



City Council Memorandum

To: Mayor Fasbender & City Councilmembers
From: Dan Wietecha, City Administrator
Date: November 7, 2022
Item: Commercial Waste Characterization Study

Council Action Requested:

Approve Master Agreement and Project Agreement for Services with Foth Infrastructure & Environment to conduct 2022-2023 Commercial Waste Characterization Study. Approval would be subject to minor changes prior to final signature.

Background Information:

The City has received an incentive/grant “to reduce the costs to the payers of solid waste collection services in the City or to implement the solid waste strategies and tactics in the Dakota County Solid Waste Master Plan, or both.” Funds must be used by December 31, 2022.

The City has previously approved use of these funds for its 2022 share of the new Solid Waste & Recycling Coordinator shared with the Cities of Farmington and Rosemount and to purchase “Big Belly” trash and recycling bins for the downtown.

The Utilities Committee also recommended conducting a study of residential waste and recycling in order to gain baseline data. Subsequently, in discussing the proposed study with Dakota County Environmental Resources Department and potential consultants, we learned that there is already reasonable data on residential waste and recycling and that a study of commercial businesses would be much more helpful. The intent of the study is to learn about current practices, establish baseline data, and identify opportunities for improvements.

With County guidance on preferred study elements, I met with three consulting companies about their interest in the study. Based on their responsiveness to the scope, timelines, and cost, I negotiated a rough outline for the study with Foth Infrastructure & Environment at a not to exceed cost of \$50K.

Foth would kick-off the study this fall, identify priority business categories and commercial haulers, and in the spring would conduct a physical sort and sample of commercial trash and recycling. The report would be finalized by early summer 2023. The County has acknowledged the timeline and said that it would comply with the deadline requirement of the incentive/grant funds as long as the consultant is under contract and beginning the study this year.

Financial Impact:

N/A

Committee Discussion:

Utilities Committee (Braucks*, Folch, Lund) met May 13 and recommended a residential waste/recycling study.

Attachments:

- Preferred County Study Elements for Hastings Commercial Study
- Master Agreement for Services
- Agreement for Services: Hastings Commercial Waste Characterization Study

Preferred County study elements for Hastings commercial study (using processing \$)

July 2022

Background

- Dakota County adopted new recycling requirements that affect all businesses and could impact city policy approaches (e.g., requirements for recycling space/enclosures, commercial hauler licensing requirements).
 - Since 2021 all businesses in Dakota County are required to separate and recycle a [Designated List of Recyclables](#):
 - All businesses must keep the [Designated List of Contaminants](#) out of the recycling, including no plastic bags in recycling.
- There is very limited research on commercial waste composition (especially by sector) to identify how well businesses recycle and barriers to doing better.

Helpful for County to understand (preferred study elements):

OBJECTIVE: Understand how well businesses are recycling and identify opportunities for recycling improvement.

DESIRED IF STUDY CAN HELP ANSWER:

1. MINIMUM:

- What are the material types and quantities being placed in recycling and trash carts/dumpsters (possibly by business sector)?
- What are the major contaminants that businesses are placing in the recycling?
- What recyclable materials are incorrectly being discarded in the trash?
- Do businesses properly prepare their recycling (e.g. flatten boxes, empty bottles) appropriately?
- What quantity of recyclables materials in carts/dumpsters are bagged (plastic bags)?

Priority businesses:

- 445: Food/grocery stores
- 621-623: Health services (clinics, hospital)
- 312 and 722: Eating/drinking places
- 721: Lodging
- 44: Retail
- 31: Manufacturing

2. ADD ON #1 - IF BUDGET ALLOWS

- Survey/interview (to all that participate in the waste study) – and not anonymous so can correlate back to individual business trash/recycling data
 - What are barriers to recycling better (e.g., recycling knowledge, insufficient space)

- Do businesses with certain haulers have better recycling – e.g., do hauler dumpsters/carts meet our BMP requirements (trash and recycling within 10 feet, have standardized signage, no overflow)?
 - BIPOC/equity considerations: if owner/manager/employee demographics make up affects recycling
 - Do businesses using third party housekeeping staff have more contamination issues?
3. **ADD ON #2 - IF BUSINESS SAMPLE SIZE LARGE ENOUGH**
- How do recycling capture rates compare by variables such as business type, location and owner/employee make up?
 - Do businesses that contract with a certain hauler(s) recycle better?
 - Are there any specific barriers that would limit more recyclables being captured?

POSSIBLE SCOPE ITEMS:

- Determine waste and recycling composition, capture rates and recycling rates for statistical representation of businesses. Keep recycling and trash amounts separated to determine capture rates by individual businesses.
 - The right materials (Designated Recyclables) and occurrence in the recycling carts/dumpsters
 - The wrong materials (contaminants) and occurrence in the recycle carts/dumpsters
 - The correct wastes and occurrence in the trash cart
 - The wrong items (recyclable materials, hazards) and occurrence in the trash carts/dumpsters.
- Document trends in item preparation for recycling (e.g. unflattened boxes, liquids in bottles)
- Identify the quantity and nature of materials being lost through the bagging of materials placed in recycling carts/dumpsters
- Identify misconceptions and barriers to recycling.
- Determine what variables affect recycling rate, including:
 - Location: if location affects recycling (downtown vs. Hwy 61 vs. south end of town)
 - Type: if certain business types are better recyclers (e.g., select representative businesses from each or priority sector types within 31-92 [NAICS codes](#)). Preferred priority:
 - 445: Food/grocery stores
 - 621-623: Health services (clinics, hospital)
 - 312 and 722: Eating/drinking places
 - 721: Lodging
 - 44: Retail
 - 31: Manufacturing

- Hauler: If businesses that have certain haulers are better recyclers, and if hauler dumpsters carts meet BMP requirements (no overflow, have standardized labels, trash and recycling paired)
- BIPOC/equity considerations: if owner/manager/employee demographics make up affects recycling
- Housekeeping service (e.g. third party verses in-house program)
- Share statistics and identify opportunities for recycling improvements
- Provide an estimate of annual total citywide business recyclables and trash generation (*if doable – because would also need to include organics if businesses separately collect – likely only a handful*)

Material sort categories

- Should provide necessary detail while still being able to compare data with “similar” regional studies. It should:
 - Align with County’s [Designated Recyclables](#) and [Designated Contaminants](#)
 - Also be similar to regional sorts ([2013 MPCA Waste Composition](#), Hennepin County, [Red Wing residential recycling sort](#))
- County can draft category sorting list, but can we also be included to finalize it with contractor?

