PROFESSIONAL SERVICES AGREEMENT BETWEEN OHM ADVISORS AND THE CITY OF ANN ARBOR FOR CONSTRUCTION INSPECTION SERVICES

This agreement (“Agreement”) is between the City of Ann Arbor, a Michigan municipal corporation, having its offices at 301 E. Huron St. Ann Arbor, Michigan 48104 ("City"), and OHM Advisors, (“Contractor”), a Michigan Corporation, with its address at 34000 Plymouth Road, Livonia, Michigan, 48150. City and Contractor are referred to collectively herein as the “Parties.” The Parties agree as follows:

I. DEFINITIONS

Administering Service Area/Unit means Public Services Area/Engineering Unit.

Contract Administrator means Nicholas Hutchinson, City Engineer, 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 Construction Inspection Services, RFP No. 21-07.

II. DURATION

Contractor shall commence performance on July 1, 2021 (“Commencement Date”) and services shall continue until June 30, 2024, unless this Agreement is 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 Construction Inspection Services ("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 compensation 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. The Contractor shall also comply with and be subject to the City of Ann Arbor policies applicable to independent contractors.

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.

Contractor does not have any authority to execute any contract or agreement on behalf of the City, and is not granted any authority to assume or create any obligation or liability on the City's behalf, or to bind the City in any way.

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.

B. 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 from the Effective Date or Commencement Date of this Agreement (whichever is earlier) through the conclusion of this Agreement, 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 Agreement; 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 (if applicable) necessary to perform the Services pursuant to this Agreement.

C. The Contractor warrants that it has available, or will engage, at its own expense, sufficient trained employees to provide the Services pursuant to this Agreement.

D. The Contractor warrants that it has no personal or financial interest in the Project other than the fee it is to receive under this Agreement. The Contractor further certifies that it shall not acquire any such interest, direct or indirect, which would conflict in any manner with the performance of the Services it is to provide pursuant to this Agreement. Further Contractor agrees and certifies that it does not and will not employ or engage any person with a personal or financial interest in this Agreement.

E. 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. Further Contractor agrees that the City shall have the right to set off any such debt against compensation awarded for Services under this Agreement.

F. 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.

G. The person signing this Agreement on behalf of Contractor represents and warrants that she/he has express authority to sign this Agreement for Contractor and agrees to hold the City harmless for any costs or consequences of the absence of actual authority to sign.

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 below 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:

OHM Advisors
George A. Tsakoff, Principal
34000 Plymouth Road
Livonia, Michigan, 48150

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

City of Ann Arbor
Nicholas Hutchinson, City Engineer
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, 3rd 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 inthe 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.

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 Exhibits A, B, and C, 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. This Agreement may be executed and delivered by facsimile and upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

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 _____
George A. Tsakoff, Principal

Its

Date: _____

FOR THE CITY OF ANN ARBOR

By _____
Christopher Taylor, Mayor

By _____
Jacqueline Beaudry, City Clerk

Date: _____

Approved as to substance

_____
Craig Hupy, Public Services Area Administrator

_____
Tom Crawford, City Administrator

Approved as to form and content

_____
Stephen K. Postema, City Attorney

EXHIBIT A
SCOPE OF SERVICES

1. General

   A. The Contractor understands that there is no guarantee, or implied promise of any nature, that any inspection work at all will be authorized, and that the City is under no obligation to authorize any inspection work.

   B. Construction inspection services will be on an as-needed basis and will cover Private Development and Capital Improvement projects. The Contractor agrees to provide full-time and overtime inspection and up to the minimum number of qualified inspectors identified in its proposal with the anticipation that there may be days that will require multiple inspectors working simultaneously.

   C. Due to the nature of private development work it is not possible to determine the number of inspection requests which may be required under the contract. The City makes no guarantee of a specific number of work requests in soliciting these services.

2. Requirements

   A. Ability to work effectively with the City's engineering staff with respect to any of the construction inspection services required by the City.

   B. Ability to work effectively with the public and the public agencies.

   C. The ability to function in a support role to the Engineering Unit. The Contractor's services will be utilized for the construction inspection activities that exceed the staffing level or the expertise of the Engineering Unit.

   D. The ability to work with private developers, other consulting engineers, builders, contractors, and owners of property to assist and accommodate orderly development within the City while minimizing inconveniences and delays.

   E. The Contractor will demonstrate experience and a working knowledge of private development and public project inspection relative to water main, sanitary sewer, storm sewer, road, and sidewalk construction.

   F. The Contractor will provide invoicing for billing periods ending the fifteenth (15th) and thirtieth (30th) days of each month and submit invoicing within two (2) weeks from the end of the billing period unless otherwise directed and approved by the city.

3. Tasks

A. Supervision and Inspection

Engineering supervision and full-time inspection services shall be provided on all projects assigned to the Contractor. Sufficient personnel as agreed upon by the City shall be assigned to the construction project to assure that each element of the project is constructed in keeping with the plans and specifications approved by the City.

Activities associated with this task will be dedicated to verifying that all materials provided, and work performed is in conformance with the project plans and specifications. Inspector's Daily Reports (IDRs) shall be prepared per the guidelines in Attachment B. Tasks include, but are not limited to:

a) thorough review of the plans and specifications and other project related documents prior to construction startup;

b) daily communication with the City Project Manager/Engineer/Civil Engineering Specialist Supervisor;

c) daily communication with the contractor's supervisor to coordinate inspection activities and to properly inspect, test, measure, and document the work;

d) daily communication with the contractor, advising of needed corrections to ancillary work items, e.g. traffic control and soil erosion control devices;

e) daily communication with the survey crew(s) to obtain proper interpretation of stakes and coordinate daily staking needs;

f) daily communication with testing personnel to properly sample and test the materials and work;

g) attend the weekly progress/planning meetings;

h) inspect materials to be used in the work, verifying they meet the project specifications;

i) monitor, document and notify responsible party(s) of potentially hazardous site conditions relating to construction crew members, motorists and pedestrians, which need to be corrected;

j) document material usage and quantities on the IDR using FieldBook;

k) review/inspect the Contractor's equipment to confirm it meets the project specifications, and document the specific type and amount of equipment used on the IDR;

l) inspect the contractor's workmanship to verify that it meets the methods, tolerances, time requirements, temperature requirements etc., of the specifications, and document this on the IDR;

m) inspect and document that the work is performed and completed to the lines, grades, and elevations required by the project plans and specifications;

n) document the contractor workforce and weather conditions on the IDR;

o) document daily contractor activities, including any description and explanation of downtime, damage to the work, any actions taken by others including private utilities, City forces, adjacent property owners, etc. on the IDR;

p) final measure work as it's done by the contractor, calculate quantities and document this on the IDR or in field books as appropriate;

q) conduct daily review/inspection of temporary traffic control devices and the maintenance of traffic throughout the construction influence area;

r) conduct periodic nighttime review/inspection of temporary traffic control devices and the maintenance of traffic throughout the construction influence area, as needed;

s) provide certified storm water operators and conduct daily inspection of all soil erosion and sedimentation control devices for proper maintenance and effectiveness as placed;

t) perform and document NPDES inspections at the required frequencies; suspend any work and/or reject any materials not conforming to the contract requirements;

u) perform and document wage rate interviews;

v) document changes, extra work, "revisions to" notes etc. on the plans to assist in the preparation of "as built" plans;

w) develop and maintain the project "punch list";

x) keep all needed force account documentation, as required.

The Contractor shall furnish its inspectors with equipment and materials as necessary to properly perform their work. This will include, but is not limited to, laptop computers equipped with FieldBook, cell phones, Michigan Department of Transportation (MDOT) Standard Specifications for Construction, City of Ann Arbor Public Services Department Standard Specifications, MDOT standard plans, a Nikon AP-5 Auto Level with tri-pod legs or equivalent, eye level, right angle prism, plumb bob with gammon reel, 25 foot grade pole, 6 foot level, torpedo level, 24 inch digital level, 100 foot cloth tape, 25 foot steel tape, measuring wheel, pick axe, road point shovel, sledge hammer, paint, first-aid kit, and any other hand tools needed to inspect the work.

Once assigned to the project, inspection personnel will not be removed from, or added to, the project without the written authorization of the City's Project Manager.

B. As-Built Construction Plans

The specific tasks associated with the development of the "as-built" plans include:

a) obtain "original" (electronic format) contract plans from the City;

b) document all plan changes, extra work, "revisions to" notes, etc. as project work progresses;

c) collect and confirm all field changes; develop the appropriate "as- constructed" notes;

d) submit marked up plans, drawings, and notes to the City for use in preparing as-built drawings. Submit this information within one (1) month of project completion and at periodic intervals as directed by the city;

e) at the City's option the Contractor shall develop/draft the "as-built" drawings for review and approval by the city. Provide electronic drawing files to the City on CD or other approved media conforming to the City's Standard Specifications and the Public Services Area/Engineering AutoCAD drafting standards. Provide these files within two (2) months from project completion unless otherwise agreed to by the city.

4. Guidelines for IDR Content

A. Capital Improvement Projects

Prior to the start of a new project, the project manager and the inspector(s) should meet and review these guidelines and how they specifically apply to the project at hand. This conversation should also include the procedural steps for submitting and generating/ungenerating IDRs, and the review of IDRs.

