

**PROFESSIONAL SERVICES AGREEMENT BETWEEN  
NORTHWEST CONSULTANTS, INCORPORATED  
AND THE CITY OF ANN ARBOR  
FOR THE  
SNYDER/EDGEWOOD AVENUES AREA STORM WATER IMPROVEMENTS PROJECT**

The City of Ann Arbor, a Michigan municipal corporation, having its offices at 301 E. Huron St. Ann Arbor, Michigan 48104 ("City"), and Northwest Consultants, Incorporated ("Contractor"), an Ohio Corporation with its address at 3220 Central Park West, Toledo, Ohio 43617, agree as follows:

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.

Contract Administrator means Nicholas S. Hutchinson, 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 Snyder/Edgewood Avenues Area Storm Water Improvements Project; City of Ann Arbor File No. 2018-034.

**II. DURATION**

Contractor shall commence performance on \_\_\_\_\_, 2018 ("Commencement Date"). This Agreement shall remain in effect until satisfactory completion of the Services specified below unless terminated as provided for in Article XI. The terms and conditions of this Agreement shall apply to the earlier of the Effective Date or Commencement Date.

**III. SERVICES**

- A. The Contractor agrees to provide Professional Engineering ("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 Article 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, etc.) 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 that 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. Prior to commencement of work under this Agreement, Contractor shall provide to the City documentation satisfactory to the City, through City-approved means (currently myCOI), demonstrating it has obtained the policies and endorsements required by Exhibit C. Contractor shall add registration@mycoitracking.com to its safe sender's list so that it will receive necessary communication from myCOI. When requested, Contractor shall provide the same documentation for its subcontractor(s) (if any).
- B. Any insurance provider of Contractor shall be 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-authorized 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:

Northwest Consultants, Inc.  
44978 Ford Road, Suite A  
Canton, Michigan 48187

Attention: Jie Luo, P.E.  
Vice-president

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

City of Ann Arbor  
Public Services Area  
c/o Craig Hupy, P.E., Public Services Area Administrator  
301 E. Huron St.  
Ann Arbor, Michigan 48104

With a copy to: The City of Ann Arbor  
ATTN: Office of the City Attorney  
301 East Huron Street, 3<sup>rd</sup> Floor  
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.

## **XIX. ELECTRONIC TRANSACTION**

The parties agree that signatures on this Agreement may be delivered electronically in lieu of an original signature and agree to treat electronic signatures as original signatures that bind them to this Agreement.

## **XX. EFFECTIVE DATE**

This Agreement will become effective when all parties have signed it. The Effective Date of this Agreement will be the date this Agreement is signed by the last party to sign it.



**FOR CONTRACTOR**

By \_\_\_\_\_  
Jie Luo, P.E.  
Its Vice-president

Date: \_\_\_\_\_

**FOR THE CITY OF ANN ARBOR**

By \_\_\_\_\_  
Christopher Taylor, Mayor

By \_\_\_\_\_  
Jacqueline Beaudry, City Clerk

**Approved as to substance**

\_\_\_\_\_  
Craig Hupy  
Public Services Area Administrator

\_\_\_\_\_  
Howard S. Lazarus, City Administrator

**Approved as to form and content**

\_\_\_\_\_  
Stephen K. Postema, City Attorney

## **EXHIBIT “A”**

### **SNYDER / EDGEWOOD AVENUES AREA STORM WATER IMPROVEMENTS PROJECT SCOPE OF SERVICES**

#### **GENERAL PROJECT REQUIREMENTS**

The LEAD CONSULTANT (Northwest Consultants, Inc.) shall manage all aspects of the project design up to the completion of the 30% plans, cost estimate, and list of needed specification submittal for the project as detailed in RFP 18-23 issued by the City of Ann Arbor for which proposals were due on May 28, 2018. All work on this project shall be performed in accordance with the requirements of RFP 18-23 and this Scope of Services. The work includes, but is not limited to; managing all aspects of the project, including the work of all sub-consultants and project coordination with all affected agencies. The Consultant Project Manager must ensure the timely and cost-effective delivery of the project design, as well as provide oversight and review of all project deliverables. The Consultant Project Manager will be responsible for the overall review and coordination of the contract documents in order to ensure preparation of plans that are detailed, thorough, and accurate and meet all the requirements of the City of Ann Arbor.

The CONSULTANT shall coordinate efforts with the City of Ann Arbor (CITY) and the Washtenaw County Water Resources Commission (WCWRC) to ensure a timely and cost-effective submittal of the project deliverables. The Consultant Project Manager shall provide oversight, review, and coordination of the CONSULTANT derived project deliverables with that of the CITY's so that a seamless product is provided.

The CONSULTANT shall schedule and chair design progress meetings to be held on a monthly basis. This is to include a design kick-off meeting in which all affected parties to the design will be contacted and invited to attend. The CONSULTANT shall prepare and distribute written meeting minutes for all progress and coordination meetings. CONSULTANT shall coordinate the efforts with any other needed agency(ies), various CITY service units, private utility companies, other formal and informal committees, and the public in general.

The CONSULTANT shall perform all work and provide all work products and deliverables in accordance with the schedule included in this scope of services entitled Exhibit A-1.

The CONSULTANT shall provide the necessary hydraulic analysis and design services for the preparation of plans and cost estimates developed to a 30% level (preliminary plans) to allow the City of Ann Arbor to move forward with the final design phase of the project with a known and fully implementable design at a later date.

#### **DESIGN REQUIREMENTS**

All improvements shall be designed in accordance with the applicable AASHTO, City of Ann Arbor, WCWRC, MDOT, MDEQ, and any other relevant standards.

All drawings shall be prepared to City of Ann Arbor Public Services Area Drafting Standards. All drawings shall be prepared using AutoCad Civil 3D 2013, or newer, software as approved by the CITY. The CITY shall be provided with one portable flash drive containing all drawings, specifications, and cost estimates upon completion of the project's design.

In general, the CONSULTANT shall prepare to City of Ann Arbor Standards, plan and profile sheets, at a horizontal scale of 1"=20' and a vertical scale of 1"=2' for all work. This shall include, but not be limited to, water main, sanitary and storm sewer, and roadway plans. Other plans, such as structure plans, sections, and elevations; traffic control drawings; intersection enlargement plans; typical cross-sections, cross-sections, details, etc. shall be drawn at scales as approved by the CITY in order to properly complete the work of the project. The following is a brief overview of the major or critical elements of the work:

1. Drainage: Provide enclosed conduit drainage systems, storm water infiltration devices, and/or storm water detention facilities (either above or underground, or both, as dictated by site needs and constraints) in order to adequately convey the chosen storm water event.
2. General Design Standards: Incorporate the City of Ann Arbor Public Services Department Standard Specifications (current edition); WCWRC Standards; 2012 MDOT Standard Specifications for Construction; MDEQ Permitting regulations; ADA accessibility standards; and, the City of Ann Arbor Code of Ordinances.
3. Water main(s), Sanitary Sewer(s), and Storm Sewer(s): The design of any proposed or relocated facility shall be designed in accordance with the City of Ann Arbor, Public Services Area, Standard Specifications and as directed by the City.
4. Roadway and Sidewalk Replacement Plans: All roadway and sidewalk replacements shall be detailed to a 30% plan completion level that includes roadway centerline elevations, curb elevations as measured at the edge of metal, roadway longitudinal and transverse grades, sidewalk and sidewalk ramp spot elevations, and longitudinal and transverse grades, any other large miscellaneous paved areas, and other areas as directed by the City. These drawings shall be drawn at scales as approved by the City, but in no case shall they be smaller than 1" = 20'.

