

**PROFESSIONAL SERVICES AGREEMENT BETWEEN
APTIM ENVIRONMENTAL & INFRASTRUCTURE, INC.
AND THE CITY OF ANN ARBOR
FOR
SOLID WASTE RESOURCES MANAGEMENT PLAN (2019-2023)**

The City of Ann Arbor, a Michigan municipal corporation, having its offices at 301 E. Huron St. Ann Arbor, Michigan 48104 ("City"), and Aptim Environmental & Infrastructure, Inc. ("Contractor") a(n) Louisiana Corporation
(State where organized) (Partnership, Sole Proprietorship, or Corporation)
with its address at 1607 East Main Street, Suite E, St. Charles, Illinois 60174
agree as follows on this _____ day of _____, 20____.

The Contractor agrees to provide services to the City under the following terms and conditions:

I. DEFINITIONS

Administering Service Area/Unit means Public Services Area, Systems Planning Unit.

Contract Administrator means Craig Hupy, P.E., acting personally or through any assistants authorized by the Administrator/Manager of the Administering Service Area/Unit.

Deliverables means all Plans, Specifications, Reports, Recommendations, and other materials developed for and delivered to City by Contractor under this Agreement

Project means Solid Waste Resource Management Plan (2019-2023).
Project name

II. DURATION

This Agreement shall become effective on _____, 20____, and shall remain in effect until satisfactory completion of the Services specified below unless terminated as provided for in Article XI.

III. SERVICES

- A. The Contractor agrees to provide professional planning services
type of service
("Services") in connection with the Project as described in Exhibit A. The City retains the right to make changes to the quantities of service within the general scope of the Agreement at any time by a written order. If the changes add to or deduct from the extent of the services, the contract sum shall be adjusted accordingly. All such changes shall be executed under the conditions of the original Agreement.

- B. Quality of Services under this Agreement shall be of the level of quality performed by persons regularly rendering this type of service. Determination of acceptable quality shall be made solely by the Contract Administrator.
- C. The Contractor shall perform its Services for the Project in compliance with all statutory, regulatory and contractual requirements now or hereafter in effect as may be applicable to the rights and obligations set forth in the Agreement.
- D. The Contractor may rely upon the accuracy of reports and surveys provided to it by the City (if any) except when defects should have been apparent to a reasonably competent professional or when it has actual notice of any defects in the reports and surveys.

IV. INDEPENDENT CONTRACTOR

The Parties agree that at all times and for all purposes under the terms of this Agreement each Party's relationship to any other Party shall be that of an independent contractor. Each Party will be solely responsible for the acts of its own employees, agents, and servants. No liability, right, or benefit arising out of any employer/employee relationship, either express or implied, shall arise or accrue to any Party as a result of this Agreement.

V. COMPENSATION OF CONTRACTOR

- A. The Contractor shall be paid in the manner set forth in Exhibit B. Payment shall be made monthly, unless another payment term is specified in Exhibit B, following receipt of invoices submitted by the Contractor, and approved by the Contract Administrator.
- B. The Contractor will be compensated for Services performed in addition to the Services described in Section III, only when the scope of and compensation for those additional Services have received prior written approval of the Contract Administrator.
- C. The Contractor shall keep complete records of work performed (e.g. tasks performed/hours allocated) so that the City may verify invoices submitted by the Contractor. Such records shall be made available to the City upon request and submitted in summary form with each invoice.

VI. INSURANCE/INDEMNIFICATION

- A. The Contractor shall procure and maintain during the life of this contract such insurance policies, including those set forth in Exhibit C, as will protect itself and the City from all claims for bodily injuries, death or property damage which may arise under this contract; whether the act(s) or omission(s) giving rise to the claim were made by the Contractor, any subcontractor or anyone employed by them directly or indirectly. In the case of all contracts involving on-site work, the

Contractor shall provide to the City, before the commencement of any work under this contract, documentation satisfactory to the City demonstrating it has obtained the policies and endorsements required by Exhibit C.

- B. Any insurance provider of Contractor shall be admitted and authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company's Key Rating Guide of "A-" Overall and a minimum Financial Size Category of "V". Insurance policies and certificates issued by non-admitted insurance companies are not acceptable unless approved in writing by the City.
- C. To the fullest extent permitted by law, Contractor shall indemnify, defend and hold the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses, including attorney's fees, resulting or alleged to result, from any acts or omissions by Contractor or its employees and agents occurring in the performance of or breach in this Agreement, except to the extent that any suit, claim, judgment or expense are finally judicially determined to have resulted from the City's negligence or willful misconduct or its failure to comply with any of its material obligations set forth in this Agreement.

VII. COMPLIANCE REQUIREMENTS

- A. Nondiscrimination. The Contractor agrees to comply, and to require its subcontractor(s) to comply, with the nondiscrimination provisions of MCL 37.2209. The Contractor further agrees to comply with the provisions of Section 9:158 of Chapter 112 of the Ann Arbor City Code and to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity.
- B. Living Wage. If the Contractor is a "covered employer" as defined in Chapter 23 of the Ann Arbor City Code, the Contractor agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code. The Contractor agrees to pay those employees providing Services to the City under this Agreement a "living wage," as defined in Section 1:815 of the Ann Arbor City Code, as adjusted in accordance with Section 1:815(3); to post a notice approved by the City of the applicability of Chapter 23 in every location in which regular or contract employees providing services under this Agreement are working; to maintain records of compliance; if requested by the City, to provide documentation to verify compliance; to take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee or person contracted for employment in order to pay the living wage required by Section 1:815; and otherwise to comply with the requirements of Chapter 23.

VIII. WARRANTIES BY THE CONTRACTOR

- A. The Contractor warrants that the quality of its Services under this Agreement shall conform to the level of quality performed by persons regularly rendering this type of service.

- B. The Contractor warrants that it has all the skills, experience, and professional licenses necessary to perform the Services specified in this Agreement.
- C. The Contractor warrants that it has available, or will engage, at its own expense, sufficient trained employees to provide the Services specified in this Agreement.
- D. The Contractor warrants that it is not, and shall not become overdue or in default to the City for any contract, debt, or any other obligation to the City including real and personal property taxes.
- E. The Contractor warrants that its proposal for services was made in good faith, it arrived at the costs of its proposal independently, without consultation, communication or agreement, for the purpose of restricting completion as to any matter relating to such fees with any competitor for these Services; and no attempt has been made or shall be made by the Contractor to induce any other person or firm to submit or not to submit a proposal for the purpose of restricting competition.

IX. OBLIGATIONS OF THE CITY

- A. The City agrees to give the Contractor access to the Project area and other City-owned properties as required to perform the necessary Services under this Agreement.
- B. The City shall notify the Contractor of any defects in the Services of which the Contract Administrator has actual notice.

X. ASSIGNMENT

- A. The Contractor shall not subcontract or assign any portion of any right or obligation under this Agreement without prior written consent from the City. Notwithstanding any consent by the City to any assignment, Contractor shall at all times remain bound to all warranties, certifications, indemnifications, promises and performances, however described, as are required of it under the Agreement unless specifically released from the requirement, in writing, by the City.
- B. The Contractor shall retain the right to pledge payment(s) due and payable under this Agreement to third parties.

XI. TERMINATION OF AGREEMENT

- A. If either party is in breach of this Agreement for a period of fifteen (15) days following receipt of notice from the non-breaching party with respect to a breach, the non-breaching party may pursue any remedies available to it against the breaching party under applicable law, including but not limited to, the right to terminate this Agreement without further notice. The waiver of any breach by any party to this Agreement shall not waive any subsequent breach by any party.

