Highland Road in the LS F sewer shed.

Task 3 – Develop Alternatives for Improvement of ETS n/o Mequon Road

- A. Assess system performance for existing conditions for three wet weather events and future conditions for one of the same wet weather events; potential events include the following:
 - 4.0-inches for 24 hours, with dry soils and saturated soils (ETS s/o 167,6/2014)
 - 5.0-inches for 36 hours, with dry soils and saturated soils
 - 6.0-inches for 48 hours, with dry soils and saturated soils
 - i. Identify surcharged manholes.
 - ii. Identify pipes that are hydraulic restrictions.
 - iii. Identify pumps that are hydraulic restrictions.
 - iv. Identify simulated SSO locations and volume.
- B. Assess system performance compared with map of meter data.
- C. Evaluate and size alternatives for event consistent with East Trunk Relief Sewer design (2-mile, 48-inch diameter)

Task 4 – Evaluate Alternative Scenarios of ETS n/o Mequon Road

- A. Evaluate at least four design concepts; potential concepts may include the following or ones developed by the consultant or the client.
 - i. Re-route Lift Station (LS) G Forcemain (FM) with a second force main from East Shoreland at Highland Road to Glen Oaks Lane at Wildwood Drive (approximately 6,000ft of new FM and lift station improvements).
 - a. Model to include additional wet well capacity at LS G for second FM.
 - ii. Re-route LS F FM with a second force main from Circle Drive to relief sewer described in Task 4.A.iii.
 - a. Model to include additional wet well capacity at LS F for a second FM
 - iii. Extension of a relief sewer with inline storage from LS E to at least Glen Oaks Lane with approximately 4,000ft of new sewer pipe extension. Model scenarios with at least three different pipe diameters:
 - a. 4,000ft of 36-inch dia.,
 - b. 4,000ft of 48-inch dia.,
 - c. 4,000ft of 54-inch dia.
 - iv. Re-route LS F FM 3 miles from [Riverdale Park](#) to ETS.
 - v. Compare model runs in 3.A with Increased Pump capacities
 - a. LS E (ex. 7,300gpm; future scenarios at 9,000gpm; 10,000gpm; and 12,000gpm)

- b. LS F (ex. 600gpm; future scenarios at 800gpm; 1,000gpm, 1,500gpm)
- c. LS G (ex. 500gpm, future scenarios at 800gpm; 1,000gpm, 1,200gpm)
- d. Evaluate force mains with flow scenarios
 - i) Identify forcemain constraints
 - 1. Model to include LS E with two 16-inch dia. FM's.
 - 2. Model to include LS F on 10-inch dia. FM
 - 3. Model one LS G FM 8-inch dia. that chokes to 6-inch over MKE River
 - ii) Identify corresponding diameters necessary to accommodate improved scenarios.
 - 1. Evaluate the two existing LS E 16-inch dia. FM's for adequate sizing. If not, identify new diameter.
 - 2. Evaluate a second LS F FM for 8-inch and 12-inch diameter.
 - a) Evaluate FM extension to a Diversion Structure in 4.A.iii
 - 3. Evaluate a second LS G FM for 8-inch and 12-inch diameter
 - a) Evaluate FM extension to a Diversion Structure in 4.A.iii
- B. Evaluate and size alternatives for event consistent with ETS design (2-mile, 48-inch diameter relief sewer)
- C. Review results of individual conceptual scenarios with the City.
- D. Provide Memo on alternative scenario evaluation that summarizes for Task 4.

Task 5 – Prepare Cost Estimates for Preferred Scenarios

- A. Develop preliminary costs for each scenario in 4.A and provide in preliminary memo.
 - i. Identify at least four preferred scenarios.
- B. Review results of individual alternative concepts with the City.
 - i. Evaluate feasibility of success for any individual concepts as stand along projects.
 - ii. Evaluate feasibility of success for concepts as combined projects in sequence.
- C. Identify three alternative combinations for the ETS north of Mequon Road.
 - i. Compare costs, constructability, level of service, acceptability, and other factors.
- D. Coordinate with City for recommended alternatives/scenario.
- E. Provide Memo for Task 5.

Task 6 – Delivery Draft and Final Report that Summarizes Finding of Modeling Effort with Recommendations to Improve Level of Service

- A. Compile data in previous memos to summarize the model development, calibration and analysis process and findings, alternative evaluations, cost comparisons, and recommendations.
- B. Deliver draft report for City review and comment.
- C. Allow for City to provide comments on preliminary report and final draft report.
- D. Provide final report in hard copy and digital format including model and supporting GIS files.

