

**PROFESSIONAL SERVICES AGREEMENT BETWEEN
STANTEC CONSULTING SERVICES
AND THE CITY OF ANN ARBOR
FOR COST OF SERVICE STUDY FOR WATER AND WASTEWATER SERVICES**

The City of Ann Arbor, a Michigan municipal corporation, having its offices at 301 E. Huron St. Ann Arbor, Michigan 48104 ("City"), and Stantec Consulting Services (FKA Hawksley Consulting) ("Contractor") a(n) New York Corporation with its address at 777 S. Harbour Island Blvd, Suite 600, Tampa, FL 33602 agree as follows on this 20th day of March, 2017.

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

I. DEFINITIONS

Administering Service Area/Unit means Public Services Administration.

Contract Administrator means Lynne Chaimowitz, 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 Cost of Service Study for Water and Waste Water services. .
Project name

II. DURATION

This Agreement shall become effective on March 20, 2017, 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 services related to the public engagement, financial and administrative services related to the cost of service and rate design for water and waste water rates for the City of Ann Arbor ("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 perform 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:
Stantec Consulting Services, Inc
Attn: Andrew Burnham
777 S. Harbour Island Blvd, Suite 600
Tampa, FL 33602

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

City of Ann Arbor
Public Services Area
Attn: Lynne Chaimowitz
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 _____
Andrew Burnham
Its Director

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 Service Area
Administrator

Approved as to form and content

Stephen K. Postema, City Attorney

EXHIBIT A SCOPE OF SERVICES

INTRODUCTION AND OVERVIEW

The City of Ann Arbor, Michigan, is seeking proposals from qualified consultants to prepare cost-of-service studies on water and wastewater rates. Such studies are intended to achieve fair and equitable water and wastewater rate structures that will assure adequate revenues for operation and maintenance of water and wastewater treatment distribution and collection systems, debt service, capital improvements and bond covenant requirements. This study will specify a number of rate structure alternatives that will be provided for the City's consideration, including different rates for different classes of customers.

BACKGROUND

The City of Ann Arbor is organized into four service areas. These include the Public Services, Financial and Administrative Services, Safety Services, and Community Services. The Public Services Area is responsible for providing the majority of the Utility's services including supplying: drinking water, sanitary sewage disposal, hydropower generation, and storm water services to the City of Ann Arbor and surrounding communities. The department is divided into six service units (fleet and facilities, project management, water treatment, wastewater treatment, systems planning and public works) and an administrative unit that also houses financial support services. The City of Ann Arbor serves more than 28,000 utility connections. The Public Works Unit has the responsibility of the installation and service of our customers' water meters and automated meter reading system, backflow prevention device inspections, and is responsible for the operation and maintenance of the water distribution and sanitary sewer systems.

Customer Service is the one utility function that is not part of the Public Services Area. It is housed in the Financial and Administrative Service Area and is responsible for rendering accurate bills through the utilization of the automated meter reading system's data.

The function of the Wastewater Treatment Services Unit is to treat wastewater to environmentally acceptable standards for discharge to the Huron River. The plant's annual average design flow is 29.5 million gallons per day (MGD) and currently treats around 18 MGD on average. This service unit is also responsible for the operation and maintenance of eight sewage lift stations at seven remote sites.

The Water Treatment Services Unit (WTSU) treats raw water and delivers potable water to citizens of the City of Ann Arbor, Ann Arbor Township and Scio Township. In addition to the water treatment plant, the WTSU operates and maintains four pumping

SCOPE OF SERVICES

With nearly 300 years of combined experience and over 1,000 similar studies completed, Stantec will provide the City with the highest level of service, providing the requested services in the most comprehensive and efficient manner.

1 Understanding the Scope of Work

Through our team's 70+ years in the industry, our experience with the City, and our preliminary discussions with the City during the pre-proposal conference, we have developed a keen understanding of the scope of work for this study. We understand the financial challenges the City is facing in terms of the cost of substantial water and wastewater treatment rehabilitations, and potential increases in cost that may be forthcoming from the sanitary sewer asset management plan. We also understand that it is has been several years since a detailed cost of service and rate structure analysis has been performed for the water and sewer system. As such, we will work closely with the City to 1) evaluate alternative multi-year financial management plans that meets the financial requirements of the utility, and 2) perform a comprehensive and very detailed review of the cost of service and rate design for each customer class in order to ensure that the rates are fair and system costs are equitably apportioned amongst your customers.

Moreover, we understand that the City has affordability concerns for low-income users, and that its affordability programs are currently funded outside of the monthly charges (through optional donations on monthly bills). During the study, we will use our unique approach to affordability analysis (WARi™) to 1) better define affordability for and within the community, 2) demonstrate potential opportunities to enhance the success of your existing affordability programs, and 3) develop modifications to and/or new affordability programs based upon current industry practices.

Last, but certainly not least, we understand the importance of public engagement with the City's stakeholders. Through our current work on the City's stormwater rate study, we have built credibility and trust with City staff and stakeholders throughout the community that has led to support for sustainable solutions, and we will continue to build on this success during this study. As such, we are pleased to include Project Innovations in a similar role for this project to ensure the City receives the highest quality customer engagement throughout the rate study process.

2 Detailed Approach

We have organized our project approach to align with the main elements described in the Request for Proposals – Planning, Public Engagement, Rate Design Development, and Evaluation and Recommendation. Within each work element, we have defined specific tasks that will be completed to accomplish the goals and objectives of the study.

Phase I. Planning

The key components of the first phase of the study will include a meeting with the City's Public Services and Finance staff and the transfer of all key data from the City to our project team.

Task 1: Project Planning Workshop

To initialize the study, we will conduct an on-site workshop with City staff to discuss key issues, roles/responsibilities, confirm study objectives, data requirements, the initiation of the public engagement strategy development, and the

overall project schedule, which will identify key milestones for deliverables, including draft and final reports. We will discuss all data requirements, and the workshop will service as the first phase of the data transfer process.

Task 2: Data Review

Once all data has been received, we will review it in detail, including regulatory requirements, historical and future operating expenses, debt service, reserve policies, billing procedures, existing rate structures, customer characteristics, system and capital improvement information, and other data provided by City staff. Follow-up calls with staff will be made to ensure full understanding of all data received prior to utilization in the study.

Task 3: Review of Existing Rates & Assessment of Performance

As part of the planning phase of the study, we will perform a comprehensive review all the existing rates and rate structures, including current practices for billing based on consumption and prompt payment discounts. We will also thoroughly review the currently available modeling tools and related studies, such as the 2003 Cost of Service Study and Model, 2015 Capital Recovery Charge Study, and 2014 Water Distribution Level of Service & Reinvestment Study, as well as other key data such as any negotiated contracts with neighboring townships and the methodology supporting the reimbursement to the General Fund.

Once all this information has been reviewed, we will perform a preliminary reconciliation of the revenues generated by the water and wastewater services and the relationship to expenditures. Further analysis of the current and projected revenue requirements of the system will be conducted in the Rate Design Development phase.