Minimum information for all IDRs:

a) Date
b) Project Name and File Number
c) Project Limits (as necessary)
d) Inspector(s) Name and time spent on the project site(s) that day.
e) Weather conditions throughout the day; temperature range (High and Low), especially if freezing conditions exist. Note any occurrences of precipitation during the work day.
f) A timeline of activities throughout the day, which would include such items as: time contractor arrived; start and end times of any work activities and/or delays/downtime; and time the contractor left the site.
g) Number of pieces of equipment (and specific description) on-site, either stored and/or being used (e.g. Komatsu PC 400 excavator; Case 580 Extend-a-hoe excavator, etc.) for all Contractors on-site. (Note: utilize the "equipment hours" field in Field Manager to keep track of active and inactive equipment.)
h) Specific number of personnel on-site and their labor description for all Contractors on-site (i.e. laborers, foremen, operators, etc.).

i) Specific location(s) where work was performed, for example: “placed 2NS sand subbase from Rd. Sta. 16+40 to 20+00 (Lt.)”
j) Description of material acceptance testing performed. Provide name of representative(s), company that employs them, and the time they arrived and left the site.

In addition to the basic information above, the following detailed information must also be included, depending on the specific work activities occurring:

k) Descriptions of each pay item that is documented for payment including item number, quantity accepted and posted, detailed limits of payment, and material documentation (signed delivery tickets, etc.) used in completing the work.
l) Legible, dimensioned sketches detailing the work being paid that is not clearly shown on the plan.
m) Description of work performed and its limits including:
    - description of soil conditions encountered during the work;
    - description of groundwater conditions, if any;
    - description of the condition of traffic control devices in place and their suitability for service;
    - special safety precautions utilized by the contractor;
    - description of SESC measures in-place or utilized by the contractor;
    - discussion of unsafe working conditions created by the contractor; discussion of unsafe working practices utilized by the contractor;
    - documentation of direction provided to the contractor;
    - documentation of direction received from the Project Engineer and/or the CES Supervisor;
    - documentation of work performed, or direction provided to outside agencies such as city forces, private utility companies, or contractor(s) employed by other agencies;
    - documentation of work (or work practices) being performed by the contractor that is contrary to the specifications;
    - documentation of damage to existing site features caused by contractor forces; include statement(s) regarding city participation, or lack thereof, in repairs, e.g. damage to trees/tree roots, mailboxes, existing curb and gutter, drive approaches, private utilities (gas, fiber, etc.), or private utility service leads, etc.;
    - description/documentation of any unusual site occurrences.
n) Description of information provided, or statements made, by the Contractor that indicate additional payment or time extensions may be sought at a later date. Include any specific responses of which you are aware that were provided to the Contractor in relation to these statements.
o) Description of delays encountered while performing the work or delays or difficulties regarding material deliveries.
p) Description of any unique or noteworthy event that may have occurred on or near the project. For example, a traffic accident that may have occurred within the traffic control of the project; vehicular damage (if you’re aware that it occurred); or any other similar occurrence.
q) Individuals that visited the site including their name and role on, or relating to, the project, and a thorough documentation of any interaction with those individuals, including the public.

r) Description of deviations in the proposed work from the approved plans. Also include the name of the person that authorized the deviation.
s) Document that work was performed in accordance with specifications and details (e.g. for storm sewer, note trench width at pipe, trench bedding depth with proper materials, backfilled with proper material in proper lifts; density checked per specs)
t) Document materials such that all material delivered to the site is from the approved source and is accounted for – if placed, approximately how much; if remaining stockpiled, estimate amount. Materials and quantities reported should reflect daily tickets.

Procedure for submitting & reviewing IDRs

a) IDRs should be completed by the inspector daily (ideally) or at a minimum every 2 days and submitted within two working days from the date the work occurred.
b) When submitted, the IDRs should show up as "generated" in Field Manager.
c) Project Managers (PMs) will review IDRs at a minimum interval of twice a week, depending on the schedule worked out between the PM and the inspector.
d) If there are changes to be made, the PMs will review them with the CES.
e) Changes made to an IDR need to be noted in the comment section with a description of the change, the individual making the change, and the date of change made.
f) The CES Supervisor will review disputed changes with the inspector and the PM. This review will be performed in a timely manner so that the material is still fresh in everyone's memory and is not holding up payments to the contractor.
g) The CES Supervisor will review a sampling of IDRs each week to make sure these guidelines are being followed.

B. Private Development Projects

Prior to the start of a new project, the project manager and the inspector(s) should meet and review these guidelines and how they specifically apply to the project.

Minimum information for all IDRs:

a) Date
b) Project Name and File Number
c) Project Limits (as necessary)
d) Inspector(s) Name and hours spent on the project that day with a breakdown of hours spent on-site, if different.
e) Weather conditions throughout the day; temperature range (Hi and Low), especially if freezing conditions exist. Note any occurrences of precipitation during the work day.
f) A timeline of activities throughout the day, which would include such items as: time contractor arrived; time they started productive work; start and end times of any delays/downtime; time productive work was completed; time the contractor left the site.
g) Number of pieces of equipment (and specific description) on-site, e.g. Komatsu PC 400 excavator; Case 580 Extend-a-hoe excavator, etc. for all Contractors on-site.
h) Specific number of personnel on-site and their labor description for all Contractors on-site (i.e. laborers, foremen, operators, etc.).
i) Specific location(s) where work was performed, for example: "placed 2NS sand subbase from Rd. Sta. 16+40 to 20+00 (Lt.)". Document how work was performed in accordance with specifications and details (e.g. for storm sewer, note trench width at pipe, trench bedding depth with proper materials, backfilled with proper material in proper lifts; density checked per specs)

In addition to the basic information above, the following detailed information must also be included, depending on the specific work activities occurring:

j) Legible, dimensioned sketches detailing intricate piping layouts or unusual circumstances to be included on the as-built markups.
k) Description of work performed and its limits including:
    - soil and groundwater conditions encountered during the work;
    - condition of traffic control devices in place and their suitability for service;
    - if SESC measures need correction
    - unsafe working conditions and note if CES supervisor is notified.
    - direction provided to the contractor;
    - direction received from the Project Engineer and/or the CES Supervisor;
    - work performed by and/or any direction provided to outside agencies such as city forces, private utility companies, or contractor(s) employed by other agencies;
    - work (or work practices) being performed by the contractor that is contrary to the specifications;
    - density testing, or any other material acceptance testing, performed this date.
    - Provide name of density testing company.
    - damage to existing site features caused by contractor forces; include statement(s) regarding city participation, or lack thereof, in repairs. E.g. damage to trees/tree roots, mailboxes, existing curb and gutter, drive approaches, private utilities (gas, fiber, etc.), or private utility service leads, etc.
l) Description of delays encountered while performing the work or delays or difficulties regarding material deliveries. Note information provided or statements made by the Contractor indicating any potential project delays.
m) Description of any unique or noteworthy event that may have occurred on or near the project. For example, a traffic accident that may have occurred within the traffic control of the project; vehicular damage (if you're aware that it occurred); or any other similar occurrence.
n) Individuals that visited the site including their name (if provided) and role on, or relating to, the project, and any interaction with those individuals, including the public.
o) Description of deviations in the proposed work from the approved plans and specifications. Also include the name of the person that authorized the deviation.

<u>Procedure for submitting & reviewing IDRs:</u>

a) IDRs should be completed by the inspector daily (ideally) or at a minimum every 2 days and submitted within two working days from the date the work occurred.
b) When submitted, the IDRs should show up as "ungenerated" in Field Manager.
c) Project Managers (PMs) will review IDRs at a minimum interval of twice a week.
d) IDRs will be reviewed in light of the above IDR Guidelines.
e) If there are minor changes to be made (such as grammatical changes), the PMs can make those changes as they review. More substantial changes should be marked up and discussed with the inspector.
f) CES Supervisor will review disputed changes with the inspector and the PM. This review will be performed in a timely manner such that the material is still fresh in everyone's memory and is not holding up payments to the contractor.
g) CES Supervisor to review a sampling of IDRs each week to make sure this procedure is being followed.

OHM Advancing Communities®

Request for Qualifications (RFP No. 21-07)

Construction Inspection Services

City of Ann Arbor, Michigan

Submitted: Tuesday, February 23, 2021 - 2:00P EST

CONSTRUCTION

February 23, 2021

Attn: Mr. Dave Clemons
City of Ann Arbor
c/o Customer Service 301 East Huron Street
P.O. Box 8647
Ann Arbor, MI 48107

Re: RFP No. 21-07 – Construction Inspection Services

Dear Mr. Clemons,

We understand that the City of Ann Arbor (the City) is committed to providing a high level of ongoing service related to both public works projects and private development across the City. In this regard, we further understand that the City desires as-needed construction inspection assistance within the Engineering Unit of the Public Services Area.

Over the past 10 years and beyond, OHM Advisors has provided various types of civil, environmental, transportation, and general engineering services to various operating units with the City, by providing a well-rounded team of motivated technical professionals through a single point of contact. We propose to continue this structure under this contract with the Engineering Unit for construction inspection services, expanding the breadth of expertise available to the City for private and public construction projects that may be required. Phil Maly would serve as a single point of contact (Project Manager) for this contract, emphasizing the client/consultant relationship that has proved to be successful for this growing partnership between the City and OHM Advisors across various engineering disciplines of the City.

OHM Advisors' approach to providing construction inspection support to the City, as requested in the RFP, is predicated upon our project manager providing an extremely seasoned and readily available team of construction engineering specialists that fully understand the needs of the City related to availability, response time, and expertise. We believe that this approach will allow OHM Advisors to provide high-level on-site support at a moment's notice with redundancy, utilizing the benefit of our Ann Arbor office, with highly talented staff that also live within proximity to City offices and project sites.

