



AGENDA ITEM EXECUTIVE SUMMARY

Agenda Item:	Sanitary Sewer River Crossing Design Engineering		
Presenter & Title:	Bob Van Gyseghem, Superintendent of Water & Wastewater		
Date:	June 6, 2022		
Please Check Appropriate Box:			
<input checked="" type="checkbox"/>	Committee of the Whole Meeting	<input type="checkbox"/>	Special Committee of the Whole Meeting
<input checked="" type="checkbox"/>	City Council Meeting	<input type="checkbox"/>	Special City Council Meeting
<input type="checkbox"/>	Public Hearing	<input type="checkbox"/>	Other -
Associated Strategic Plan Goal/Objective: EMS-II, ES-III			
Estimated Cost: \$900,000	Budgeted?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other Funding? <input type="checkbox"/> Yes <input type="checkbox"/> No
Executive Summary:			
<p>Deuchler Engineering studied the river crossing using flow meter data and modeling over the course of the past several years. During these years, significant rain events occurred causing Sanitary Sewer Overflows, SSO's, specifically on River Lane. The modeling showed that even with continued investment in sanitary sewer rehabilitation west of the river, SSO's would continue with the single river crossing. Currently all sanitary sewage from the west side of the city flows across the Fox River to the wastewater plant in a single 20-inch sewer main. On August 16, 2021, Deuchler Engineering presented to the Geneva City Council their evaluation on the need for a new sanitary sewer river crossing to the Wastewater Treatment Plant. The final report recommended the installation of a new twin pipe crossing across the river to the wastewater plant. The new twin crossing will reduce the likelihood of SSO's, provide system reliability, and ease maintenance activities. Staff is presenting for consideration an engineering agreement with Deuchler Engineering for the design and permitting of a new twin pipe sanitary sewer river crossing. Staff is pleased with the work provided by Deuchler Engineering and has negotiated a contract for the design and permitting of the new twin pipe crossing and screening building.</p>			
Attachments: <i>(please list)</i>			
<ul style="list-style-type: none"> • Resolution • Engineering Agreement 			
Voting Requirements:			
<p><i>This motion requires a simple majority of affirmative votes for passage.</i></p> <p><i>The Mayor may vote on three occasions: (a) when the vote of the aldermen or trustees has resulted in a tie; (b) when one half of the aldermen or trustees elected have voted in favor of an ordinance, resolution, or motion even though there is no tie vote; or (c) when a vote greater than a majority of the corporate authorities is required by state statute or local ordinance to adopt an ordinance, resolution, or motion.</i></p>			
Recommendation / Suggested Action: <i>(how the item should be listed on agenda)</i>			
<p>Recommend approval of a Resolution authorizing the City Administrator to execute an engineering agreement with Deuchler Engineering a Division of Fehr-Graham & Associates at a cost not-to-exceed \$900,000.00.</p>			

RESOLUTION NO. 2022-45
RESOLUTION AUTHORIZING EXECUTION OF
Engineering Agreement with Deuchler Engineering a Division of Fehr-Graham & Associates

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GENEVA, KANE COUNTY, ILLINOIS, as follows:

SECTION 1: That the City Administrator is hereby authorized to execute, on behalf of the City of Geneva, an engineering agreement with Deuchler Engineering, a Division of Fehr-Graham & Associates, for design of sanitary sewer river crossing and screening room, in the form attached as "Exhibit A".

SECTION 2: This Resolution shall become effective from and after its passage as in accordance with law.

PASSED by the City Council of the City of Geneva, Kane County, Illinois, this ____ day of _____, 2022

AYES: __ NAYS: __ ABSENT: __ ABSTAINING: __ HOLDING OFFICE: __

Approved by me this ____ day of _____, 2022.

Mayor

ATTEST:

City Clerk

**ENGINEERING AGREEMENT
FOR
SANITARY SEWER RIVER CROSSING AND SCREENING BUILDING
CITY OF GENEVA, ILLINOIS**

This Agreement is made and entered into this _____ day of _____, 2022, by and between Fehr-Graham & Associates LLC, whose address is 230 Woodlawn Avenue, Aurora, IL, 60506, hereinafter called the “Engineer”, and the City of Geneva, State of Illinois, hereinafter called the “Owner”, and covers certain professional engineering services in connection with the improvement.

Witnesseth that, in consideration of these premises and of the mutual covenants herein set forth,

Now, therefore, the Owner and Engineer, in consideration of their mutual covenants, herein agree in respect to the performance of professional engineering services by the Engineer, and the payment for those services by the Owner, as set forth below.