Deliverables for Work Element I – Planning

1. Data Request List
2. Final Project Timeline
3. Preliminary Evaluation of Water and Wastewater Rates (Technical Memo)

Phase II. Public Engagement

Through our past experience with the City, we understand the importance of public engagement throughout this rate study process. Project Innovations will take the lead on this work element which will run throughout the duration of the study. Their philosophy is to engage the public early and often. Successful public engagement builds trust on two levels: trust in the project team's technical competence and in the project team's willingness to truly listen to the community. A well-publicized timeline, clearly established milestones, and easily accessible digital records offer some transparency. Competently facilitated meetings and fruitful conversations will develop emotional connections between the project team and the community. The result? An acclaimed public engagement process. The key to any successful public planning process must affirm these four questions:

1. Did the process create a safe space for citizens to raise issues?
2. Did the process create sufficient opportunities to be heard?
3. Did the citizens believe that their feedback was respected and used by the project team?
4. Can the Public Engagement Team effectively convert technical output to a format that can be easily digested by a wide variety of stakeholders and used in a productive manner?

Task 4: Prepare a Public Engagement Strategy

First and foremost, we propose integrating a digital component into the Public Engagement Program. We will use all communication channels available, such as, printed brochures, project newsletters, direct mail, short videos, social

media, SMS text messaging, and online meetings. Incorporating tools and modes of communication that people already use in their personal and professional lives will increase participation, allow for more robust dialogue and be more cost effective and green, as well. Key tasks in this effort include:

- a. Situation Analysis: Identify key issues the Public Engagement Program will address.
- b. Objectives: Clarify objectives of the public engagement efforts in support of the City’s objectives.
- c. Develop Message Model: Identify the five key messages that must be communicated to build trust in the project team’s competence.
- d. Target Audience Lists: Develop an expanded list of stakeholders, including listed groups and appropriate press contacts (on-line and print, newsletters, business, local, and broadcast), and other influencers.
- e. Engagement Matrix: Create a matrix to be used to determine which stakeholder groups will be targeted at each communication point, similar to the example below being used in the Stormwater Level of Service Study.

Tasks	2016									2017					
	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.
Advisory Group Meetings															
Focus Group Meetings															
Public Meetings															
Survey via A ² Open City Hall															
Updates via web page, email, & postings															

- f. Risk Analysis: Identification of aggrieved stakeholders that may require alternative communication strategies.
- g. Social Media Strategy: Identify the appropriate social media outlets to disseminate information.
- h. Using the overall project timeline and information gleaned from the aforementioned tasks, create a detailed communication plan, with milestones for each element.

Task 5: Engage the Public Throughout the Project

The City’s objective is to engage a wide variety of groups, including a Project Working Group, consisting of City of Ann Arbor staff, other public agencies, and its selected consulting team; and citizen at-large groups that will be engaged at City-wide public meetings. The City may also choose to form an Advisory Committee consisting of stakeholders that will review materials and provide input at key stages in the process. The full extent is dependent on Task 4.

Our preliminary estimates of the frequency and number of formal meetings that will require facilitation are as follows:

- ✓ **Focus Groups** – 4 to 6 meetings, interval based on project progress.
- ✓ **Presentations to City Council, Boards and Commissions** – 2 presentations
- ✓ **Optional: Advisory Committee** – 6 to 8 meetings, interval based on project progress. Our strategy would be to develop the Advisory Committee into a high performing team. Key tasks include: Interviewing members to identify desired/ expected mode of operating within the Advisory Committee, confirm roles and

responsibilities of members, identify and provide appropriate technical education for committee members, determine communication processes and develop a charter to guide membership.

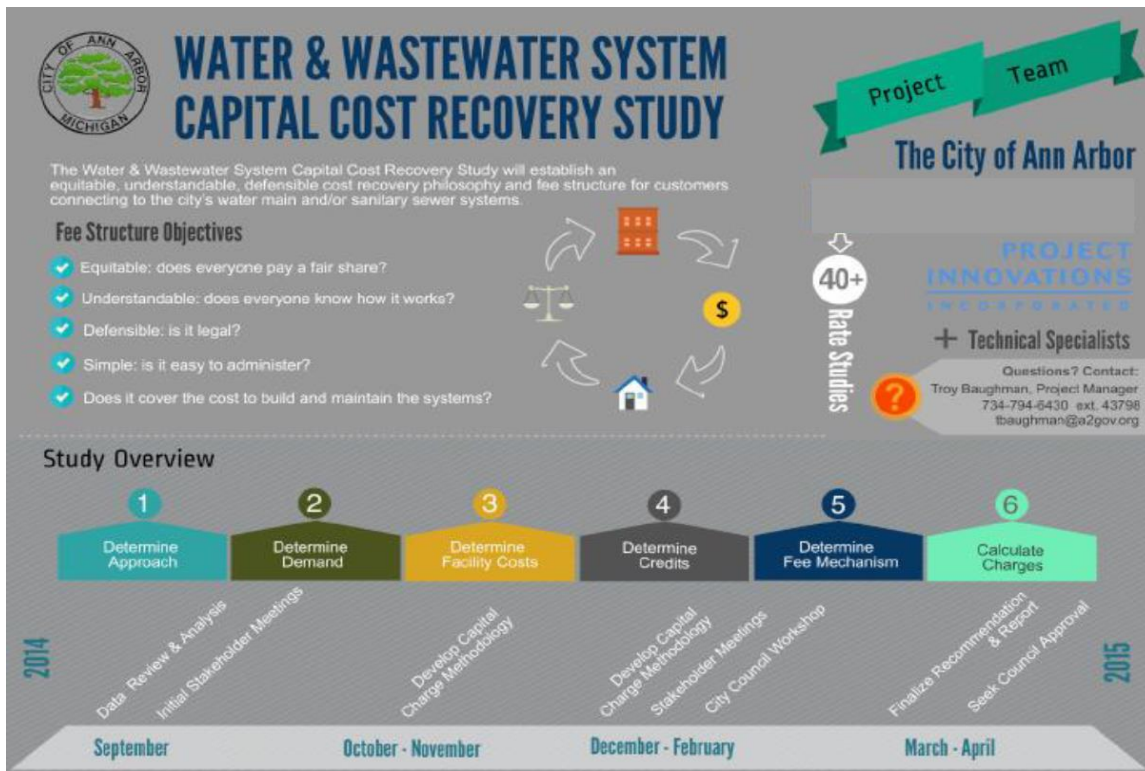
All meetings will be facilitated to include:

- ✓ Agendas that provide relevant information.
- ✓ Meeting processes that create a safe space for citizens to express their concerns.
- ✓ Simple and easy to digest meeting documentation.

Task 6: Create and Distribute Public Engagement Materials

Coordinating with the City's Communication Department, the team is prepared to create, distribute, and archive the materials suggested by the City in the RFP, including but not limited to press releases, emails, social media, Tree Town Log, City meetings, A2 City News Resident Newsletter, WaterMatters Newsletter, Public Meeting Display Cases, Educational Materials, Project Web Page, Project Newsletter/Fliers, Direct Mail/Flier Distribution, Presentations at Committee Meetings/Commission Meetings/Groups/Council/Administrator, Working Sessions, Public Meetings, Feedback Forms, Citywide Meetings, and Community Workshops.

We would also use infographics (data displayed visually) to convey information in an easy-to-understand manner. This is an example of an infographic used in the Ann Arbor Water and Wastewater Capital Cost Recovery Study:



Task 7: Document Public Engagement Activities

The following documents will be created, distributed and archived as part of the public engagement process: Project Plan, Project Working Group Meeting Summaries, Meeting Agendas, Meeting Presentations, Supporting Documents, Focus Group Summary of Findings, Interview Summary of Findings, Council and Commission Presentations with Q&A.