These drawings shall take into consideration the effects of "part-width" construction on streets (if necessary) and shall be adequately dimensioned to allow key elevations, or dimensions, to be obtained without calculation.

5. Soil Erosion, Grading, Tree Planting, Natural Features Protection Plans, and other miscellaneous Plans: These plans shall be prepared to a 30% plan completion level in accordance with the appropriate Chapters of the City of Ann Arbor Code of Ordinances, and as approved by the CITY.
6. Soil Investigation: The Consultant shall employ a qualified geotechnical engineer to perform a detailed, comprehensive, soil investigation, the cost of which is detailed in Exhibit "B" of this Professional Services Agreement. Soil borings shall be taken at

frequencies as determined by the Consultant, and as agreed to by the CITY, all as necessary to ensure an adequate representation of site soil conditions and anticipated limits and depths of permeable soils.

The CONSULTANT shall prepare a soil boring plan which details the location and depth of each soil boring planned to be taken. The depth of all soil borings shall be approved by the CITY. All soil borings shall be performed to a depth of at least 5' below any proposed structure or utility.

Based on the soil investigation, the CONSULTANT shall provide the CITY with recommendations as to the expected permeability of the roadway and site soils for the purpose of designing the storm water mitigation measures and roadway pavements to the extent necessary.

All traffic control required to perform the soil borings and all related work shall be in accordance with the Michigan Manual of Uniform Traffic Control Devices (MMUTCD) and the City of Ann Arbor Design Standards. The Consultant shall also be responsible for coordinating this work with the Miss-Dig network a minimum of 3 working days in advance of any underground activities. The costs associated with providing traffic control plans and obtaining the necessary permits, shall be included in the proposal. The City of Ann Arbor will waive the City of Ann Arbor permit fees associated with this work.

All findings as produced as part of the soil investigation shall be provided in a bound report and made available for review and comment by the CITY. The geotechnical sub-consultant shall be available to discuss in detail the report and its findings and respond to written comments regarding the report.

7. Pavement Structural Design: The replacement pavement(s) shall be designed in accordance with the "Guide for Design of Pavement Structures" as published by AASHTO and the City of Ann Arbor Design Standards. The pavements shall be designed for a service life of 20 years.
8. Maintenance of Traffic: The construction of the roadways and utilities associated with this project will be performed under traffic. Provide schematic maintenance of traffic strategies that follow the requirements of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD) and the City of Ann Arbor requirements. The schematic traffic control plans shall be prepared with the intent of ensuring the efficient, safe, and orderly maintenance of vehicular, pedestrian, and bicycle traffic throughout the project and around the construction staging areas.

A minimum of one lane of vehicular traffic in each direction shall be maintained along S. Main Street and/or W. Stadium Boulevard within the limits of construction at all times. Pedestrian traffic along one side of the roadway and access to all properties shall be maintained at all times. Work restrictions will be required for the Ann Arbor Street Art Fairs, University of Michigan events such as home football and basketball games, commencement exercises, and other events. The construction operations must carefully consider these events during the preparation of these plans.

9. Right-of-Way Requirements: Identify and prepare exhibit drawings for all easements and grading permits that will be required to construct the Preferred Alternative. This is to include technical assistance and preparation of the exhibit drawings in an 8½" x 11" format, as required and directed by the City. The areas where the expected grading permits and easements are necessary will be determined as the design of the project progresses.
10. Coordination of Design: The Consultant shall coordinate all elements of the design with all affected parties, including, but not limited to; MDEQ, various City Departments, University of Michigan, WCWRC, Private Utility Companies, other formal and informal committees, and the public in general.
11. Monthly Progress Mtgs./Meeting Attendance: Schedule and chair design progress meetings to be held on a monthly basis. This is to include a design kick-off meeting in which all parties affected by the design and construction of the project are invited to attend. Prepare and distribute typed meeting minutes for all progress and coordination meetings.

## **MEETINGS**

The CONSULTANT shall attend and document the following meetings through the course of the project:

- One (1) Kickoff Meeting with the City of Ann Arbor
- Ten (10) Monthly Progress Meetings with the City of Ann Arbor
  - Six (6) Monthly Progress Meetings will include the full Public Awareness and Involvement Team from the CONSULTANT.
- Four (4) Public Meetings

## **PUBLIC AWARENESS AND INVOLVEMENT**

The CONSULTANT shall propose and devise public awareness and involvement strategies throughout the course of the design of the project.

The CONSULTANT will develop a Public Engagement Strategy. The Public Engagement Strategy will follow the CITY's guidelines for early and effective citizen participation in planning of major projects. To effectively engage interested stakeholders and communicate progress throughout the project, the key components of the public engagement strategy will include:

- Situation Analysis – input from the CITY regarding key issues to be addressed.
- Communication Objectives – clarify the CITY's objectives for dissemination of information and engagement of stakeholders.
- Message Model – identify the messages that must be communicated to ensure stakeholder participation, introduction to the project team's competencies, and project merits.
- Target Audience Lists – develop a list of stakeholders, CITY staff, media, and other influencers.
- Engagement Timeline – timing to conduct meetings and provide interim and final reports.
- Risk Analysis – identification of aggrieved stakeholder groups which may require alternative communication strategies.

- Media Strategy – establish a balanced strategy to disseminate information using appropriate electronic and print methods to reach target audiences.
- Public Engagement Milestones – depict the interaction of the above mentioned strategy.

The CONSULTANT will engage with the following groups as part of the project:

- Project Working Group - consisting of CITY Project Manager, CONSULTANT Project Manager, CONSULTANT Public Engagement Facilitator and specific CITY staff to manage communication objectives for the project. Six (6) meetings are anticipated. These meetings are considered to be a part of the Monthly Progress Meetings previously described.
- Neighborhood Association meetings (also known as Public Meetings as described previously) in the Snyder/Edgewood Avenue area. Four (4) meetings are anticipated.
- Engage the local media via news releases and media advisories to inform and educate the public on the project’s objectives, opportunities to provide input and project progress.

The CONSULTANT will design, document, and perform a neighborhood walkthrough to start the Public Engagement. The CONSULTANT will coordinate this walkthrough with the CITY’s Communication Department. This walkthrough will include the following:

- The walkthrough will target up to 30 homes within the project area.
- The CONSULTANT will draft a letter for the CITY to send to the neighborhood residents. This letter will introduce the project and invite the residents to contact the CONSULTANT to schedule a visit (or phone call) to discuss the issues and concerns.
- Prior to any visits or discussions with the residents, the CONSULTANT will draft a list of critical information to be gathered.

If the CITY and CONSULTANT determine that not enough interest has been expressed from the letters, the CONSULTANT will design and print a postcard survey. The CONSULTANT will then hand deliver the postcard survey door-to-door within the project limits.

The CONSULTANT will coordinate public engagement materials with the CITY’s Communication Department. The CONSULTANT will create, distribute, and archive the materials suggested by the CITY, including but not limited to Public Meeting visual aids, project overview/updates, emails, printed announcements, social media, submissions to newsletters, and website updates.

The following documents will be created, distributed and archived by the CONSULTANT as part of the public engagement process: public engagement plan, public meeting announcements and agendas, meeting summaries, supporting handouts, and public engagement report summary at the close of the project.

