

STANDARD AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT made between the City of Aurora, whose address is 44 E. Downer Place, Aurora, Illinois 60507 hereinafter called the **CLIENT** and Crawford, Murphy & Tilly, Inc., Consulting Engineers, 2750 West Washington Street, Springfield, Illinois 62702, hereinafter called the **ENGINEER**.

WITNESSETH, that whereas the **CLIENT** desires the following described professional engineering, land surveying or architectural services:

Professional consulting engineering services for the completion of a Source Water Protection Plan for the water system as described in the attached Exhibit A – Scope of Services.

NOW THEREFORE, the **ENGINEER** agrees to provide the above described services and the **CLIENT** agrees to compensate the **ENGINEER** for these services in the manner checked below:

☒ On a time and expense basis in accordance with the attached Exhibit C - Schedule of Hourly Charges which is subject to change at the beginning of each calendar year. Reimbursable direct expenses will be invoiced at cost. Professional or Subconsultant services performed by another firm will be invoiced at cost plus ten percent. Note that no Professional or Subconsultant services are anticipated to be furnished to the **ENGINEER** by another firm on this project.

☐ At the lump sum amount of \$ ____.

IT IS MUTUALLY AGREED THAT, payment for services rendered shall be made monthly in accordance with invoices rendered by the **ENGINEER**.

IT IS FURTHER MUTUALLY AGREED:

That the compensation for design phase engineering services for the Source Water Protection Plan for the water system shall not exceed \$58,150, per the attached Exhibit B without further authorization from the **CLIENT**.

The **CLIENT** and the **ENGINEER** each binds himself, his partners, successors, executors, administrators and assignees to each other party hereto in respect to all the covenants and agreements herein and, except as above, neither the **CLIENT** nor the **ENGINEER** shall assign, sublet or transfer any part of his interest in this **AGREEMENT** without the written consent of the other party hereto. This **AGREEMENT**, and its construction, validity and performance, shall be governed and construed in accordance with the laws of the State of Illinois. This **AGREEMENT** is subject to the General Conditions attached hereto.

IN WITNESS WHEREOF, the parties hereto have affixed their hands and seals this ____ day of ____, 2021.

CLIENT:

CITY OF AURORA

(Client Name)

(Signature)

(Name and Title)

ENGINEER:

CRAWFORD, MURPHY & TILLY, INC.

Theresa O'Grady, P.E.
(Signature)

Theresa O'Grady, Group Manager

(Name and Title)

CMT Job No. _____

STANDARD GENERAL CONDITIONS
Crawford, Murphy & Tilly, Inc.

1. Standard of Care

In performing its professional services hereunder, the **ENGINEER** will use that degree of care and skill ordinarily exercised, under similar circumstances, by members of its profession practicing in the same or similar locality. No other warranty, express or implied, is made or intended by the **ENGINEER'S** undertaking herein or its performance of services hereunder.

2. Reuse of Document

All Reports, Drawings, Specifications, other documents, and electronic media prepared or furnished by **ENGINEER** pursuant to this Agreement are instruments of service in respect to the Project and shall be the property of the **CLIENT**. **ENGINEER** shall retain the right of reuse of said documents and electronic media by and at the discretion of the **ENGINEER** whether or not the Project is completed. Reproducible copies of **ENGINEER'S** documents and electronic media of the Project and **ENGINEER's** documents shall be delivered to the **CLIENT**; however, Project and **ENGINEER's** documents and electronic media are not intended or represented to be suitable for reuse by the **CLIENT** or others on additions or extensions of the Project, or on any other project.

3. Termination

This Agreement may be terminated by either party upon seven days prior written notice. In the event of termination, the **ENGINEER** shall be compensated by the client for all services performed up to and including the termination date, including reimbursable expenses.

4. Parties to the Agreement

The services to be performed by the **ENGINEER** under this Agreement are intended solely for the benefit of the **CLIENT**. Nothing contained herein shall confer any rights upon or create any duties on the part of the **ENGINEER** toward any person or persons not a party to this Agreement including, but not limited to any contractor, subcontractor, supplier, or the agents, officers, employees, insurers, or sureties of any of them.

5. Construction and Safety

This project will be completed with **CLIENT** staff working alongside **ENGINEER** staff. The **ENGINEER** shall be responsible for the safety of their own personnel working on the job site. The **CLIENT** shall be responsible for the safety of their own personnel working on the job site.

6. Payment

CLIENT shall be invoiced once each month for work performed during the preceding period. **CLIENT** agrees to approve and pay such invoices in the manner provided by the Local Government Prompt Payment Act, 50 ILCS 505/1 et. seq. **CLIENT** further agrees to pay interest on all amounts approved and not paid at the interest rate permitted under the Local Government Prompt Payment Act.