- B. The City may terminate this Agreement, on at least thirty (30) days advance notice, for any reason, including convenience, without incurring any penalty, expense or liability to Contractor, except the obligation to pay for Services actually performed under the Agreement before the termination date.
- C. Contractor acknowledges that, if this Agreement extends for several fiscal years, continuation of this Agreement is subject to appropriation of funds for this Project. If funds to enable the City to effect continued payment under this Agreement are not appropriated or otherwise made available, the City shall have the right to terminate this Agreement without penalty at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of termination to Contractor. The Contract Administrator shall give Contractor written notice of such non-appropriation within thirty (30) days after it receives notice of such non-appropriation.
- D. The provisions of Articles VI and VIII shall survive the expiration or earlier termination of this Agreement for any reason. The expiration or termination of this Agreement, for any reason, shall not release either party from any obligation or liability to the other party, including any payment obligation that has already accrued and Contractor's obligation to deliver all Deliverables due as of the date of termination of the Agreement.

XII. REMEDIES

- A. This Agreement does not, and is not intended to, impair, divest, delegate or contravene any constitutional, statutory and/or other legal right, privilege, power, obligation, duty or immunity of the Parties.
- B. All rights and remedies provided in this Agreement are cumulative and not exclusive, and the exercise by either party of any right or remedy does not preclude the exercise of any other rights or remedies that may now or subsequently be available at law, in equity, by statute, in any agreement between the parties or otherwise.
- C. Absent a written waiver, no act, failure, or delay by a Party to pursue or enforce any rights or remedies under this Agreement shall constitute a waiver of those rights with regard to any existing or subsequent breach of this Agreement. No waiver of any term, condition, or provision of this Agreement, whether by conduct or otherwise, in one or more instances, shall be deemed or construed as a continuing waiver of any term, condition, or provision of this Agreement. No waiver by either Party shall subsequently effect its right to require strict performance of this Agreement.

XIII. NOTICE

All notices and submissions required under this Agreement shall be delivered to the respective party in the manner described herein to the address stated in this Agreement or such other address as either party may designate by prior written notice to the other. Notices given under this Agreement shall be in writing and shall be personally delivered, sent by next day express

delivery service, certified mail, or first class U.S. mail postage prepaid, and addressed to the person listed below. Notice will be deemed given on the date when one of the following first occur: (1) the date of actual receipt; (2) the next business day when notice is sent next day express delivery service or personal delivery; or (3) three days after mailing first class or certified U.S. mail.

If Notice is sent to the CONTRACTOR, it shall be addressed and sent to:

APTIM Environmental & Infrastructure, Inc.
Devin A. Moose
National Director, Solid Waste Consulting & Engineering

1607 East Main Street, Suite E.
St. Charles, Illinois 60174

If Notice is sent to the CITY, it shall be addressed and sent to:

City of Ann Arbor
Craig Hupy, Public Services Administrator

301 E. Huron St.
Ann Arbor, Michigan 48104

XIV. CHOICE OF LAW AND FORUM

This Agreement will be governed and controlled in all respects by the laws of the State of Michigan, including interpretation, enforceability, validity and construction, excepting the principles of conflicts of law. The parties submit to the jurisdiction and venue of the Circuit Court for Washtenaw County, State of Michigan, or, if original jurisdiction can be established, the United States District Court for the Eastern District of Michigan, Southern Division, with respect to any action arising, directly or indirectly, out of this Agreement or the performance or breach of this Agreement. The parties stipulate that the venues referenced in this Agreement are convenient and waive any claim of non-convenience.

XV. OWNERSHIP OF DOCUMENTS

Upon completion or termination of this Agreement, all documents (i.e., Deliverables) prepared by or obtained by the Contractor as provided under the terms of this Agreement shall be delivered to and become the property of the City. Original basic survey notes, sketches, charts, drawings, partially completed drawings, computations, quantities and other data shall remain in the possession of the Contractor as instruments of service unless specifically incorporated in a deliverable, but shall be made available, upon request, to the City without restriction or limitation on their use. The City acknowledges that the documents are prepared only for the Project. Prior to completion of the contracted Services the City shall have a recognized proprietary interest in the work product of the Contractor.

Unless otherwise stated in this Agreement, any intellectual property owned by Contractor prior to the effective date of this Agreement (i.e., Preexisting Information) shall remain the exclusive property of Contractor even if such Preexisting Information is embedded or otherwise incorporated in materials or products first produced as a result of this Agreement or used to develop Deliverables. The City's right under this provision shall not apply to any Preexisting Information or any component thereof regardless of form or media.

XVI. CONFLICTS OF INTEREST OR REPRESENTATION

Contractor certifies it has no financial interest in the Services to be provided under this Agreement other than the compensation specified herein. Contractor further certifies that it presently has no personal or financial interest, and shall not acquire any such interest, direct or indirect, which would conflict in any manner with its performance of the Services under this Agreement.

Contractor agrees to advise the City if Contractor has been or is retained to handle any matter in which its representation is adverse to the City. The City's prospective consent to the Contractor's representation of a client in matters adverse to the City, as identified above, will not apply in any instance where, as the result of Contractor's representation, the Contractor has obtained sensitive, proprietary or otherwise confidential information of a non-public nature that, if known to another client of the Contractor, could be used in any such other matter by the other client to the material disadvantage of the City. Each matter will be reviewed on a case by case basis.

XVII. SEVERABILITY OF PROVISIONS

Whenever possible, each provision of this Agreement will be interpreted in a manner as to be effective and valid under applicable law. However, if any provision of this Agreement or the application of any provision to any party or circumstance will be prohibited by or invalid under applicable law, that provision will be ineffective to the extent of the prohibition or invalidity without invalidating the remainder of the provisions of this Agreement or the application of the provision to other parties and circumstances.

XVIII. EXTENT OF AGREEMENT

This Agreement, together with any affixed exhibits, schedules or other documentation, constitutes the entire understanding between the City and the Contractor with respect to the subject matter of the Agreement and it supersedes, unless otherwise incorporated by reference herein, all prior representations, negotiations, agreements or understandings whether written or oral. Neither party has relied on any prior representations, of any kind or nature, in entering into this Agreement. No terms or conditions of either party's invoice, purchase order or other administrative document shall modify the terms and conditions of this Agreement, regardless of the other party's failure to object to such form. This Agreement shall be binding on and shall inure to the benefit of the parties to this Agreement and their permitted successors and permitted assigns and nothing in this Agreement, express or implied, is intended to or shall confer on any other person or entity any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of this Agreement. This Agreement may only be altered, amended or modified by written amendment signed by the Contractor and the City. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement.