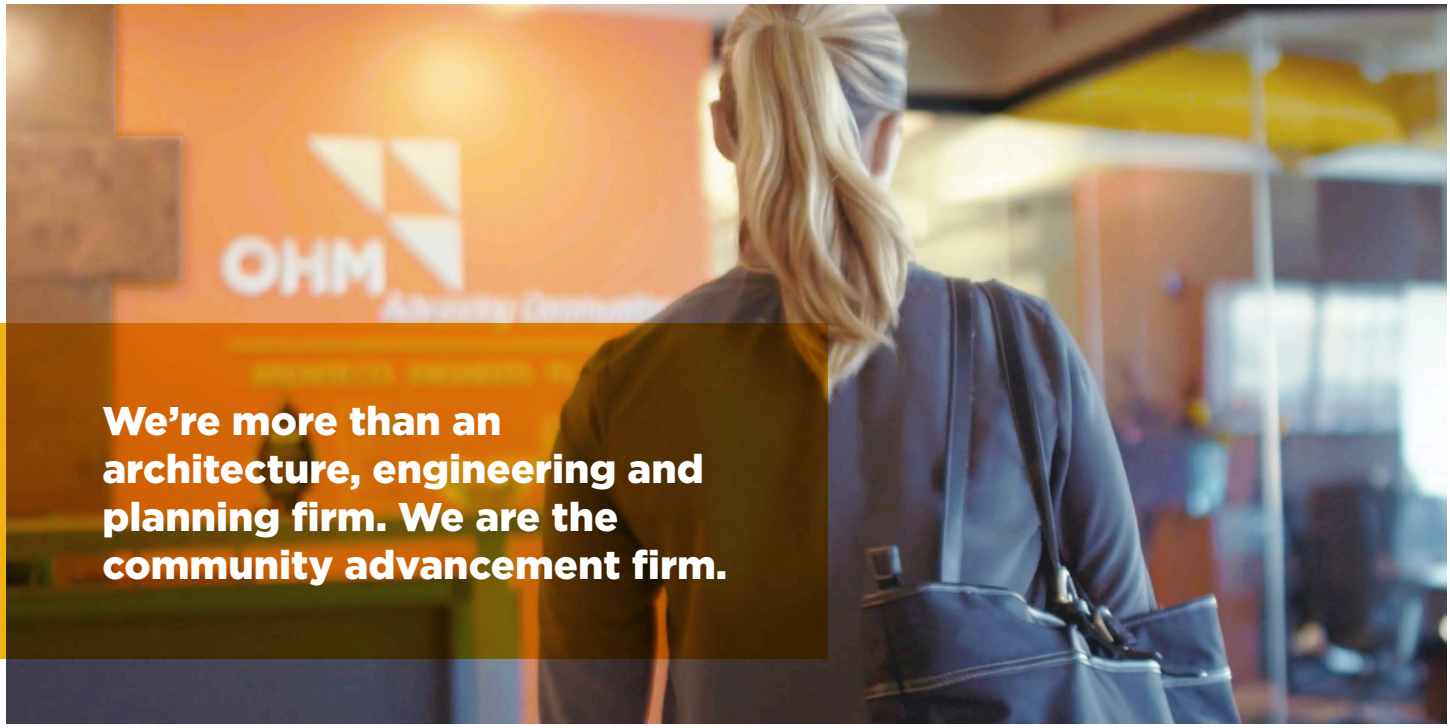
In addition to providing a dedicated single point of contact and supporting team of construction inspectors for this contract, OHM Advisors is committed to providing additional value-added staff that are available to support this contract by providing knowledge, expertise, and familiarity with City processes and construction phase operations. This staff is not meant to provide additional cost to the City, but rather provide added value as part of our overhead operations. Team members such as Cresson Slotten, Gary Smolinski, and George Tsakoff are available as part of our on-going company operations to provide support to the designated OHM Advisors and City team regarding coordination on systems and processes, construction expertise and staffing support, as well as on-going mentorship and training with one goal in mind - furthering the quality of projects and life within the City of Ann Arbor.

We have accomplished a lot together on key projects and on-going contracts over the years, and we intend to continue to serve the City in the same way through this Construction Inspection Services Contact for the Engineering Unit of the Public Services Area.

Sincerely,
OHM Advisors

George A. Tsakoff, *Principal*

Philip Maly, *Project Manager*



We're more than an architecture, engineering and planning firm. We are the community advancement firm.

Who We Are

OHM Advisors was founded in Detroit, Michigan in 1962, with the simple idea to move communities forward by creating extraordinary relationships with our clients. More than 50 years later—with a staff of more than 500 associates—we're still living our mission of Advancing Communities.

The OHM Advisors' team thinks differently. From the way we talk about ourselves and to the way we approach projects to the culture that lives within our office walls, it's clear that our mindset is unique and passion drives our solutions. Advancing Communities is a mission-driven position that means people come first—those we serve and the people they serve. Our growth in recent years has been strategic. We add services and open new offices to serve our clients' needs and help our associates grow in their careers.

Firm Location
We currently have sixteen (16) offices throughout Michigan, Ohio, Kentucky and Tennessee, with our permanent headquarters in our Livonia office.

Project Contract Office
355 S. Zeeb Road, Ann Arbor, Michigan, 48103
t 734.522.6711 **w** ohm-advisors.com

Authorized Negotiator
George Tsakoff, PE, *Principal In Charge*
t 734.466.4439 **e** George.Tsakoff@ohm-advisors.com

Firm Ownership
OHM Advisors is a privately held corporation, incorporated and licensed to operate in the State of Michigan. We are governed by a seven-member Board of Directors and have thirty-nine employee shareholders. Our federal ID number is 38-1691323.

In-House Capacity

34 Architectural Staff Members
27 CADD Technicians
103 Civil Engineers
110 Construction Inspect. & Managers
08 Mechanical & Electrical Engineers
06 GIS Specialists
09 Planners
31 Surveyors
21 Landscape Architects
07 Technicians/Analysts
46 Transportation Engineers
06 Structural Engineers
01 Geotechnical Engineer
43 Water Resources Engineers
66 Administrative Professionals

What We Do

We perform the following services in-house, and have solid relationships with partners to provide additional needed services.

Engineering

Municipal
Transportation and Traffic
Stormwater
Wastewater
Drinking Water
Mechanical and Electrical

Architecture

Design and Documentation
Facility Evaluation and Master Planning
Capital Improvement Planning
BIM, Modeling

Surveying

Topo, ROW, Land, Road
Hydraulic, Bridge
Boundary, Geodetic Control
GIS and GPS
Construction Staking

Urban Design

Parks and Public Places
Streetscapes, Gateways, Trailheads
Athletic and Recreation Facilities

Planning

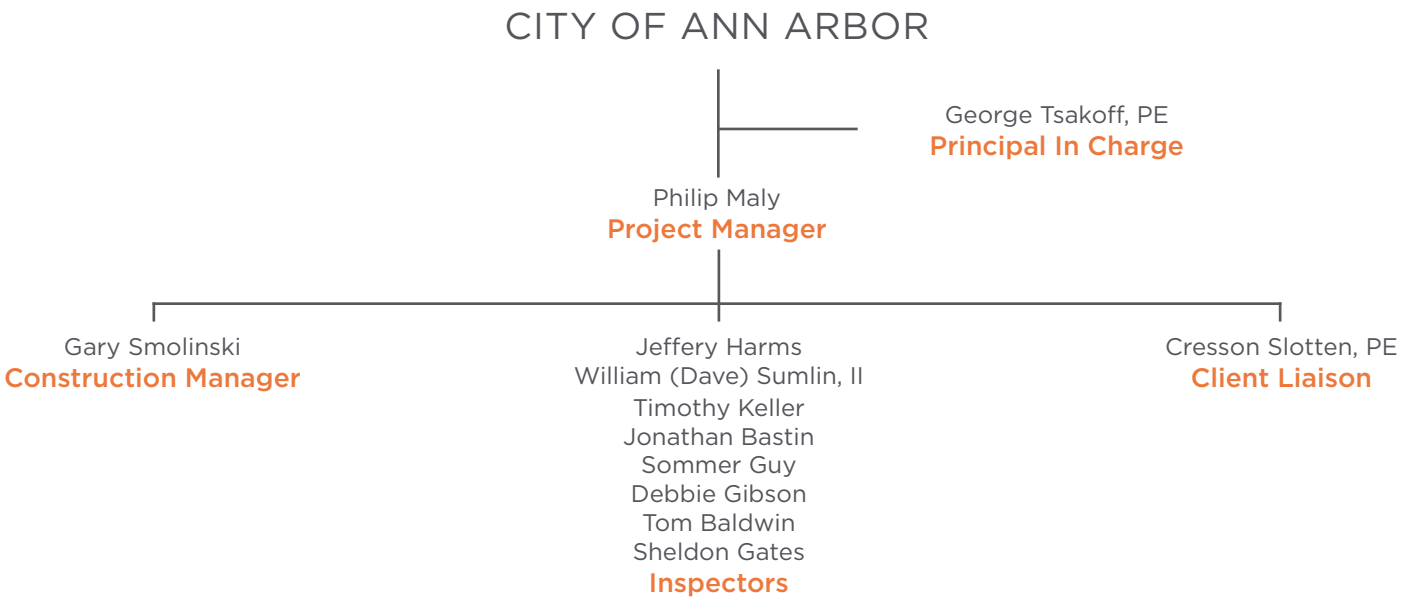
Community
Land Design and Documentation
Private Development

Construction Engineering

Administration
Inspection
Engineering

Our People

OHM Advisors attests to the fact that the key personnel provided within this proposal have adequate availability to provide the services as outlined in this document. In addition to the key staff that will support the project directly, we have over 500 professionals firm-wide to provide as-needed support to our clients.