Examples:

1. Oregon Commercial Mixed Recyclables Composition Study (2020)
<https://www.oregonmetro.gov/sites/default/files/2020/05/21/commercial-mixed-recyclables-composition-study-20200521.pdf>
2. Draft Dakota County RFP for household recycling capture rate



RFP Residential bin
audits 9-24-2021.doc



Project Title (the "Project"): Engineering and Consulting Services

This Master Agreement for Services (hereinafter "Agreement") is made and entered into this 28th day of October, 2022, by and between FOTH INFRASTRUCTURE & ENVIRONMENT, LLC, (hereinafter "Consultant") and CITY OF HASTINGS, (hereinafter "Client"), for the services described under the Scope of Services (the "Services").

CLIENT: City of Hastings, MN
Address: City Hall, 101 4th Street East, Hastings, MN 55033
Phone No: 651-480-2326 Email Address: DWietecha@Hastingsmn.gov

Scope of Services: Client hereby agrees to retain Consultant to perform the following Services:
Services to be performed in accordance with the project-specific Work Orders issued under this Agreement.

Schedule: Services shall be performed according to the following schedule:
Schedule to be in accordance with the project-specific Work Orders issued under this Agreement.

Compensation: In consideration of these Services, the Client agrees to pay Consultant compensation as follows:
Compensation to be in accordance with the project-specific Work Orders issued under this Agreement.

Term: This Agreement shall commence as of the date set forth above and shall remain in effect until terminated as provided herein.

The attached Agreement for Services Standard Terms and Conditions, along with any Exhibits, is made a part hereof and incorporated into this Agreement.

IN WITNESS WHEREOF, this Agreement is accepted on the date first written above, subject to the terms and conditions above stated and the provisions set forth herein.

CLIENT

FOTH INFRASTRUCTURE & ENVIRONMENT, LLC

Signed:
Name (printed): Mary Fasbender
Title: Mayor
Date:

Signed:
Name (printed): Nathan O. Klett
Title: Senior Client Manager
Date: 10/28/2022

Name (printed): Kelly Murtaugh
Title: City Clerk
Date:

Signed:
Name (printed): Bruce D. Rehwaldt
Title: Senior Client Manager
Date: 10/28/2022

1.0 Commencement of Services - The Services will commence consistent with the schedule referenced in the Work Orders or as otherwise agreed to by the parties. If after commencement of the Services, the Project is delayed for any reason beyond the control of Consultant for more than sixty (60) days, the terms and conditions contained herein are subject to revision by Consultant.

1.1 Standard of Care - The standard of care for any professional Services performed or furnished by Consultant under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Consultant makes no other warranties, express or implied, under this Agreement or otherwise, in connection with any Services performed or furnished by Consultant. Subject to the standard of care, Consultant and its sub-consultants may use and rely upon data, reports, design elements and information ordinarily or customarily furnished by others, including, but not limited to Client, Client's other contractors or consultants, specialty contractors, manufacturers, suppliers, and the publishers of technical standards.

Consultant shall not be required to sign any document, no matter by whom requested, that would result in the Consultant having to certify, guarantee, or warrant the existence of conditions whose existence the Consultant cannot ascertain.

2.0 Client Responsibilities - Client shall provide, at Client's expense, all criteria, design, and construction standards including full information as to Client's requirements for the Project, including all document specifications. The provision or production of such data or information is not included in the Services, except where explicitly referenced in the Scope of Services. As stated in Section 1.1, Consultant shall be entitled to rely upon such data and information in the performance of the Services and shall not be liable for any incorrect advice, judgment or decision based on any inaccurate information furnished by Client, Client's agents or Client's other consultants. Such data and information shall include but not be limited to the following:

- a. If not included in the Scope of Services, a complete survey of the Project site which shall include but not be limited to easements, right-of-way, encroachments, zoning and deed restrictions, subterranean structures or utilities, existing buildings and improvements.
- b. If not included in the Scope of Services, soils data, laboratory tests, reports and inspections of samples, materials or other items, with appropriate professional interpretations.
- c. Legal counseling services necessary for the Project including legal review of the construction contract documents.
- d. Accounting, bond and financial advisory (including, if applicable, "municipal advisor" services as described in Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) and the municipal advisor registration rules issued by the Securities and Exchange Commission), independent cost estimating, and insurance counseling services.
- e. If not included in the Scope of Services, permits and approvals from any authorities having jurisdiction over the Project.

2.1 Right of Entry - Client shall provide for entry for the employees, agents and subcontractors of Consultant and for all necessary equipment.

2.2 Client Authorized Representative - Client shall designate a person authorized to act as Client's representative. Client or his representative shall receive and examine documents submitted by Consultant and shall be empowered to interpret and define Client's policies and render decisions and authorizations in writing promptly to prevent unreasonable delay in the progress of Consultant's Services. Client shall give prompt written notice to Consultant whenever Client observes or otherwise becomes aware of any defect in the Project, Services or other event which may substantially affect Consultant's performance of Services under this Agreement.