FOR CONTRACTOR

By _____
Devin A. Moose
Its
National Director,
Solid Waste Consulting & Engineering

FOR THE CITY OF ANN ARBOR

By _____
Christopher Taylor, Mayor
By _____
Jacqueline Beaudry, City Clerk

Approved as to substance

Howard S. Lazarus, City Administrator

Craig Hupy
Public Services Administrator

Approved as to form and content

Stephen K. Postema, City Attorney

**EXHIBIT A
SCOPE OF SERVICES**

(See attached work plan)

Section C: Proposed Work Plan

C.1 Project Understanding

APTIM understands that the City is seeking an update to its *Waste Less: Solid Waste Resource Plan 2013-2017*. There are a number of factors that make this the ideal time to be updating the prior plan:

- The prior plan was developed for a five-year planning period, and it has now been five years since it was completed.
- Washtenaw County has recently drafted an amended Solid Waste Management Plan which updates regional objectives and goals for waste reduction and diversion and includes recommendations for regional collaboration on solid waste matters. As the largest community in the County and as a participant in development of the County's amended plan, the City is committed to helping to achieve the goals of the County's plan.
- The City's solid waste fund balance is being depleted, with costs outpacing revenues under current conditions. Capital improvements required to maintain, rehabilitate, or replace aging infrastructure including the City's MRF and Drop-Off Station are projected to further strain the solid waste fund.
- There is interest from the community and City officials in expanding solid waste services, particularly to increase diversion and make continued progress towards the City's long-term goal of zero waste. One example of this is the City's commissioning of the development of the Comprehensive Organics Management Plan in 2016, which evaluated options for increasing diversion of organics (including food waste) from both the residential and commercial sectors.
- Increasing services has been shown to also increase costs. Given the current and projected near-term funding challenges, it has become apparent that a holistic assessment of current services and any future options is needed to achieve a sustainable solid waste system.

The City's Solid Waste Resource Management Plan will be more than a solid waste plan update - it will serve as a business plan to guide solid waste operations for the next five years and beyond. The City seeks a plan developed through objective research and fact-based analysis, building on a baseline of existing programs and services, and considering approaches that have been successful in other communities. For this reason, the planning process will incorporate significant benchmarking of other communities to draw from their experiences and successes. Through our prior work on the City's organics plan, advisory committee members and stakeholders identify with progressive, zero waste communities such as Seattle, Portland, San Francisco, Boulder, and Austin with an understanding that there needs to be consideration of local and regional practices as well in Michigan communities like Grand Rapids, Lansing, East Lansing, Kalamazoo, Marquette, Ypsilanti, Saginaw, and others. This same mindset will be applied to identifying the benchmark communities to be researched for the Solid Waste Resource Management Plan. The City also seeks a plan that can be implemented, necessitating the development of options that meet the needs and interests of the community and is supported by the community. The Solid Waste Resource Management Plan will therefore include a robust community engagement strategy to secure input from key stakeholders as well as the general public. In APTIM's experience, this is crucial to the acceptance and successful implementation of any plan.

The City currently provides comprehensive solid waste services using a mix of in-house crews and contracted service providers. APTIM has a clear understanding of the roles and responsibilities of the City and each of its vendors in providing solid waste services currently. We have reviewed each of the vendor contracts in place and are aware of the cost structures of each of those agreements. This familiarity provides us the ability to immediately begin evaluating current conditions and options, without the need to get up-to-speed on the City's program. Significant effort and investment has been made by the City to establish its current system, and the Solid Waste Resource Management Plan will seek to first build upon the existing plan and system, drawing on the strengths and benefits of current operations, while evaluating potential service enhancements to promote a sustainable system (both environmental and financial) going forward.

C.2 Work Plan (Revised April 2, 2018)

The APTIM team has prepared the following work plan to address the services requested by the City. The work plan is based on:

1. Our review of RFP #18-04 (including Addendum #1);
2. A preliminary review of recent and prior planning documents, including the existing Waste Less Solid Waste Resource Plan and Washtenaw County's pending amended Solid Waste Management Plan;
3. APTIM's experience in solid waste planning and diversion program analysis and implementation, including prior planning services provided to the City through development of the Comprehensive Organics Management Plan;
4. Bell & Associates' experience in evaluating solid waste costs of service in progressive communities utilizing varying service delivery options like the City;
5. Project Innovations' experience in conducting community engagement and facilitation on a range of environmental issues, including a number of engagements with the City; and
6. Lake Research Partners' experience in conducting scientific surveys, including surveys addressing public views of waste management programs.

APTIM previously collaborated with Lake Research Partners and Project Innovations on the development of the City's Comprehensive Organics Management Plan in 2016. Their familiarity with the City's solid waste operations and long-term program goals and the City's interest in executing a robust community engagement process for this project make them an ideal fit for the City's current plan update. We have also previously worked with Bell & Associates to complete solid waste system cost analyses; their prior experience performing financial analyses for a number of local governments will prove invaluable in assessing the City's current costs of service and developing a forward-looking strategy. APTIM had multiple discussions with our subcontractors to review the scope requested by the City and obtain their input. The work plan below reflects the unique and specialized experience of all members of the APTIM team.

Task One. Documentation Review & Project Kick-Off

Task 1.1. Documentation Review

As the initial Task in the project, to identify prior and current planning efforts completed and policies adopted by the City, the APTIM team will review the documents identified in RFP #18-04, including:

- *Washtenaw County Solid Waste Management Plan Amendment*
- *Waste Diversion Site Feasibility Study: An Assessment of Recovery Facilities to Manage Recyclables*
- Results of Washtenaw County's Examination of Potential for Regional Approach to Recycling and Solid Waste (anticipated March 2018)
- City's Solid Waste Financial Plan
- City's Comprehensive Annual Financial Report
- City's Current Service Operating Model
- City Solid Waste Program contracts for Recycle, Compost and Trash
- Current capital improvements/needs identified in the City's Capital Improvements Plan (CIP)
- Status of existing goals contained in *Waste Less: City of Ann Arbor Solid Waste Resource Plan Update 2013-2017*
- *City of Ann Arbor Sustainability Framework*
- *Comprehensive Organics Management Plan*

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- *Climate Action Plan*
 - *Biodigester Feasibility Study*
 - *Multi-Family Recycling Incentive Pilot Program Report*

APTIM has previously reviewed these documents through our prior work with the City, providing us significant awareness of current contracts, programs, and policies. Our review of documents during this task will be expedited because of this familiarity and will serve to synthesize existing information on the City's solid waste system; understand prior solid waste planning activities conducted by the City; understand the role of solid waste diversion in other sustainability/environmental initiatives of the City; begin assessing current system costs; and confirm contractual conditions with the City's partner organizations (e.g., Recycle Ann Arbor, WeCare Denali, Waste Management) that may impact future programs and policies.

Task 1.2. Kick-Off Meeting

Approximately 2 weeks after we commence work on the document review, the APTIM team proposes a kick-off meeting with City staff, including the City's project manager, solid waste program financial staff, solid waste operations / public works staff, and others identified by the City who may be engaged in development of the plan. We envision a half-day meeting with the City's staff team, and will prepare a formal agenda prior to the meeting. As a preliminary agenda, we would propose to allocate the first half of the meeting to discussion of project management issues, schedule, and the community engagement strategy, and the second half of the meeting to a preliminary discussion of technical issues that will influence plan development, with topics as follows:

- Introductions of consultant team and City staff team members.
- Review project administration, including points of contact with the City.
- Review overall work plan and project schedule.
- Discuss Solid Waste Resource Management Plan review and approval to be performed by the City, including identifying steps for approval or adoption by City commissions or City Council.
- Discuss proposed community engagement strategy, including type and schedule of engagement activities; stakeholders to be invited for interviews and/or advisory committee participation; and outreach to the public to secure their input to the plan.
- Review current collection and management responsibilities for different segments of the waste stream (e.g., residential garbage, recycling, and composting; commercial garbage and recycling in the downtown and outlying areas; multi-family garbage and recycling) and options the City has considered or seeks evaluation of in the plan.
- Review availability of benchmark data for current programs / services (e.g., material quantities collected and managed by the City and its contractors).
- Discuss financial status of the solid waste enterprise fund and gain more detailed perspective on future potential funding requirements and limitations.
- Review prior investigations performed and findings made by the City to address downtown alleys, fats, oils, and grease (FOG), and regional collaborations.
- Conduct a preliminary, qualitative discussion of program and policy options that may be considered in the Plan, with the aim of obtaining initial feedback from City staff's perspective.