SECTION 1 - PROJECT DESCRIPTION

1.1 The Owner intends on entering into a contract with the Engineer for professional engineering services to design and permit a new sanitary sewer river crossing across the Fox River and a new Screening Building. The contract documents for the sanitary sewer river crossing and Screening Building will be prepared as separate packages.

1.1.1 Engineer will prepare contract documents for a new sanitary sewer river crossing across the Fox River.

1.1.1.1 The river crossing is anticipated to be two 20-inch diameter sanitary sewer pipes encased in concrete. The method of installation is anticipated to be open trenching with coffer dams.

1.1.1.2 Engineer will complete the following anticipated activities to support the permitting of a new sanitary sewer river crossing across the Fox River. Permitting activities will be completed as needed for state and federal requirements. Permitting activities during construction and post-construction monitoring are not included in this scope.

- Wetland Delineation, Report
- Fish and Mussel Survey and Reports
- USACE/IDNR/IEPA Joint Permit Application Submittal
- Section 404 (b)(1) NEPA Merger Process
- IEPA 401 Water Quality Certification (Project Specific)
- IDNR-OWR Floodway Construction Permit
- Kane County Stormwater Permit
- Kane County Forest Preserve District Permitting
- Union Pacific Railroad Right-of-Way Permit
- IDNR Conservation Plan/Incidental Take Authorization

1.1.2 Engineer will prepare contract documents for a new Screening Building.

1.1.2.1 The new screening building is anticipated to include 2 mechanically screened screens and a bypass channel with a manually cleaned screen, housed in a new building south of the existing influent pump station. The proposed building is estimated to be 32-feet by 40-feet and roughly 20-feet deep.

1.1.3 Engineer will perform the following tasks common to both the new sanitary sewer river crossing across the Fox River and a new Screening Building.

- Meetings and Workshops
- Project Management
- Survey
- Geotechnical Coordination
- Loan Application Assistance
- Local Permitting Assistance
- IEPA Permitting
- Bid Assistance

1.2 The foregoing goals and objectives are hereinafter referred to as the “PROJECT”.

SECTION 2 - THE ENGINEER AGREES

2.1 To perform professional engineering services in connection with Section 1 herein referred to as the “PROJECT” and as hereinafter stated.

2.2 To serve as the Owner’s professional engineering representative in those phases of the Project to which this Agreement applies, and to give consultation and advice to the Owner during the performance of the services.

2.3 To provide professional engineering services for the PROJECT in connection with the attached Scope of Work and Anticipated Project Schedule.

2.4 That all studies and plans furnished by the Engineer pursuant to this Agreement will be endorsed by him and will show his professional seal where such is required by law.

SECTION 3 - THE OWNER AGREES

3.1 To furnish all available data such as construction plans of sanitary sewers and wastewater treatment plant, preceding reports prepared by others, GIS maps of the City streets and sewer systems, land use plan, comprehensive development plans, sewer televising videos, manhole inspection reports, and sewer rehabilitation plans completed by Owner and others.

3.2 To designate in writing a person to act as Owner’s representative with respect to the services to be performed or furnished by Engineer under this Agreement. Such person will have complete authority to transmit instructions, receive information, interpret and define Owner’s policies and decisions with respect to Engineer’s services for the Project.

- 3.3 To pay the Engineer for those services described in Section 1 and Section 2.3 on time and materials basis with a not-to-exceed fee in the amount of \$900,000 based on the Engineer's fee schedule in effect at that time. The below table summarizes the anticipated tasks and anticipated effort.

Common Tasks	Estimated Hours	Estimated Fees, including other direct costs
Project Management and Meetings	316	\$52,132
Survey	50	\$7,310
Loan Application Assistance	76	\$9,648
IEPA and Local Permitting Assistance	240	\$30,646
River Crossing		
Design	1,195	\$174,755
Permitting (Environmental, Railroad)	1,104	\$143,130
Bid Assistance	85	\$12,335
Headworks		
Design	3,108	\$457,034
Bid Assistance	90	\$13,010
Total	6,264	\$900,000