Task 7 - Meetings (assume 8 meetings)

- 1. Kickoff meeting with City to clarify data received and address questions needed for modeling.
- 2. Review Model development. Consultant to present model framework that reflects existing sanitary system and status of evaluation.
 - a. Consultant to acquire software copy and assist with installation of PC-SWMM software onto Utility Engineering staff computer at City Hall.
 - b. Meetings may be held virtually.
- 3. Review Existing system evaluation and calibration efforts, identified in Task 2.
- 4. Meeting to discuss goals for Level of Service and ETS design capacity, identified in Task 3.
- 5. Define and clarify options to be modeled as Alternatives, identified in Task 4.
- 6. Present alternatives evaluated, identified in Task 5.
- 7. Compare and select alternatives for recommendation, as identified in preparation of Task 6.
- 8. Meet to discuss Draft Report and respond to City review comments on the report.

IF AUTHORIZED, Task 8 – Recalibrate Model with Meter Data Post-Sewer-Main-Rehabilitation

- A. After Grouting Implementation on Contract 2598-21 (anticipated completion summer 2022), adjust and re-calibrate model for event in Task 3 to reflect any reduced I/I based on post-rehabilitation implementation (Grouting Sanitary Sewer Mains)
- B. Attend meeting with staff to review, provide software upgrades in 2022 and guidance to reflect changes in City’s sanitary collection system.
- C. Provide Summary Memo for Task 8 that evaluates pre-rehabilitation conditions and post-rehabilitation outcomes.

IF AUTHORIZED, Task 9 – Recalibrate Model with Meter Data Post- Lateral-Rehabilitation

- A. After Grouting Implementation on Contract 3566-22 (anticipated completion late fall 2022), adjust and re-calibrate model for event in Task 3 to reflect any reduced I/I based on post-rehabilitation implementation (Grouting Sanitary Building Sewer Laterals)
- B. Attend meeting with staff to review, provide software upgrades in 2023 and guidance to reflect changes in City’s sanitary collection system.
- C. Provide Summary Memo for Task 9 that evaluates pre-rehabilitation conditions and post-rehabilitation outcomes.

IF AUTHORIZED, Task 10 - Develop PC-SWMM model of Central Trunk System

- A. Collect Data and Develop model schematic of system for evaluation.
- B. Develop a representation of the Central Trunk in PCSWMM using City GIS, former MIKE Urban model and other sources of information as needed.
- C. Check model configuration data against as-built drawings.
- D. Deliver Recommendations Memorandum for Task 10
 - i. Identify Choke points in system for further evaluation.
 - ii. Recommend Locations to install meters (ISCO 2150) for additional Central Trunk Model Analysis.
- E. This is anticipated to follow the development and completion of the ETS model effort.
- F. Calibration is limited to available meter data near Sherwood Drive and Cedarburg Road.

SCHEDULE

The schedule milestones for completing the scope of work are identified in Table B-1.

Table B-1. Project Schedule Milestones	
Notice to Proceed	January 12, 2022
Memo on Project Status and Progress of Model Development	March 1, 2022
Review Calibrated Model / Begin Developing Alternative Scenarios	April 4, 2022
Complete Existing System Evaluation / Begin Evaluating Scenarios	May 2, 2022
Identify Preferred Alternative Scenarios	June 15, 2022
Draft Report for City Review	July 2022
Finalize Report and Deliverables	August 2022

**PROJECT#3744-22:
Prepare Sanitary Sewer System Hydraulic Model with Recommendations
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**Exhibit C
Project Costs**

Tasks	Description	Anticipated No. of Hours	Fees
1	Data Gathering and Background Analysis	107	\$14,379
2	Develop PCSWMM model of East Trunk System	375	\$50,979
3	Develop Alternatives for Improvement of ETS n/o Mequon Road	103	\$13,935
4	Evaluate Alternative Scenarios of ETS n/o Mequon Road	261	\$36,919
5	Prepare Cost Estimates for Preferred Scenarios	81	\$15,735
6	Deliver Report that Summarize Findings of Modeling Effort with Recommendations for Capital Improvements	175	\$27,147
7	Meetings (assume 8 meetings)	94	\$15,398
Subtotal of Tasks 1 through 7		1196	\$174,492
8	IF AUTHORIZED, Task 8 – Recalibrate Model with Meter Data Post-Rehabilitation of Sewer Mains	40	\$5,176
9	IF AUTHORIZED, Task 9 – Recalibrate Model with Meter Data Post-Rehabilitation of Laterals	40	\$5,176
10	IF AUTHORIZED, Task 10 - Develop PC-SWMM model of Central Trunk System	131	\$18,073
Subtotal of “If Authorized Tasks” 8 through 10		211	\$28,425
Total for Tasks 1 through 10		1407	\$202,917