Task Two. Community Engagement

The APTIM team understands that the City desires a robust community engagement process to secure input to the Solid Waste Resource Management Plan from stakeholders and members of the community. Based on our prior planning experience in communities across the U.S., and particularly our recent planning experience in Ann Arbor, obtaining stakeholder input into the Plan and building community support for plan

recommendations contributes to having a final plan that is tailored to the unique needs of the local community and that can be implemented.

The subtasks outlined below are consistent with engagement elements identified in the City's Community Engagement Toolkit and will follow this framework.

Task 2.1. Develop Community Engagement Strategy

In consultation with the City's staff team, the APTIM team will begin by developing a strategy for active stakeholder participation in the planning process. Specific activities under this subtask include:

- Situation Analysis: Identify key issues the Community Engagement Strategy will address.
- Objectives: Clarify objectives of community engagement efforts parallel the City's objectives.
- Visioning: Design and conduct a two-hour visioning session with the Environmental Commission to gather the Commission's input to long-term solid waste resource management in Ann Arbor. Key concepts identified in the visioning session will be integrated into the Community Engagement Strategy and the analysis of opportunities (Task Three).
- Develop Message Model: Identify the key messages to communicate to build trust in the project team and the planning process.
- Identify Stakeholders: Develop a comprehensive list of stakeholders to be engaged to participate in one-on-one interviews, focus groups, and/or the Plan Advisory Committee. Stakeholders will be identified using the City's Stakeholder Analysis Worksheet within the Community Engagement Toolkit and including other stakeholders based on key industry and service groups identified by the project team and City staff. Washtenaw County and participants in the Washtenaw County plan amendment will also be considered for stakeholder participation to address regional collaboration and consistency with the County's plan recommendations.
- Stakeholder Outreach Process: Identify the procedure to contact stakeholders and invite their participation in select engagement activities.
- Contact Plan: Confirm interview, focus group, and committee meeting requirements.
- Community Engagement Schedule: Identify timeline, key topics, and milestones for each engagement element.
- Documented Community Engagement Strategy: The strategy will use Ann Arbor's Community Action Plan format.

The community engagement strategy will be a key agenda item for the initial kick-off meeting with the City's staff team and is expected to be completed through subsequent discussions with appropriate City staff.

Task 2.2. Stakeholder Interviews

Because of the broad scope of the Solid Waste Resource Management Plan and the diverse interests of stakeholders in future solid waste programs in the City, the APTIM team proposes to conduct one-on-one interviews with various large or key stakeholders. Preliminarily, we think it is important to meet with representatives from each of the vendors providing solid waste services to the City's residents or businesses (i.e., Recycle Ann Arbor, WeCare Denali, Waste Management, Advanced Disposal), the University of Michigan, the Downtown Development Authority, A2Y Chamber, and City staff providing key solid waste operations functions (e.g., collections, customer service, enforcement/inspections). There are other potential stakeholders that may be added to this list as the strategy is developed.

Our proposed scope includes two days of interviews targeting up to 12 stakeholders, with interviews conducted after the kick-off meeting and prior to the first meeting of the Plan Advisory Committee. Many of the interviewed stakeholders will also be invited to participate on the Plan Advisory Committee. We believe that dedicated interviews of these stakeholders will yield important perspectives and information for

consideration by the broader Plan Advisory Committee and the City. Often, this type of detailed information cannot be easily obtained within an advisory committee meeting.

Task 2.3. Focus Groups

To expand on the information collected through stakeholder interviews and evaluate more broadly the attitudes of stakeholders and members of the community on solid waste issues, the APTIM team proposes to conduct two focus group meetings. One focus group will address residential waste programs, and the second focus group will address commercial waste programs. This will provide a more in-depth conversation around current programs and needs or opportunities for future solid waste programs. Each focus group will meet for approximately 90 minutes with facilitated discussion.

Task 2.4 Plan Advisory Committee

The APTIM team will conduct a series of Plan Advisory Committee meetings to receive stakeholder input to the plan. The Plan Advisory Committee is envisioned to operate in the same manner as the advisory committees established for the Comprehensive Organics Management Plan, with the objective of advising and providing feedback on the opportunities being evaluated and recommendations developed for the plan. Specific work activities will include:

- Work with the City's staff team to finalize the membership of the committee.
- Establish a preliminary meeting schedule for the advisory committee for review and approval by the City and advisory committee.
- Assist the City to invite members and obtain participation on the committee.
- Attend each of the advisory committee meetings. APTIM will serve as a source of technical information during these meeting, with Project Innovations acting as the meeting facilitator.
- Prior to each meeting, prepare meeting materials (e.g., Powerpoint or other materials) and agenda for review by the City and then distribute to the advisory committee members. We assume that the materials will be posted on the project website (as described below) in the interest of source reduction and to facilitate timely receipt of the materials, but will have paper copies available at the meetings.
- Prepare minutes of each advisory committee meeting.

We are proposing 4 meetings of the advisory committee. Assuming work on the plan commences in March 2018 and that the plan is developed over a 12-month period, we envision conducting committee meetings in June 2018, September 2018, November 2018, and February 2019. Detailed agendas will be prepared for each meeting, but a high-level agenda for the Plan Advisory Committee might comprise the following:

- Meeting 1:* Review project objectives, confirm meeting schedule, establish meeting protocol, and obtain initial perspectives on solid waste management in Ann Arbor.
- Meeting 2:* Discuss options, with a focus on optimizing existing programs and services and considering regional strategies.
- Meeting 3:* Discuss options, with a focus on new programs and services, the resources required for implementation, and associated system impacts.
- Meeting 4:* Present preliminary recommendations for committee feedback.

Task 2.5. Website Management

APTIM and Project Innovations will assist the City to develop and maintain a project website. The purpose of this website will be to:

- Keep the community informed about meeting dates and schedule and encourage their participation.
- Provide access to presentation materials and meeting minutes from the Plan Advisory Committee.
- Report the results of the resident survey.

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- Provide access to the final report.

We have assumed that the City will provide hosting services for the webpage. The consultant team will assist the City to develop a project-specific webpage, and then will provide documents as they become available for uploading to the website.

Task 2.6. Scientific-Based Resident Survey

To gauge community attitudes, awareness, and interest regarding current and potential future solid waste operations, a scientific survey of residents is proposed. By “scientific”, we mean a survey that is designed to include a random sample of residents that is not subject to potential bias from self-reporting that can be an issue with voluntary, web-based surveys.

Survey questions will be developed by APTIM and Lake Research Partners, in collaboration with the City’s staff team. Lake Research Partners will be responsible for implementing the survey, compiling and analyzing responses, and preparing a report on the findings. Survey questions may address:

- Perception of the City’s and respondent’s waste management concerns
- Awareness of and satisfaction with existing services
- Support for prospective new or changed services and willingness to fund additional services
- Demographic characteristics, such as age, race, gender, residence type, and geographic location; these questions enable cross-tabulation of results for specific sub-populations

For this project, Lake Research Partners is recommending a listed sample frame of Ann Arbor adult residents over the age of 18 including both landlines and cell phones. This is a method for selecting people for involvement in telephone statistical surveys by accessing telephone numbers listed to an Ann Arbor exchange or address. Using available telephone databases for telephone exchanges used within Ann Arbor, Lake Research Partners will draw a sample among eligible numbers. Our proposal is based on a sample size of 600 residents in Ann Arbor households, enabling a break out of statistically significant results among critical subgroups of residents.