### **INFORMATION GATHERING**

The CONSULTANT shall gather and review information pertaining to existing public and private utilities and determine the precise location, both horizontally and vertically, of all existing utilities. The CONSULTANT shall prepare and submit a MISS-DIG Design Ticket following the approved protocol for this service. This includes the evaluation and recommendation as to the adequacy of

existing public utilities including sanitary and storm sewers, water mains, and the possible need for utility expansion and/or renovation. Obtain record drawings from the private utility companies. Coordinate all aspects of the proposed work with the private utility companies. Where critical crossings of utilities are believed to exist, or the elevation(s) of existing utilities may significantly affect the design, or relocation of, the proposed bridges, utilities, roadways, retaining walls, and the like, test holes shall be dug to determine the precise location, both horizontally and vertically of these points.

The CONSULTANT shall prepare a complete, detailed, ground survey of the construction influence area. This survey shall be used to supplement the previous survey performed for the Stadium Boulevard Reconstruction Project.

#### Previous Survey Limits

The previous survey performed for the Stadium Boulevard Reconstruction Project includes the following roadways:

- Potter Ave. from S. Seventh St. to Edgewood Ave.
- W. Stadium Blvd. from S. Seventh St. to S. Industrial Hwy.
- S. Main St. from Ann Arbor-Saline Rd to Snyder Ave.
- Hutchins Ave. from W. Stadium Blvd. to Potter Ave.
- Prescott Ave. from W. Stadium Blvd. to Potter Ave.
- Edgewood Ave. from W. Stadium Blvd. to Potter Ave.
- Snyder Ave. from Prescott Ave. to Edgewood Ave.

#### Survey Limits

The CONSULTANT supplemental topographical survey shall include:

- Snyder Ave. from S. Seventh St. to S. Main St.
- Invert and rim elevations of the storm sewer system throughout the watershed area as needed for the hydraulic model.

The CITY will provide GIS information including pavement edges and 2ft contours for areas outside of the *Previous Survey Limits* and *Survey Limits* for use in the Hydraulic Analysis and Modeling. Additional survey outside of these limits will be considered outside this scope of services. The CONSULTANT shall make arrangements with the CITY to obtain this information prior to it being required for use on the project.

The CONSULTANT shall at a minimum, locate all trees 6” in diameter or greater and provide the genus and cultivar (if applicable) breakdown; locate all cultural features within the requested survey boundaries; provide a survey with 1’ contour intervals; locate all “breaklines” and other features as necessary to develop accurate contours; provide detailed spot elevations at all existing sidewalk and sidewalk ramp areas; and, provide all survey work to national map accuracy standards; establish and define the existing Right-of-Way of Snyder Avenue, Edgewood Avenue, as well as all intersecting cross-streets that are affected by the project; coordinate with CITY personnel such that the appropriate title work and appraisals can be obtained for the purposes of right-of-way and grading permit acquisition; locate all existing property irons and monuments within the survey limits; and, locate existing public and private utilities. All survey work shall be performed in accordance with the City of Ann Arbor Public Services Area’s Standards and its Geodetic Control Manual.

The CITY shall obtain the needed title work and appraisals required for the project right-of-way and/or grading permits.

### **GEOTECHNICAL INVESTIGATION**

As part of the soil investigation, the CONSULTANT shall determine if any areas exist where construction operations may damage existing structures, or adversely affect their foundations, e.g. existing houses along Snyder and/or Edgewood Avenues, etc. If these areas are determined to exist, recommendations for the elimination or minimization of these adverse effects, shall be incorporated into the planned improvements and shall be specified on the plans and in the project specifications.

The CONSULTANT shall perform a total of five (5) test borings at this site. These borings shall be as follows:

- Two (2) borings for the proposed roadway and local street improvements to a depth of approximately 10 feet below the existing roadway surface. The roadway borings will be drilled within the future and existing lanes on approximately 200 feet intervals within Snyder Avenue west and east of the Edgewood intersection.
- Three (3) borings for the proposed underground stormwater storage facilities (or infiltration facilities) to a depth of approximately 30 feet below the existing roadway surface. The stormwater borings will be drilled within the future and existing lanes along Snyder Avenue and Edgewood Avenue within the project limits at locations determined during design.

The geotechnical field work will include determination of the subsurface (soil and groundwater) conditions by drilling test borings and obtaining split spoon samples (ASTM D1586) of the subsurface materials to determine their physical properties and characteristics. Samples will be obtained with a split spoon sampler at 2.5-foot intervals to a depth of 10 feet below ground surface and every 5 feet thereafter. Additional samples will be collected when sand is encountered in the 30-foot boreholes for permeability testing. After completion of the drilling operations for the shallow borings, the test holes shall be backfilled with excavated soil and patched with bituminous cold patch or quickcrete. However, for the deep borings, the borings will be backfilled with grout. Based on the site subsurface conditions encountered, if additional soil boring depths greater than those planned are considered necessary by the CONSULTANT to develop the required recommendations, the CITY will be notified immediately for authorization. No additional soil drilling will be performed without prior authorization.

The possibility of encountering artesian conditions during the drilling of the deep borings is remote. To minimize the potential, the CONSULTANT shall drill with hollow-stem augers. However, if artesian conditions are encountered that cannot be controlled by simple grouting, a combination of water and/or bentonite pellets will be used by the CONSULTANT to relieve the pressure. Additional costs of any such extra measures will be considered outside this scope of services.



During field activities, the CONSULTANT shall mark and survey the boring and test pit locations. The actual boring locations shall be included on the site plans. North and East coordinates and the ground surface elevations shall be included on the soil boring logs.

During field operations the CONSULTANT shall provide traffic control in accordance with the current edition of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD) that will include signs, cones, a flashing arrow board and flagmen. In addition, the CONSULTANT shall conduct his field operations such that lane closures will be limited to the hours between 9:00 am and 3:00 pm. The CITY will provide any permit required to perform the fieldwork. The CONSULTANT will submit all necessary paperwork to obtain the permit. The fees associated with the right-of-way permits will be waived by the CITY.

The CONSULTANT shall be responsible for coordinating field work with the Miss Dig network a minimum of 3 working days in advance of any underground activities.

Hazardous material drilling conditions are not anticipated to be encountered for this project. Should suspect environmental conditions be encountered during drilling, the CONSULTANT shall stop fieldwork and return to any potential contaminated soil or groundwater areas with the appropriate level of personal protection, decontamination equipment, field environmental professional, and photo-ionization detector (PID) instrumentation.

The CONSULTANT shall perform up to three (3) permeability tests to verify the permeability and drainage of the subsurface soils conditions at selected locations.

The CONSULTANT shall classify and test representative soil samples obtained during the field exploration program as necessary to make the required recommendations. The nature and extent of this laboratory testing program will be dependent upon the subsurface conditions encountered during the field exploration program. If cohesive soils are encountered, the CONSULTANT shall perform tests including, but not limited to, moisture contents, Atterberg limits, and unconfined compressive strength. If granular soils are encountered, the CONSULTANT shall perform tests including, but not limited to, grain size distribution, loss-by-wash on the No. 200 screen, and hydrometer tests.

The CONSULTANT shall obtain bulk samples to perform CBR tests for pavement design and analysis.

The CONSULTANT shall retain the unused soil samples for three months after the submission of the final report.

At the conclusion of the field and laboratory work, the CONSULTANT shall analyze the data and prepare a written report. The geotechnical report shall include the following:

- Report discussing geotechnical and laboratory services provided
- Summary of soil classifications and groundwater conditions
- Estimates of resilient modulus of subgrade reaction, soil permeability, and infiltration capacity

- General recommendations for construction and subgrade preparation
- Soil boring logs
- Laboratory test results

The CONSULTANT shall provide three (3) copies of the report. A draft copy of the report will be provided for review and comment prior to issuing the final reports.