3.0 Fees and Payment

3.1 Invoice Payment Due - Client shall compensate Consultant for Services and expenses rendered under this Agreement. Consultant's fee for Services will be based on Consultant's rates currently in effect at the time the Services are done; lump sum or other schedules as identified under the Compensation section of the Work Orders. Rates of Consultant are subject to annual revision. Payment shall be due within thirty (30) days after the date of invoice describing the Services performed and expenses incurred during the preceding invoice period.

3.2 Failure to Pay. Client agrees that timely payment is a material term of this Agreement and that failure to make timely payment as agreed constitutes a breach hereof. In the event payment for Services rendered has not been made within thirty (30) days from the date of invoice, Consultant may, after giving seven (7) days' written notice to Client and without penalty or liability of any nature, and without waiving any claim against Client, suspend all work on all Services as set forth herein. Upon receipt of payment in full for Services rendered, plus interest charges, Consultant will continue with Services. Payment of all compensation due Consultant pursuant to this Agreement shall be a condition precedent to Client using any of Consultant's work product and/or deliverables under this Agreement.

3.3 Interest on Late Payments - In order to defray carrying charges resulting from delayed payments, simple interest at the maximum rate allowed by law will be added to the unpaid balance of each invoice. The interest period shall commence thirty (30) days after the date of the original invoice and shall terminate upon date of payment. Payments will be first credited to interest and then to principal.

4.0 Insurance/Limitation of Consultant's Liability - Consultant will maintain the following insurance coverages:

- a. Worker's compensation insurance pursuant to state law.
- b. Comprehensive automobile and vehicle liability insurance covering claims for injuries to members of the public and/or damages to property of others arising from use of motor vehicles, including onsite and offsite operations, and owned, non-owned, or hired vehicles, with \$1,500,000 combined single limits.
- c. Commercial general liability insurance covering claims for injuries to members of the public or damage to property of others arising out of any covered negligent act or omission of Consultant or of any of its employees, agents, or subcontractors, with \$1,500,000 per occurrence and \$2,000,000 in the aggregate.
- d. Professional liability insurance, if applicable, of \$1,500,000 per claim and in the aggregate.

5.0 Indemnification - Consultant, to the fullest extent permitted by law, shall indemnify and hold harmless Client and any of Client officers, directors, employees and agents from and against claims, losses, damages, liabilities, including attorney's fees and expenses, for third-party claims of bodily injury, sickness or death, and property damage or destruction to the extent caused by the negligent acts or omissions of Consultant or Consultant's separate contractors or anyone for whose acts any of them may be liable, but only to the extent of the negligence. Nothing in this Section shall obligate Consultant to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence or willful misconduct. Notwithstanding the forgoing, Consultant has no obligation to defend or pay indemnitee defense costs incurred prior to a final determination of liability or to pay any amount that exceeds the proportionate share of Consultant's finally determined percentage of liability as determined by a court of competent jurisdiction.

6.0 Hazardous Materials - Client hereby understands and agrees that Consultant has not created nor contributed to the creation or existence of any types of hazardous or toxic wastes, materials, chemical compounds, or substances, or any other type of environmental hazard or pollution ("Hazardous Materials"), whether latent or patent, at Client's premises, or in connection with or related to the Project with respect to which Consultant has been retained to provide Services. Therefore, to the fullest extent permitted by law, except for Hazardous Materials introduced onto the site by Consultant and not required or permitted in the performance of Consultant's Services, Client agrees to indemnify, and hold Consultant, its officers, directors, shareholders, employees, and Consultants, harmless from and against any and all claims, damages, and expenses, whether direct, indirect, consequential or otherwise, including, but not limited to, attorney fees and court costs, arising out of, or resulting from the discharge, escape or release, of Hazardous Materials. Nothing contained within this Agreement shall be construed or interpreted as requiring Consultant to assume the status of a generator, transporter, or owner or operator of a treatment, storage or disposal facility, as those terms appear within the Resource Conservation and Recovery Act, 42 U.S.C.A., §6901 et seq., as amended, or within any State statute governing the generation, treatment, storage, and disposal of waste.

7.0 Documents- Ownership of Work Product and Proprietary Information - The deliverables prepared under this Agreement shall become the property of the Client only upon completion of the Services and payment in full of all monies due to Consultant. In the event Client reuses or makes any modifications to the deliverables without prior written authorization of Consultant, the Client agrees, to the fullest extent permitted by law, to indemnify and hold Consultant, its consultants, agents, officers, directors, shareholders and employees harmless from any claim, liability or cost (including reasonable attorneys' fees and defense costs) arising or allegedly arising out of any unauthorized reuse or modifications of Consultant's Services, work product, and/or deliverables by the Client or any person or entity that acquires or obtains the such work product and/or deliverables from or through the Client without the written authorization of Consultant.

Notwithstanding the foregoing Consultant's liability to Client for any computer programs, software products, or related data furnished hereunder is limited solely to the correction of residual errors, minor maintenance, or update(s) as agreed. CONSULTANT MAKES NO WARRANTIES OF ANY KIND, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE, or against infringement, with respect to computer programs, software products, related data, technical information, or technical assistance provided by Consultant under this agreement. The Consultant will take reasonable precautions to prevent the transmission of any electronic virus, or other contamination with the exchange of electronic media, but Consultant makes no assurances that those precautions are adequate to assure a contamination free transmission.

Consultant retains title and interest in all of its standard details, plans, specifications, methodologies, tools, and computation documents, whether in written or electronic form, which have been incorporated into the documents and instruments of service, but which were developed by Consultant independent of this Agreement.

8.0 Termination or Abandonment - If any portion of the Services or Project is terminated or abandoned by Client, the provisions of these Terms and Conditions in regard to compensation and payment shall apply insofar as possible to that portion of the work not terminated or abandoned. If said termination occurs prior to completion of any phase of the Project, the fee for Services performed during such phase shall be based on Consultant's reasonable estimate of the portion of such phase completed prior to said termination, plus a reasonable amount to reimburse Consultant for termination costs.