We believe that the proposed survey will provide a number of benefits to the City:

- First, it will provide broad-based community input, beyond the advisory committee and stakeholder interviews. Although the advisory committee members and/or key stakeholders are a critical component of this study, they will all have individual goals, aspirations, and concerns that they will bring to the plan process. A resident survey, on the other hand, will provide for broader community involvement and options. Simply put, the advisory committee and stakeholders are expected to provide “expert”, or at least “experienced”, advice and input, whereas the resident survey will provide input from an “average” customer-based perspective.
- Second, the results of the resident survey will be quantifiable and statistically-significant.
- Third, the survey can be structured to ask questions and provide valuable input to the advisory committee, City staff and, ultimately, the City Council regarding current and prospective solid waste programs and services.
- Fourth, because the plan will consider options that may impact the work required by households (e.g., for segregating materials) or may have cost implications, obtaining feedback on such options from randomly selected residents will be particularly valuable to the City Council when considering implementation of plan recommendations.

Within the overall project schedule, we would propose to conduct the resident survey during the July–October period (although the actual phone calls are completed over a period of several days, additional time is required to prepare the survey and compile results). This will allow initial input from the Plan Advisory Committee, stakeholder interviews, and focus groups to be incorporated into the survey questionnaire and

provide time for the committee to consider the results of the survey in analyzing options and providing feedback on recommendations.

Task Three. Identify and Evaluate Opportunities and Recommendations

As an initial element of Task Three, baseline data on quantities, sources, and management methods of waste, recyclables, and organics within the City will be compiled. This baseline information is essential for evaluating opportunities to enhance existing operations or develop new programs. We have previously reviewed the City's internal data from its scale operations and have a sound understanding of the data available. This data will be analyzed to identify or update:

- Aggregate and per household quantities of garbage, recyclables, and organics currently collected through residential and commercial collection programs.
- Number of accounts or customers by sector (e.g., single-family, multi-family, downtown commercial, outlying commercial).

Additional work items to be completed in Task Three and Task Four will utilize and expand on this baseline information.

Task 3.1. Downtown Alleys

Ann Arbor's downtown alleys are significantly space constrained, due to their narrow profile and multi-purpose nature of their use (commercial deliveries, waste and recycling container storage and collection, limited parking for residents or businesses, storage bins for other materials such as uniforms / rugs / used cooking oil (FOG), etc.). To address this concern, City staff began an internal assessment of alleys in the downtown area in 2016, with an objective of identifying alley management practices that could enhance their usability, safety, and cleanliness. The City has identified an interest in continuing this assessment as part of the solid waste plan process.

APTIM will review the data compiled by the City's internal work group to date on downtown alley conditions, needs, and options. We will also review the alley management strategies in place in other cities in the U.S. with similar constraints to identify best management practices that may be instituted in Ann Arbor. While the alleys serve multiple functions, the research for this element will be focused on alley solid waste management practices identified in other cities. Options to improve downtown alley solid waste practices will be incorporated into stakeholder interviews, the commercial focus group, and/or meetings with the Plan Advisory Committee to gather community feedback.

Task 3.2. Fats, Oils, and Grease (FOG)

Fats, oils, and grease, or FOG, was identified by the City as a material stream of interest for the Comprehensive Organics Management Plan. During development of the organics plan, it was determined that FOG is currently managed outside of the traditional solid waste management structure and limited information is available on the waste stream. Unlike other waste streams, FOG is typically collected from generators (restaurants) at no cost to the generator and blended or used directly as a fuel source. Material quantities are not reported to the City. Because FOG is not compatible with organic waste management methods such as composting, it was not further evaluated as a material of focus in the organics plan.

As an element of the City's overall solid waste stream, FOG collection containers are an added concern for the City's constrained downtown alleys, and they can be problematic at properties outside the downtown area as well:

- The majority of FOG containers are identified with a service provider, but there is a lack of information on the generators utilizing the containers.
- FOG spills in the vicinity of containers impact aesthetics, stormwater quality, safety, and cleanliness.
- The City has not historically tracked, regulated, or provided FOG collection services and does not have an existing mechanism to influence or improve FOG management.

APTIM will research FOG management practices in place in other cities to identify both operational practices and regulatory practices that could be implemented to improve FOG management in Ann Arbor.

Task 3.3. Education and Outreach

APTIM and Project Innovations will review current education and outreach strategies implemented by the City (and its service providers, to the extent education and outreach requirements are included in contracts), identifying the outreach methods utilized (e.g., City website, Waste Watcher publication, etc.). Effectiveness of current education and outreach strategies will be assessed by:

- Including questions in the resident survey (Task 2.6) regarding education and outreach; these questions can be varied or more extensive for the transient student / rental population to more specifically assess effectiveness of current efforts on this sector.
- Conducting a focus group with students to identify opportunities and barriers to increase education and outreach effectiveness with transient residents.
- Discussing education and outreach methods with stakeholders representing the business community through interviews, the commercial focus group, and/or the Plan Advisory Committee to identify opportunities and barriers to increase education and outreach effectiveness within the commercial sector.

APTIM will perform further research into the education and outreach strategies implemented in other communities to identify:

- Outreach methods (e.g., print media, social media) and frequency
- Intended purpose (e.g., increase participation, reduce contamination) and target audience
- Messaging utilized (e.g., slogans, graphics, etc.)
- Measures of effectiveness of implemented strategies (e.g., diversion increases documented as a result of education and outreach efforts, reductions in contamination in recyclables, etc.)
- Detailed education and outreach program development and implementation costs

Based on this research and the assessment of current education and outreach performed in Ann Arbor, we will identify recommendations to improve education and outreach effectiveness. We will also identify performance metrics to measure the effectiveness of strategies post-implementation.

Task 3.4. Ordinances and Regulations

City code sections relevant to solid waste management and solid waste operations, most notably the City's Solid Waste Code (Chapter 26 of the Municipal Code), will be reviewed to identify:

- Inconsistencies and conflicts between code sections and City or State regulations
- Provisions that would limit program modifications or implementation of new programs
- Requirements that are difficult to enforce or are not enforceable as currently written

Modifications will be proposed to address any issues related to current solid waste management practices as well as potential future solid waste management practices.

Task 3.5. Program Funding

The City's solid waste operations are currently funded through a property tax millage paid by all property owners in the City and through user fees paid by commercial businesses for waste collection under the commercial waste franchise agreement. Data provided by the City on current fund balances and projected future operating costs and revenues indicate that the City's solid waste services are running a deficit and current funding levels are not adequate to sustain current service levels. This is a critical concern for the City, and the Solid Waste Resource Management Plan must take funding into consideration.

Bell & Associates will perform a detailed cost of service analysis for the City's current solid waste operations. Financial and operational data will be analyzed using the same methods used to measure the performance of other public and private waste management providers. The review checklist details costs by operation and uses program data to determine operational efficiency. Results of the analysis will be compared to established industry benchmarks and internal operational goals. The results are an indication of the level of control management has over the activities of the department. The analysis will include:

- Review of financial data provided by the City, including operating budgets, year-end general ledgers, balance sheet / current fund balances, millage and customer rates, current contracts, service provider invoices, schedules of all solid waste assets, lease agreements, and debt instruments.
- City facility tours, field observations, and staff interviews to document operational factors including, but not limited to, staffing, equipment types and conditions, collection schedules, recycling programs, and management / administration.
- Developing a cost model based on the City's current general ledger, utility policy, required fund balance, and other internal reporting formats. This ensures the source of the model inputs are known by staff. Bell & Associates' experience with the operational and economic aspects of solid waste and recycling collection and material processing is critical to the design of a reliable and flexible model. Background information will be utilized in the Excel based rate model, with the general structural components identified in Figure 1 below.