## **HYDRAULIC ANALYSIS AND MODELING**

The CONSULTANT will perform the Hydraulic Analysis and Modeling for this project. The CONSULTANT will work cooperatively with City staff to develop a practical design concept and detailed alternatives to address the project objectives. The alternatives will be reviewed for hydraulic performance and the results will establish the basis of design for an effective and implementable solution.

The CITY's InfoSWMM hydraulic model will be used for hydraulic analysis on the neighborhood scale. The CONSULTANT will update the model so that the base model represents current conditions. Physical data gathered during survey and geotechnical investigations will also be incorporated where appropriate.

The CONSULTANT will use the updated InfoSWMM model to evaluate existing conditions to set a baseline for comparison against the stormwater management alternatives. Where neighborhood-scale modeling is not needed, hydraulic calculations will be performed to evaluate predicted flows and performance of stormwater management

The primary evaluation criterion for alternatives analysis will be for the proposed improvements to allow for collection and conveyance of the 10-year, 12-hour storm even without surface flooding. The CONSULTANT analysis for this project will consider a phased approach to gain incremental improvements in the near-term and lay out a plan to achieve the overall performance standard in the long-term.

As an initial design concept, the conveyance capacity across W. Stadium Blvd. will be increased, and alternatives for storage and infiltration in the area will be considered. The CONSULTANT will prepare three (3) levels of alternatives (with three (3) options for each) that will represent different levels of infrastructure footprint with high, medium, and low descriptors for factors such as land acquisition, construction impact, and expected cost for a total of nine (9) options:

- High – Private property acquisition or easements, larger footprint, more depth to maximize storage volume and infiltration
- Medium – Footprint contained within ROW, but with deeper excavations to maximize volume
- Low – Footprint contained within ROW and excavations limited to shallower depths

The CONSULTANT will also run future conditions scenarios with implementation of Green Streets stormwater management policies in the upstream tributary area to show how the level of service will improve over time and the extent of future phased work that would be necessary to achieve the overall design standard for each of the alternatives.

The CONSULTANT will provide a description of the hydraulic analysis approach and results of the alternatives modeling in a hydraulic analysis memorandum that can be a stand-alone document or can be wrapped into a project basis of design report. The CONSULTANT will provide a final hydraulic analysis as a check of the 30% design concept after any modifications or refinements are made during the preliminary design process. Analysis of the 30% design will also include validation of the model once flow and rainfall data are available, along with any recommended calibration adjustments.

## **ROADWAY DESIGN**

The CONSULTANT shall provide geometric designs for the preferred alternative for main line roadways and the intersecting streets in accordance with all AASHTO, City of Ann Arbor, and MDOT Standards. The plans shall be prepared to 30% completion level.

The CONSULTANT shall review the 30% design concept from the Hydraulic Analysis and Modeling. This design concept is unknown at this time. The CONSULTANT price proposal is based on the following project concept:

- Project Limits:
  - Snyder Avenue from Prescott Avenue to east of Edgewood Avenue
  - Edgewood Avenue from Berkley Avenue to W. Stadium Boulevard
  - W. Stadium Boulevard from Prescott Avenue to S. Main Street
- Hydraulic Design Concepts:
  - Deep (approximately 20ft to 30ft deep) underground storage (and/or infiltration trenches) including sewer culverts and chambers/drainage structures
  - Design to take into account the previously designed improvements along W. Stadium Boulevard to ensure no conflicts.
- Roadway Design Concepts:
  - Full-width reconstruction of the pavement and driveways within the effected project limits.
  - Sidewalk replacements (including sidewalk ramps) as required for hydraulic and roadway design.

Should the approved alternative from the hydraulic analysis and modeling differ from the presented project limits and scope of services, the CITY and CONSULTANT shall determine an equitable increase or decrease in work to be performed for the development of the 30% design plans.

The CONSULTANT shall prepare pavement marking plans to ensure safety of motorists and pedestrians. This shall include the re-stripping of any streets affected by project detour routes when the construction has been completed.

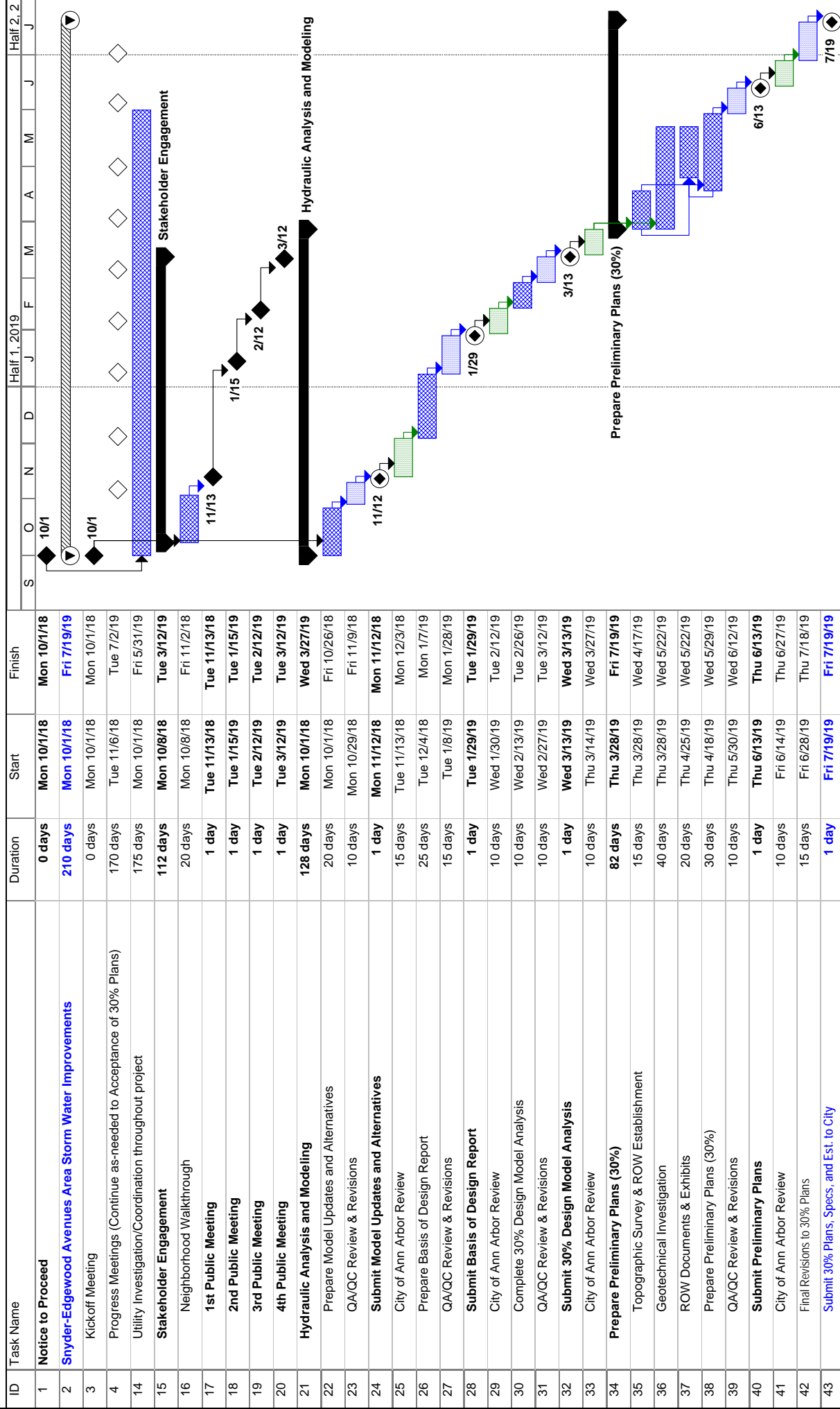
The CONSULTANT shall review and evaluate existing storm water drainage systems and options for on-site storm water detention and/or water quality improvement. Propose and design improvements, where possible, including using City of Ann Arbor Public School properties located adjacent to W. Stadium Boulevard. All storm sewer shall be designed to accommodate the approved alternative from the hydraulic analysis and modeling. A 10-year storm will be used for storm sewers impacted by, but not a part of the proposed hydraulic improvements.

