

**AGENDA ITEM EXECUTIVE SUMMARY**

Agenda Item number: *6.d

Title:

Recommendation to Approve Professional Service Agreement for the Eastern Sewer Service Study

Presenter:

Tim Wilson

Meeting: Government Services Committee

Date: October 28, 2019

Proposed Cost: \$59,622

Budgeted Amount: \$60,000

Not Budgeted: ☐**Executive Summary** (*if not budgeted please explain*):

There are several development opportunities on the east side of St. Charles and there are portions of the current sanitary system that may not handle the additional sanitary sewer flows generated by future developments or redevelopment of this corridor. The intent of the Eastern Sanitary Sewer Service Study is to evaluate the potential risk to existing customers and to minimize any surcharges in the service area. In addition, the study will analyze and develop options to increase the capacity of the sanitary sewer system. Once the options are developed, cost estimates will be created for all the viable alternatives.

This study will be a continuation of services already established with Engineering Enterprises Inc. (EEI) and the work they have already completed in this sanitary drainage area, in relation to capacity and CMOM studies. This project will take approximately six months to finish. Once the study is completed a plan will be created, preparing the city for future development opportunities on its eastern corporate borders.

The engineering fees associated with this project are based on cumulative hourly rates not to exceed proposed project cost. Based on similar engineering studies and conceptual design projects completed for the city, the proposal rates provided are comparable.

Attachments (*please list*):

* Eastern Sanitary Sewer Service Study Professional Services Agreement

Recommendation/Suggested Action (*briefly explain*):

Recommendation to approve Professional Services Agreement for the Eastern Sanitary Service Study project to Engineering Enterprises for \$59,622.



Engineering Enterprises, Inc.

October 10, 2019

Mr. Tim Wilson
Public Works Manager - Environmental Services
City of St. Charles
Two East Main Street
St. Charles, IL 60174

**Re: *Eastern Sanitary Sewer Service Study
City of St. Charles, Kane & DuPage Cos., IL***

Dear Mr. Wilson:

In accordance with your request, enclosed for your review and consideration is our proposed agreement for the Eastern Sanitary Sewer Service Study. The agreement includes a detailed scope of services, estimate of level of effort and associated cost and schedule for the project. We are proposing four (4) project meetings, a project initiation meeting and three (3) progress review meetings, as part of the project.

Assuming agreement approval will be obtained by early November, we propose to conduct the project initiation meeting in early November. We are proposing to conduct the majority of the analysis by the end of the year, and then conduct a presentation to the City Council in February 2020. We propose to submit the project report to the City by the end of March 2020.

We look forward to continuing our outstanding partnership with the City and look forward to working with you and members of your staff on this project. If you have any questions or require any additional information, please do not hesitate to contact me.

Respectfully submitted,

ENGINEERING ENTERPRISES, INC.

Jeffrey W. Freeman, P.E., CFM, LEED AP
Vice President

JWF/me

Enclosures

pc: Matt Wilson – Public Works Division Manager (Via E-mail)
Dave Todd – Environmental Services Assistant Division Manager (Via E-mail)
STD, DMT, ARS – EEI (Via E-mail)

\\Milkyway\\EEI_Storage\\Docs\\Public\\St. Charles\\2019\\SR1909 Eastern Sanitary Sewer Service Study\\Project Management\\PSA\\SR1909 Agreement Letter.doc

**AGREEMENT FOR CONSULTING ENGINEERING SERVICES FOR
Eastern Sanitary Sewer Service Study**

This Agreement, made this _____ day of _____, 2019 by and between the City of St. Charles, Kane and DuPage Counties, Illinois, a municipal corporation of the State of Illinois (hereinafter referred to as the "CITY") and Engineering Enterprises, Inc. of 52 Wheeler Road, Sugar Grove, Illinois, 60554 (hereinafter referred to as the "ENGINEER").

In consideration of the mutual covenants and agreements contained in this Agreement, the CITY and the ENGINEER agree, covenant and bind themselves as follows:

1. Services: ENGINEER agrees to perform for the CITY the Services defined within Attachment A.
2. Direction: The Public Works Manager - Environmental Services, or his written designee, shall act as the CITY'S representative with respect to the Services to be provided by the ENGINEER under this Agreement and shall transmit instructions and receive information with respect to the Consulting Engineering Services.
3. Compensation: The work items, estimated staff time, and projected fees for each work item are summarized within Attachment B. Based on this computation, the CITY agrees to pay the ENGINEER for providing the Services on a time and material basis not to exceed an amount of \$59,622.
4. Term: The term of this Agreement shall be active through April 30, 2020 unless otherwise extended through written confirmation by both parties. The work items and phases shall be completed in accordance with the schedule defined within Attachment C.
5. Payment: Engineer shall invoice the CITY on a monthly basis for Services performed and any costs and expenses incurred during the previous thirty (30) day period. The CITY shall pay the ENGINEER within thirty (30) days of receipt of said invoice.
6. Termination: This Agreement may be terminated upon fourteen (14) days written notice of either party. In the event of termination, the ENGINEER shall prepare a final invoice and be due compensation calculated as described in paragraph 3 for all costs incurred through the date of termination.
7. Documents: All related writings, notes, documents, information, files, etc., created, compiled, prepared and/or obtained by the ENGINEER on behalf of the CITY for the Services provided herein shall be used solely for the intended project.
8. Notices: All notices given pursuant to this Agreement shall be sent Certified Mail, postage prepaid, to the parties at the following addresses:

The CITY:

City of St. Charles
Two East Main Street
St. Charles, IL 60174
Attn: Tim Wilson
Public Works Manager -
Environmental Services

The ENGINEER:

Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, IL 60554
Attn: Jeffrey W. Freeman, P.E. CFM, LEED AP
Vice President


9. Waiver: The failure of either party hereto, at any time, to insist upon performance or observation of any term, covenant, agreement or condition contained herein shall not in any manner be constructed as a waiver of any right to enforce any term, covenant, agreement or condition hereto contained.
10. Amendment: No purported oral amendment, change or alteration hereto shall be allowed. Any amendment hereto shall be in writing by the governing body of the CITY and signed by the ENGINEER.
11. Succession: This Agreement shall ensure to the benefit of the parties hereto, their heirs, successors and assigns.

IN WITNESS WHEREOF, we have hereunto signed our names the day and year first above written.

CITY OF ST. CHARLES

ENGINEERING ENTERPRISES, INC.:

Title: _____



Vice President

ATTEST:

ATTEST:

Title: _____



Administrative Assistant

ATTACHMENT A – SCOPE OF SERVICES

Eastern Sanitary Sewer Service Study

City of St. Charles, IL

Introduction

There are at least two large redevelopment opportunities, as well as some undeveloped areas on the East side of the City of St. Charles. Previous sanitary sewer modeling determined surcharging will occur in portions of the eastern conveyance corridor, and that some sections have insufficient capacity to convey the additional flows that would be generated by development and redevelopment in the corridor. The purpose of the Eastern Sanitary Sewer Service Study is to first evaluate the potential risk of basement backups in the minimal surcharging (surcharging less than four feet) portions of the conveyance corridor. In addition, options will be developed and analyzed that will increase the capacity of the conveyance corridor. Once the options are developed, cost estimates will be prepared for viable alternatives. An implementation plan will be prepared if a phased construction approach is feasible. The analyses will be summarized in a presentation to the City Council and within a project report.

The proposed work items for this project are as follows:

PROJECT FACILITATION & MEETINGS

- 0.1 Project Administration
- 0.2 Project Initiation & Three (3) Progress Meetings (4 Total Meetings)

SURCHARGING RISK ASSESSMENT

- 1.1 Estimate Residential Buildings Top of Foundation and Slab Elevations With Google Earth
- 1.2 Compare HGL Elevations To Basement Slab Elevations
- 1.3 Develop GIS Exhibit Summarizing Potential Risk For Basement Backups

SEGMENT EXPANSION EVALUATIONS

- 2.1 Corridor Site Visit
- 2.2 Main & Kautz Corridor Expansion Analysis - Parallel Gravity Sewer
- 2.3 Main & Kautz Corridor Expansion Analysis - Rt. 64 & Kautz Excess Flow LS & FM
- 2.4 East/West Main Corridor Expansion Analysis - Gravity Sewer Improvements
- 2.5 East/West Main Corridor Expansion Analysis - Kautz & Stern Excess Flow LS & FM

SANITARY SEWER MODELING

- 3.1 Main & Kautz Corridor Expansion (Parallel Gravity Sewer) Model Runs & Exhibits
- 3.2 Main & Kautz Corridor Expansion (Rt. 64 & Kautz Excess Flow LS & FM) Model Runs & Exhibits
- 3.3 East/West Main Corridor Expansion (Gravity Sewer Improvements) Model Runs & Exhibits
- 3.4 East/West Main Corridor Expansion (Kautz & Stern Excess Flow LS & FM) Model Runs & Exhibits