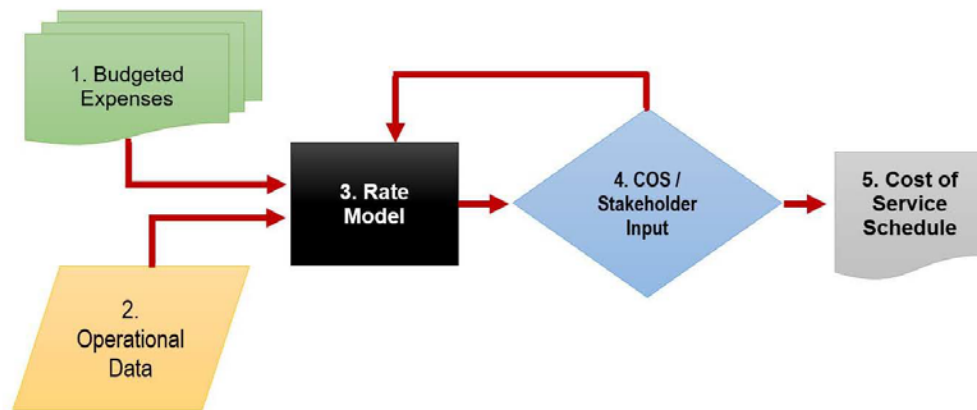


Figure 1: Rate Model Inputs and Product

Elements of the rate model include:

1. Actual / budgeted line item expenses and revenues from FY17 and FY18 and projected over a three to five-year period plus required fund balance(s). The projection of costs will be based on expected inflation, labor contracts, transport and disposal contracts, and the expected growth of the waste stream.
2. Operational data such as customer counts, collection routes, collected waste, recyclable material tons processed, staffing levels, days of operation, and other information necessary to calculate costs.
3. The model will generate the unit costs for the services provided by the City.

4. Input and direction is provided by City staff, elected officials, and other stakeholders to refine the expected costs to achieve the City's objectives. Fund balances will be reviewed to determine if levels are adequate per the City's fiscal policies.
5. The final product is the schedule of costs for the various collection services and program alternatives.

The model will segregate the costs so future changes to incoming waste tons, recyclable/compostable tons, budget, diversion programs, or days of operation can be tested to calculate the sensitivity. Collection costs are comprised of the components and expected performance identified in Table 1. The model will segregate these costs so changes to the budget, programs, or productivity can be tested to calculate the sensitivity for each line of business.

Table 1. Cost Components for Collection Operations		
Cost Component	Cost / Price	Performance
Disposal Cost	Tip Fee per Ton	Average Set-out Weight
Labor Cost	Weighted Cost per Unit of Labor	Route Hours / Collection Productivity
Truck Cost	Truck Depreciation, Fuel cost per Gallon, and Repairs	Route Hours / Collection Productivity
Container Cost	Replacement Cost	Per Customer
Operational Costs	Total of Remaining Operational Costs	Collection Productivity
Administrative Cost	Management, Customer Service, Taxes, and Fund Transfers	Per Customer

The completed current cost of service model will be submitted to City staff for review and input. A conference call with the City's staff team will be conducted to review the mechanics, logic, and output of the model, discuss findings, and solicit direction from staff.

To assess program funding options, APTIM will:

- Benchmark program funding approaches implemented in other cities, identifying strengths and weaknesses of various approaches and comparability with the City's current funding structure
- Review the City's use of the solid waste millage to fund a portion of its operations, including identifying limitations to funding through the millage
- Review the City's use of fees for services to fund a portion of its operations
- Identify alternative funding approaches that could be implemented in Ann Arbor based on approaches implemented in benchmark communities and analyze revenues under alternative approaches compared to the current funding structure
- Assess the impact to the City of pending state legislation to increase the state tipping fee surcharge on landfilled waste
- Review community input (Task Two) from engagement activities such as the resident survey, focus groups, and Plan Advisory Committee to assess community acceptance of various funding approaches

Task 3.6. Service Delivery

The City currently performs solid waste services with both in-house crews and contracted service providers. City staff have considered exploring privatization of additional elements of their solid waste collection operations, as well as potential regional approaches to solid waste services. Regionalization options are

currently under review in collaboration with Washtenaw County, and the results of that analysis (expected to be completed in March 2018) will be incorporated into this task.

To evaluate service delivery options, APTIM will:

- Document existing service delivery methods in place in the City, including clear delineation of entities responsible for managing each material stream from individual generator sectors (e.g., single-family residential, multi-family residential, downtown, commercial, etc.).
- For contracted services, compile current contract termination dates and options for extension. Current contracts vary in duration and dates of expiration, and this may impact the timing of or ability to modify service delivery methods or implement program changes. For example, to the extent the City may consider privatizing its residential organic waste collection operations, it may be beneficial to combine residential (as an existing, potentially expanded, service) and commercial organics collection (as a new service) into a single contract for service. Implementation of this potential option may therefore be dependent in part on the commercial waste franchise, which will expire in 2019.
- Benchmark service delivery methods in other communities and document operational and cost parameters under varying service delivery models.
- Review and incorporate findings of the ongoing regionalization analysis being completed by Washtenaw County. If the County's analysis does not result in continued effort toward regionalization or a regional entity, identify additional regional strategies for collaborative contracting and program services.
- Identify recommended service delivery methods to increase the cost-efficiency and effectiveness of the City's services.

Task 3.7. Diversion Options

Though diversion options were not explicitly identified in RFP #18-04 as an area of interest for examination through the plan process, an overarching objective of the Solid Waste Resource Management Plan is to continue striving to achieve zero waste, with near term objectives of reducing waste generation and increasing waste diversion for compatibility with the Washtenaw County Solid Waste Management Plan Amendment. Analysis of diversion options is therefore appropriate to include in the City's plan.

The City currently provides a number of diversion opportunities, and initial evaluations will consider how to optimize existing programs to achieve increased diversion. Increasing participation in existing programs and use of existing infrastructure is typically the lowest cost approach to increasing diversion, particularly when compared to investing in equipment or infrastructure to implement a new program.

Drawing on input from City staff and stakeholders, we anticipate the evaluation of diversion options will focus largely on the more prevalent components of the waste stream that would have the greatest potential for impacting diversion rates (e.g., commodity recyclables / single-stream recyclables, organic wastes, construction and demolition wastes). Options for organics will draw from the Comprehensive Organics Management Plan, with updates to the analyses contained in that plan as appropriate. There may also be interest in considering options to divert smaller components of the waste stream (e.g., household hazardous waste, electronics, pharmaceuticals, textiles). While these materials would have a lesser impact on overall diversion rates and may result in higher costs per ton diverted when compared to programs targeting commodity recyclables or organics, diversion of these materials may support other policy objectives for reducing waste stream toxicity.

An additional option that members of the Environmental Commission have previously expressed interest in exploring is pay-as-you-throw (PAYT) waste service. PAYT is purported to encourage diversion by charging generators with less waste material a lower rate, consistent with other utilities which charge on a usage basis (e.g., electricity, water and sewer). For this option to be implemented for the City's residential waste stream, the current funding structure would have to be modified such that residents pay a user fee for their solid

waste services. The variable and uncertain nature of generator disposal behaviors under a PAYT structure may introduce additional funding concerns that will need to be considered.