This Agreement may be terminated by either party if the other party fails to fulfill its obligations under this Agreement through no fault of the terminating party. No such termination may be effected unless the other party is given not less than ten calendar days written notice of intent to terminate and an opportunity for correcting the default (plus such additional time as is reasonably necessary to correct the default, other than any payment default) and for consultation with the terminating party before termination. Consultant shall be paid for Services performed to the termination date including reimbursable expenses due plus termination expenses.

9.0 Jurisdiction - This Agreement shall be governed by the laws of the State of the Project.

10.0 Dispute Resolution - The parties will use good faith efforts to resolve any dispute, controversy or claim arising out of or relating to this Agreement or the relationship between the parties (a "Dispute") through negotiation. To invoke the dispute resolution procedures in this section, one party must give the other party a written notice of its intent to negotiate. The notice will include a detailed description of the Dispute and a proposed resolution. Within five (5) business days after delivery of the notice, each party will designate a senior executive with authority to resolve the Dispute. The designated executives will engage in discussions in an effort to resolve the Dispute. If the designated executives do not agree on a resolution within twenty (20) days after the dispute notice has been delivered, the parties may agree to submit the Dispute to non-binding mediation by any mutually agreed-upon mediator, rules and location. Any mediation fees and expenses will be allocated and paid by the parties equally. If the parties do not reach a resolution through negotiation or mediation, either party may pursue all remedies available under this Agreement, at law or in equity in a court of competent jurisdiction. Each party hereby irrevocably waives its rights to trial by jury in any Dispute or proceeding arising out of this agreement or the transactions relating to its subject matter.

11.0 Waiver - Consultant's waiver of any term, condition, or covenant or breach of any term, condition, or covenant, shall not constitute a waiver of any other term, condition, or covenant, or the breach thereof.

12.0 Successors and Assigns - All of the terms, conditions, and provisions hereof shall inure to the benefit of and be binding upon the parties hereto, and their respective successors and assigns, provided, however, that no assignment of this Agreement shall be made without written consent of the parties to this Agreement.

13.0 Severability - If any provision of this Agreement is declared invalid, illegal, or incapable of being enforced by any Court of competent jurisdiction, all of the remaining provisions of this Agreement shall nevertheless continue in full force and effect, and no provision shall be deemed dependent upon any other provision unless so expressed herein.

14.0 Force Majeure - Neither party to this Agreement will be liable to the other party for delays in performing the Services, or for the direct or indirect cost resulting from such delays, that may result from a Force Majeure condition. Each party will take reasonable steps to mitigate the impact of any force majeure. If Consultant is delayed in the performance of the Work due to acts, omissions, conditions, events, or circumstances beyond its control and due to no fault of its own or those for whom Consultant is responsible, the Contract Time(s) for performance as well as the Contract Price shall be reasonably extended by Change Order. By way of example,

events that will entitle Consultant to an extension of the Contract Time(s) include acts or omissions of Client or anyone under Client's control (including separate contractors), changes in the Work, Differing Site Conditions, Hazardous Conditions, wars, floods, labor disputes, unusual delay in transportation, epidemics, earthquakes, adverse weather conditions not reasonably anticipated, and other acts of God (Force Majeure Condition). For clarity purposes, labor shortages or supply chain disruptions resultant from epidemic or pandemic events are specifically to be considered grounds constituting a Force Majeure Condition. Labor shortages and inefficiencies, delays, escalation, or cost impacts resulting from labor shortages or supply chain disruptions associated with such an event shall be considered grounds for a Force Majeure Condition event and shall afford Consultant the opportunity for schedule and cost relief associated with such an event.

15.0 Entire Agreement - This Agreement, and its attachments, constitutes the entire understanding between Client and Consultant relating to Services to be provided by Consultant and, excepting only confidentiality agreements between the parties pertaining to the Project, supersede any prior or contemporaneous agreements, promises, negotiations, or representations not expressly set forth herein. Subsequent modifications or amendments to this Agreement must be in writing and signed by the parties to this Agreement. The foregoing notwithstanding, if the Client, its officers, agents, or employees request Consultant to perform extra work or Services pursuant to this Agreement, Client will pay for the additional Services even though an additional written Agreement is not issued or signed. The obligations of Consultant under this Agreement shall survive in accordance with applicable State statutes.

16.0 Notices – Notices shall be communicated to the following addresses:

If to City: City of Hastings
101 4th Street East
Hastings, MN 55033
Attention: City Administrator

Or e-mailed: _____

If to Consultant: _____

Or e-mailed: _____

17.0 Independent Contractor Status – All services provided by Consultant, its officers, agents and employees pursuant to this Agreement shall be provided as employees of Consultant or as independent contractors of Consultant and not as employees of the City for any purpose.

18.0 Data Practices Compliance – All data collected by the City pursuant to this Agreement shall be subject to the Minnesota Government Data Practices Act, Minnesota Statutes, Chapter 13.



Project Title: Hastings – Commercial Waste Characterization Study **FOTH Project Number:** 0022Hxxx.00
CLIENT Project Number: _____
(If applicable)

This Work Order (in addition to and subject to the conditions contained in the Master Agreement for Services dated **October 28, 2022**), (hereinafter "Work Order"), is made and entered into this **28th** day of **October, 2022**, by and between **FOTH INFRASTRUCTURE & ENVIRONMENT, LLC**, (hereinafter "Consultant") and **CITY OF HASTINGS**, (hereinafter "Client"), for the services described under the Scope of Services (the "Services").

Client: City of Hastings, MN
Address: City Hall, 101 4th Street East, Hastings, MN 55033
Phone No: 651-480-2326 **Email Address:** dwietecha@hastingsmn.gov

Scope of Services: Client hereby agrees to retain Consultant to perform the following Services:
Complete a commercial waste characterization sort study involving selected samples from Hastings businesses. (Pursuant to the attached Foth proposal- Exhibit A).