COST ESTIMATING & IMPLEMENTATION PLAN DEVELOPMENT

- 4.1 Main & Kautz Corridor Expansion (Parallel Gravity Sewer) Cost Estimate
- 4.2 Main & Kautz Corridor Expansion (Rt. 64 & Kautz Excess Flow LS & FM) Cost Estimate

- 4.3 East/West Main Corridor Expansion (Gravity Sewer Improvements) Cost Estimate
- 4.4 East/West Main Corridor Expansion (Kautz & Stern Excess Flow LS & FM) Cost Estimate
- 4.5 Implementation Plan

REPORT & PRESENTATION

- 5.1 Prepare Report
- 5.2 Prepare Presentation & Attendance @ City Council Meeting

Additional Services

It is assumed the Surcharging Risk Assessment will identify some areas where surveying will be required to assess some connecting sub-basins. Once those areas are defined, the ENGINEER will define the additional level of effort and associated cost for the work. Upon mutual approval of the scope and fee by the CITY and ENGINEER, it is assumed a contract amendment for the additional work will be processed.

Additional work items, including additional meetings beyond the meetings defined in the above scope, shall be considered outside the scope of the base contract and will be billed in accordance with the Standard Schedule of Charges.

ENGINEERING ENTERPRISES, INC.
CONSULTING ENGINEERS

| | |
|-------------|-----------|
| DATE: | 10/6/2019 |
| ENTERED BY: | JWF |

ATTACHMENT B:
ESTIMATE OF LEVEL OF EFFORT AND ASSOCIATED COST
PROFESSIONAL ENGINEERING SERVICES
Eastern Sanitary Sewer Service Study
CITY OF ST. CHARLES, IL

| WORK ITEM NO. | WORK ITEM | ENTITY: | EEI | | | | | | WORK ITEM HOUR SUMM. | COST PER ITEM |
|---|--|---------------|---------------------------|------------------------------|---------------------------------|---------------------|----------------------|--------|-------------------------------|---------------------|
| | | PROJECT ROLE: | Principal In Charge | Senior Project Manager | Senior Project Engineer I | Project Engineer | GIS/ CAD Tech. | Admin. | | |
| | | HOURLY RATE: | \$203 | \$197 | \$153 | \$141 | \$141 | \$70 | | |
| PROJECT FACILITATION & MEETINGS | | | | | | | | | | |
| 0.1 | Project Administration | | 2 | 6 | | | | | 8 | \$ 1,588 |
| 0.2 | Project Initiation & Three (3) Progress Meetings (4 Total Meetings) | | 16 | 24 | 16 | | | 3 | 59 | \$ 10,634 |
| Project Facilitation & Meetings Subtotal: | | | 18 | 30 | 16 | - | - | 3 | 67 | \$ 12,222 |
| SURCHARGING RISK ASSESSMENT | | | | | | | | | | |
| 1.1 | Estimate Residential Buidlings Top of Foundation and Slab Elevations With Google Earth | | 1 | 2 | 24 | | 2 | | 29 | \$ 4,551 |
| 1.2 | Compare HGL Elevations To Basement Slab Elevations | | 1 | 2 | 8 | | 2 | | 13 | \$ 2,103 |
| 1.3 | Develop GIS Exhibit Summarizing Potential Risk For Basement Backups | | 1 | 2 | 2 | | 8 | | 13 | \$ 2,031 |