The CONSULTANT shall determine the condition of the existing sanitary sewer through the use of videotaping. The CITY will provide the videotaping of the existing sanitary sewer. The CONSULTANT shall review the tape and recommend to the CITY repairs, or replacement, as necessary. The CONSULTANT shall review the impacts to the sanitary sewer from the storm water drainage systems and roadway reconstruction and recommend to the CITY replacement as necessary. The CONSULTANT shall design new or repaired sanitary sewer required within the Project Limits.

The CONSULTANT shall identify, define, and prepare all exhibit drawings for all easements and grading permits that will be required to construct the proposed improvements. This is to include technical assistance, and the preparation of the corresponding exhibit drawings in an 8½" x 11" format, as required and directed by the CITY. The areas where the expected grading permits and easements are necessary will be determined as the design of the project progresses.

The CONSULTANT shall prepare all plans necessary to meet pertinent City of Ann Arbor requirements to the 30% plan completion level. For example, these shall include, but not be limited to; Natural Features Protection Plans; Soil Erosion Control Plans; Grading Plans; Landscaping and Planting plans; etc. These requirements can be found in Chapter 57 of the City of Ann Arbor Code of Ordinances. The requirements of the City of Ann Arbor Code of Ordinances shall take precedence over all other MDOT standard practices.

## Snyder/Edgewood Avenues Storm Water Improvements Project Detailed Progress Schedule



Project: Snyder-Edgewood Schedule  
Date: Thu 8/9/18

**Task** (Blue hatched bar)  
**Split** (Dotted line)  
**Progress** (Black bar)

**Milestone** (Diamond)  
**Summary** (Thick black bar)  
**Project Summary** (Thin black bar)

**External Tasks** (Grey bar)  
**External Milestone** (Grey diamond)  
**Deadline** (Green arrow)

NORTHWEST CONSULTANTS, INC.

**EXHIBIT "B"**

**SNYDER-EDGEWOOD AVENUES AREA STORM WATER IMPROVEMENTS PROJECT  
CITY OF ANN ARBOR  
July 17, 2018**

Northwest Consultants, Inc.  
44978 Ford Road, Suite A  
Canton, MI 48187  
(734) 454-7566  
(734) 454-7536 - Fax

<u>Personnel Category</u>	<u>Hourly Rate</u>
Project Manager, PE	\$148.10
QA/QC Engineer, PE	\$168.89
Sr. Project Engineer, PE	\$135.11
Project Engineer, PE	\$103.93
Design Engineer, EI	\$75.35
Project Surveyor, PS	\$114.32
Field Surveyor	\$62.36

**DERIVATION OF HOURLY RATES**

Overhead Rate: 131.99%  
Profit: 12%

<u>NAME</u>	<u>TITLE</u>	<u>CODE</u>	<u>SALARY RATE</u>	<u>HOURLY RATE *</u>
A. Kilpatrick, PE	Project Manager, PE	PM	\$57.00	\$148.10
T. Luo, PE; J. Drummond, PE	QA/QC Engineer, PE	QA	\$65.00	\$168.89
G. Schmitt, PE; K. Jansing, PE	Sr. Project Engineer, PE	SPE	\$52.00	\$135.11
E. Hansen, PE; A. Moncznik, PE	Project Engineer, PE	PE	\$40.00	\$103.93
R. Mettlach, EI; M. Drago, EI; J. Grant, EI	Design Engineer, EI	DE	\$29.00	\$75.35
I. Scrott, PS	Project Surveyor, PS	PS	\$44.00	\$114.32
Various	Field Surveyor	S	\$24.00	\$62.36

\* Hourly Rate = Salary Rate x (1+Overhead Rate) x (1+Profit)

**Notes**

- 1 - See attached CDM Smith Sub-Consultant Fee Proposal for Details
- 2 - See attached CTI Sub-Consultant Fee Proposal for Details
- 3 - See attached Project Innovations (PI) Sub-Consultant Fee Proposal for Details

<u>TASK 1 - HYDRAULIC ANALYSIS AND MODELING</u>	<u>HOURS BY PERSONNEL CATEGORY</u>							<u>Total Hours</u>	<u>NCI DIRECT COSTS</u>	<u>NCI TOTAL COSTS</u>	<u>CDM Smith<sup>1</sup> TOTAL COSTS</u>	<u>CTI<sup>2</sup> TOTAL COSTS</u>	<u>PI<sup>3</sup> TOTAL COSTS</u>	<u>TOTAL COST</u>
	<u>PM</u>	<u>SPE</u>	<u>PE</u>	<u>DE</u>	<u>PS</u>	<u>FS</u>								
Kickoff Meeting	8		12				20	\$40	\$2,472	\$696	\$0	\$0	\$0	\$3,168
<b>Topographic Survey &amp; ROW Establishmen</b>														
Record Research (incl. avail. survey)				4	12		16	\$0	\$1,673	\$0	\$0	\$0	\$0	\$1,673
Fieldwork					110		220	\$450	\$19,885	\$0	\$0	\$0	\$0	\$19,885
Establish alignments and ROW			16	8	8		32	\$0	\$3,180	\$0	\$0	\$0	\$0	\$3,180
Data processing, Preparing topo drawing & DTM	2			16			18	\$0	\$1,502	\$0	\$0	\$0	\$0	\$1,502
<b>Geotechnical Investigation</b>														
Field Work						8	8	\$40	\$1,453	\$0	\$4,665	\$0	\$0	\$6,118
Lab Study							0	\$0	\$0	\$0	\$2,620	\$0	\$0	\$2,620
Report	4		4				8	\$0	\$1,008	\$0	\$2,660	\$0	\$0	\$3,668
<b>Utility Coordination</b>														
Record Research (incl. avail. info)				8			8	\$0	\$603	\$0	\$0	\$0	\$0	\$603
Fieldwork coordination					8	8	16	\$40	\$1,453	\$0	\$0	\$0	\$0	\$1,453
Conflict identification and resolution	2		8	12			22	\$0	\$2,032	\$0	\$0	\$0	\$0	\$2,032
Utility Meetings (Assume 1)	8		8				16	\$0	\$2,016	\$0	\$0	\$0	\$0	\$2,016
<b>Prepare Model Updates and Alternatives</b>														
Coordinate Models and Alternatives	8		8				16	\$0	\$2,016	\$6,520	\$0	\$0	\$0	\$8,536
Conflict identification and resolution			8	8			16	\$0	\$1,434	\$6,000	\$0	\$0	\$0	\$7,434
<b>Prepare Basis of Design Report</b>														
Coordinate Basis of Design Report	8		8				16	\$0	\$2,016	\$3,448	\$0	\$0	\$0	\$5,464
Conflict identification and resolution			8	8			16	\$0	\$1,434	\$2,928	\$0	\$0	\$0	\$4,362
<b>Prepare 30% Design Model Analysis</b>														
Coordinate 30% Design Model Analysis	8		8				16	\$0	\$2,016	\$1,884	\$0	\$0	\$0	\$3,900
Conflict identification and resolution			8	8			16	\$0	\$1,434	\$1,884	\$0	\$0	\$0	\$3,318
QA/QC	16	16					32	\$0	\$5,072	\$0	\$0	\$0	\$0	\$5,072
Progress Meetings (Assume 5)	20			30			50	\$200	\$6,280	\$5,944	\$0	\$0	\$0	\$12,224
<b>Subtotal - Task 1</b>	<b>84</b>	<b>16</b>	<b>0</b>	<b>126</b>	<b>72</b>	<b>146</b>	<b>126</b>	<b>\$70</b>	<b>\$770</b>	<b>\$58,982</b>	<b>\$29,304</b>	<b>\$9,945</b>	<b>\$0</b>	<b>\$98,231</b>