- 3.5 That those services beyond the scope of Section 1 and not included in Section 2, will be considered additional work. Compensation for additional work will be paid in accordance with the Engineer's fee schedule in effect at that time, except that this compensation will not be included in the above not-to-exceed amount. No additional work will be performed without the Owner's prior written approval.
- 3.6 That payments due the Engineer for services rendered will be made in monthly payments based upon actual work completed and within the time frame set forth in Section 3.7.
- 3.7 To pay Engineer after approval of the invoice in accordance with the Illinois Prompt Payment Act.
- 3.8 Reimbursable expenses and services from outside vendors, subconsultants and subcontractors shall be invoiced with a 1.08 multiplier for administrative costs.
- 3.9 If Engineer is requested to respond to any mandatory orders for the production of documents or witnesses on Owner's behalf regarding work performed by Engineer, Owner agrees to pay all costs and expenses incurred by Engineer not reimbursed by others in responding to such order, including reasonable attorneys' fees, staff time at current billing rates and reproduction expenses. Notwithstanding the foregoing to the contrary, Engineer shall cooperate in providing documents requested pursuant to reasonable Freedom of Information requests at no additional cost or charge to the Owner. Freedom of Information requests requiring Engineer staff time in excess of 2 hours and reproduction expenses in excess of \$50 shall be reimbursed by the Owner.
- 3.10 Engineer's employees shall not be retained as expert witnesses except by separate written

agreement. The Owner agrees to pay the Engineer pursuant to the Engineer's then current fee schedule for any Engineer employee(s) subpoenaed by any party as an occurrence witness as a result of the Engineer's services under this Agreement.

- 3.11 Engineer acknowledges that it carries, and shall maintain for the duration of the Project, insurance issued by a company or companies qualified to do business in Illinois in the below amounts for Professional Liability, Worker's Compensation, Employer's Liability, and Commercial Automobile Liability with the following coverages:
- 3.11.1 Commercial General Liability Insurance, limits of not less than one (1) million dollars (\$1,000,000) each occurrence and two (2) million dollars (\$2,000,000) general aggregate.
 - 3.11.2 Automobile Liability Insurance with limits of not less than one (1) million dollars (\$1,000,000).
 - 3.11.3 Workers Compensation and Employer's Liability Insurance of not less than one (1) million dollars (\$1,000,000).
 - 3.11.4 Professional Liability Insurance, limits of not less than two (2) million dollars (\$2,000,000) per claim and four (4) million dollars (\$4,000,000) aggregate.
 - 3.11.5 Umbrella Liability Insurance, limits of not less than five (5) million dollars (\$5,000,000) per occurrence and five (5) million dollars (\$5,000,000) aggregate.

Certificates for such insurance shall be delivered to Owner prior to the commencement of any work. Engineer will not modify the insurance coverages without the Owner's prior written consent. In no event shall the Engineer indemnify any other party for the consequences of that party's negligence, including failure to follow the Engineer's recommendations. Notwithstanding anything herein to the contrary, neither party shall be liable to the other for any incidental or consequential damages, including loss of use or loss of profits.

- 3.12 Within the limits and the conditions of Engineer's insurance, Engineer agrees to indemnify and hold Owner harmless from and against 3rd party tort loss, damage, injury or liability to the extent caused by any negligent acts of Engineer, its employees, and their employees. Engineer shall not be responsible for any loss, damage or liability covered by insurance beyond the amounts, limits and conditions of such insurance. Engineer shall not be responsible for any loss, damage or liability arising from any acts by Owner, its agents or employees.
- 3.13 If any of the provisions contained in this Agreement are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired.

SECTION 4 - IT IS MUTUALLY AGREED

- 4.1 This Agreement may be terminated by the Owner upon giving notice in writing to the Engineer at his last known post office address. Upon such termination, the Engineer shall cause to be delivered to the Owner copies of all reports, drawings, specifications, partial and completed estimates and data. The Engineer shall be paid for any services completed

and any services partially completed in accordance with Section 3. Engineer can terminate the Agreement if there is a material breach by the Owner.