For each of the diversion options considered APTIM will:

- Benchmark programs in place in other communities to identify operational and cost parameters and diversion performance
- Identify collection requirements and current availability of collection services
- Identify processing requirements and current availability of processing infrastructure to manage collected material
- Estimate diversion potential and impact on the City's diversion rate
- Incorporate Community interest in or perceived need for diversion of the material and/or support for programs, as assessed through community engagement efforts in Task Two
- Identify compatibility with the existing system
- Develop cost projections (in conjunction with Task Four), including cost per ton diverted and system cost impact

Task Four. Identify and Evaluate Logistics and Resource Needs

For this task, we will identify the resources required to implement potential options. This will include identifying:

- Staffing required and associated labor costs, including staff for collection and management operations, customer service, administration, education and outreach, and code enforcement / field management.
- Quantity, type, and cost of equipment (e.g., trucks, containers) required.
- Typical performance parameters (e.g., number of drivers/helpers and stops per route for collection operations).
- Availability of space to perform program operations, particularly for services occurring in downtown alleys.

The work in earlier tasks will assist in identifying and analyzing these factors. For instance, the stakeholder interviews in Task Two will provide insight from service providers including City Public Works and private companies on the resources required to provide current services that may translate to other options. Benchmarking of practices in other communities performed in Task Three will provide a broader understanding of operational structures and resources utilized to provide varying services, as well as information on program and household costs in those communities. This benchmark data, coupled with the City's in-house information, will provide the basis for completion of this task.

Based on the community input secured in Task Two, research and analysis completed in Task Three, and the resource needs identified in Task Four, we will then formalize recommendations and develop an implementation strategy which addresses:

- Program enhancements or new programs to be implemented to achieve overall objectives of increased waste diversion and decreased waste generation
- Method of service provision (i.e., which program elements are best managed by the City and which should be contracted by the City)
- City Code amendments needed (if any) to implement programs
- Timing and/or phasing of program rollout

The implementation strategy will be developed in conjunction with the City's staff team and the Plan Advisory Committee, with the aim of presenting a comprehensive, holistic, and sustainable strategy for managing solid waste resources in Ann Arbor in the future and meets the needs and interests of the community.

Task Five. Reporting and Presentations

Task 5.1. Report

In Task Five, the APTIM team will document all of the community engagement input, research and analysis of options, recommendations, and implementation strategy in a draft Solid Waste Resource Management Plan report. The report will include an executive summary and overview for wide distribution to highlight the Plan development process and content. APTIM has extensive experience presenting data, analysis, and findings to both technical industry professionals and to elected officials and the public using narrative and graphics that are easily understood by each target audience. The report will provide detailed documentation of the analyses performed, with supporting information provided as appendices to the report.

The draft report will be submitted to the City's staff team for review and comment. A final draft report will then be prepared for presentation to the Environmental Commission.

Task 5.2. Presentations to the Environmental Commission

In addition to the visioning session conducted with the Environmental Commission early in the project, APTIM proposes to attend two Environmental Commission meetings during the project, each with the following purpose:

- Present plan development progress. Following the third meeting of the Plan Advisory Committee, APTIM will present an update on the status of plan development, including reviewing the options under consideration, benchmark findings from other communities researched, compatibility of options with the City's funding methods and available funds, and community input received. This presentation will provide an opportunity for the Environmental Commission to provide input to the development of recommendations and the proposed solid waste management strategy.
- Present the final draft Solid Waste Resource Management Plan. APTIM will provide a comprehensive review of the plan and receive comments and respond to questions from the Environmental Commission. Depending on the approval process the City determines is applicable to the plan, the final draft of the plan may be modified to address comments from the Environmental Commission.

Task 5.3. Project Management

The APTIM team will work closely with City staff throughout the development of the Solid Waste Resource Management Plan. We recommend conducting bi-weekly phone conferences with the City's staff team to maintain ongoing, open dialogue and provide consistent progress reports as the plan develops. When possible, in-person meetings of the project team will be scheduled in conjunction with other community engagement meetings or presentations to the Environmental Commission. APTIM will develop agendas for each team meeting and provide follow-up summaries of action items identified to ensure clear communication and coordination between the City and the APTIM team.

Task Six. RFP Assistance

APTIM will assist the City to develop a Request for Proposals for consolidated residential and commercial trash, recycling, and organics collection services. For this task, APTIM proposes to provide the following services:

- Prepare an information request to the City for certain background information and elements to include in the RFP;
- Prepare a procurement time schedule to guide the RFP, proposal review, and contract award processes;
- Draft the scope of work for the collection services RFP and assemble the RFP package;

-
- Assist the City to respond to technical questions from vendors (the City will be responsible for preparing any addenda to be issued);
 - Assist the City to review vendor proposals; and
 - Develop interview questions or items for clarification for the City's use during vendor interviews or negotiations.

All work items in Task Six will be closely coordinated with the City's staff team. Because the contract will start July 1, 2019, work on this task will commence immediately following award of the contract for the Resource Management Plan.

Deliverables

A number of project deliverables are identified in the task descriptions within the work plan. All deliverables will be transmitted via email or through a dedicated web portal provided by APTIM. All deliverables that are to be distributed to stakeholders or made publicly available will be provided to the City in draft form for comment and approval prior to distribution outside the project team.

In summary form, project deliverables and formats are identified below:

- Kick-off meeting agenda (Microsoft Word); a draft will be provided for City staff review and comment
- Written Community Engagement Strategy, utilizing Ann Arbor's Community Action Plan format and developed in consultation with City staff (Microsoft Word/Excel and PDF)
- Stakeholder invitations (Microsoft Word or Outlook) and outreach materials including a project fact sheet (PDF)
- Plan Advisory Committee meeting agendas, presentation materials, and meeting summaries (PDF)
- Resident survey questionnaire (Microsoft Word or PDF)
- Resident survey cross-tabulations of responses and report of findings (PDF)
- Draft, final draft, and final Solid Waste Resource Management Plan report (Microsoft Word and PDF)
- Presentations to the Environmental Commission (PowerPoint and PDF)
- Draft and final Request for Proposals package (Microsoft Word and PDF)

Schedule

APTIM has developed the preliminary project schedule depicted in Table 2 to illustrate the work flow for the development of the Solid Waste Resource Management Plan and demonstrate completion within the City's desired time frame of 12 to 15 months. Under this preliminary schedule, the Solid Waste Resource Management Plan is anticipated to be completed within 14 months. We recognize the schedule is preliminary, but believe it provides the City with a high-level understanding of the distribution of work activities throughout the project completion period. We anticipate that the project schedule will be reviewed and updated with a greater level of detail and certainty after the kick-off meeting.

TABLE 2. PRELIMINARY PROJECT SCHEDULE (Revised April 2, 2018)

	2018								2019						
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Task 1 - Documentation Review & Project Kick-Off	■														
Task 2 - Community Engagement															
Task 2.1 - Strategy Development		■	■												
Environmental Commission Visioning Session			■												
Task 2.2 - Stakeholder Interviews			■												
Task 2.3 - Focus Groups			■												
Task 2.4 - Plan Advisory Committee				■				■		■			■		
Task 2.5 - Website Management			■	■	■	■	■	■	■	■	■	■	■	■	■
Task 2.6 - Scientific-Based Resident Survey			■	■	■	■	■	■	■	■	■	■	■	■	■
Task 3 - Opportunities and Recommendations		■	■	■	■	■	■	■	■	■	■	■	■	■	■
Task 4 - Logistics and Resource Needs									■	■	■	■	■	■	■
Task 5 - Reporting and Presentations															
Task 5.1 - Report													■	■	■
Task 5.2 - Environmental Commission Presentations											■			■	
Task 5.3 - Project Management	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Task 6 - RFP Assistance	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Section D: Fee Proposal

APTIM's fee proposal is provided in a separate, sealed envelope.