7. Insurance

ENGINEER shall indemnify and save harmless **CITY**, its officers and employees, from suits, actions or claims of any character brought because of any injuries or damages received or sustained by any person, persons, or property resulting from any negligent act, error or omission on the part of **ENGINEER**.

During the term of this AGREEMENT, **ENGINEER** shall provide the following types of insurance with no less than the following specified amounts.

- a. Comprehensive general liability – combined single limit amount of \$1,000,000 per incident, \$2,000,000 general aggregate limit.
- b. Auto Liability – combined single limit amount of \$1,000,000 per incident on any vehicle driven by an R.I. while engaged in any activity within the scope of this AGREEMENT.
- c. Professional Liability - \$5,000,000;
- d. Worker's Compensation – Statutory Limit; the policy shall include a "Waiver of Subrogation" clause;
- e. "Umbrella Coverage" - \$5,000,000.

ENGINEER shall furnish to **CITY** satisfactory proof of coverage of the above insurance requirements by a reliable company or companies, before commencing any work. Such proof shall consist of a current certificate executed by the insurance company(s) and shall be filed with **CITY**. Said certificate shall name the city of Aurora as additional, non-contributory insured and contain a clause which requires that no change shall be made to the coverage and there shall be no cancellation or lapse of such coverage unless **CITY** receives written notification from the insurance company providing coverage at least thirty (30)-days in advance of said cancellation or change in coverage.

CITY OF AURORA

Source Water Protection Plan

EXHIBIT A: SCOPE OF SERVICES

January 30, 2021

Background

Title 35 of the Illinois Administrative Code, Section 604.300 requires that all community water supplies (CWS) treating groundwater or surface water as a primary or emergency water supply develop a Source Water Protection Plan. The code includes a schedule based on the population served. A CWS serving greater than 50,000, such as the City of Aurora's water system, must submit their Source Water Protection Plan to the Illinois Environmental Protection Agency (IEPA) by July 26, 2022. Updates to the Source Water Protection Plan are required every five years.

The City of Aurora has requested the assistance of CMT in developing a Source Water Protection Plan to meet the requirements of Title 35, Section 604.300.

Project Tasks

This project will include the completion of a Source Water Protection Plan following the outline included with this Scope. CMT will provide the City with a hard copy and electronic copy of the final Source Water Protection Plan, which the City will submit to the IEPA for approval.

The following tasks are anticipated for the completion of the Source Water Protection Plan:

1. **Kick-off Workshop** - It is anticipated that the project would begin with a Kick-off Workshop with key project team members and City staff. The kick-off workshop would review the project scope and schedule and would include a list of information required from the City. A list of anticipated information is below:
 - Locations and date of most recent river and well water samples, along with lab results for those samples
 - Any recent reports regarding river or well water quality
 - Map of existing storm, sanitary, and combined sewers throughout the city in GIS or AutoCAD format
2. **Interviews and Data Gathering** - CMT project team members will conduct an interview with key City water supervisory and operations staff. During the interview, CMT will request input from City staff on the following sections of the Source Water Protection Plan:
 - Existing policy regarding source water
 - Existing resources in place for protecting source water
 - Existing barriers to source water protection
 - Statement of importance of source water
 - Efforts to protect source water
 - Objectives to be met by Source Water Protection Plan
 - Action plan and schedule for meeting objectives

3. **Determine River Intake Zone of Influence** – CMT will gather publicly available information from the Illinois Department of Natural Resources and the Illinois State Water Survey about the existing topography, velocity, and flow range of the Fox River near the existing water intake and develop an exhibit showing the zone where contaminants released by existing outfalls may impact the river intake, based on flow and mixing calculations. CMT will investigate potential sources of river contamination, including City storm, sanitary, and combined sewer outfalls, overland flows to the river, and National Pollution Discharge Elimination System (NPDES) permit holders upstream of the river intake as far as Elgin. Storm sewer drainage areas will be mapped to their outfalls to incorporate potential contamination sources via the storm sewer. CMT will create a table and/or exhibits summarizing the potential contamination sources.
4. **Determine Areas of Protection for Wells** – CMT will determine the area of protection required for all wells in the system. For the deep wells and shallow wells in confined rock aquifers, the minimum setback of 200 feet established by the IEPA will be used to define the areas of protection. For the shallow wells which draw from unconfined aquifers (Wells 101, 103, 115, and 119), areas of protection will be based on zones of influence calculated from available Illinois State Water Survey static and pumping water levels. CMT will investigate potential sources of contamination in each of the areas of protection using information from the EPA and Environmental Data Resources (EDR). An exhibit showing potential contamination sources within well protection areas will be developed.
5. **Develop a Source Water Protection Action Plan** – With input from City staff, CMT will develop a list of source water protection objectives and a plan to meet those objectives. This may include contact lists in the event that a contaminant is recognized at the river intake or water treatment plant, protective measures such as additional signage in well protection areas, and a plan for monitoring real-time river water quality from stations maintained by the Illinois Department of Natural Resources. Anticipated schedules and required resources will be included in the action plan.
6. **Develop Draft Source Water Protection Plan** – CMT will develop a draft document following the attached outline and submit to City staff for review and comment.
7. **Develop Final Source Water Protection Plan** – CMT will incorporate City comments into a finalized document. City staff will be responsible for submitting the final version to the IEPA for approval.