**EXHIBIT "B"**

**SNYDER-EDGEWOOD AVENUES AREA STORM WATER IMPROVEMENTS PROJECT  
CITY OF ANN ARBOR  
July 17, 2018**

Northwest Consultants, Inc.  
44978 Ford Road, Suite A  
Canton, MI 48187  
(734) 454-7566  
(734) 454-7536 - Fax

<u>Personnel Category</u>	<u>Hourly Rate</u>
Project Manager, PE	\$148.10
QA/QC Engineer, PE	\$168.89
Sr. Project Engineer, PE	\$135.11
Project Engineer, PE	\$103.93
Design Engineer, EI	\$75.35
Project Surveyor, PS	\$114.32
Field Surveyor	\$62.36

TASK 2 - PRELIMINARY PLANS (30%)	HOURS BY PERSONNEL CATEGORY							Total Hours	NCI DIRECT COSTS	NCI TOTAL COSTS	CDM Smith <sup>1</sup> TOTAL COSTS	CTI <sup>2</sup> TOTAL COSTS	PF <sup>3</sup> TOTAL COSTS	TOTAL COST	
	PM	QA	SPE	PE	DE	PS	FS								
Utility Coordination															
Conflict identification and resolution	2			8	12			22	\$0	\$2,032	\$0	\$0	\$0	\$0	\$2,032
Utility Meetings (Assume 1)	8			8				16	\$40	\$2,056	\$0	\$0	\$0	\$0	\$2,056
Right-of-Way and Real Estate Impacts															
Review impacts and limits of work	8			12				20	\$0	\$2,432	\$0	\$0	\$0	\$0	\$2,432
Prepare exhibits and descriptions	8			8	12	16		44	\$0	\$4,750	\$0	\$0	\$0	\$0	\$4,750
Maintaining Traffic Design & Plans															
Conceptual Alternatives	8			12	8			28	\$0	\$3,035	\$0	\$0	\$0	\$0	\$3,035
Critical Path Analysis and Coordination	4			12	8			24	\$0	\$2,442	\$0	\$0	\$0	\$0	\$2,442
Conceptual Approval Meeting (Assume 1)	8			8				16	\$40	\$2,056	\$0	\$0	\$0	\$0	\$2,056
MOT Preliminary Plan Preparation	4			8	12			24	\$0	\$2,328	\$0	\$0	\$0	\$0	\$2,328
Hydraulics/Stormwater Drainage Systems															
Review existing system	4			16	24			44	\$0	\$4,064	\$0	\$0	\$0	\$0	\$4,064
Prepare preliminary facilities design	4		4	16	60			84	\$0	\$7,317	\$0	\$0	\$0	\$0	\$7,317
Preliminary (30%) Roadway/Utility Design & Plans															
Plan Preparation	8			16	24			48	\$0	\$4,656	\$0	\$0	\$0	\$0	\$4,656
Utility Design (WM & San)	4			8	12			24	\$0	\$2,328	\$0	\$0	\$0	\$0	\$2,328
Preliminary Plan Review Meeting	8			8				16	\$40	\$2,056	\$0	\$0	\$0	\$0	\$2,056
Quantities/Cost Estimate	4			24	24			52	\$0	\$4,895	\$0	\$0	\$0	\$0	\$4,895
Special Provisions	16			24				40	\$0	\$4,864	\$0	\$0	\$0	\$0	\$4,864
QA/QC	20	20						40	\$0	\$6,340	\$0	\$0	\$0	\$0	\$6,340
Progress Meetings (Assume 5)	20			30				50	\$200	\$6,280	\$0	\$0	\$0	\$0	\$6,280
City of Ann Arbor Review Meetings (Assume 1)	8			8				16	\$40	\$2,056	\$0	\$0	\$0	\$0	\$2,056
Final Submittal/Deliverables	4			8	8			20	\$0	\$2,027	\$0	\$0	\$0	\$0	\$2,027
<b>Subtotal - Task 2</b>	<b>150</b>	<b>20</b>	<b>4</b>	<b>234</b>	<b>204</b>	<b>16</b>	<b>0</b>	<b>628</b>	<b>\$360</b>	<b>\$68,014</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$68,014</b>

TASK 3 - STAKEHOLDER ENGAGEMENT	HOURS BY PERSONNEL CATEGORY							Total Hours	NCI DIRECT COSTS	NCI TOTAL COSTS	CDM Smith <sup>1</sup> TOTAL COSTS	CTI <sup>2</sup> TOTAL COSTS	PF <sup>3</sup> TOTAL COSTS	TOTAL COST
	PM	QA	SPE	PE	DE	PS	FS							
Scoping, Design of CEP								0	\$0	\$0	\$0	\$0	\$1,350	\$1,350
Progress Meetings (Assume 7)								0	\$0	\$0	\$0	\$0	\$4,200	\$4,200
Content and Materials Production	8			16	16			40	\$0	\$4,053	\$1,024	\$0	\$3,200	\$8,277
Public Meetings (Assume 4)	28	20	0	8	0	0		56	\$160	\$8,516	\$5,480	\$0	\$3,600	\$17,596
Stakeholder Engagement								0	\$0	\$0	\$0	\$0	\$10,365	\$10,365
<b>Subtotal - Task 3</b>	<b>36</b>	<b>20</b>	<b>0</b>	<b>24</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>96</b>	<b>\$160</b>	<b>\$12,569</b>	<b>\$6,504</b>	<b>\$0</b>	<b>\$22,715</b>	<b>\$41,788</b>

<b>PROJECT TOTALS</b>	<b>270</b>	<b>56</b>	<b>4</b>	<b>384</b>	<b>292</b>	<b>162</b>	<b>126</b>	<b>1294</b>	<b>\$1,290</b>	<b>\$139,566</b>	<b>\$35,808</b>	<b>\$9,945</b>	<b>\$22,715</b>	<b>\$208,034</b>
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**General:**

The Consultant 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 contained in this Exhibit B states the nature and amount of compensation the Consultant may charge the City.

The Consultant shall be paid on the basis of reasonable time spent and materials used at the rates and prices specified in this Exhibit B for acceptable work performed and acceptable deliverables received. The total fee to be paid the Consultant for Services identified in this Exhibit B shall not exceed \$208,034.00.

All Services are to be performed in accordance with the terms of this professional services agreement.