Deliverables for Work Element II – Public Engagement

4. Public Engagement Plan
5. Plan, Facilitate, and Document Meetings
 - a. Public Meetings (5)
 - b. Focus Groups (4-6)
 - c. Presentations to City Council (2)
 - d. Optional: Advisory Committee (6-8)
6. Prepare, Distribute, and Archive Public Engagement Materials
 - a. Information Materials
 - b. Meeting Materials
 - c. Project Description Materials
 - d. Social Media
 - e. Updates to City Web Pages
7. Prepare a Public Engagement Summary Report and Video

Phase III. Rate Design Development

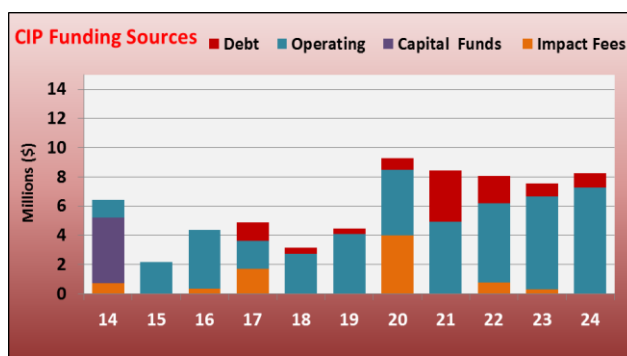
The third phase of the study will include much of the analytical work, including the development of financial plans, detailed cost of service analysis, and development of alternative rate structures for the City's water and wastewater services. We will also conduct an analysis of the affordability of the City's current and recommended rates and provide suggestions on affordability programs for implementation.

Task 8: Development of Financial Plan

We will perform a detailed review of any existing financial plans, inclusive of assumptions on customer growth, demands, cost escalation factors and other relevant information provided by staff that was used in developing the existing plans. We will use them use our financial planning model, FAMS-XL, to develop long-term financial management plans, inclusive of projected annual revenue requirements and rate adjustments.

The module allows examination of historical operating expenses, growth and trends in billed volume/accounts, alternative capital improvement spending levels and funding sources, debt service coverage ratios, levels of operating and capital reserves, and other financial policies that affect the future revenue requirements of our client's utilities. In addition to evaluating financial goals and objectives, we can also evaluate alternative customer and billed volume growth projections, cost escalation factors, elasticity of demand in response to rate increases, and other variables that could affect the financial performance of the City.

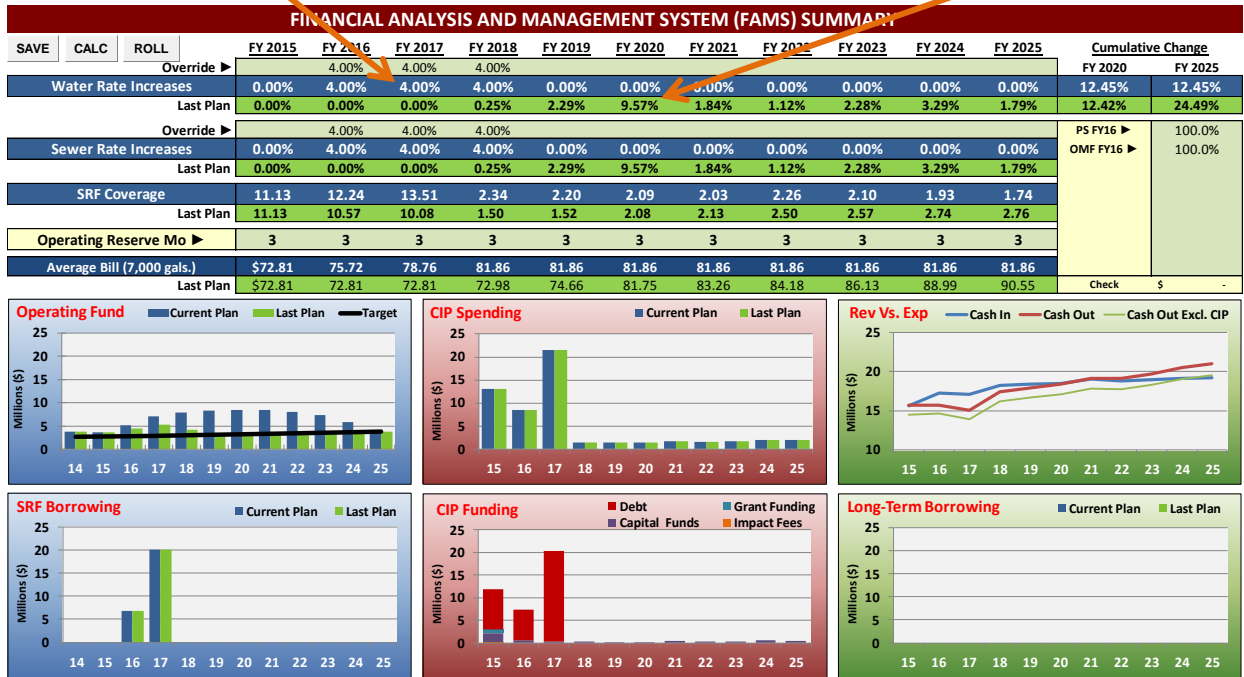
The financial planning module features several valuable forecasting outputs, including projections of revenues, operating expenses, capital spending levels, and growth. The financial planning module also provides an interactive capital planning tool which could be used to review the City's capital improvement program, and to evaluate the impacts of alternative projects, costs, timing and funding sources. For all scenarios reviewed, the financial planning module will develop a funding plan, including the identification of the amount, timing, and type of borrowing as may be required.



An example of a control panel of the revenue sufficiency and financial planning module used in the interactive work sessions for the development of a ten-year financial plan for a combined water and wastewater enterprise fund is presented below. The green bars and panels represent the “last” scenario evaluated, which was “just-in-time” rates, resulting in a rate spike in FY 2020 followed by varying increases throughout the forecast. The blue bars and panels represent the “active” scenario, which includes lower levels of rate increases in the initial three years, followed by no increases thereafter. The graph shows that the financial consequences of the earlier somewhat smaller rate increases in the “active” scenario are acceptable, and that the rate increases provide smaller, more predictable customer impacts.

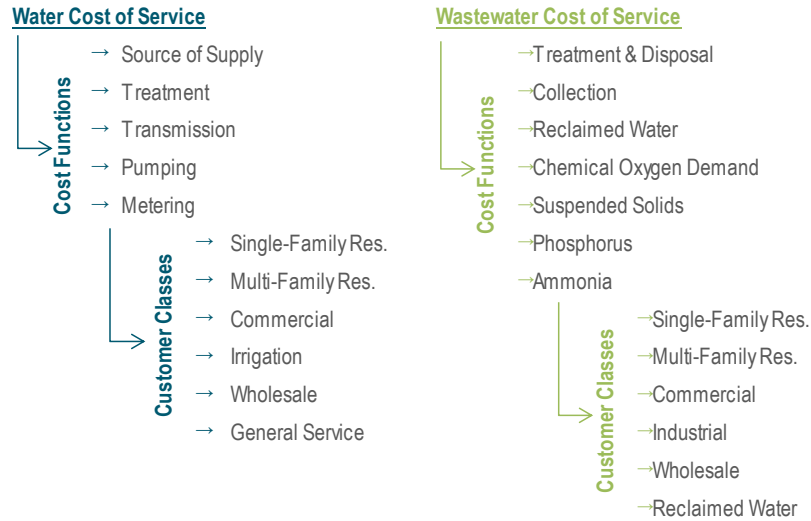
4% increase in FY 2016-18 eliminates rate spike in FY 2020