Schedule: Services shall be performed according to the following schedule:
Estimated completion July 31, 2023

Compensation: In consideration of these Services, the Client agrees to pay Consultant compensation as follows:
 Lump-Sum in the amount of _____
 Unit Cost/Time Charges (Standard Rates) with a total amount not-to-exceed \$ 50,000.00
 Unit Cost/Time Charges (Standard Rates) for an estimated cost of \$.00
 Other as stated here: _____

Special Conditions (if any):

Entire Agreement: This Work Order, along with other approved project-specific Work Orders, together with and subject to the Master Agreement for Services referenced above, constitutes the entire understanding between the parties with respect to the subject matter hereof. This Work Order may be modified by subsequent written addenda mutually agreeable by both parties.

IN WITNESS WHEREOF, this Agreement is accepted on the date first written above, subject to the terms and conditions above stated and the provisions set forth herein.

CLIENT	FOTH INFRASTRUCTURE & ENVIRONMENT, LLC
Signed: _____	Signed: <u></u>
Name (printed): _____	Name (printed): <u>Nathan O. Klett</u>
Title: _____	Title: <u>Senior Client Manager</u>
Date: _____	Date: <u>10/28/2022</u>
	Signed: <u></u>
	Name (printed): <u>Bruce D. Rehwaldt</u>
	Title: <u>Senior Client Manager</u>
	Date: <u>10/28/2022</u>

City of Hastings
Commercial Waste Characterization Study
October 10, 2022 (Revised October 28, 2022)

Scope of Work

I. Our Understanding of Your Project

Foth Infrastructure & Environment, LLC (Foth) understands that the City of Hastings, MN (City) intends to undertake a commercial waste characterization study (Study) to serve as background information for further planning to support commercial establishments implement effective recycling programs. Dakota County (County) is responsible for overall solid waste management planning and has been a close partner in advising the City on the scope of this Study. The City and County have identified the lack of systematic commercial waste composition research/data as a barrier to appropriate planning for support of business recycling and would like to use this study to establish a baseline for future commercial characterization studies.

In August 2022, the City released a request for proposals (RFP) for consulting services to conduct this Study. The objective of this Study is to better understand how well businesses are recycling, identify opportunities for recycling improvement, and to establish a baseline. The County provided funding support for this Study and the County's grant requires the City's expenses for consultant services for this project be encumbered by the City prior to December 31, 2022.

The County has adopted a Solid Waste Management Master Plan (September 2017) and subsequent revisions to the County's Solid Waste Management Ordinance 110 (November 2019) that includes recycling requirements for residents, commercial entities, and the waste industry. Ordinance 110 requirements include the adoption of a standardized, Designated Lists of Recyclables (Recyclables) and Contaminants.¹ These lists are applicable to all waste generators including residents, businesses, schools, and government agencies. The County has published a Business Compliance Brochure² that summarizes recycling requirements for all businesses in the County and states that all commercial property owners and managers are required to:

1. *“Have recycling service*
2. *Recycle a designated list of recyclable materials*
3. *Co-locate recycling with trash containers*
4. *Label containers*
5. *Provide recycling education*

¹ Dakota County's Designated List of Recyclables and Contaminants (January 21, 2020); As adopted by County Board Resolution Number 20-040: [DesignatedListRecyclables.pdf \(dakota.mn.us\)](https://www.co.dakota.mn.us/Environment/Business/Requirements/Documents/DesignatedListRecyclables.pdf)

² Dakota County's compliance brochure: "Businesses in Dakota County are Required to Recycle" (February 6, 2022):

<https://www.co.dakota.mn.us/Environment/Business/Requirements/Documents/BusinessComplianceBrochure.pdf>

6. *Submit an annual report (to the County)*”

In addition, certain larger businesses that generate organics (food scraps) must collect them for proper management (e.g., commercial composting). Organics recovery and capture rates, however, is not a part of this recyclables Study.

The research questions for this Study as posed in the City’s RFP included:

1. *“What are the material types and quantities of recyclables being placed in recycling and trash carts/dumpsters (possibly by business sector)?*
2. *“What are the major contaminants that businesses are placing in the recycling?”*
3. *“What recyclable materials are incorrectly being discarded in the trash?”*
4. *“Do businesses properly prepare their recycling (e.g., flatten boxes, empty bottles) appropriately?”*
5. *“What quantity of recyclables materials in carts/dumpsters are bagged (plastic bags)?”*

The businesses targeted by the City and County for this Study are (presented in order of importance):

- ◆ Food/grocery stores
- ◆ Health services (clinics, hospital)
- ◆ Eating/drinking places
- ◆ Lodging
- ◆ Retail
- ◆ Manufacturing

The City maintains a list of such commercial establishments in a *SmartSheets* database platform. The City’s database has all businesses coded by North American Industry Classification System (NAICS). The City has stated that a confidential report can be generated to be shared with Foth at the start of this Study.

The County maintains a list of licensed haulers. There are currently 20 commercial haulers listed that are licensed to operate in the City of Hastings. About 30 percent of these are likely to be “roll-off” haulers only (i.e., haulers that do not service commercial establishments with regular mixed trash and recyclables via standard “dumpsters” or carts). Therefore, Foth is assuming that about 13 commercial haulers may have commercial customers that may be eligible for samples to be provided to this Study.

It is recognized by all parties that Study funding is limited. Therefore, a full, multi-season waste sort study, including all individual recyclable commodities, is outside the expected scope of this Study. The City and County are requesting an appropriately scoped Study capture rate methodology that is:

- ◆ Repeatable;
- ◆ As representative as possible of Citywide commercial trash and recycling streams;
and
- ◆ Cost effective within the budget limits.