## DIRECT COSTS SUMMARY

### SNYDER-EDGEWOOD AVENUES AREA STORM WATER IMPROVEMENTS PROJECT CITY OF ANN ARBOR

July 17, 2018

**Northwest Consultants, Inc.**

44978 Ford Road, Suite A

Canton, MI 48187

(734) 454-7566

(734) 454-7536 - Fax

TASK 1 - HYDRAULIC ANALYSIS AND MODELING	DIRECT COST BREAKDOWN				DIRECT COSTS	
	NCI Mileage	SUB CDM Smith <sup>1</sup>	SUB CTI <sup>2</sup>	SUB PI <sup>3</sup>		
Kickoff Meeting	\$40				\$40	
Topographic Survey & ROW Establishment						
Record Research (incl. avail. survey)					\$0	
Fieldwork	\$450				\$450	
Establish alignments and ROW					\$0	
Data processing, Preparing topo drawing & DTM					\$0	
Geotechnical Investigation						
Field Work	\$40		\$3,265		\$3,305	
Lab Study			\$2,080		\$2,080	
Report					\$0	
Utility Coordination						
Record Research (incl. avail. info)					\$0	
Fieldwork coordination	\$40				\$40	
Conflict identification and resolution					\$0	
Utility Meetings (Assume 1)					\$0	
Prepare Model Updates and Alternatives						
Coordinate Models and Alternatives					\$0	
Conflict identification and resolution					\$0	
Prepare Basis of Design Report						
Coordinate Basis of Design Report					\$0	
Conflict identification and resolution					\$0	
Prepare 30% Design Model Analysis						
Coordinate 30% Design Model Analysis					\$0	
Conflict identification and resolution					\$0	
QA/QC					\$0	
Progress Meetings (Assume 5)	\$200	\$240			\$440	
<b>Subtotal - Task 1</b>	<b>\$770</b>	<b>\$240</b>	<b>\$5,345</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,355</b>



## DIRECT COSTS SUMMARY

### SNYDER-EDGEWOOD AVENUES AREA STORM WATER IMPROVEMENTS PROJECT CITY OF ANN ARBOR

July 17, 2018

**Northwest Consultants, Inc.**

44978 Ford Road, Suite A

Canton, MI 48187

(734) 454-7566

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TASK 2 - PRELIMINARY PLANS (30%)	DIRECT COST BREAKDOWN				DIRECT COSTS
	NCI Mileage	SUB CDM Smith <sup>1</sup>	SUB CTI <sup>2</sup>	SUB PI <sup>3</sup>	
Utility Coordination					
Conflict identification and resolution					\$0
Utility Meetings (Assume 1)	\$40				\$40
Right-of-Way and Real Estate Impacts					
Review impacts and limits of work					\$0
Prepare exhibits and descriptions					\$0
Maintaining Traffic Design & Plans					
Conceptual Alternatives					\$0
Critical Path Analysis and Coordination					\$0
Conceptual Approval Meeting (Assume 1)	\$40				\$40
MOT Preliminary Plan Preparation					\$0
Hydraulics/Stormwater Drainage Systems					
Review existing system					\$0
Prepare preliminary facilities design					\$0
Preliminary (30%) Roadway/Utility Design & Plans					\$0
Plan Preparation					\$0
Utility Design (WM & San)					\$0
Preliminary Plan Review Meeting	\$40				\$40
Quantities/Cost Estimate					\$0
Special Provisions					\$0
QA/QC					\$0
Progress Meetings (Assume 5)	\$200				\$200
City of Ann Arbor Review Meetings (Assume 1)	\$40				\$40
Final Submittal/Deliverables					\$0
<b>Subtotal - Task 2</b>	<b>\$360</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>360</b>
TASK 3 - STAKEHOLDER ENGAGEMENT	NCI Mileage	SUB CDM Smith <sup>1</sup>	SUB CTI <sup>2</sup>	SUB PI <sup>3</sup>	DIRECT COSTS
Scoping, Design of CEP					\$0
Progress Meetings (Assume 7)					\$0
Content and Materials Production					\$0
Public Meetings (Assume 4)	\$160	\$120		\$1,000	\$1,280
Stakeholder Engagement					\$0
<b>Subtotal - Task 3</b>	<b>\$160</b>	<b>\$120</b>	<b>\$0</b>	<b>\$1,000</b>	<b>\$0</b>
<b>PROJECT TOTALS</b>	<b>\$1,290</b>	<b>\$360</b>	<b>\$5,345</b>	<b>\$1,000</b>	<b>\$0</b>

**Notes**

1 - See attached CDM Smith Sub-Consultant Fee Proposal for Details

2 - See attached CTI Sub-Consultant Fee Proposal for Details

3 - See attached Project Innovations (PI) Sub-Consultant Fee Proposal for Details

**SUB-CONSULTANT FEE PROPOSAL (CDM Smith)**

**SNYDER-EDGEWOOD AVENUES AREA STORM WATER IMPROVEMENTS PROJECT  
CITY OF ANN ARBOR  
July 17, 2018**

**CDM Smith**

645 Griswold Street, Suite 3770  
Detroit, MI 48226  
(313) 963-1313

NAME	TITLE	CODE	HOURLY RATE
M. TenBroek, PE, BCEE	QA/QC Engineer, PE	QA	\$260.00
J. Zawacki, PE	Sr. Environmental Engineer, PE	SEE	\$174.00
A. Chan, LEED AP	Environmental Engineer 1	EE 1	\$128.00
A. Reeder, PE	Environmental Engineer 2	EE 2	\$130.00

TASK 1 - HYDRAULIC ANALYSIS AND MODELING	HOURS BY PERSONNEL CATEGORY				Total Hours	DIRECT COSTS	TOTAL COST
	QA	SEE	EE 1	EE 2			
Kickoff Meeting		4			4	\$0	\$696
Prepare Model Updates and Alternatives							
Coordinate Models and Alternatives	2	8	36		46	\$0	\$6,520
Conflict identification and resolution		8	36		44	\$0	\$6,000
Prepare Basis of Design Report							
Coordinate Basis of Design Report	2	8	12		22	\$0	\$3,448
Conflict identification and resolution		8	12		20	\$0	\$2,928
Prepare 30% Design Model Analysis							
Coordinate 30% Design Model Analysis		2	12		14	\$0	\$1,884
Conflict identification and resolution		2	12		14	\$0	\$1,884
Progress Meetings (Assume 7)	2	12	12	12	38	\$240	\$5,944
<b>Subtotal - Task 1</b>	<b>6</b>	<b>52</b>	<b>132</b>	<b>12</b>	<b>202</b>	<b>\$240</b>	<b>\$29,304</b>

TASK 3 - STAKEHOLDER ENGAGEMENT	HOURS BY PERSONNEL CATEGORY				Total Hours	DIRECT COSTS	TOTAL COST
	QA	SEE	EE 1	EE 2			
Scoping, Design of CEP					0	\$0	\$0
Progress Meetings (Assume 7)					0	\$0	\$0
Content and Materials Production			8		8	\$0	\$1,024
Public Meetings (Assume 4)	4	16	12		32	\$120	\$5,480
Stakeholder Engagement					0	\$0	\$0
<b>Subtotal - Task 3</b>	<b>4</b>	<b>16</b>	<b>20</b>	<b>0</b>	<b>40</b>	<b>\$120</b>	<b>\$6,504</b>

<b>PROJECT TOTALS</b>	<b>10</b>	<b>68</b>	<b>152</b>	<b>12</b>	<b>242</b>	<b>\$360</b>	<b>\$35,808</b>
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**SUB-CONSULTANT FEE PROPOSAL (CDM Smith)**