9.57% Rate Spike in FY 2020 with “Just-in-Time” Rates



Task 9: Cost of Service Analysis

The cost allocation module of our modeling system allows for the total cost of service and revenue requirements for the water and wastewater utilities to be functionalized and distributed to customer classes. Each utility system’s cost of service and revenue requirements are functionalized to defined segments, which are then allocated to each class of wholesale and retail customers based upon the characteristics or units of service of each respective class of customer. Examples of typical utility functions and customer classes are presented on the following page. **Please note that system functions and customer classes are unique to each community and would be determined based upon a review of the City’s system and user data for each respective utility.**

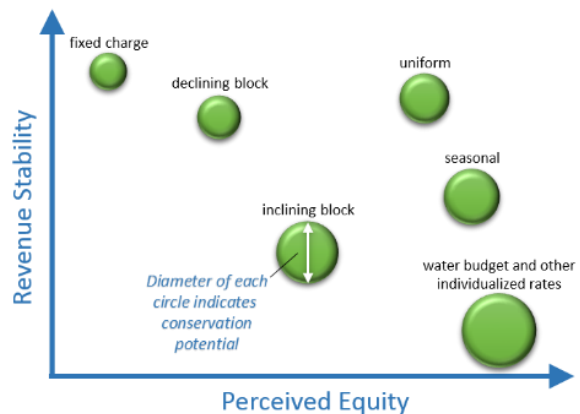


We identify the most appropriate industry-accepted cost of service allocation methodologies, such as those defined by the American Water Works Association and Water Environment Federation, based upon available data, legal requirements, system configuration, service agreements, resources, customer base, demand and usage characteristics, local practice, and public policy objectives. We then customize the cost allocation module to employ the identified methodologies and concepts best suited for each utility system. **At this time, we can also evaluate the various customer classes which may include adding a customer class or combining existing customer classes, based upon the results of the cost of service allocation analysis.**

At the conclusion of the cost allocation portion of the analysis, we compare the resulting allocation of revenue requirements to the revenue generated by the current rates for each customer class of each utility. To the extent current revenue recovery levels are not in line with the results of the cost of service allocation analysis, we evaluate alternative levels of revenue recovery by class of customer within the rate structure analysis that would better comport with the identified cost of service allocations.

Task 10: Rate Design

Based upon the results of Tasks 9, we will review and design alternative rate structures for the water and wastewater systems that will comport with the cost of service and revenue requirements defined during this study. Alternative rate structures will be evaluated to determine if they may better serve the City’s fiscal stability and/or public policy objectives relating to fixed cost recovery, economic development, conservation, and affordability, while ensuring a fair and equitable distribution of costs, and conformance with Michigan regulations, including the Bolt V. Lansing ruling of 1997. Similarly, we can also evaluate the distribution of costs between the fixed and variable components of the rate structure, and will make recommendations that are consistent with your cost recovery objectives and consider your reserve policies as well as revenue stability and affordability objectives.



The following example identifies the impact of three rate structure alternatives or options on a class of customers with 3/4" meters in terms of the dollar amount and percentage change in the monthly bill. The table shows the percentage of customers at each level of usage, which can be used to determine the percentage of customers affected by each rate structure alternative at different levels of usage. **Similar detailed customer impact analysis will be provided for all of the City's customer classes, which would ultimately be used to develop higher-level impact charts for public presentation purposes, including sample non-residential customer bill calculations.**

3/4" Meter Water & Sewer Monthly Bill Comparison													
Billing Statistics				Current	Option 1			Option 2			Option 3		
					"Across-the-Board" Increase			Rate Structure Change - Alt. A			Rate Structure Change - Alt B.		
% of Bills	Cumulative %	# of Bills	Use (Tgal)	Mo. Bill	Mo. Bill	\$ Chg.	% Chg.	Mo. Bill	\$ Chg.	% Chg.	Mo. Bill	\$ Chg.	% Chg.
11.8%	11.77%	7,999	0	\$ 14.50	\$ 15.30	\$ 0.80	5.5%	\$ 8.34	\$ (6.16)	-42.5%	\$ 7.76	\$ (6.74)	-46.5%
10.1%	21.87%	6,867	1	\$ 14.50	\$ 15.30	\$ 0.80	5.5%	\$ 11.44	\$ (3.06)	-21.1%	\$ 9.75	\$ (4.75)	-32.8%
13.5%	35.41%	9,202	2	\$ 14.50	\$ 15.30	\$ 0.80	5.5%	\$ 14.54	\$ 0.04	0.3%	\$ 11.74	\$ (2.76)	-19.0%
17.1%	52.47%	11,601	3	\$ 14.50	\$ 15.30	\$ 0.80	5.5%	\$ 17.64	\$ 3.14	21.7%	\$ 13.73	\$ (0.77)	-5.3%
12.7%	65.16%	8,624	4	\$ 26.96	\$ 28.44	\$ 1.48	5.5%	\$ 30.04	\$ 3.08	11.4%	\$ 27.03	\$ 0.07	0.3%
10.0%	75.17%	6,803	5	\$ 39.42	\$ 41.59	\$ 2.17	5.5%	\$ 42.44	\$ 3.02	7.7%	\$ 40.33	\$ 0.91	2.3%
7.3%	82.43%	4,934	6	\$ 51.88	\$ 54.73	\$ 2.85	5.5%	\$ 54.84	\$ 2.96	5.7%	\$ 53.63	\$ 1.75	3.4%
4.9%	87.30%	3,314	7	\$ 64.34	\$ 67.88	\$ 3.54	5.5%	\$ 67.24	\$ 2.90	4.5%	\$ 66.93	\$ 2.59	4.0%
3.2%	90.52%	2,187	8	\$ 76.80	\$ 81.02	\$ 4.22	5.5%	\$ 79.64	\$ 2.84	3.7%	\$ 80.23	\$ 3.43	4.5%

Note that our detailed presentation of customer bill impacts is based on our pattern of acquiring and analyzing an extensive database from our client's billing systems. We are careful to understand the way that billing systems actually store information and process meter reading data to calculate and generate bills. Our rate analysis is always conducted with an awareness of the limitations (or opportunities) of your billing system.

Our rate design models can easily adjust revenue levels that are generated from fixed versus variable charges. Bill impact analyses of representative customers in each customer class will also be used to consider the social and economic factors of the proposed rates. Sensitivity analysis will be conducted to measure the financial impact of changes in customer water use due to mandatory drought restrictions.

As part of this task, we will provide **detailed surveys of the water and sewer rates and rate structures of a minimum of five (5) comparable water and wastewater utilities** in terms of size, treatment processes, capital needs, capacity and customer base. We will compare the rates and rate structures of these utilities to the rates recommended during the study to ensure the recommended rates align with the City's peers.

Task 11: Affordability Analysis and Program Development

In order to mitigate financial burden of water and wastewater bills on low income customers, utilities can implement a variety of affordability programs. Programs typically offer a discount on a total bill for qualifying customers. Households that meet specific age, disability, and poverty level metrics are encouraged to apply for these programs. Other assistance programs may be run through other governmental programs such as the Low Income Home Energy Assistance Program (LIHEAP). If a customer in the City qualifies for the State's Weatherization or the Home Heating Credit programs, the City could use those programs to administer a low income rate assistance program.

Our approach developed by Stantec's Financial Services Practice called WARi™, or Weighted Average Residential index, can be used to evaluate affordability programs in the City. This approach evaluates income levels and the financial burden of sewer rates for each individual census tract and projects that data using GIS, in order to quantify the impact of rising water and sewer rates throughout the service area. Census tract information regarding customers that would qualify for specific affordability programs based on income levels can be determined to help the City establish and/or enhance its affordability programs.