| Surcharging Risk Assessment Subtotal: | | | 3 | 6 | 34 | - | 12 | - | 55 | \$ 8,685 |
| SEGMENT EXPANSION EVALUATIONS | | | | | | | | | | |
| 2.1 | Corridor Site Visit | | 6 | 6 | 6 | | | | 18 | \$ 3,318 |
| 2.2 | Main & Kautz Corridor Expansion Analysis - Parallel Gravity Sewer | | 1 | 1 | 4 | | 2 | | 8 | \$ 1,294 |
| 2.3 | Main & Kautz Corridor Expansion Analysis - Rt. 64 & Kautz Excess Flow Lift Station & Forcemain | | 1 | 1 | 4 | | 2 | | 8 | \$ 1,294 |
| 2.4 | East/West Main Corridor Expansion Analysis - Gravity Sewer Improvements | | 1 | 1 | 4 | | 2 | | 8 | \$ 1,294 |
| 2.5 | East/West Main Corridor Expansion Analysis - Kautz & Stern Excess Flow Lift Station & Forcemain | | 1 | 1 | 4 | | 2 | | 8 | \$ 1,294 |
| Segment Expansion Evaluations Subtotal: | | | 10 | 10 | 22 | - | 8 | - | 50 | \$ 8,494 |
| SANITARY SEWER MODELING* | | | | | | | | | | |
| 3.1 | Main & Kautz Corridor Expansion (Parallel Gravity Sewer) Model Runs & Exhibits | | 1 | 3 | 8 | | 4 | | 16 | \$ 2,582 |
| 3.2 | Main & Kautz Corridor Expansion (Rt. 64 & Kautz Excess Flow Lift Station & Forcemain) Model Runs & Exhibits | | 1 | 3 | 8 | | 4 | | 16 | \$ 2,582 |
| 3.3 | East/West Main Corridor Expansion (Gravity Sewer Improvements) Model Runs & Exhibits | | 1 | 3 | 8 | | 4 | | 16 | \$ 2,582 |
| 3.4 | East/West Main Corridor Expansion (Kautz & Stern Excess Flow Lift Station & Forcemain) Model Runs & Exhibits | | 1 | 3 | 8 | | 4 | | 16 | \$ 2,582 |
| Sanitary Sewer Modeling Subtotal: | | | 4 | 12 | 32 | - | 16 | - | 64 | \$ 10,328 |
| COST ESTIMATING & IMPLEMENTATION PLAN DEVELOPMENT | | | | | | | | | | |
| 4.1 | Main & Kautz Corridor Expansion (Parallel Gravity Sewer) Cost Estimate | | | 2 | 4 | | | | 6 | \$ 1,006 |
| 4.2 | Main & Kautz Corridor Expansion (Rt. 64 & Kautz Excess Flow Lift Station & Forcemain) Cost Estimate | | | 2 | 4 | | | | 6 | \$ 1,006 |
| 4.3 | East/West Main Corridor Expansion (Gravity Sewer Improvements) Cost Estimate | | | 2 | 4 | | | | 6 | \$ 1,006 |
| 4.4 | East/West Main Corridor Expansion (Kautz & Stern Excess Flow Lift Station & Forcemain) Cost Estimate | | | 2 | 4 | | | | 6 | \$ 1,006 |
| 4.5 | Implementation Plan | | 1 | 4 | 8 | | | | 13 | \$ 2,215 |
| Cost Estimating & Implementation Plan Development Subtotal: | | | 1 | 12 | 24 | - | - | - | 37 | \$ 6,239 |
| REPORT & PRESENTATION | | | | | | | | | | |
| 5.1 | Prepare Report | | 2 | 8 | 32 | | 16 | 2 | 60 | \$ 9,274 |
| 5.2 | Prepare Presentation & Attendance @ City Council Meeting | | 11 | 2 | 7 | | 2 | | 22 | \$ 3,980 |
| Report & Presentation Subtotal: | | | 13 | 10 | 39 | - | 18 | 2 | 82 | \$ 13,254 |
| PROJECT TOTAL: | | | 49 | 80 | 167 | - | 54 | 5 | 355 | 59,222 |