- 4.2 That the Engineer warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the Engineer, to solicit or secure this Agreement, and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the Engineer, any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty the Owner shall have the right to void this Agreement without liability to the Owner whatsoever.
- 4.3 That the Owner acknowledges that the Engineer is a corporation and agrees that any claim made by the Owner arising out of any act or omission of any director, officer or employee of the Engineer, in the execution or performance of this Agreement shall be made against the Engineer and not against such director, officer or employee.
- 4.4 That the Owner and the Engineer each binds themselves and their partners, successors, executors, administrators and assigns to the other party of this Agreement and to the partners, successors, executors, administrators and assigns of such other party in respect to all covenants of this Agreement; except as above, neither the Owner nor the Engineer shall assign, sublet or transfer its interest in this Agreement without the written consent of the other. Nothing herein shall be construed as creating any personal liability on the part of any elected or appointed officer, employee or agent of any public body which may be a party hereto, nor shall it be construed as giving any right or benefits hereunder to anyone other than the Owner and the Engineer.
- 4.5 That the Engineer grants to the Owner a nonexclusive license to retain, and to reproduce the Engineer's designs, drawings, plans, specifications, photos, reports, information, observations, calculations, notes, and any other documents, data, or information, in any form in connection with the services ("Documents") for constructing additions to any project, or for completion of a project by others. Any Documents bearing the Engineer's seal or signature shall not be used by the Owner for other projects. In the event of any termination of the Engineer's services, the Engineer shall turn over and deliver to Owner a copy of all Documents, including any information or Documents in electronic format, AutoCAD, or otherwise. In the event any such Documents are incomplete, the same may be appropriately marked by the Engineer as "Incomplete and Unreliable. Use of these documents for any reason is at the user's sole risk." Owner assumes all responsibility for any Documents which have been modified by or on Owner's behalf. For incomplete Documents, or Documents that were modified, the Owner agrees to indemnify and hold harmless the Consultant, its officers, directors, and employees against any damages, liabilities or costs, including reasonable attorneys' fees and defense costs, arising from the use of such Documents.
- 4.6 The Engineer shall perform the function of Agent or Representative of the Owner during the performance of the PROJECT. The Engineer may be required to enter private properties and private premises to perform the work identified in the PROJECT. The Owner agrees to indemnify, defend and hold harmless the Engineer from any claim, suit, liability, damage, injury, cost or expense, including attorney fees, arising out of Engineer's entry into private properties and private premises, unless resulting from Engineer's negligence or wrongful conduct or as provided by law.

- 4.7 That since Engineer has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractor(s)' methods of determining prices, or over competitive bidding or market conditions, Engineer's opinions of probable total project costs and construction cost provided for herein are to be made on the basis of Engineer's experience and qualifications and represent Engineer's best judgement as an experienced and qualified professional Engineer familiar with the construction industry; but Engineer cannot and does not guarantee that proposals, bids or actual total project or construction costs will not vary from opinions of probable cost prepared by Engineer.
- 4.8 That any difference between the Engineer and Owner concerning the interpretation of the provisions of this Agreement shall be referred to a committee of disinterested parties consisting of one member appointed by the Engineer, one member appointed by the Owner and a third member appointed by the two other members for disposition and that the committee shall attempt to resolve the difference by formal non-binding mediation conducted in accordance with rules and procedure to be agreed upon by the parties.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized officers, this _____ day of _____, 2022.

Executed by the Owner:

City of Geneva, Kane County,
State of Illinois

ATTEST:

BY: _____

BY: _____

TITLE: _____

TITLE: _____

Executed by the Engineer:

Fehr-Graham & Associates LLC
230 Woodlawn Avenue
Aurora, IL 60506

BY: _____

TITLE: Principal



2022 Personnel Chargeout Rates

Principal	\$175 - 250
Sr. Project Manager	\$150 - 240
Project Manager	\$110 - 230
Engineering:	
Lead Structural Engineer	\$175 - 185
Electrical Engineer	\$170 - 180
Sr. Project Engineer	\$110 - 175
Project Engineer	\$100 - 160
CAD Manager	\$120 - 130
Designer	\$ 85 - 125
Staff Engineer	\$100 - 120
Engineer	\$ 80 - 110
Sr. Structural Engineer	\$150 - 170
Sr. Resident Engineer	\$120 - 160
Water/Wastewater Op Specialist	\$120 - 140
Sr. Engineering Technician	\$ 80 - 150
Associate Engineering Technician	\$ 70 - 110
Engineering Technician	\$ 50 - 100
Landscape Architect	\$ 80 - 100
GIS Specialist	\$ 80 - 90
Surveying:	
Survey Manager	\$170 - 180
Land Surveyor	\$100 - 160
Survey Crew Chief	\$ 90 - 120
Surveyor	\$ 80 - 100
Survey Technician	\$ 60 - 90
Environmental, Health and Safety:	
Sr. EHS Scientist	\$110 - 150
EHS Project Scientist	\$100 - 140
EHS Scientist	\$ 90 - 130
EHS Specialist	\$ 70 - 110
EHS Technician	\$ 60 - 110
Project Hydrogeologist	\$ 90 - 120
Geologist	\$ 70 - 90
Staff Hydrogeologist	\$ 80 - 110
Hydrogeologist	\$ 70 - 100
Biologist	\$ 80 - 110
I.T. Consultant	\$ 70 - 160
Grant Writer / Community Development Specialist	\$ 90 - 110
Project Coordinator	\$170 - 180
Project Administrator	\$ 70 - 110
Project Assistant	\$ 73

Charges for expert testimony will be at a rate 1.5 times the standard hourly rate. Minimum 4 hours. Overtime hours charged at standard rates when Fehr Graham controls scheduling. Reimbursable Direct Expenses will be charged at invoice cost + 15%.