Schedule

The schedule for this project is based on the deadline set by the IEPA. The Source Water Protection Plan must be submitted by July 26, 2022.

Source Water Protection Plan Content Outline

- I. Vision Statement
 - A. Policy and commitment to protecting source water. *CMT will develop this section using information to be provided by the City.*
 - B. Explanation of resources to protect source water. *CMT will develop this section using information to be provided by the City.*
 - C. Barriers to protection of source water. *CMT will develop this section using information to be provided by the City.*
 - D. Names of individuals who developed vision statement
- II. Source Water Assessment
 - A. Statement of importance of source water. *CMT will develop this section using information to be provided by the City.*
 - B. List of water supplies that obtain water from this CWS. *CMT will develop this section using information to be provided by the City.*
 - C. Delineation of sources
 - 1. Watershed map and description, including intake locations. *CMT will develop an exhibit and description based on previously developed maps.*
 - 2. Well ID numbers, descriptions, status, and well depth, description of setback zones, and description of aquifer for each well. *This section will include an updated version of previously developed well descriptions.*
 - 3. *This section will include an updated version of the map developed previously that shows all public and private wells in the area.*
 - D. Report of water quality for all sources, including:
 - 1. Sample location and date.
 - 2. Certified lab results.
 - 3. *This section will be developed based on information to be provided by the City.*
 - E. Report of finished water quality
This section will be developed based on information to be provided by City and/or from the Source Water Assessment Program Fact Sheet.
 - F. ID of source water contamination sources
 - 1. *CMT will develop an exhibit showing zone of influence on water quality at the river intake based on its location in the side channel. The exhibit will include potential sources of contamination within the zone of influence based on information provided by the EPA and EDR reports.*
 - 2. *CMT will develop exhibits delineating areas of protection for wells. The exhibits will include potential sources of contamination within each area of protection based on information provided by the EPA and EDR reports.*
 - 3. *The report will additionally discuss sources of contamination for deep wells and the shallow wells in confined aquifers based on information provided in the Source Water Assessment Program Fact Sheet from the IEPA.*
 - G. Analysis of susceptibility to contamination
Analysis will be based on the existing Source Water Assessment Program Fact Sheet.
 - H. Explanation of efforts to protect source water
Description will be developed based on conversations with staff and past projects.

III. Objectives

A. List of objectives for protecting source water. Examples include:

1. Meeting requirements of Title 35 of the Illinois Administrative Code, Section 604.300
2. Addressing specific problems identified in assessment, such as nutrient/algae growth in the river and polyfluoroalkyl substances (PFAS).
3. Planning for potential future issues.
4. *Objectives will be developed based on above assessment and conversations with City staff.*

IV. Action Plan

A. Identify actions needed to achieve objectives

1. Description of projects, programs, and activities developed to meet the objectives.
Descriptions will be developed based on conversations with City staff
2. Schedule for implementing them. *Schedule will be developed based on conversations with City staff*
3. Resources needed. *Description of resources needed will be developed based on cost estimates and conversations with City staff.*
4. Potential problems and obstacles. *These will be developed based on conversations with City staff.*