GEORGE TSAKOFF, PE

PRINCIPAL IN CHARGE

Education

- Master of Science in Civil Engineering, Wayne State University, 2013
- Bachelor of Science in Civil Engineering, Michigan State University, 1998

Experience

With OHM since 2013
15 years prior experience

Professional Registration

Professional Engineer:
MI, 2013, #6201060848

Professional Affiliations

- Chi Epsilon, National Civil Engineering Honor Society
- American Water Works Association (AWWA)
- American Public Works Association (APWA)

As a Principal in OHM Advisors Municipal Services Group, George's responsibilities include general municipal consultation, construction services oversight, engineering analysis, design, and contract document preparation for a wide array of municipal improvement projects. George works on projects from start to finish, preparing construction plans, contract documents, and detailed specifications, as well as assisting with bidding and construction phases. He also has extensive background with design and construction of water distribution and transmission systems, wastewater systems, storm drain and open channel drainage systems, shared-use pathways, and municipal building facility sites. Additionally, George has managed projects across various disciplines within OHM Advisors, including construction services. This background is critical to oversight of engineering and construction professional services contacts for local municipalities.

Select Relevant Experience

2021 & 2019 Street Light Replacement Programs, City of Ann Arbor, MI (2019, 2021)
Principal-in-Charge for the preparation of contract documents related to light pole and fixture replacement for approximately 225 total light poles (between both contracts) in the downtown and residential neighborhood areas throughout the City. These projects are part of a recurring light pole CIP to implement findings from the City's asset management system, which was previously created with OHM Advisors under a separate project.

Landfill Scale CA/CE, City of Ann Arbor, MI (2020)
Principal-in-Charge for the construction administration and construction engineering related to the installation of a truck scale at the location of the solid waste facility from Platt Road. OHM's professional services included only construction administration and engineering, as the design services were provided by others. OHM's services included daily site inspection, construction administration, and overseeing geotechnical services.

Northside Interceptor Condition Assessment, City of Ann Arbor, MI (2018)
Project Manager for the preparation of contract documents related to the condition assessment of approximately 4 miles of 78-inch pipe from an upstream location near the U of M Hospital, downstream to the City wastewater treatment plant. The condition assessment included laser scanning and sonar by a Contractor to evaluate the structural and I/I condition of the interceptor along this route. Once the condition assessment was completed, OHM provided further analysis regarding the data.

Thirteen Mile Road, Drake Road to Farmington Road, City of Farmington Hills, MI (2017)
Project Manager for contract documents related to one mile of cold milling and HMA resurfacing, pavement widening for a continuous 3-lane section, new bike lane, new curb & gutter, ADA-compliant sidewalk ramps, enclosed drainage, 1500 feet of new sanitary sewer, signing, pavement

Select Relevant Experience Continued

markings, pedestrian pushbuttons at the Mayfair Drive traffic signal, and maintaining traffic. The project also included replacement of the Minnow Pond Drain culvert with a new 10-foot by 8-foot precast concrete box culvert. This project was bid through MDOT's Local Agency Program.

Mack Pool Building Structural Recommendations, City of Ann Arbor, MI (2016)
Project Manager for the OHM Advisors structural engineering technical team tasked to evaluate structural cracking in the existing block wall at the Mack Pool facility in Ann Arbor. This effort includes a site evaluation, reviewing past recommendations from a previous engineer, recommending structural upgrades to the walls at the facility, and assisting the City with budgeting and implementing these improvements.

Briar Hill Subdivision Road Reconstruction, City of Farmington Hills, MI (2016)
Project Manager for the design and engineering related to the reconstruction of local roads within the Briar Hill Subdivision located west of Orchard Lake Road and north of 10 Mile Road, as part of a Special Assessment District. This road has significant pavement deterioration and was in serious need of reconstruction for the residents. OHM Advisors was responsible for the design and engineering efforts related to full cross section reconstruction and drainage treatment improvements where applicable to improve the functionality of the roadway system.

Veteran's Park Pool Chiller Unit Replacement, City of Ann Arbor, MI (2016)
Project Manager for the OHM Advisors mechanical engineering technical team tasked to design a replacement unit for an outdated chiller unit at the ice rink facility Veteran's Park in Ann Arbor. This effort included specifying the new chiller unit, providing specifications, as well as providing recommendations for associated structural upgrades for the roof top chiller unit support system and railings.

Hamlin Road Water Main Replacement, City of Rochester Hills, MI (2015)
Lead Municipal Engineer for the engineering, design, permitting, and special provisions related to approximately one mile of 16" water main replacement along Hamlin Road, and for extending 8" water main along Crestline Road, north of Hamlin Road. This water main replacement project was part a larger MDOT road replacement project being designed by OHM for the City. Water main replacement includes new 16" ductile iron pipe to replace existing 16" asbestos concrete pipe, and associated gate valves & wells and hydrants. Residential water services along Hamlin Road are also being replaced as part of the project, as well as connections to intersecting 12" and 8" local water mains to the north and south of Hamlin Road for intersecting local roads.

DWRF Water System Improvements, City of Livonia, MI (2015)
Lead Municipal Engineer for the engineering, design, permitting, DWRF Administrative coordination, and Specifications related to approximately nine miles of water main replacement within Sections 34 and 36 of the City. This water main replacement project was part of the 2015 DWRF funding for City of Livonia, and totals approximately $9,000,000 in construction value. The project consists of the replacement of existing 6" water main with new 8" HDPE water main. A majority of the project will be constructed by the directional boring (horizontal drilling) method of installation to preserve surface features of the established neighborhoods and minimize overall disruption. Residential water services are being replaced as part of the project, as well as the installation of new gate valves & wells and hydrants.

PHILIP MALY

PROJECT MANAGER

Education
Associate of Arts in Civil Engineering Technology
Schoolcraft College, 1976

Experience
With OHM since 2018
39 years prior experience

Certifications
- MDOT, Bituminous Paving
- MDEQ, Stormwater Management – Construction Site
- MDEQ, SESC Part 91
- First Aid / CPR
- OSHA Confined Spaced Entry Training

Professional Development
- ISCO Industries, Heat Fusion Techniques
- Midwest Society for Trenchless Technology, Trenchless Technology Symposium

Phil has over 40 years of experience involving construction engineering, construction management, and surveying. Phil began as a survey party chief for Ayres, Lewis, Norris and May (ALNM) in 1978. He completed topographic, boundary and construction staking for bridge projects, dams, water and wastewater facilities, sanitary sewers, water mains and roads. In 1998, Phil transferred into the construction services group as a field client representative, managing construction inspection staff and municipal construction oversight needs.

Phil assumed the role of Interim Utilities Director for Pittsfield Township from 2003-2005. As Interim Director, he managed a 12-man utility staff, managed customer billing for water and sewer, oversaw system repairs and emergencies including the Northeast power blackout of 2003. He also coordinated the repair of all equipment, nine sewer pump stations, two-water booster stations and an elevated water tank.

From 2006-2018, Phil performed as Field Services Department Manager at Stantec (through acquisition of ALNM) which involved managing and coordinating all survey and construction observation duties. During this time, Phil's responsibilities expanded to cover projects for the oil and gas industries.

Select Relevant Experience

Field Services Contract, Charter Township of Northville, MI (Ongoing)
Currently the Field Client Representative for all field services related to capital improvement projects (CIPs) and site development projects within the Township. This includes contract administration of CIPs, and construction management of projects related to residential, commercial, and industrial developments, including grading, utility, and road construction. In addition, this effort requires supervision and oversight of OHM on-site inspectors, training of staff, coordination with Township staff, and communication with contractors and the owner.

South University Pavement and Utility Improvements, Ann Arbor, MI (2020)
Coordinated and managed inspection/field engineering effort for a joint project between the City of Ann Arbor and the University of Michigan AEC. Oversaw and verified the accuracy of construction components, required testing, ADA compliance of concrete ramps and sidewalks and all underground sanitary, water main, storm sewer, electric, steam, communication and some gas. Aided in the resolution of utility conflicts and design conflicts. Coordinated traffic control adjustments, parking adjustments and pedestrian movement as necessary in the work zone. Assured material conformance to the specifications, conducted an HMA pre-paving meeting and coordinated all HMA paving activities. Provided on site staking as necessary to supplement construction as needed. Provided inspection as necessary to accommodate time off for the on-site OHM field engineer. Worked with business, delivery, mail and school personnel as needed to keep local activity flowing during construction. Provided on site technical support for GPS of infrastructure, record drawing review, punch list creation and follow up, attended punch list walkthroughs in the field. Observed all CDC, University and City guidelines with respect to Covid 19 throughout the project.