**SNYDER-EDGEWOOD AVENUES AREA STORM WATER IMPROVEMENTS PROJECT  
CITY OF ANN ARBOR  
July 17, 2018**

**CDM Smith**  
645 Griswold Street, Suite 3770  
Detroit, MI 48226  
(313) 963-1313

	<b>DIRECT COST BREAKDOWN</b>	
<b>TASK 1 - HYDRAULIC ANALYSIS AND MODELING</b>	<b>Mileage</b>	<b>DIRECT COSTS</b>
Kickoff Meeting		\$0
Prepare Model Updates and Alternatives		
Coordinate Models and Alternatives		\$0
Conflict identification and resolution		\$0
Prepare Basis of Design Report		
Coordinate Basis of Design Report		\$0
Conflict identification and resolution		\$0
Prepare 30% Design Model Analysis		
Coordinate 30% Design Model Analysis		\$0
Conflict identification and resolution		\$0
Progress Meetings (Assume 5)	240	\$240
<b>Subtotal - Task 1</b>	<b>\$240</b>	<b>\$240</b>
	<b>DIRECT COST BREAKDOWN</b>	
<b>TASK 3 - STAKEHOLDER ENGAGEMENT</b>	<b>Mileage</b>	<b>DIRECT COSTS</b>
Scoping, Design of CEP		\$0
Progress Meetings (Assume 7)		\$0
Content and Materials Production		\$0
Public Meetings (Assume 3)	\$120	\$120
Stakeholder Engagement		\$0
<b>Subtotal - Task 3</b>	<b>\$120</b>	<b>\$120</b>
<b>PROJECT TOTALS</b>	<b>\$360</b>	<b>\$360</b>

**SUB-CONSULTANT FEE PROPOSAL (CTI)**

**SNYDER-EDGEWOOD AVENUES AREA STORM WATER IMPROVEMENTS PROJECT  
CITY OF ANN ARBOR**

July 17, 2018

**CTI and Associates, Inc.**  
28001 Cabot Drive, Suite 250  
Novi, MI 48377  
(248) 486-5100

TITLE	CODE	HOURLY RATE
Sr. Engineer, PE	SE	\$140.00
Project Engineer, PE	PE	\$110.00
Staff Engineer	STE	\$90.00
Field Technician	FT	\$50.00

TASK 1 - HYDRAULIC ANALYSIS AND MODELING	HOURS BY PERSONNEL CATEGORY					Total Hours	DIRECT COSTS	TOTAL COST
	SE	PE	STE	FT				
Geotechnical Investigation								
Field Work			10	10	20	\$3,265	\$4,665	
Lab Study			6		6	\$2,080	\$2,620	
Report	4	6	16		26	\$0	\$2,660	
<b>Subtotal - Task 1</b>	<b>4</b>	<b>6</b>	<b>32</b>	<b>10</b>	<b>52</b>	<b>\$5,345</b>	<b>\$9,945</b>	
 <b>PROJECT TOTALS</b>	 <b>4</b>	 <b>6</b>	 <b>32</b>	 <b>10</b>	 <b>52</b>	 <b>\$5,345</b>	 <b>\$9,945</b>	

**SUB-CONSULTANT FEE PROPOSAL (CTI)**

**SNYDER-EDGEWOOD AVENUES AREA STORM WATER IMPROVEMENTS PROJECT**

**CITY OF ANN ARBOR**

July 17, 2018

**CTI and Associates, Inc.**

28001 Cabot Drive, Suite 250

Novi, MI 48377

(248) 486-5100

<b>TASK 1 - HYDRAULIC ANALYSIS AND MODELING</b>	<b>DIRECT COST BREAKDOWN</b>			<b>DIRECT COSTS</b>
	<b>Truck</b>	<b>Drilling Sub</b>	<b>Laboratory Testing<sup>1</sup></b>	
Geotechnical Investigation				
Field Work	\$75	\$3,190		\$3,265
Lab Study			\$2,080	\$2,080
Report				\$0
<b>Subtotal - Task 1</b>	<b>\$75</b>	<b>\$3,190</b>	<b>\$2,080</b>	<b>\$5,345</b>
<b>PROJECT TOTALS</b>	<b>\$75</b>	<b>\$3,190</b>	<b>\$2,080</b>	<b>\$5,345</b>

**Notes**

- 1 - Moisture Content (32 @ \$10/each)
- Atterberg limits (2 @ \$120/each)
- Grain Size w/Loss by Wash (4 @ \$80/each)
- Flexible Wall Permeabilities (3 @ \$400/each)

**SUB-CONSULTANT FEE PROPOSAL (Project Innovations)**

**SNYDER-EDGEWOOD AVENUES AREA STORM WATER IMPROVEMENTS PROJECT  
CITY OF ANN ARBOR**

July 17, 2018

**Project Innovations, Inc.**

22000 Springbrook Avenue, Suite 204  
Farmington Hills, MI 48336  
(248) 476-7577

<u>NAME</u>	<u>TITLE</u>	<u>CODE</u>	<u>HOURLY RATE</u>
T. Newman	Lead Public Engagement Facilitator	LPE	\$150.00
C. Fleetham	Public Engagement Strategist	PES	\$211.00
K. Anderson	Administrative Support	AS	\$50.00

<b>TASK 3 - STAKEHOLDER ENGAGEMENT</b>	<b>HOURS BY PERSONNEL CATEGORY</b>			<b>Total Hours</b>	<b>DIRECT COSTS</b>	<b>TOTAL COST</b>
	<b>LPE</b>	<b>PES</b>	<b>AS</b>			
Scoping, Design of CEP	9			9	\$0	\$1,350
Progress Meetings (Assume 7)	28			28	\$0	\$4,200
Content and Materials Production	8		40	48	\$0	\$3,200
Public Meetings (Assume 4)	16		4	20	\$1,000	\$3,600
Stakeholder Engagement	48	15		63	\$0	\$10,365
<b>Subtotal - Task 3</b>	<b>109</b>	<b>15</b>	<b>44</b>	<b>168</b>	<b>\$1,000</b>	<b>\$22,715</b>
<b>PROJECT TOTALS</b>	<b>109</b>	<b>15</b>	<b>44</b>	<b>168</b>	<b>\$1,000</b>	<b>\$22,715</b>

**SUB-CONSULTANT FEE PROPOSAL (CDM Smith)**

**SNYDER-EDGEWOOD AVENUES AREA STORM WATER IMPROVEMENTS PROJECT  
CITY OF ANN ARBOR  
July 17, 2018**

**Project Innovations, Inc.**  
22000 Springbrook Avenue, Suite 204  
Farmington Hills, MI 48336  
(248) 476-7577

	<b>DIRECT COST BREAKDOWN</b>	
<b>TASK 3 - STAKEHOLDER ENGAGEMENT</b>	<b>Printing/ Travel</b>	<b>DIRECT COSTS</b>
Scoping, Design of CEP		\$0
Progress Meetings (Assume 7)		\$0
Content and Materials Production		\$0
Public Meetings (Assume 3)	\$1,000	\$1,000
Stakeholder Engagement		\$0
<b>Subtotal - Task 3</b>	<b>\$1,000</b>	<b>\$1,000</b>
<b>PROJECT TOTALS</b>	<b>\$1,000</b>	<b>\$1,000</b>

**EXHIBIT C**  
**INSURANCE REQUIREMENTS**

From the earlier of the Effective Date or the Commencement 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 04 13 or current equivalent. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements that 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 Project General Aggregate
\$1,000,000	Personal and Advertising Injury

4. Motor Vehicle Liability Insurance equivalent to, as a minimum, Insurance Services Office form CA 00 01 10 13 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 that 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 for any insurance listed herein.
- 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 and unqualified 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(s); name of insurance company; name(s), email address(es), and address(es) 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 may 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) and all required endorsements 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.