CLIENT	City of Aurora
PROJECT NAME	Source Water Protection Plan
CMT JOB NO.	TBD

Approved by	TLO
DATE	02/04/21

TASK NO.	TASKS \ CLASSIFICATIONS	Principal	Engineer/Manager	Senior Project Engineer/Manager	Senior Engineer	Senior Technical Manager	GIS Specialist	Engineer	Planner	Registered Land Surveyor	Senior Technician	Technicain II	Technician I	MAN HOURS & LABOR SUMMARY
	City of Aurora Hourly Rates 2021	\$222.43	\$193.46	\$164.37	\$116.54	\$143.64	\$95.38	\$92.66	\$138.10	\$118.93	\$116.12	\$90.06	\$70.67	TOTAL
1	Kick-off Meeting		4		8									12
2	Interviews and Data Gathering		2		24									26
3	Determine River Intake Zone of Influence		4		110		40							154
4	Determine Areas of Protection for Wells		4		70						28			102
5	Develop a Source Water Protection Action Plan		4		40									44
6	Draft Source Water Protection Plan		2		24									26
7	Final Source Water Protection Plan		2		16									18
8	Project Management		38											38
9														0
10														0
11														0
12														0
13														0
14														0
15														0
	TOTAL MAN HOURS	0	60	0	292	0	40	0	0	0	28	0	0	420
	SUBTOTAL - BASE LABOR EFFORT	\$0	\$11,608	\$0	\$34,031	\$0	\$3,815	\$0	\$0	\$0	\$3,251	\$0	\$0	\$52,705
	TASKS (CONTINUED)	TOTAL LABOR EFFORT	DIRECT EXPENSE & REIMBURSABLES											TOTAL FEE
			TRAVEL MILEAGE	MEALS & LODGING	PRINTING	EQUIP- MENT	MISC	SURVEY MTL	SUBS	SUBS ADMIN	OTHER EXP	OTHER EXP	TOTAL EXPENSE	
1	Kick-off Meeting	\$1,706	\$6										\$6	\$1,712
2	Interviews and Data Gathering	\$3,184	\$12										\$12	\$3,196
3	Determine River Intake Zone of Influence	\$17,409											\$0	\$17,409
4	Determine Areas of Protection for Wells	\$12,183					\$3,740						\$3,740	\$15,923
5	Develop a Source Water Protection Action Plan	\$5,436											\$0	\$5,436
6	Draft Source Water Protection Plan	\$3,184											\$0	\$3,184
7	Final Source Water Protection Plan	\$2,252											\$0	\$2,252
8	Project Management	\$7,352											\$0	\$7,352
9		\$0											\$0	\$0
10		\$0											\$0	\$0
11		\$0											\$0	\$0
12		\$0											\$0	\$0
13		\$0											\$0	\$0
14		\$0											\$0	\$0
15		\$0											\$0	\$0
	TOTALS	\$52,706	\$18	\$0	\$0	\$0	\$3,740	\$0	\$0	\$0	\$0	\$0	\$3,758	\$56,464
	TIME PERIOD OF PROJECT	2021	2022	2023	2024	TOTAL	EST % OF OT HRS INCLUDED ABOVE					0%	MULTI-YEAR + OT	
	PERCENTAGE OF WORK TO BE PERFORMED BY YEAR	100%	0%	0%	0%	100%	AVERAGE OVERTIME RATE PREMIUM					15%	MLTPLR & AMT	
	WEIGHTING FACTOR FOR 5% ANNUAL ADJUSTMENT	1.0000	0.0000	0.0000	0.0000	1.0000	OT ADJUSTMENT FACTOR					0.0000	1.0000	\$0
	ESTIMATED CONTINGENCY												3%	\$1,690
	ROUNDING													(\$4)
	TOTAL FEE	MATH CROSS CHECK IS OK												\$58,150

**EXHIBIT C
CITY OF AURORA
RESIDENT INSPECTION AND ENGINEERING SERVICES**

CLASS NO.	CLASSIFICATION	2019 AVG DIRECT LABOR RATE	2020 AVG DIRECT LABOR RATE (2019 Rate x 3.25%)	2020 BILLING RATE (Dir Labor x 2.95 Multiplier)	2021 BILLING RATE (2020 Rate x CCI Increase)
10	Principal (IDOT Cap is \$75)	75.00	75.00	221.25	222.43
20	Project Engineer II	63.18	65.23	192.44	193.46
30	Project Engineer I	53.68	55.42	163.50	164.37
36	Project Structural Engineer I	48.46	50.03	147.60	148.39
40	Sr. Engineer I	38.06	39.30	115.93	116.54
42	Technical Manager II	46.91	48.43	142.88	143.64
44	GIS Specialist	31.15	32.16	94.88	95.38
47	Sr. Structural Engineer I	38.83	40.09	118.27	118.90
50	Engineer I	30.26	31.24	92.17	92.66
56	Structural Engineer I	30.00	30.98	91.38	91.86
60	Planner I	45.10	46.57	137.37	138.10
62	Environmental Specialist I	30.29	31.27	92.26	92.75
65	Technical Manager I	26.60	27.46	81.02	81.45
70	Land Surveyor	38.84	40.10	118.30	118.93
80	Sr. Technician I	37.92	39.15	115.50	116.12
81	Sr. Technician II	45.58	47.06	138.83	139.57
90	Technician II	29.41	30.37	89.58	90.06
100	Technician I	23.08	23.83	70.30	70.67
110	Administrative/Accounting Assistant	21.46	22.16	65.36	65.71

Computation of Billing Rate Multiplier:

Direct labor factor	1.0000
Audited overhead rate	1.683
Subtotal	2.6830
Profit factor	1.10
Total	2.95

Overhead and rate calculation is based on AASHTO guidelines for all US DOT's nationwide.