EXHIBIT B COMPENSATION

General

Contractor shall be paid for those Services performed pursuant to this Agreement inclusive of all reimbursable expenses (if applicable), in accordance with the terms and conditions herein. The Compensation Schedule below/attached states nature and amount of compensation the Contractor may charge the City:

(See attached Fee Schedule)

TABLE 1. PROPOSED BUDGET - SOLID WASTE RESOURCE MANAGEMENT PLAN: 2019-2023 (Revised March 23, 2018)

Task	Devin Moose Project Director \$215	Phil Kowalski Principal Planner \$215	Christina Seibert Project Manager \$140	APTM Support Staff \$85	APTM Expenses	Charlie Firethorn Project Innovations \$222	Admin Staff Project Innovations \$50	Project Innovations Expenses	Chris Bell Bell & Associates \$163	Bell & Associates Expenses	Lake Research Partners	Total
1- Documentation Review & Project Kick-Off												
1.1- Documentation Review	2	8	20	4		Included below	Included below		10			
1.2- Kick-Off Meeting		12	20		\$605	Included below	Included below		25	\$945		
Task 1 Subtotal, Hours	2	20	40	4		18	0		35			119
Task 1 Subtotal, Cost	\$450	\$4,300	\$5,600	\$380	\$605	\$3,998	\$0	\$0	\$6,705	\$945	\$0	\$21,981
2- Community Engagement												
2.1- Develop Strategy		2	12		\$605	Included below	Included below	Included below				
2.2- Stakeholder Interviews (2 days)			24			Included below	Included below	Included below				
2.3- Focus Groups (1 day)			16			Included below	Included below	Included below				
2.4- Advisory Committee Meetings (4)		4	32		\$1,819	Included below	Included below	Included below				
Meeting Preparation			48			Included below	Included below	Included below				
Meeting Facilitation/Participation						Included below	Included below	Included below				
2.5- Website Management		8	20			Included below	Included below	Included below				
2.6- Scientific-Based Resident Survey (See Note 1)		14	162		\$2,424	128	36	\$6,300	44	\$0	\$30,135	330
Task 2 Subtotal, Hours	0	\$3,010	\$21,260	\$0	\$2,424	\$28,418	\$1,800	\$6,300	\$0	\$0	\$30,135	\$63,365
Task 2 Subtotal, Cost	\$0	\$3,010	\$21,260	\$0	\$2,424	\$28,418	\$1,800	\$6,300	\$0	\$0	\$30,135	\$63,365
3- Opportunities and Recommendations												
3.1- Downtown Alloys		2	20									
3.2- Fish, Oils and Grease		2	16									
3.3- Education and Outreach		2	24			12						
3.4- Ordinances and Regulations		2	16									
3.5- Program Funding		32	22									
3.6- Service Delivery		10	30									
3.7- Diversion Options		4	20									
Task 3 Subtotal, Hours	8	82	182	134	\$0	12	0	\$0	44	\$0	\$0	472
Task 3 Subtotal, Cost	\$1,720	\$18,780	\$35,460	\$12,730	\$0	\$2,694	\$0	\$0	\$7,172	\$0	\$0	\$69,546
4- Implementation Logistics and Resource Needs												
4.1- Resource and Funding Needs	2	16	32									
4.2- Implementation Strategy		8	12									
Task 4 Subtotal, Hours	4	24	44	0	\$0	0	0	\$0	0	\$0	\$0	72
Task 4 Subtotal, Cost	\$860	\$5,160	\$6,160	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,180
5- Reporting and Presentations												
5.1- Report	4	36	60	20					28			
5.2- Presentations to Environmental Commission (2)		24	36		\$1,214							
5.3- Project Management	2	16	40									
Task 5 Subtotal, Hours	6	76	136	20		0	0	\$0	28			265
Task 5 Subtotal, Cost	\$1,290	\$18,340	\$18,040	\$1,800	\$1,214	\$0	\$0	\$0	\$4,564	\$0	\$0	\$44,348
6- RFP Assistance												
6.1- Draft RFP for Collection Services		40	0	0								
Task 6 Subtotal, Hours	0	40	0	0	\$0	0	0	\$0	0	\$0	\$0	40
Task 6 Subtotal, Cost	\$0	\$5,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,600
Project Total, Hours	20	266	554	168		158	36		107			1,299
Project Total, Cost	\$4,390	\$37,190	\$77,560	\$16,010	\$4,243	\$33,976	\$1,800	\$6,300	\$17,441	\$945	\$30,135	\$250,000

Notes:
 1. Project hours do not include hours for Lake Research Partners' costs are based on number of survey responses secured
 2. Project Innovations provided labor hours by major task and are therefore presented in total for each task.
 3. Additional meetings beyond those proposed in the scope of work can be attended at a cost of \$2,150 for APTM and \$1,330 for Project Innovations.

**EXHIBIT C
INSURANCE REQUIREMENTS**

Effective the date of this Agreement, and continuing without interruption during the term of this Agreement, Contractor shall have, at a minimum, the following insurance, including all endorsements necessary for Contractor to have or provide the required coverage.

A. The Contractor shall have insurance that meets the following minimum requirements:

1. Professional Liability Insurance or Errors and Omissions Insurance protecting the Contractor and its employees in an amount not less than \$1,000,000.

2. Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:

Bodily Injury by Accident - \$500,000 each accident
Bodily Injury by Disease - \$500,000 each employee
Bodily Injury by Disease - \$500,000 each policy limit

3. Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 07 98 or current equivalent. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements which diminish the City's protections as an additional insured under the policy. Further, the following minimum limits of liability are required:

\$1,000,000	Each occurrence as respect Bodily Injury Liability or Property Damage Liability, or both combined
\$2,000,000	Per Job General Aggregate
\$1,000,000	Personal and Advertising Injury

4. Motor Vehicle Liability Insurance, including Michigan No-Fault Coverages, equivalent to, as a minimum, Insurance Services Office form CA 00 01 07 97 or current equivalent. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements which diminish the City's protections as an additional insured under the policy. Further, the limits of liability shall be \$1,000,000 for each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.

5. Umbrella/Excess Liability Insurance shall be provided to apply in excess of the Commercial General Liability, Employers Liability and the Motor Vehicle coverage enumerated above, for each occurrence and for aggregate in the amount of \$1,000,000.

- B. Insurance required under A.3 and A.4 above shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its insurer against the City.

- C. Insurance companies and policy forms are subject to approval of the City Attorney, which approval shall not be unreasonably withheld. Documentation must provide and demonstrate an unconditional 30 day written notice of cancellation in favor of the City of Ann Arbor. Further, the documentation must explicitly state the following: (a) the policy number; name of insurance company; name and address of the agent or authorized representative; name and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions which shall be approved by the City, in its sole discretion; (c) that the policy conforms to the requirements specified. Contractor shall furnish the City with satisfactory certificates of insurance and endorsements prior to commencement of any work. Upon request, the Contractor shall provide within 30 days a copy of the policy(ies) to the City. If any of the above coverages expire by their terms during the term of this contract, the Contractor shall deliver proof of renewal and/or new policies and endorsements to the Administering Service Area/Unit at least ten days prior to the expiration date.