Select Relevant Experience Continued

Washtenaw Ave CDBG Sidewalk Gap, Ypsilanti Township (2019)
Managed the construction layout, construction observation and Construction Engineering for the construction of new concrete walk, re-habilitation of existing walk, commercial entrance drive re-construction, commercial parking lot re-construction, new bus stop and signaled pedestrian crossings over Washtenaw Avenue from Golfside Road east to the Ypsilanti City limits. Conducted pre-con and progress meetings, consulted and advised the county and MDOT during construction. Reviewed shop drawings and material certifications provided by the contractor, resolved field conflicts, evaluated and implemented design changes and coordinated and assisted with resident and business communications and complaints. Assisted the county in the review and processing of payments and change orders, performed preliminary and final punch list walkthroughs and facilitated closeout with the County and MDOT.

Field Services Contract, Pittsfield Charter Township, MI (1998 – 2018)*
Previously served as the Field Client Representative for all field services related to capital improvement projects (CIPs) and site development projects within the Township. This included contract administration of CIPs, and construction management of projects related to residential, commercial, and industrial developments, including grading, utility, and road construction. In addition, this effort required supervision and oversight of on-site inspectors, training of staff, coordination with Township staff, and communication with contractors and the owner.

Field Services Contract, Ann Arbor Charter Township, MI (1998 – 2018)*
Previously served as the Field Client Representative for all field services related to capital improvement projects (CIPs) and site development projects within the Township. This included contract administration of CIPs, and construction management of projects related to residential, commercial, and industrial developments, including grading, utility, and road construction. In addition, this effort required supervision and oversight of on-site inspectors, training of staff, coordination with Township staff, and communication with contractors and the owner.

Macon Road Bridge Replacement and Hydraulic Analysis WCWRC (2018)
Field Services Manager for the replacement of the existing bridge on Macon Road over the Cammett-Luckhardt Drain. The existing bridge was in poor condition and was closed to traffic, and the existing drain had excessive sedimentation build up. A culvert was designed to replace the existing bridge to convey the flow and the drain was cleaned out. The project included a full hydraulic analysis, including flow determination on these drains. OHM was responsible for the construction plans, estimate, and bidding documents as well as the construction administration and engineering.

Nixon Farms Development, City of Ann Arbor MI (2017)*
Located near the intersection of Nixon/Green/Duh varren Roads. This project was a two-phase multifamily and single-family development on the north side of the City of Ann Arbor, started in 2017. Provided coordination of personnel needed for the inspection of underground sanitary sewer, water main and storm sewer as needed throughout the duration of the project. Also coordinated the testing of portions of the sanitary sewer and water main testing as well as paving activities. Challenges included traffic control on Duh varren Road during the simultaneous construction of the Nixon Road and Duh varren roundabout project, working in close proximity to local wetlands, and controlling contractor activities with respect to local noise ordinance, soil erosion and safety regulations.

Easy Street Road Reconstruction; City of Ann Arbor, MI (2010)*
Field Services Manager of construction for the complete reconstruction of Easy Street including water main, storm sewer and street work. Coordinated all meetings, inspectors, testing and punch list activities for this project. Prepared record set documents for delivery to the City. Processed payments and pay request applications from the contractor.

**Completed prior to OHM Advisors*

GARY SMOLINSKI

CONSTRUCTION MANAGER

Education
Associate of Applied Science in Concrete Technology, Alpena Community College, 1986

Experience
With OHM since 1989
3 years prior experience

Certifications
- Troxler Operator
- ACI, Concrete Technician Level II
- MCA, Concrete Technician, Level II
- MDOT, FieldManager
- MDOT FieldBook

Professional Affiliations
Midwest Society for Trenchless Technology, Officer and Board Member, Treasurer, 2014 to Present

Professional Development
- NASTT 2019 No-Dig Show, Trenchless Technology Center, Louisiana Tech University
- Structural Liners & High Build Coatings attended 06/14/17
- Successfully completed the Michigan Public Service Institute (MPSI), Central Michigan University, 2005-2007
- Construction Safety - The Roles, Responsibilities and Control of Hazards for the Consulting Engineer, ACEC/M, 2005

Gary Smolinski, construction manager at OHM, has over 30 years of experience in the construction of infrastructure projects in southeast Michigan. He has been involved in the construction of hundreds of municipal and MDOT LAP projects which include major roads, bridges and large diameter sewers and water projects. On MDOT LAP projects, Mr. Smolinski assists the project engineer and serves as the liaison between the field staff and the project engineer. He ensures that projects are completed, from the preconstruction meeting through the final pay estimate, according to MDOT and community standards and procedures. He is responsible for staffing and scheduling for the as-needed contracts of multiple communities throughout SE Michigan, and assisting the Project Engineer/Field Technician to coordinate staffing and work with the contractor to resolve as many issues as possible throughout the course of the projects, reviewing material testing reports as work progresses, coordinating material laboratory testing and construction staking requests, and communicating with the lead field inspector and office technician daily to review current items.

Mr. Smolinski's recent project oversight experience has been focused on both Municipal Capital Improvement and private development projects. Mr. Smolinski knows the importance of understanding and applying each community's Standard Specifications, procedures, and processes. He understands the nuances of traffic control and knows how to manage construction issues. He understands that project budgets and schedules need to be maintained and that citizen complaints, along with contractor claims, must be addressed in a timely manner. He and his staff understand the responsibility for resolving contractor claims and working with the local government officials to resolve project issues promptly before they become major issues and before they have a negative impact on a project. Under his management, engineers and technicians supervise and document all aspects of project construction – including material and workmanship quality, construction estimates, progress reports, and compliance with local, federal, and state requirements.

Select Relevant Experience

Litchfield Road Reconstruction (SAD) Plymouth Township, MI (2020)
Construction Coordinator responsible for staffing and scheduling for the reconstruction of Litchfield Road and Court under the jurisdiction of Wayne County, located in a residential neighborhood of the Plymouth Notch Subdivision between Ann Arbor Trail and Ann Arbor Road, east of McClumpha Road. The existing concrete roadway had considerable pavement failures throughout the neighborhood. The project consisted of replacing the existing concrete road with 7" of concrete over 6" of 21AA aggregate over an approved sub-grade for the 27'-wide roadway. The project also included the installation some new storm sewer, along with the installation of new edge drain on both sides of the road for improved sub-grade performance.

General Drive Reconstruction (SAD) Plymouth Township, MI (2019)
Construction Coordinator responsible for staffing and scheduling for the reconstruction of General Drive, located in an industrial park under the jurisdiction of Wayne County between

Select Relevant Experience Continued

Joy Road and Ann Arbor Road, west of Haggarty Road. The existing concrete roadway had considerable pavement failures throughout the industrial park. The project consisted of replacing the existing concrete road with 10" of concrete over 9" of 21AA aggregate over an approved sub-grade for the 27'-wide roadway. The project also included the installation of new edge drain on both sides of the road for improved sub-grade performance.

Smith Road & Vining Road Rehabilitation, City of Romulus (2020)
Construction Manager for the rehabilitation of two existing concrete roads in the City of Romulus. Smith Road from Vining Road to Merriman Road and Vining Road from Wick Road to Smith Road. All concrete patching, full-depth joint repairs, and joint/crack sealing was done in accordance with applicable requirements of the City of Romulus, Wayne County Department of Public Services, the Michigan Department of Environment Great Lakes and Energy (EGLE), and the Michigan Department of Transportation. This contract included Special Provisions for unique pay items and all other pay items following the 2012 Michigan Department of Transportation Standard Specifications for Construction.

Ecorse/Vining Road Improvements, City of Romulus, MI (2018)
Construction Manager for the construction oversight of one mile of a Wayne County Class A Primary Road. The project included the removal of the existing two-lane roadway and replacing it with a three-lane 10" concrete road with new storm system, four signal designs, and substantial auxiliary lanes to serve future development of this area. The project was construction in conjunction with Wayne County standards and Specifications with the final package approved by WCDPS.

Ecorse City Subdivision & Olive Street WM Improvements, City of Romulus, MI (2017-2018)
Construction Manager for this project that included the preparation of plans, specifications, and permits for two miles of water main replacement using pipe bursting and directional drill technologies. The planned improvements consisted of replacing the entire water system, including the pipes, hydrants, valves, and water services. The plans for this project were prepared using extensive GIS data, aerial imagery; city provided record drawings and franchise utility information.

Goddard Road Reconstruction, City of Romulus, MI (2015-2017)
Project manager on this MDOT/LAP road reconstruction project of Goddard Road between Romaine and Wayne Roads. The roadway reconstruction operations was performed, following the MDOT Local Agency Programs (LAP) procedures, to replace all existing pavement, curbs, sidewalks and traffic signals at Shook Road and Wayne Road. In addition, the intersection with Wayne Road, which is under the jurisdiction of Wayne County, was replaced due to age, poor conditions and inadequate capacity. The City of Romulus DDA is funding a streetscape project within the downtown area that will require close coordination to ensure the two designs mesh with each other. The streetscape incorporates decorative signing, lighting enhancements, landscaping, planter boxes, seat walls, decorative benches and trash receptacles as well as decorative sidewalks and cross walks. The project includes other aspects of construction including RR coordination and upgrades, historic clearance through the State Historic Preservation Office (SHPO), ROW acquisition, water main replacement, maintenance of traffic, pavement marking and signing, on-street parking, drainage upgrades, and ADA sidewalk ramps.

2014 DWRF Watermain Replacement, City of Livonia, MI (2015)
Client Representative overseeing the construction of a $4M project to replace approximately 4 miles of aged and under-sized water mains. The project was constructed utilizing a combination of open-cut and horizontal directional drilled pipe installation to cost effectively minimize impacts to neighborhoods. The project was completed by August to allow adequate time for the paving work behind the project to be finalized and was competed under budget.