Notes:
* Three (3) model runs will be completed for each alternative; One run with a portion of Route 64 & Kautz property redeveloped, one with a larger redevelopment of the Route 64 & Kautz properties and one with all future developments included

| DIRECT EXPENSES | |
|-------------------|--------|
| Printing = | \$ 300 |
| Mileage = | \$ 100 |
| | |
| DIRECT EXPENSES = | \$ 400 |

| LABOR EXPENSES | |
|--------------------------------------|-----------|
| Engineering Expenses = | \$ 51,258 |
| Drafting & GIS Technician Expenses = | \$ 7,614 |
| Administrative Expenses = | \$ 350 |
| TOTAL LABOR EXPENSES = | \$ 59,222 |
| TOTAL COSTS = | |
| \$ 59,622 | |

Attachment C:
SCHEDULE

Eastern Sanitary Sewer Service Study
CITY OF ST. CHARLES, IL

| WORK ITEM NO. | WORK ITEM | Year: | 2019 | | | | | | | | | | | | 2020 | | | | | | | | | | | | | | | | | | | |
|---|---|----------------|---------|----|----|----|----------|----|----|----|----------|---|----|----|---------|---|----|----|----------|---|----|----|-------|---|---|----|-------|----|---|----|----|----|--|--|
| | | Month: | October | | | | November | | | | December | | | | January | | | | February | | | | March | | | | April | | | | | | | |
| | | Week Starting: | 7 | 14 | 21 | 28 | 4 | 11 | 18 | 25 | 2 | 9 | 16 | 23 | 30 | 6 | 13 | 20 | 27 | 3 | 10 | 17 | 24 | 2 | 9 | 16 | 23 | 30 | 6 | 13 | 20 | 27 | | |
| PROJECT FACILITATION & MEETINGS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.1 | Project Administration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.2 | Project Initiation & Three (3) Progress Meetings (4 Total Meetings) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SURCHARGING RISK ASSESSMENT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.1 | Estimate Residential Buidlings TOF and Slab Elevations With Google Earth | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 | Compare HGL Elevations To Basement Slab Elevations | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.3 | Develop GIS Exhibit Summarizing Potential Risk For Basement Backups | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEGMENT EXPANSION EVALUATIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.1 | Corridor Site Visit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.2 | Main & Kautz Corridor Expansion Analysis - Parallel Gravity Sewer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.3 | Main & Kautz Corridor Expansion Analysis - Rt. 64 & Kautz Excess Flow LS & FM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.4 | East/West Main Corridor Expansion Analysis - Gravity Sewer Improvements | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.5 | East/West Main Corridor Expansion Analysis - Kautz & Stern Excess Flow LS & FM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SANITARY SEWER MODELING | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.1 | Main & Kautz Corridor Expansion (Parallel Gravity Sewer) Model Runs & Exhibits | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.2 | Main & Kautz Corridor Expansion (Rt. 64 & Kautz Excess Flow LS & FM) Model Runs & Exhibits | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.3 | East/West Main Corridor Expansion (Gravity Sewer Improvements) Model Runs & Exhibits | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.4 | East/West Main Corridor Expansion (Kautz & Stern Excess Flow LS & FM) Model Runs & Exhibits | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COST ESTIMATING & IMPLEMENTATION PLAN DEVELOPMENT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.1 | Main & Kautz Corridor Expansion (Parallel Gravity Sewer) Cost Estimate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.2 | Main & Kautz Corridor Expansion (Rt. 64 & Kautz Excess Flow LS & FM) Cost Estimate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.3 | East/West Main Corridor Expansion (Gravity Sewer Improvements) Cost Estimate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.4 | East/West Main Corridor Expansion (Kautz & Stern Excess Flow LS & FM) Cost Estimate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.5 | Implementation Plan | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| REPORT & PRESENTATION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.1 | Prepare Report | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.2 | Prepare Presentation & Attendance @ City Council Meeting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

G:\Public\St. Charles\2019\SR1909 Eastern Sanitary Sewer Service Study\Project Management\PSA\SR1909 Attachment C - Schedule.xlsx\All 2019 Work Items

| Legend | |
|---|-------------------------------------|
|  | Project Administration Work Item(s) |
|  | Meeting(s) & Field Visits |
|  | Field & Analysis Work |
|  | Report Development |
|  | Presentation Development |



Standard Schedule of Charges

January 1, 2019

| EMPLOYEE DESIGNATION | CLASSIFICATION | HOURLY RATE |
|---|----------------|-------------|
| Senior Principal | E-4 | \$208.00 |
| Principal | E-3 | \$203.00 |
| Senior Project Manager | E-2 | \$197.00 |
| Project Manager | E-1 | \$178.00 |
| Senior Project Engineer/Planner/Surveyor II | P-6 | \$165.00 |
| Senior Project Engineer/Planner/Surveyor I | P-5 | \$153.00 |
| Project Engineer/Planner/Surveyor | P-4 | \$141.00 |
| Senior Engineer/Planner/Surveyor | P-3 | \$129.00 |
| Engineer/Planner/Surveyor | P-2 | \$117.00 |
| Associate Engineer/Planner/Surveyor | P-1 | \$106.00 |
| Senior Project Technician II | T-6 | \$153.00 |
| Senior Project Technician I | T-5 | \$141.00 |
| Project Technician | T-4 | \$129.00 |
| Senior Technician | T-3 | \$117.00 |
| Technician | T-2 | \$106.00 |
| Associate Technician | T-1 | \$ 93.00 |
| Engineering/Land Surveying Intern | I-1 | \$ 84.00 |
| GIS Technician | G-1 | \$ 75.00 |
| Administrative Assistant | A-3 | \$ 70.00 |

CREW RATES, VEHICLES AND REPROGRAPHICS

| | |
|---|--|
| 1 Man Field Crew with Standard Survey Equipment | \$168.00 |
| 2 Man Field Crew with Standard Survey Equipment | \$262.00 |
| 1 Man Field Crew with RTS or GPS * | \$208.00 |
| 2 Man Field Crew with RTS or GPS * | \$302.00 |
| Vehicle for Construction Observation | \$15.00 |
| In-House Scanning and Reproduction | \$0.25/Sq. Ft. (Black & White) \$1.00/Sq. Ft. (Color) |
| Reimbursable Direct Costs & Services by Others | Cost + 10% |

*RTS = Robotic Total Station / GPS = Global Positioning System