II. Foth's Qualifications

Foth is very well qualified to provide these services required for this Study. We have provided similar waste characterization and capture rate studies for multiple clients. Often, the services include strategic consulting to prepare sort study design services to match the appropriate methods (e.g., number samples; how to randomize sample selection; list and definition of sort categories) with the clients' research objectives and resource constraints.

Foth has conducted numerous waste characterization studies, including the following:

- ◆ Minneapolis - Residential Waste Characterization & Capture Rates (2022)
- ◆ Hennepin County – Multi-Family Recycling (2017)
- ◆ Hennepin County – Minneapolis Residential Waste (2016)
- ◆ Ramsey/Washington County – Solid Waste Characterization (2014)
- ◆ Solid Waste Management Coordinating Board & Minnesota Pollution Control Agency – Construction & Demolition (C&D) Waste Characterization (2009)

III. Scope of Services

Based on our recent discussions, we understand that Foth will work collaboratively with City and County staff to finalize the Study project plan and sort design plan. Foth currently assumes that the City intends this Study to include a capture rate study whereby recyclables and contaminants are sorted into appropriate, broad categories of materials from both trash and recyclables streams. Separate organics streams would not be sorted.

Foth proposes that the final Study project plan and sort design be completed as a first phase during the fall and winter months (e.g., November 2022 through March 2023). Then, once the weather warms up again, conduct the sort operations in the Spring of 2023 (e.g., April and May).

Our proposal includes the tasks, deliverables and schedule outlined below. Throughout the project, Foth will maintain close communications with City staff. Midpoint project check-in meetings will be scheduled at 50 percent of budget and at the end of Phase 1 planning (prior to authorization to proceed with Task 7 sort operations).

(Note that the schedule of deliverable deadlines are examples based on the assumption that the City will authorize Foth to proceed in November 2022. If this authorization is delayed, there will be a corresponding delay in task schedules.)

PHASE 1 - PROJECT PLANNING AND SORT DESIGN:

Task 1 - Project Kick-Off Meeting:

Foth will submit a “data needs” list to the City including specific background information required for this Study (e.g., list of commercial establishments in the City that are already working with the County to enhance recycling services; detailed City map showing alleys; annual recycling reports submitted by businesses in Hastings to the County; etc.). A project kick-off meeting will be facilitated by Foth to finalize the Study workplan as drafted in this proposal including schedule, budget, project communication channels, and budget management.

Consultant Deliverables:

- A. Data needs list.
- B. Kick-off meeting agenda and summary notes.
- C. Finalized project workplan, schedule, budget, and communication protocols.

Proposed Schedule:

Approximately one month after full execution of the Agreement for Consultant Services (e.g., approximately November 2022).

Task 2 – Characterize Commercial Establishments in the City:

Foth will tabulate and analyze the City’s confidential database of commercial establishments to characterize businesses by the six NAICS code categories listed in the City’s RFP. Foth will also include any data from the County (e.g., from annual recycling reports submitted by Hastings businesses). Foth will identify data gaps and if additional data sources are needed.

Consultant Deliverables:

- A. Report chapter characterizing Hastings businesses.
- B. Recommendations for additional data sources, if any.

Proposed Schedule:

Approximately one month after completion of the previous task (e.g., approximately December 2022).

Task 3 – Conduct Commercial Route Audit:

Foth will drive the alleys of the City to conduct one preliminary route audit to determine the market share by hauler of eligible businesses. Priority will be given in the same order of six NAICS code categories as presented in the City’s RFP. To the extent possible, route audit tally sheets will include business names by hauler. The proposed budget assumes this route audit will not exceed eight hours. Therefore, not all businesses can be included in the audit and lower priority business categories may be excluded.

Consultant Deliverables:

- A. Report chapter summarizing the results of the route audit, including market share by hauler within the priority business categories.
- B. Summary of the cost and effectiveness of the route audit methodology. Recommendations for future commercial waste characterization studies.

Proposed Schedule:

Approximately six weeks after the Task 1 kick-off meeting (e.g., December 2022).

Task 4 – Characterize Commercial Haulers and Disposal Facilities:

Based on results of previous two tasks and other data, identify the commercial haulers serving the priority businesses in Hastings. Ideally this description will include the haulers’ operations in terms of fleet/maintenance locations and disposal facilities used. Disposal facilities include resource recovery facilities, landfills, or transfer stations for trash; and material recovery facilities (MRFs) for

recycling. The list of haulers and customers will be partial as not all routes will be audited and not all businesses can be readily identified from the alley.

Consultant Deliverables:

- A. Report chapter summarizing characteristics of haulers serving priority businesses.

Proposed Schedule:

Approximately one month after the previous task (e.g., approximately January 2023).

Task 5 – Sort Design Plan:

Based on results of all previous tasks, Foth will draft a sort operations design plan. Elements of this plan will include proposed:

- ◆ Types of waste streams to be sorted: trash and recycling
- ◆ Types of samples (i.e., collected from loads as hauled by haulers that become project partners or collected by Foth)
- ◆ Method of random sample selection
- ◆ Methods of sample collection, storage, and disposal
- ◆ Hauler partner(s)
- ◆ Number samples (by NAICS code business type)
- ◆ Sort categories, including definitions
- ◆ Sort location
- ◆ Sort schedule
- ◆ Checklist of sort and safety equipment and supplies
- ◆ Staffing plan
- ◆ Data quality assurance / quality control (QA/QC) plan
- ◆ Safety plan

At this time, Foth is analyzing two sampling options: (1) From hauler-collected packer trucks; or (2) Foth-collected samples removed from commercial containers such as dumpsters, bagged, and tagged. In either case, trash and recyclables samples will be collected from the same businesses. Capture rates by business establishment would only be possible with the 2 – Foth collected samples option. A final recommendation about this sampling method will be made after Tasks 3 and 4 are completed in order to more fully evaluate all sample collection options.