Task 11.1: Extract detailed income data for each census tract in the service area

The U.S. Census Bureau's American Community Survey (ACS) reports the number of households at various income levels within sixteen standardized income levels for each census tract. As such, there are sixteen data points available for each census tract to inform the population of household incomes. Each census tract also has a unique median household income. WARi uses all 16 data points to assess income distribution for every census tract in the City's service area.

Task 11.2: Determine actual as well as average existing and future bills

WARi also uses the City's billing database to analyze actual water and sewer bills for each census tract to compare what customers are being charged with their household income. Applying the relevant projected increases in revenue requirements as identified in Task 8 above, we will develop a projection of system-wide rate increases applicable for the residential class for a five, ten, and twenty-year period. We will apply these annual increases to the specific cost per household for each tract resulting in a projected household cost in each tract that can be aggregated at higher levels for evaluation and presentation purposes.

Task 11.3: Determine financial burden in each census tract for every income band

Given the previous steps, we will prepare the appropriate calculations of average bills by income level for 16 income bands within each census tract, resulting in a financial burden for each income band. Next, we will determine the median income in each tract compared to the average household cost. This gives us a residential indicator of affordability in each tract. Further, the weighted average financial burden in each tract will be calculated as the burden for each income band multiplied by the percentage of the tract population in each band. Finally, we will calculate a weighted average financial burden for the entire service area. These tasks provide the City with not only measures of affordability by census tract, but a weighted measure for the full service area.

Task 11.4: Evaluate and develop affordability programs based upon results

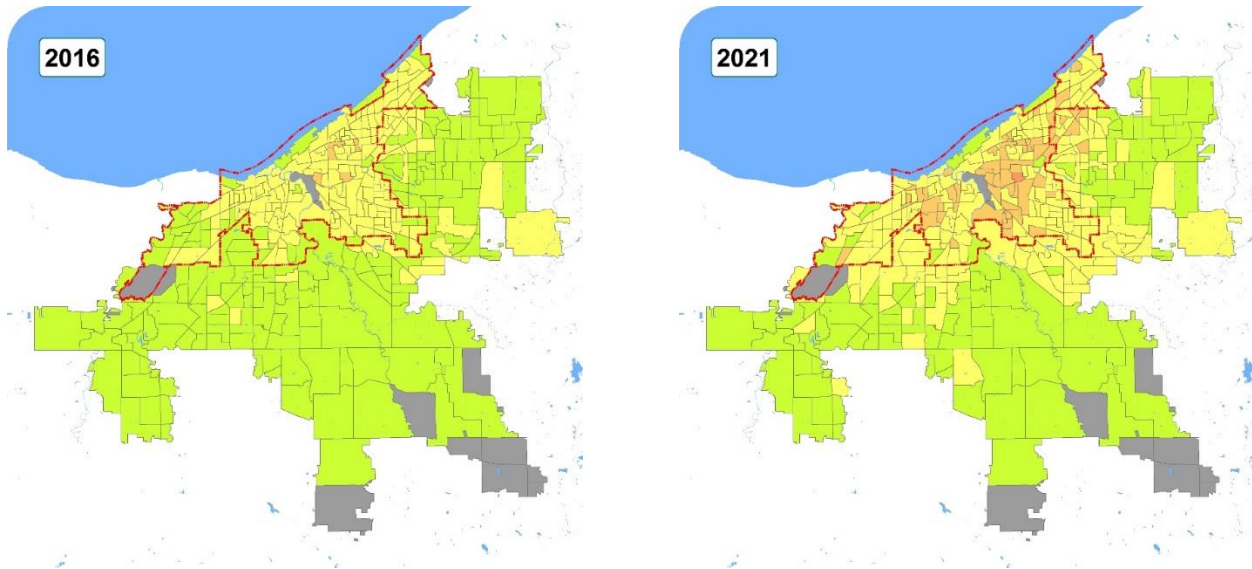
Based on the billing data provided by the City, we will evaluate the effectiveness of existing affordability programs as well as identify additional affordability programs, including income-based programs. For example, one criterion for eligibility in a program that offers a discount on a customer's bill could be the household's income as a percentage of the U.S. poverty level. An estimation of the number of eligible households for such a program can be prepared based on demographic data from the US Census Bureau.

We will prepare maps and tables that identify the potential number of households that could be assisted by an income-based affordability program and use that information to project the cost impact to the City and its rate payers. The neighborhoods for focused outreach are identified, and the maps will be provided to Project Innovations for use in the stakeholder presentations that will occur throughout this study.

The outcomes of a WARi analysis are best presented graphically. The figures on the following page show the WARi outcomes for the Northeast Ohio Regional Sewer District in 2016 and 2021. WARi results are presented on a scale from green to red, where census tracts colored green indicate that the WARi for that individual tract is less than or equal to the 2016 WARi for the entire service area. Coloring from orange through red is based on multiples of the 2016 WARi, as identified in the supporting table that is below the figures presented on the following page.

As is expected, WARi results in 2021 indicate a worsening of affordability throughout the service area when considering national metrics for affordability thresholds. An observation from this example is that the increase in number of households expected to receive unaffordable sewer bills is projected to have a negative impact on revenue due to an

increase in uncollectible accounts. This information is being used to further target at-risk neighborhoods and ensure the maximum number of households are participating in the District's affordability programs.



Summary of Color Coding

Relative to 2016 System-wide WARI	Color
Less than 1.0	Light Green
Up to 2.5 times	Yellow-Green
Up to 4 times	Yellow
Up to 5.5 times	Orange
Higher than 5.5 times	Red

Deliverables for Work Element III – Rate Design Development

1. Multi-Year Financial Plan, including rate revenue adjustments (5-, 10- and 20- year time horizons)
2. Recommendations for updates/changes to Cost of Service
3. Recommendations for alternative rate structures
4. Recommendations on affordability measures and programs

Phase IV. Evaluation and Recommendation

The final phase of the study will include implementation assistance (such as ordinances and policy updates), preparation of draft and final reports, and the transfer of appropriate models and results to the City. The report will summarize the recommendations and results of all other work elements, including the public engagement efforts. This work element will include additional implementation tasks, such as updates to various policies and ordinances.

Task 12: Preparation of Report

We will prepare a draft report summarizing the method, results and recommendations developed in Work Elements I through III. We will conduct conference calls with staff to discuss the draft as well as any additional adjustments to the analysis that may be required. We will make the necessary adjustments and prepare a final report upon receipt of all staff, management, and stakeholder comments.

Task 13: Implementation Assistance

At the conclusion of the study, we will work with City staff to make updates to any ordinances or policies that have been effected by the results and recommendations of this study. This will include rate ordinances, policies, as well as any changes to data collected within the utility billing system, modifications to accounting/cost reporting, and affordability programs. We will be able to provide additional implementation assistance as necessary during the course of the study.

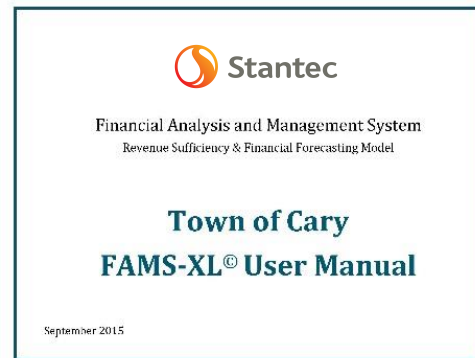
Task 14: Transfer of Modeling Tools

At the conclusion of the study, we will provide you with any of the cost of service and rate modeling tools used during the study to the City at no additional cost. The models you will receive are fully functioning Excel-based models, and can be used by staff for future updates. We do require that the City signs a usage and non-disclosure agreement for any of our modeling tools in order to protect the propriety nature of our modeling system. Within the agreement, we also typically identify the parameters for any future maintenance, updates, and support services that the City may desire. Upon request, we can provide a sample agreement that we have used with our clients.