CRESSON SLOTTEN, PE

CLIENT LIAISON

Education
Bachelor of Science in Civil Engineering, University of Michigan, 1986

Experience
With OHM since 2021
34 years prior experience

Professional Registration
Professional Engineer:
- MI, 1993 #6201038784

Professional Affiliations
- Chi Epsilon, National Civil Engineering Honor Society
- American Water Works Association (AWWA)

As a member of OHM Advisors' Municipal Services Group, Cresson Slotten is utilizing his substantial and diverse experience gained from a 33+ year career with the City of Ann Arbor, Michigan in their engineering, systems planning and public works groups, including seven years as the City's Systems Planning Unit Manager, on a variety of civil and municipal projects for multiple OHM Advisors clients. His significant background in private development reviews and construction oversight, as well as capital improvement project design, bidding and project management is beneficial on both private and publicly funded infrastructure projects for various communities.

Cresson's experience in strategic and technical infrastructure planning, including master planning, capital improvements planning/programming and infrastructure asset management across municipal utilities, transportation and solid waste systems will assist communities and agencies with both their short-term and longer-view strategies and visions.

Some of the local communities and agencies that Cresson has worked with over the years, as well as now with OHM Advisors, include: the City of Ann Arbor; Washtenaw County Water Resources Commissioner's Office and Department of Public Works; Ann Arbor DDA; University of Michigan; Michigan Department of Transportation; SEMCOG; Washtenaw Area Transportation Study (WATS); Ann Arbor Area Transportation Authority (AAATA); Washtenaw Regional Resource Management Authority (WRRMA); Pittsfield Charter Township, Ann Arbor Charter Township, Scio Township, Superior Township, and the Charter Township of Northville among others.

Select Relevant Experience

Clark Road Pump Station Improvements, Superior Township, MI (2021)
Assisting with management of this project to replace an existing pre-manufactured "can" station installed in 1969 with a new relocated pump station building and wet well, including over 700 feet of new 12-inch and 18-inch gravity sanitary sewer utilizing trenchless installation.

2021 Street Light Replacement Program, City of Ann Arbor, MI (2021)
Assisting with design development for preparation of contract documents for the replacement of light poles and fixtures in the downtown and along major roadways throughout the City. This project is a recurring light pole CIP to implement findings from the City's asset management system, which was previously created with OHM Advisors under a separate project.

Solid Waste Resources Management Plan, City of Ann Arbor, MI (2018-2019)*
Project Manager for the development of the City's plan, including scoping of the project, procurement and selection of consultant team and City lead throughout the public engagement and plan development process. This effort, which had over sixty participants on its advisory committee, resulted in the plan that optimizes resources, mitigates financial and operational risk, and improves customer service.

Select Relevant Experience Continued

The Treeline – Allen Creek Urban Trail Master Plan, City of Ann Arbor, MI (2015-2017)*
Member of the Project Management Team that was responsible for providing direction on project decisions and coordinating the entire master plan process. This element of the City's Master Plan lays out the plan for the Treeline, formerly known as the Allen Creek Greenway, as an urban trail and improvements to the Allen Creek floodplain connecting City-owned properties, neighborhoods, and downtown businesses to the regional Border-to-Border trail (B2B Trail) and the Huron River.

Sanitary Sewer Wet Weather Evaluation Project, City of Ann Arbor, MI (2013-2015)*
Member of the project management team providing guidance on the project; provided background and insight on the City's sanitary collection system; participated in, and assisted with the community engagement efforts; and, provided review and QA/QC of project materials and deliverables. This project, which OHM Advisors performed for the City, evaluated the effectiveness of the City's 11-year long Footing Drain Disconnection (FDD) Program to reduce wet weather impacts in the sanitary system through flow metering, FDD effectiveness evaluation, hydrologic modeling, hydraulic modeling, capacity assessment, alternative evaluation, and an extensive public engagement program.

Stormwater Model Calibration and Analysis Project, City of Ann Arbor, MI (2012-2015)*
Member of the project management team providing direction and guidance on the project; provided background and insight into the City's stormwater management system; participated in, and assisted with the community engagement efforts; and, provided review and QA/QC of project materials and deliverables. This project developed a calibrated validated computer model of the entire City of Ann Arbor stormwater system, to analyze the existing system's performance to determine its current level of service and to recommend improvements to the stormwater system.

Capital Improvements Plan/Program Lead, City of Ann Arbor, MI (2003-2011)*
Developed, guided, and managed the City's collaborative, prioritized and data-based approach to capital improvement planning. Working with thirteen Asset Category Teams consisting of planning, engineering and operational staff and some key outside stakeholders, and utilizing GIS-based asset inventories and condition data along with a prioritization model tool, assembled and formed the City's 6+ year Capital Improvements Plan (CIP), every other year, and adjusting the plan in the intervening year. This included adoption of the CIP by the Planning Commission and utilization of the CIP in the creation of the recommended 2-year Capital Projects Budget for City Council approval.

Engineering Division Private Development Team Leader, City of Ann Arbor, MI (1990-2003)*
Led the City Engineering Division's role in private development and other non-City funded infrastructure projects, overseeing a team of engineers in site plan and engineering plan reviews and construction oversight for these projects. Also oversaw and supervised the team's design, bidding and project management of various City infrastructure projects including utility extensions and replacements, road reconstruction, and sidewalk and bike path construction.

**Completed prior to OHM Advisors*

JEFFREY HARMS

CONSTRUCTION INSPECTOR

Education
Bachelor of Science in Construction Management Eastern Michigan University, 2005

Experience
With OHM since 2019
20 years prior experience

Certifications
- Asset Management Planning
- USDOL, OSHA Authorized Construction Safety Trainer
- USDOL, 30-Hour OSHA Construction Safety
- USDOL Soil Conservation Technician
- MDEQ, Storm water Management – Construction Site Operator
- MDEQ, Storm water Management – Industrial Site Operator
- First Aid / CPR
- OSHA Confined Spaced Entry, Attendant, and Rescue Training

Professional Development
- Michigan Public Service Institute graduate

Jeff joined OHM Advisors in 2019 and has over 20 years of experience involving Storm water construction engineering, construction management, maintenance, and lake level operations. Jeff began as an Inspector for the Washtenaw County Drain Commissioner in 1997. His job included inspection and analysis of proposed and existing storm water systems, lake level monitoring and operations; project management including bid specification, timelines, cost estimation, site design, hiring subcontractors, monitoring project budgets, inspection punch lists, basic surveying; permit inspection; operation of power equipment; liaison between Water Resources and other county offices, i.e., Parks & Recreation, Environmental Health Regulation, Building Inspection and the Sheriff's Department; environmental response; Drain Code enforcement; database maintenance of all county drains; preparation and presentation of reports for Boards of Determination; consultation of county residents with information on drainage issues. Special projects for the office include management of biological control program, head of accounting system procurement team, Apprenticeship Committee, and Chair of the Zeeb Road Safety Committee.

Jeff assumed the role of Director of Field Services from 2003-2017. As Director he facilitated maintenance of approximately 500 county drains, responsibilities included financial oversight of service contracts, bids, staff billing and division revenues and expenses; fleet management and equipment acquisition; human resources; staff training, evaluation and timekeeping; operations and project management; emergency response operations for flooding and hazmat situations; lake level monitoring and management; Drain Code and permit compliance for the storm water maintenance programs, projects, and field personnel related to county drains; and represented the Water Resources Commissioner's Office at the Local and State Level. Jeff was also responsible for the oversight of the staff apprenticeship program with the U.S. Department of Labor.

Select Relevant Experience

South University Pavement and Utility Improvements, City of Ann Arbor, MI (2020)
Constructor Inspector and onsite owner's agent for a joint project between the City of Ann Arbor and the University of Michigan AEC. Checked grades, clarified plans and specifications, inspected completed work, and recorded and verified daily quantities, reviewed payment applications. Communicated with OHM project manager regarding changes, issues, and billing. Inspection encompassed infrastructure demolition, repair and/or placement of the following components: steam lines and tunnels, flowable fill tunnels, tunnel caps, water mains, hydrants, water sampling, water main pressure testing, electrical duct banks, electrical vaults, concrete sidewalks, and driveway approaches, seat walls, flagstone walkways, brick and granite walkways, curb and gutter, storm water catch basins, manholes, infiltration beds and pipes, line televising, sanitary pipe lining, manhole reconstruction, asphalt road, street lights and pedestrian crossings, ADA compliance, bus stops, tunnel waterproofing, directional drilling, pipe boring, signs and sign bases, site restoration, change order review, documenting daily quantities, GPS of infrastructure, record drawing review, punch list creation and follow up.

Select Relevant Experience Continued

Majestic Lakes Development,
City of Ypsilanti, MI (2019-2020)
Construction Inspector on this private development project for the installation of water main, water sampling, pressure testing, storm water pipe and infrastructure installation, GPS of infrastructure, punch list preparation and final inspection.

Storm Water Rules Pilot Audit,
Scio Township, MI (2019-2020)
Reviewed plans, inspected, and reported on the condition and functionality of select existing storm water retention/ detention systems for Washtenaw County Water Resources.

Dexter Pedestrian Mobility Project,
City of Dexter, MI (2019)
Construction Inspector responsible for coordinating construction activities daily. Also verified grades, clarified plans, inspected completed work, and tracking quantities. Kept contractors on schedule and within budget. Regularly communicated with citizens and client regarding issues and questions. Monitored work site for safety and proper contractor follow up.