Sort location options may include: (a) the County Highway Dept. facility in Hastings (900 County Road 47); (b) a facility owned by one of the selected hauler partners; or (c) another option not yet identified. Safety and efficiency of hauling, sample unloading, storage, sort operations, and sample disposal will all be evaluation criteria to propose the recommended sort location. Final sort operation details will be worked out after the sort location is selected.

The draft sort design plan will be submitted to the City and County for review and comment. Foth assumes that the City will be primarily responsible for review, comment, and approval of the plan; i.e., the City will have final decision-making authority on the scope of the final sort design plan. Based on comments, Foth will finalize the plan.

Important note: The budget limitations will necessitate that the proposed sort design plan will have a limited number of sort categories and number of samples. Sort categories will be consistent with Dakota County’s designated list of recyclables. Foth will provide an estimate of the sort operations cost per category and cost per sample. These unit cost estimates will allow the City and County to understand direct impacts on statistical confidence limits of Study results. Foth proposes a goal for purposes of these discussions of sampling from at least five Hastings businesses.

Consultant Deliverables:

- A. Draft sort design plan including all elements listed above.
- B. Unit cost estimates of sort operations by category and by sample.
- C. Final sort design plan.

Proposed Schedule:

Approximately one month after the previous task (e.g., approximately February 2023).

Task 6 – Select Hauler Partner(s):

Once the sort design plan is finalized, Foth will work with the City to initiate contact with prospective hauler partners to begin discussions of the proposed project. It is assumed that, at a minimum, permission will be needed from at least one hauler with active presence in commercial hauling in Hastings. But it may also be necessary for a hauler to provide actual sample collection operations under option 1. The sort design plan will specify the preferred sample collection method. This task will analyze alternative strategies to incentivize prospective hauler partner(s)³ to accept our invitation to join this project. The goal of this task will be to secure the commitment of at least one hauler partner, ideally two or more.

Consultant Deliverables:

- A. Summarize analysis of alternative hauler incentives to become an operating partner as part of this project.

³ Potential incentives could include: (a) monetary payment; (b) additional public relations contacts with prospective “new” commercial customers; (c) additional public relations contacts with city and County government officials (e.g., participate in the presentation to the Hastings City Council and/or County Board); or avoided disposal costs for management of samples.

- B. Contacts with multiple haulers to invite them to consider partnering.
- C. Selection of final hauler partner(s) including executed contract(s) with specified scope(s) and lists of responsibilities.

Proposed Schedule:

Approximately one month after the previous task (e.g., approximately March 2023).

PHASE 2 - SORT OPERATIONS AND ANALYSIS:

Task 7 – Conduct Waste Sort:

Foth will lead the sort operations. The number of samples collected will depend on the remaining budget and final sort design plan. The first deliverable for this task will include an analysis of the remaining budget; estimate of the number of samples; and Foth recommendations for next steps to start operations. Based on these recommendations, the City will make the final decision on operating plans.

Foth will send out notices of the sort schedule to all affected parties, including:

- ◆ Hauler partner(s).
- ◆ Commercial establishments to be sampled.
- ◆ City and County operations staff directly involved (e.g., County Highway Department staff if the County’s Hastings Highway Dept. facility is selected).
- ◆ All members of the sort staff team.

Foth currently assumes that at least two weeks of trash and recyclables will be sampled from randomly selected businesses. All samples will be stored in a safe, secure, and environmentally appropriate manner until adequate amounts of materials are accumulated (i.e., representing samples adequate volume for at least one full day of sorting). The trash samples will be stored for the minimum amount of time possible before sorting (e.g., two days from collection); Recyclable samples may be stored longer if needed (e.g., for up to a week).

Foth currently assumes that after sorting, trash samples will be disposed of per normal trash management procedures at the sort location facility (e.g., in the facility’s dumpster, etc.). Recyclable samples will be delivered to an appropriate MRF or set out for collection by the sort facility recycling hauler.

The number of days of sorting will be kept to a minimum to provide for the most cost-effective sort operations plan. However, health and safety of the sort crew and other facility personnel will be the first priority. Foth will assume a seven-hour operating day, with the eighth hour for daily communications, set-up, and clean-up.

Sort equipment will be prepared at the sort location prior to the first day of sort operations. This equipment will be removed from the sort location the day after the final day of sort operations.

At this time, Foth assumes that hard copy data sheets will be used to record sort sample weights by sample number. If needed, anecdotal notes will also be recorded on the sample data sheets. Sample photos will be taken with white board notes (e.g., sample number, date, time). The daily log sheet will record the date, weather conditions, shift start/stop times, sort staff, etc. The daily data and log sheets will be copied ASAP and treated with secure management methods.

Foth data entry operations at Foth's Lake Elmo offices will begin after the first day of sort operations. This near real-time data entry will help provide for another level of data QA/QC.

Consultant Deliverables:

- A. Assembly of all sort & safety equipment and supplies.
- B. Sort schedule notices sent out to all appropriate parties.
- B. Samples collected and stored pursuant to final sort design plan.
- C. Sort operations completed on time without a reportable safety incident.
- D. Data entry completed following QA/QC plan pursuant to final sort design plan.

Proposed Schedule:

Approximately one month after the previous task (e.g., approximately April 2023).

Task 8 – Draft Report:

The results of all previous tasks will roll up into a full, draft report. Foth will produce a series of data tables and charts to fully itemize the results of the sort. To the extent possible allowed by the limits of the data results and budget resources, the following research objective priorities will be summarized in the report:

- ♦ Composition of the total commercial trash stream (all trash samples) by broad material categories with special attention on recyclables remaining in the trash.
- ♦ Composition of the total recyclables stream (all recyclables samples) by broad material categories with special attention on contaminants remaining in the recyclables.
- ♦ If they participate in recycling, capture rates by broad material category by type of business.