We will prepare customized user manuals for the modules of our system that you license as well as onsite training for staff to ensure the future beneficial use of the modules by the City. For each tab of the model, the user manuals present the purpose and important features of each tab, describe how to update each tab, and identify other tabs within the model that are dependent upon or linked to each tab.

We also include a “Source Data” box within each section of the user manuals for the applicable tabs. These “Source Data” boxes indicate the source data we were provided that were used to populate the tabs.

At the end of each user manual, we include a section called “Tips for New Users” which includes additional information about the models that may be useful to you based upon our past experience, as well as a “Notes & Comments” section that will allow you to keep track of any additional items of relevance to you. Below is an excerpt regarding the Beginning Balances tab of our Financial Planning Module from a client user manual.



FAMS-XL USER MANUAL TAB B: BEGINNING BALANCES

Tab B: Beginning Balances

Source Data:
CAFR or Trial Balances

Purpose
The purpose of Tab B is to identify the balance of each sub-account or fund as defined on Tab A at the start of the first fiscal year (most commonly thought of as the balance at the end of the prior fiscal year).

FY2015 Beginning Balances										
SOURCE: FAMS-XML/Excel data provided by Client										
1	Revenue Fund	Water	Sanitary	Sanitary	Public Works	Public Works	Public Works	Public Works	Public Works	Public Works
	Sub-accounts	Sub-accounts	Sub-accounts	Sub-accounts	Sub-accounts	Sub-accounts	Sub-accounts	Sub-accounts	Sub-accounts	Sub-accounts
2	5	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0

Dependent Tabs
 Tab B informs the beginning fund balance for each fund defined in the model on Tab FS: Funding Summary.

How to Update
 To Update Tab B, simply replace the values in the green input cells with the most current or updated data. Alternatively, the user can simply input cash balances as may be appropriate.

Stantec 12

Deliverables for Work Element IV – Evaluation and Recommendation

1. Draft and Final Report
2. Updated Ordinances/Policies/Contracts/Programs
3. Excel-based Model(s)
4. User Manual(s)

C.3 Preliminary Project Schedule

Based upon our understanding of the scope of services and the detailed approach outlined above, we have prepared the following project schedule, which allows for completion of the analysis and significant public engagement activities in time for implementation of new rates to be effective July 1, 2018.

City of Ann Arbor, Michigan
 Cost of Service Study for Water and Wastewater Services Unit
Proposed Project Timeline

Tasks	2017										2018						
	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	
Phase I - Planning																	
Task 1 Project Planning Workshop	Initiation Workshop																
Task 2 Data Review																	
Task 3 Review of Existing Rates & Assessment of Performance																	
Phase II - Public Engagement																	
Task 4 Prepare a Public Engagement Strategy																	
Task 5 Engage the Public Throughout the Project																	
Task 6 Create and Distribute Public Engagement Materials																	
Task 7 Document Public Engagement Activities																	
Phase III - Rate Design Development																	
Task 8 Development of Financial Plan																	
Task 9 Cost of Service Analysis																	
Task 10 Rate Design																	
Task 11 Affordability Analysis and Program Development																	
Phase IV - Evaluation and Recommendations																	
Task 12 Preparation of Report Documenting All Findings & Recommendations																	
Task 13 Implementation Assistance																	
Task 14 Transfer of Modeling Tools																	

A detailed schedule for all public engagement efforts will be developed in April/May and will run throughout the duration of the study.

New Rates Effective July 1, 2018

EXHIBIT B COMPENSATION

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:

Project Tasks	Estimated Labor Hours										Total Project	
	Stantec						Project Innovations					
	Project Manager	Technical Advisor	QA/QC & Affordability	Project Consultant	Project Analyst	Admin & Accounting	Senior Advisor	Lead Facilitator	Admin Support	Graphics/Media		
	A. Burnham	W. Ziebertz	C. Malesky	K. Stevens	S. Rao	Staff	C. Fleetham	T. Newman	K. Anderson	L. Byron		
Rates ---->	\$350	\$305	\$260	\$160	\$130	\$75	\$240	\$170	\$50	\$140		
Phase I. Planning												
Task 1 Project Planning Workshop												
1.1	Prepare preliminary work plan, timeline for tasks, initial data request list, and agenda prior to kick-off meeting.	3	1	1	2	1	4	1	2	0	0	15
1.2	Conduct kick-off workshop to review project objectives, schedule, roles, key issues, approach, available data, and key assumptions. Prepare meeting summary.	4	4	4	4	0	0	2	2	0	0	20
Task 2 Data Review												
2.1	Conduct detailed review of all data received.	2	1	2	4	6	0	0	0	0	0	15
2.2	Confer with City staff as necessary to request supplemental information and/or clarification.	1	0	1	2	3	0	0	0	0	0	7
Task 3 Review of Existing Rates & Assessment of Performance												
3.1	Perform comprehensive review of existing rates and rate structures, including billing policies and payment discounts, as well as all available rate studies and models.	6	4	2	3	4	0	0	0	0	0	19
3.2	Perform preliminary reconciliation of revenues from billing data for normalized test year and expenses from various data sources.	2	1	2	4	6	0	0	0	0	0	15
Phase II. Public Engagement												
Task 4 Prepare a Public Engagement Strategy												
4.1	Situation Analysis: Identify key issues the Public Engagement Program will address.	1	1	1	0	0	2	4	4	2	0	15
4.2	Objectives: Clarify objectives of the public engagement efforts in support of the City's objectives.	1	1	0	0	0	0	2	2	4	0	10
4.3	Develop Message Model: Identify the five key messages that must be communicated to build trust in the project team's competence.	1	1	0	0	0	0	2	2	4	0	10
4.4	Target Audience Lists: Develop an expanded list of stakeholders, including the RFP's listed groups and appropriate press contacts (on-line and print, newsletters, business, local, and broadcast), and other influencers.	1	1	0	0	0	0	1	2	4	0	9
4.5	Engagement Matrix: Create a matrix to be used to determine which stakeholder groups will be targeted at each communication point, similar to the example below being used in the Stormwater Level of Service Study.	1	1	0	0	0	0	1	2	4	0	9
4.6	Risk Analysis: Identification of aggrieved stakeholder groups which may require alternative communication strategies.	0	0	0	0	0	0	1	2	4	0	7
4.7	Social Media Strategy: Identify the appropriate social media outlets to disseminate information.	1	1	0	0	0	0	1	2	4	0	9
4.8	Using the overall project timeline and information gleaned from prior tasks, create a detailed communication plan, with milestones for each element.	1	1	0	0	0	0	1	2	6	0	11
Task 5 Engage the Public Throughout the Project												
Time allocation TBD after Task 4 is complete												
5.1	Conduct formal meetings with focus groups (4-6 meetings), presentations to City Council, Boards and Commissions (2 presentations), and Advisory Committee (to include 6 to 8 meetings).	32	0	0	32	0	0	0	72	8	0	144
5.2	For each meeting/presentation, prepare agenda and summary of meeting minutes.	16	0	0	8	0	0	0	16	12	0	52
Task 6 Create and Distribute Public Engagement Materials												
6.1	Develop engagement materials based on wants/needs of the City.	2	1	0	2	0	0	2	8	4	16	35
6.2	Review with staff and make adjustments as necessary.	1	1	0	1	0	0	0	2	4	4	13
Task 7 Document Public Engagement Activities												
7.1	Summarize all meetings, interview, etc. conducted during the study.	0	0	0	0	0	4	1	6	12	0	23
7.2	Develop documentation in final report of the complete public engagement effort.	2	0	0	0	0	0	1	4	8	0	15