Streetlight Replacement CIP, City of Ann Arbor, MI (2019)
Construction Inspector that facilitated scheduled street light replacements with contractor throughout the city, based on conditional assessment. Inspected completed work and verified quantities. Pre-assessed locations, and conferred proper locations to contractor, and facilitated communications to resolve issues and questions. Provided updates on scheduling and progress.

Implementation of Water Resources Field Services City Works Program, Washtenaw County, MI (2014-2017)*
Implemented the conversion of records to an asset management based City Works System. Established procedures for record keeping, assessing, and follow up of work orders. Implemented projected costs and schedules for future projects in selected areas. Communicated with local officials regarding expenses, costs, and future projects. Provided quality control, oversight, and guidance to staff utilizing the system.

Water Resources County SAW Grant,
Washtenaw County, MI (2014-2017)*
Oversaw field operation activities to conduct inspections of select urban systems in regards to a county wide drain SAW grant. Provided program design, staffing, logistics, coordination, review, planning, estimating, record keeping, reporting, and budget monitoring. Installed a system for future asset management and proactive maintenance. Provide detailed records of activities for grant funding.

Saline River Area SAW Grant,
Washtenaw County, MI (2014-2017)*
Manage field activities related to the SAW Grant award including inspection processes, scheduling, coordinating equipment and personnel, reporting, analysis, recommendations, and estimating. Provide detailed records of activities for grant funding.

MDEQ General Permit Management,
Washtenaw County, MI (2013-2017)*
Review drain maintenance projects for compliance under the Water Resources General Permit with MDEQ. Apply for and manage permits as needed, and coordinate inspections and review with MDEQ.

****Work completed prior to joining OHM Advisors.***

WILLIAM (DAVE) SUMLIN, II

CONSTRUCTION INSPECTOR

Education
Coursework in Electrical Engineering, Oakland University, 1982-1984

Experience
With OHM since 1989

Certifications
- OSHA 10-Hour Safety Training
- ACI Concrete Field Testing Tech, Grade 1, expires 03/09/2022
- MDOT, HMA Paving Operations, expires 02/28/2022.
- OSHA, Confined Space Entry, 2006
- MDOT, Office Management Procedures, 1995
- MCA, Concrete Testing Certification, 2001
- MDEQ, SESC Administrator, expires 7/1/2021.

Professional Development
- MDOT, Construction Project Record Keeping System (CPRKS) Seminar, 2001
- MDOT, Bituminous Pavement Training, 2001

Dave Sumlin has over 30 years of construction experience and provides construction inspection on multiple types of infrastructure projects in southeast Michigan. He has experience in the construction of Municipal Capital Improvement Projects, Private Development Projects, and MDOT/LAP Projects; all which include facets such as roads, bridges, storm sewers, sanitary sewers, and water mains. He is responsible for ensuring that construction is performed in compliance with project specifications and approved plans. He monitors project operations through daily review and reporting of pay quantities and communicates significant changes in quantities and any potential claims directly to the Project Manager. Dave also has experience of the MDOT/LAP delivery to appropriately maintain project records for state funded local government projects.

Select Relevant Experience

Schoolcraft Road Reconstruction, City of Livonia, Michigan (2019)
Construction Inspector on this MDOT/LAP project that consisted of concrete reconstruction with integral curb and gutter, concrete inlay with integral curb, concrete sidewalk construction, and ADA ramps. OHM Advisors provided Project Engineering, Project Inspection and Office Technician services on the project, and oversaw the work of a testing sub-consultant.

As-Needed Construction Inspection, Multiple Communities in SE Michigan (Ongoing)
Dave performs Construction Inspection on Capital Improvement Projects and Private Development Projects for several communities in Southeast Michigan. They include the City of Livonia, the City of Westland, the City of Romulus, the City of Novi, the City of Farmington Hills, Ypsilanti Township, Scio Township, Superior Township, and the City of Dexter. He understands the importance of reviewing and familiarizing himself with the plans and specifications of each project, as well as the requirements, sequence of construction, and other important aspects of the work.

Newburgh Road Concrete Patching, City of Westland, Michigan (2018)
Construction Inspector for 0.55 Miles of federally funded concrete pavement repairs of Newburgh Road in the City of Westland, let through the MDOT/LAP Program. A variety of concrete repairs were necessary on this project, including transverse repairs, longitudinal joint repairs, corner spall repairs and long stretches of pavement inlay. The project included driveway apron repairs and the addition of ADA compliant sidewalk ramps. OHM Advisors provided Project Engineering, Project Inspection and Office Technician services on the project, and oversaw the work of a testing sub-consultant.

Select Relevant Experience Continued

Grove Road, Township of Ypsilanti, Washtenaw County, MI (2018)
Construction Inspector for the construction of 4.60 mi of hot mix asphalt shared-use path, concrete curb & gutter, sidewalks, driveways, retaining walls, guardrail, and traffic signals. Location was on Grove Road from Emerick Street southeasterly to Bridge Road, and on Bridge Road from Grove Road south to North Hydro Park in the Township of Ypsilanti, Washtenaw County.

Prospect Bridge over the Amtrak Railroad, City of Ypsilanti, Washtenaw County, MI (2014)
Construction Inspector for the rehabilitation of this bridge over the Amtrak Railroad in the City of Ypsilanti. Work included replacement of HMA wearing surface, expansion joint replacement, patching of prestressed box beam top flanges, sidewalk repair, railing repair, drainage improvements, ADA improvements, restoration, and HMA approach mill and fill. OHM was responsible for inspection of the project, office technician duties, soil erosion and sedimentation control inspections, and oversight of the materials testing sub-consultant.

Grove Street Paving – Emerick to I-94, City of Ypsilanti, MI (2012)
Construction Inspector for this road reconstruction project along Grove Road from the south side of the I-94 overpass to the City limit just south of Emerick Street. The heavily deteriorated existing concrete pavement was completely removed and replaced with an asphalt cross-section pavement. The existing road width was maintained; however, it was reconfigured to include one travel lane in each direction, a reciprocal turn lane, and bike lanes on each side of the road. The existing concrete curb and gutter was integral to the pavement, and was also completely removed and replaced. In addition, the stormwater system was completely reconfigured to take advantage of natural quality improvements (vegetative swales) before the ultimate discharge reached Ford Lake.

Goddard Road Water Main, City of Romulus MI (2011)
Construction Inspector for the replacement of the 12" and 8" water mains from Middle Belt Road to Inkster Road using pipe-bursting trenchless technology methods. All of the fire hydrants and gate valves along this project were removed and replaced via open-cut methods. The project also included the replacment of some of the driveways, sidewalks, and pavement repairs of both asphalt and concrete roadway.

Wahrman Road Phase 2, City of Romulus, MI (2010-2011)
Construction Inspector for the enhancement of the storm sewers, sanitary sewer, and water main. During construction, the road was detoured and open to local trafic from Genron Court to Eureka Road. Wayne Road also extended and traffic was detoured north of Eureka Road through Metropolitan Airport property. As part of the improvements, the intersection of Wahrman/Wayne & Eureka Road was shifted to the east and new mast-arm traffic signals were installed.

Ann Arbor Trail Phase 2, City of Westland, MI (2010)
Construction Inspector for the reconstruction of the Middlebelt & Ann Arbor Trail intersection. The project included placement of a concrete base and an asphalt overlay, per Wayne County's Standard Specifications. In addition, storm sewers and the water mains were replaced prior to the replacement of the pavement. This project also included joint repair and asphalt overlay from Flamingo Road (east of Merriman) to Inkster Road. All the sidewalk ramps were upgraded to the current ADA standards.

Prospect Pointe Phase 2, Charter Township of Superior, MI (2008)
Construction Inspector for this new subdivision development in Superior Township. The new development connected into existing road networks, sanitary sewer, and water main. Storm water from this development discharged into a County Drain. The streets and storm sewers were dedicated to Washtenaw County upon completion.

TIMOTHY KELLER

CONSTRUCTION INSPECTOR

Education
Coursework in Industrial Technical Construction, Eastern Michigan University, 1991

Experience
With OHM since 2002
18 years prior experience

Certifications
- OSHA 10-Hour Safety Training
- OSHA Confined Spaces Training, expires 01/19/19
- MDOT Concrete Paving Operations, attended 3/24/15
- Previously MDOT Density, Ferris State University Certified
- Previously MDOT Certified Aggregate Technician, Level I
- MDOT HMA Paving Operations, received 2/15/08
- MDEQ Storm Water Management Operator-Construction Site, expires 7/1/21
- OSAH Confined Space Entry Training, attended 8/23011
- NASSCO PACP, MACP, and LACP previously Certified

Professional Development
Pressure Pipe Rehabilitation, Lanzo Technologies, attended 12/07/2016

Mr. Keller is a Construction Inspector within the OHM Construction Group. His responsibilities include observing the construction of new storm sewers, sanitary sewers, water mains, and roadways for both public and private development. Mr. Keller's duties include record keeping of daily events, tracking of contract quantities, identifying concerns with the contractor's work and being a liaison between the contractor, residents, and the community. Prior to working with OHM, Tim was a pipe layer for Verdeterre Contracting.