- ◆ Percent of businesses that have recycling service as required by the County as measured by route audit.
- ◆ Percent of recyclables bagged in recycling carts/dumpsters.
- ◆ Detailed description of waste composition methods used for this Study and recommendations for improvement and standardization.

The report will include conclusions and recommendations for improving recycling. The roles and opportunities for improvement by entity will be addressed including businesses, haulers, the City, and the County.

Consultant Deliverables:

- A. Draft report submitted to the City and County for review and comment.

Proposed Schedule:

Approximately one month after the previous task (e.g., approximately June 2023).

Task 9 – Finalize Report:

Foth will finalize the report based on comments from City and County staff. The budget assumes one iteration of changes to get to a final report.

Consultant Deliverables:

- A. Final report.

Proposed Schedule:

Approximately one month after the previous task (e.g., approximately in July 2023).

IV. City Responsibilities

The City is responsible for the following information and activities:

- ◆ Provide a single contact source for review, comment, and decision making on all issues related to the project.
- ◆ Data requested by Foth (see Task 1 – Project Kick-Off Meeting).
- ◆ Coordination with County staff.
- ◆ Joint (multiple) employee to observe sort and assist with photos.

V. Foth's Project Team

- ◆ Nathan Klett, Project Manager – Coordinate work activities, work products and communication with the City

- ◆ Dan Krivit, Senior Consultant – Project planning, sort operations design, data analysis, and report organization.
- ◆ Cami Van Abel, Senior Project Manager – Continued project planning, sort operations design, data analysis, and report organization.
- ◆ Andre Lirette, Project Engineer – Field operations
- ◆ Gabi Romenesko, Project Engineer – Data entry and data QA/QC

VI. Schedule

Foth will work with the City to develop a schedule that meets the City's needs, but is anticipated to be completed by approximately July 2023. The first phase (project planning and sort design) should be completed by approximately March 2023.

VII. Optional Services

Through the development of this project, additional items may be necessary for the completion of the project. If these items are required, they would be considered extra services and additional compensation would be warranted. Compensation for such services may be negotiated at a future time, as desired.

VIII. Reimbursement

Foth proposes to complete the work described in our scope of services in this proposal on a time and materials basis using our standard hourly labor rates and resources charges (see attached) for a cost estimate not to exceed \$50,000.

IX. Agreement to Proceed

Foth's services will be provided in accordance with the attached Agreement for Professional Services terms and conditions (Terms). Please review and return a signed copy to authorize us to begin. Should you desire to authorize our services through the use of a Purchase Order, the previously referenced Terms shall govern and replace those on the Purchase Order. Should we start services upon a verbal authorization it is with the understanding they are provided in accordance with the above referenced Terms. Should you have any questions regarding these terms and conditions, or any other matter, please contact us. If the above Terms are not acceptable, please notify us in writing before we begin providing services.

**Foth Environment Solutions
Public Solid Waste
2022 Labor Rate Schedule***

Classification	Hourly Rate (USD)
Program Director/Corporate Executive	\$256
Client Director	\$195
Project Director	\$195
Project Manager III	\$175
Project Manager II	\$167
Project Manager I	\$160
Engineer/Scientist VI	\$195
Engineer/Scientist V	\$182
Engineer/Scientist IV	\$165
Engineer/Scientist III	\$145
Engineer/Scientist II	\$135
Engineer/Scientist I	\$120
Technician VI	\$168
Technician V	\$145
Technician IV	\$125
Technician III	\$110
Technician II	\$100
Technician I	\$78
Project Coordinator	\$125
Administrative Assistant II/Project Administrative Specialist	\$92
Administrative Assistant I	\$82

INVOICING PROCEDURES

- ◆ All personnel are billed portal-to-portal for required travel.
- ◆ All testimony or direct mediation work including the following: depositions; trial testimony; mediation meetings or presentations; public meetings; public hearings; standby time; pre-trial preparation; and other litigation/mediation services will be billed with a separate Litigation/Mediation Rate Schedule.
- ◆ Expedited deliverables requested by the client that require overtime work will be billed at one and one-half times the hourly billing rate for the overtime hours worked. Prior notice of this surcharge will be given.
- ◆ Payments are due and payable in accordance with the terms of the Agreement with Foth Infrastructure & Environment, LLC (Foth).
- ◆ Foth reserves the right to modify this schedule periodically, as appropriate.

* Do not provide this rate schedule or copies of this rate schedule to other parties without prior approval of Foth.

**Foth Environment Solutions
Public Solid Waste
2022 Resource Charges***

Item	Cost Basis	Standard Charge (USD)
Standard Office/Communication/Software⁽¹⁾		3% of labor
Travel		
Automobile Travel	Mileage	\$0.65/mi ⁽²⁾
Public Transportation		Cost + 10%
Subsistence and Lodging		Cost + 10%
Survey Vehicles	Mileage	\$1.00/mi ⁽³⁾
Equipment		Based on market rates ⁽³⁾
Subconsultants (drilling, laboratory, etc.)		Cost + 10%
Outside Printing Costs		Cost + 10%
Specialty Mailing Services		Cost + 10%
Miscellaneous		Cost + 10%

Notes: The cost of specific technical equipment and employee travel expenses needed on projects is in addition to the hourly labor rates. This list is not all inclusive but represents the most common resource charges applied to Foth projects.

- ⁽¹⁾ Standard Office/Communication/Software charges are designed to cover Foth's costs for the following: in-house printing/reproduction; standard postage, except express or specialty mail; and software usage.
- ⁽²⁾ Mileage rates are subject to change based on Federal Government Standards.
- ⁽³⁾ Survey Vehicle and Equipment charges are subject to change based on availability and economic conditions. Special equipment rates quoted on an individual basis, if requested.

* Do not provide this rate schedule or copies of this rate schedule to other parties without prior approval of Foth.