City of Ann Arbor, Michigan
 Cost of Service Study for Water and Wastewater Services Unit
 Project Work Plan & Cost Estimate Schedule

Project Tasks	Estimated Labor Hours										Total Project	
	Stantec						Project Innovations					
	Project Manager	Technical Advisor	QA/QC & Affordability	Project Consultant	Project Analyst	Admin & Accounting	Senior Advisor	Lead Facilitator	Admin Support	Graphics/Media		
	A. Burnham	W. Zieburz	C. Malesky	K. Stevens	S. Rao	Staff	C. Fleetham	T. Newman	K. Anderson	L. Byron		
Rates ---->	\$350	\$305	\$260	\$160	\$130	\$75	\$240	\$170	\$50	\$140		
Phase III. Rate Design Development												
Task 8 Development of Financial Plan												
8.1 Prepare water and wastewater customer and demand analysis to determine projected growth trends in usage patterns, identify peak demands and the demands placed on the system, and total projected water and wastewater system customers, ERCs and usage.		2	1	1	3	6	0	0	0	0	0	13
8.2 Input financial and billing data into our FAMS-XL® financial planning module, run the module, and produce preliminary output, including a 5, 10, and 20-year financial management program that will include the following:		0	0	4	8	20	0	0	0	0	0	32
o Examination of historical and projected expenses (operating, capital improvement and capital equipment) and revenue requirements												
o Capital Improvements Program and Capital Financing Plan												
- Project listing by year, including integration of specific scenarios as required												
- Alternative funding sources for capital projects												
- Development of a capital financing plan, including identification of timing and amount of borrowing requirements												
o Borrowing Program												
- Borrowing required (by source) to fund CIP projects not funded by other sources to include but not necessarily be limited to revenue bonds, State or other programs or bank loans												
- Timing of bond issue(s)/loan(s) to provide required borrowed funds												
- Annual debt service of bond issue(s)/loan(s)												
o Revenue Sufficiency Analysis, including Cash Flows												
- Annual revenue projections, include a breakdown of revenues from sale of services, connection fees, and other revenues												
- Annual operations and maintenance expense projections												
- All other annual revenue requirements such as R&R, minor capital, transfers to other funds, current debt service/loan payments, replenishment of reserves, etc.												
o Sources and Uses of Funds Analysis												
o Financial Policy Review												
- Reserve Levels (Minimum Fund Balance Policies) for each fund												
- Beginning and ending funds balances by fund by year												
8.3 Make adjustments to the model as required in order to simulate the utility's current/specific financial dynamics.		1	0	1	2	4	0	0	0	0	0	8
8.4 Review results with consulting team, make required adjustments, and prepare alternative scenarios.		2	2	2	3	4	0	0	0	0	0	13
8.5 Meet with City staff in an interactive work session to review preliminary results. [1st Interactive]		4	0	0	4	0	0	0	0	0	0	8
8.6 Make adjustments per input from City staff in the prior sub-task and distribute workbook of assumptions, inputs, and preliminary results for staff review.		1	0	1	2	4	0	0	0	0	0	8
8.7 Meet with City staff in second interactive work session to review adjusted results. [2nd Interactive]						-- Included in Task 9.9 --						
8.8 Perform adjustments per input from City staff and determine plan of rate annual revenue adjustments and revenue requirements for the test year for rate making.		0	0	1	1	2	0	0	0	0	0	4
Task 9 Cost of Service Analysis												
9.1 Perform a detailed review of all of the City's revenue sources, including sale of water and sewer services.		1	1	1	1	2	0	0	0	0	0	6
9.2 Identify all test year costs/revenue requirements associated with the provision of water and sanitary sewer service from the preferred financial forecast alternative identified in Task 8 into the cost allocation module.		1	0	2	3	4	0	0	0	0	0	10

City of Ann Arbor, Michigan
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Project Tasks		Estimated Labor Hours										Total Project
		Stantec					Project Innovations					
		Project Manager	Technical Advisor	QA/QC & Affordability	Project Consultant	Project Analyst	Admin & Accounting	Senior Advisor	Lead Facilitator	Admin Support	Graphics/Media	
		A. Burnham	W. Zieburz	C. Malesky	K. Stevens	S. Rao	Staff	C. Fleetham	T. Newman	K. Anderson	L. Byron	
Rates ---->		\$350	\$305	\$260	\$160	\$130	\$75	\$240	\$170	\$50	\$140	
9.3	Analyze the City's billing consumption records, service area, existing agreements, and existing customer classes to determine recommended customer classes for cost allocation and rate design.	2	2	1	2	2	0	0	0	0	0	9
9.4	Conference call with City staff to discuss customer classes, agreements, and other considerations to determine appropriate customer classes, system functional components, and appropriate cost of service allocation methodology (per AWWA Manuals, WEF Manual, and common industry practices).	2	2	0	2	0	0	0	0	0	0	6
9.5	Allocate costs/revenue requirements to identified functional cost components for each respective utility system and determine unit cost of each function.	3	2	4	6	8	0	0	0	0	0	23
9.6	Allocate costs of each functional component to identified retail and wholesale customer classes based upon appropriate customer class characteristics/criteria.	1	1	2	4	6	0	0	0	0	0	14
9.7	Compare allocated costs/revenue requirements by customer class to revenue generated by existing rates.	1	0	1	1	2	0	0	0	0	0	5
9.8	Review results with consulting team, make required adjustments and identify key discussion points for review with City staff.	2	1	2	3	4	0	0	0	0	0	12
9.9	Meet with City staff in an interactive work session to review preliminary results. [2nd Interactive]	4	0	0	4	0	0	0	0	0	0	8
9.10	Make adjustments as required based upon input from City staff and distribute workbooks of preliminary results.	1	1	1	2	3	0	0	0	0	0	8
9.11	Meet with City staff in second interactive work session to review adjusted results. [3rd Interactive]	-- Included in Task 10.2.i --										
9.12	Perform adjustments as required based upon input provided by City staff and finalize cost allocation analysis and corresponding cost allocation plan.	0	0	1	1	2	0	0	0	0	0	4
Task 10	Rate Design											
10.1	Conduct a diagnostic analysis of the current water and wastewater rate structures for all retail and wholesale customer classes to identify strengths and weaknesses in terms of but not limited to the following criteria:	4	4	2	3	3	4	0	0	0	0	20
	a. Compliance with legal precedent and generally accepted industry practice (national and local). Prepare survey of comparable systems.											
	b. Fair and equitable distribution of costs to customers in proportion to the benefit received and/or demand placed on the system.											
	c. Consistency with policies and management objectives regarding such things as affordability, conservation, economic development, etc.											
	d. Fiscal stability/risk of the utility.											
	e. Ease of administration and understanding to City staff and customers.											
10.2	Develop User Fees:											
	a. Load billing history data into our FAMS-XL® rate model and create a bill frequency analysis.	1	1	2	4	8	0	0	0	0	0	16
	b. Conduct a revenue test to ensure accuracy of billing data.	0	0	1	1	2	0	0	0	0	0	4
	c. Set up the rate model in conformance with the rate design evaluation in Task 10.1 and the cost allocation results of Task 9.	1	1	2	3	4	0	0	0	0	0	11
	d. Run the model and prepare alternative rate structures that reflect the following considerations:	3	2	2	3	4	0	0	0	0	0	14
	- Recovery of appropriate amount and types of costs in fixed monthly charges and variable rates by class of customer											
	- Inclining block charges designed to encourage conservation											
	e. Prepare a customer impact analysis to compare alternative water and sewer rates for each customer class to existing rates.	2	1	2	2	3	0	0	0	0	0	10
	f. Review results with consulting team and adjust as required.	2	2	2	3	4	0	0	0	0	0	13
	g. Meet with City staff in an interactive work session to review preliminary results. [2nd Interactive]	-- Included in Task 9.9 --										

City of Ann Arbor, Michigan
 Cost of Service Study for Water and Wastewater Services Unit
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Project Tasks		Estimated Labor Hours										Total Project
		Stantec					Project Innovations					
		Project Manager	Technical Advisor	QA/QC & Affordability	Project Consultant	Project Analyst	Admin & Accounting	Senior Advisor	Lead Facilitator	Admin Support	Graphics/Media	
		A. Burnham	W. Zieburz	C. Malesky	K. Stevens	S. Rao	Staff	C. Fleetham	T. Newman	K. Anderson	L. Byron	
Rates ---->		\$350	\$305	\$260	\$160	\$130	\$75	\$240	\$170	\$50	\$140	
h.	Make adjustments based upon input from City staff in the prior sub-task and distribute workbook of preliminary results.	1	1	1	2	3	0	0	0	0	0	8
i.	Meet with City staff in second interactive work session to review adjusted results. [3rd Interactive]	4	4	0	4	0	0	0	0	0	0	12
j.	Perform adjustments based upon City staff input and finalize alternative rate structure options.	1	1	1	1	2	0	0	0	0	0	6
Task 11 Affordability Analysis and Program Development												
11.1	Extract detailed income data for each census tract in the service area.						0	0	0	0	0	0
a.	Obtain GIS layer file and related map data.	1	0	4	6	10						
b.	Determine the census tracts within the service area.	1	0	2	3	4						
c.	Obtain full census data for identified tracts.	1	0	3	4	6						
d.	Input census data into our Weighted Average Residential Index (WARI) model.	1	0	6	8	10						
11.2	Determine actual and average existing and forecasted bills.						0	0	0	0	0	0
a.	Link billing information with parcel information to identify usage and income by census tract.	1	1	2	4	3						
b.	Identify residential customer usage/revenue and income by census tract.	1	1	4	6	4						
c.	Allocate residential revenue to households.	1	1	6	4	8						
d.	Forecast household costs by census tract.	1	1	2	3	3						
11.3	Determine financial burden in each census tract for every income band.						0	0	0	0	0	0
a.	Calculate comprehensive financial burdens.	1	1	6	8	12						
b.	Calculate median financial burdens in each tract.	1	1	4	6	8						
c.	Calculate weighted average burden in each tract.	1	1	3	4	6						
d.	Calculate the weighted median burden.	1	1	2	2	4						
e.	Calculate WARI in order to determine the weighted average financial burden for the entire system based on the results of prior subtasks.	1	2	3	3	4						
11.4	Evaluate and develop affordability programs based upon affordability results.						0	0	0	0	0	0
a.	Review existing affordability and assistance programs and identify participants.	3	2	4	2	3						
b.	Conduct literature review and identify affordability practices of other utilities that comport with legal requirements.	1	2	4	2	6						
c.	Identify opportunities for enhancements/adjustments to programs.	1	2	3	1	1						
d.	Review findings with City staff.	2	2	2	0	0						
e.	Perform adjustments per discussion with City staff to finalize findings and recommendations.	1	1	2	1	1						
Phase IV. Evaluation and Recommendations												
Task 12 Preparation of Report Documenting All Findings & Recommendations												
12.1	Prepare a Draft Report of the initial results and recommendations of the full study for staff review/comment.	8	6	8	12	8	4	0	0	0	0	46
12.2	Prepare Final Draft Report based upon edits from City staff, and provide to staff for further review, as needed.	4	3	4	6	4	2	0	0	0	0	23
12.3	Integrate final staff comments and prepare Final Report of the Study.	2	1	2	3	2	1	0	0	0	0	11
Task 13 Implementation Assistance												
13.1	Identify adjustments to utility billing system for additional data fields and/or customer classifications as identified during study.	1	2	1	2	0	0	0	0	0	0	6
13.2	Identify adjustments to financial/accounting systems to support future cost of service and rate calculation requirements/objectives.	1	2	1	2	0	0	0	0	0	0	6
13.3	Identify adjustments to utility rate ordinances/schedules based upon identified rate structure modifications and future rate adjustments requirements.	1	1	1	2	0	0	0	0	0	0	5

City of Ann Arbor, Michigan
 Cost of Service Study for Water and Wastewater Services Unit
 Project Work Plan & Cost Estimate Schedule

Project Tasks	Estimated Labor Hours										Total Project	
	Stantec					Project Innovations						
	Project Manager	Technical Advisor	QA/QC & Affordability	Project Consultant	Project Analyst	Admin & Accounting	Senior Advisor	Lead Facilitator	Admin Support	Graphics/Media		
	A. Burnham	W. Zieburz	C. Malesky	K. Stevens	S. Rao	Staff	C. Fleetham	T. Newman	K. Anderson	L. Byron		
	Rates ---->	\$350	\$305	\$260	\$160	\$130	\$75	\$240	\$170	\$50	\$140	
13.4	Assist in development of documentation required to implement any identified changes/additions to City's affordability programs, incentives, disconnection policies, etc.	1	2	3	0	0	1	0	0	0	0	7
13.5	Review all documentation and adjustments with staff and revised as appropriate.	2	2	2	2	0	0	0	0	0	0	8
Task 14	Transfer of Modeling Tools											
14.1	Develop customized Excel Models for future use by the City.											
14.2	Prepare customized user manuals for the models to be transferred for City's use and corresponding usage/non-disclosure agreements.	4	1	2	4	8	2	0	0	0	0	21
14.3	Provide on-site model training with staff to ensure future beneficial use of the models.	8	0	0	8	0	0	0	0	0	0	16
14.4	Make adjustments to models and/or user manuals, as necessary, based upon training sessions, and deliver final models to City.	2	1	1	2	4	1	0	0	0	0	11
TOTAL ESTIMATED MAN-HOURS TO BE DETERMINED BY DEPENDENT WORK TASKS		48			40				88	20		196
TOTAL ESTIMATED MAN-HOURS		180	90	140	250	245	25	20	130	80	20	1180
TOTAL ESTIMATED FEE		\$63,000	\$27,450	\$36,400	\$40,000	\$31,850	\$1,875	\$4,800	\$22,100	\$4,000	\$2,800	\$234,275
TOTAL ESTIMATED EXPENSES												\$22,700
TOTAL ESTIMATED PROJECT COST												\$256,975
THE FOLLOWING AMOUNT IS TO BE APPROVED AFTER THE COMPLETION OF TASK 4											\$ 39,160	

The above project is to be billed monthly based on progress of tasks. Percentage of completion of above tasks will be reported to the City and presented for payment.

**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. 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 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.