Select Relevant Experience

Nine Mile Rd Sanitary Sewer Extension, City of Novi, MI (Ongoing)
Construction Inspector for the selected alternate of Guided Pilot Tube (GPT) for a 6,000 lft sewer extension to replace a force main system with hydraulics/operational issues. The project construction is trenchless for the 4,000 lft of natural beauty road that is required to have minimum disturbance within the work zones. The remaining 2,000 lft of open cut construction does not have the same restrictions. The project also has extensive deep well dewatering and challenging soils.

Harris Road Water Main Improvements, YCUA (2019)
Construction Inspector on water main improvements along Harris Rd from Michigan to Holmes in Ypsilanti Township, Michigan. The project included the replacement of 8" watermain and sanitary main and lateral repair. The project was an LAP project with the YCUA watermain as a category 3 item within the County Contract.

Greencastle Water Main Improvements, City of Farmington Hills, MI (2018-2019)
Construction Inspector on water main improvements for installation of 5,450 feet via directional drill in the Greencastle subdivision in Farmington Hills, Michigan.

Olive Street Water Main Improvements, City of Romulus, MI (2018)
Construction Inspector on water main improvements along Olive, Bibbins and Sterling Street(s) in Romulus, Michigan. The project included the replacement of 2,600 feet of existing water main with 8" PVC and 8" ductile iron pipe. The construction methods utilized on this project were static pipe bursting and open cut methods.

Ecorse City Subdivision Water Main Improvements, City of Romulus, MI (2017)
Construction Inspector on water main improvements in the Ecorse City Subdivision to replace 7,800 feet of 6" and 8" cast iron pipe. Project employed pre-chlorinated pipe bursting technology to minimize disruption to the residents.

Select Relevant Experience Continued

Section 15 Water Main Replacement, City of Southfield, MI (2015)
Construction Inspector for water main and paving improvement project in Section 15 in the City of Southfield. The improvements consisted of replacing the entire water system, including the pipes, hydrants, valves, and services, as well as replacing sections of concrete within the area impacted by the water main project, areas of failed pavement, and upgrading existing sidewalk ramps to ADA compliant sidewalk ramps.

Section 13 Water Main Replacement, City of Southfield, MI (2016)
Construction Inspector for replacement of 18,000 feet of water main and appurtenances within the City of Southfield. Project included open cut of bell and spigot PVC C909, 300 homes, and 3 miles of road reconstruction.

Section 12 Water main Replacement, City of Southfield, MI (2016)
Construction Inspector for replacement of 12,000 feet of water main and appurtenances within the City of Southfield. Project included open cut and directional drilling of bell and spigot PVC C909, 200 homes, ½ mile of concrete road reconstruct, and 1.5 mile of concrete patching as necessary.

Section 31 Water Main Replacement, City of Southfield, MI (2015)
Construction Inspector for replacement of 25,000 feet of water main and appurtenances within the City of Southfield. Project includes open cut and directional drilling of bell and spigot C909, 450 homes, pulverizing, grading, and paving of 5 miles of residential streets.

2013 Watermain Projects Bradley – Snow and Northeast Area, Charter Township of Ypsilanti, MI (2014)
Construction Inspector for installation of approximately 16,000 feet of water main and of appurtenances within portions of sections 2 and 24 of the Charter Township of Ypsilanti. The project included 1,500ft of 16" fusible PVC, 300 ft of 24" Ductile Iron, including 24" line stops and valves.

Golfside Road Water Main and Paving Improvements – Packard to Clark, YCUA (2013)
Construction Inspector for upsize pipebursting of 1,900 lft of existing 12" water main and replacement with 16" DR 11 fusible PVC water main. Project also included CIPP lining of 1800 lft of 10" sanitary force main.

Ecorse/Emerick DWRF Water Main Replacement, YCUA (2013)
Construction Inspector for 15,000 lft of water main replacement using directional drill, pipe burst, and open cut of fusible PVC and ductile iron. Project had 350 homes, 30 Orangeburg sanitary lead replacements and was coordinated with the Road commission for their pulverization and paving program.

Holmes Road Water Main and Paving Improvements Phase II and III, Rue Deville to Ridge, WCRC (2011)
Construction Inspector for abandonment of two parallel water mains of different sizes from different eras, and replacement with 13,000 lft of 16" water main. The project was performed with collaboration of storm, road, and signal improvements with the Washtenaw County Road Commission as part of an MDOT local agency project. The project included utility pole, gas main, phone, and cable relocation.

Hewitt Road Water Main and Paving Improvements, Packard to North of Washtenaw, WCRC (2009)
Construction Inspector for the replacement and upsizing of 1400 lft 8" water main via Pipebursting with 12" DR 11 fusible PVC water main. The project was performed with collaboration of storm, road, and signal improvements from the Washtenaw County Road Commission as part of an MDOT local agency project. The project included temporary water, and multiple businesses that had to be kept in service at all business hours.

JONATHAN BASTIN

CONSTRUCTION INSPECTOR

Education
Bachelor of Science in Civil & Environmental Engineering, University of Michigan – Ann Arbor, 2012

Experience
With OHM since 2020
8 years prior experience

Certifications
- OSHA HAZWOPER General Site Worker – 40 hr, National Environmental Trainers, Issued 01/2017
- Certified Construction Site Storm Water Operator, Michigan EGLE, expires 2026
- Concrete Field Testing Technician – Grade I, American Concrete Institute, expires 02/2023
- Michigan Certified Density Technician, Ferris State University, expires 03/2023
- Michigan Certified Aggregate Technician Level II Endorsements A-G, Ferris State University, expires 03/2023
- Michigan Certified Hit Mix Asphalt Laboratory Technician Level I, Ferris State University, expires 04/2022

Professional Affiliations
- American Institute of Steel Construction, member since 2011

Jonathan Bastin, Construction Inspector at OHM Advisors, has nine years of experience in the Civil Construction industry. He began his career in construction as a carpenter after attending a certification course in Modern Carpentry through the Youth Opportunity program in Detroit, Michigan. Later he attended the University of Michigan to study civil engineering with a focus in structural and geotechnical engineering. Upon graduating, Jonathan took a position as an engineering field technician performing geotechnical investigations and quality assurance testing of construction materials. Over his eight (8) year tenure he gained experience on a variety of small scale commercial and industrial projects and medium sized municipal and Local Agency roadway projects and grew into a management position. Jonathan is currently working as a Construction Inspector in OHM Advisors Construction Field Services Group, where he performs inspection on a variety of projects to multiple communities.

Select Relevant Experience

2020 HMA Paving Program, City of Romulus, MI (2020)
Construction Inspector provided daily inspection and documentation of construction activities for this 0.75-mile pavement rehabilitation for Beverly Rd, Hunt St, and Irma St. The existing pavement was pulverized, reshaped, and paved. The roadway was regraded and paved with 4.5 inches of HMA in two lifts. Gravel shoulders were installed, and culverts were replaced as needed.

Mill Creek Trail Phase 2, City of Dexter, MI (2020)
Construction Inspector provided daily inspection and documentation of construction activities for this MDOT/LAP project consisting of approximately 0.76 miles of mixed-use trail connecting to Mill Creek Park Phase I on the north and Baker Road. The trail was constructed with sections of on-grade asphalt path and boardwalk sections supported on helical piles.

"Vistar" PFG Romulus, City of Romulus, MI (2020)
Construction Inspector on this Private Development project provided daily inspection and documentation of construction activities and obtaining GPS data collection for the installation of sanitary sewer service line and storm sewer for the new 165,200 sft two-story Performance Food Group regional distribution warehouse facility, including concrete and asphalt parking areas and drives, concrete sidewalks, detention basins, and a walking path.

Landfill Scale and Entrance Improvements, City of Ann Arbor, MI (2020)
Construction Inspector provided daily inspection and documentation of construction activities for the demolition of the existing scale and installation of two new scales and associated communication systems, ramps, pavement, and other site work for the Material Recovery Facility at the W.R. Wheeler Service Center.

Select Relevant Experience Continued

Dunning Subaru Expansion, Scio Township, MI (2020)
Construction Inspector on this Private Development project provided daily inspection and documentation of construction activities and obtaining GPS data collection for the installation of an underground stormwater infiltration system for the existing approximately 14,200 SF single-story dealership, and proposed approximately 14,900 SF additions including expanded asphalt parking lots and concrete sidewalks.

Augusta Township Fire Station, Augusta Township, MI (2020)
Construction Inspector provided daily inspection and documentation of construction activities and obtaining GPS data collection for the installation of water main and sanitary sewer service line for the new 9,416 SF two-story fire station, parking lot, and stormwater retention pond.

Big Silver Fire Lake Trail, Putnam Township and Dexter Township, MI (2020)
Construction Inspector provided daily inspection and documentation of construction activities and gather GPS data for the installation of a new sanitary force main for five (5) lakefront lots in Dexter Township and three (3) future parcels in Putnam Township. Other site improvements include a proposed private road, a parking lot and gravel drive at the existing recreation hall, and demolition of former camp buildings.

Whittaker Road Animal Clinic Building Addition, Ypsilanti Township, MI (2020)
Construction Inspector provided shop drawing reviews for this 1,202 SF building addition to the existing Whittaker Rd Animal Clinic. The building addition will incorporate site improvements including stormwater BMPs, parking lot resurfacing, and additional landscaping. Construction is expected to begin winter 2021.

Chick-fil-A Northville Twp FSU Store #4326, Northville Township, MI (2021)
Construction Inspector provided inspection and documentation for project closeout including ADA Compliance and utility acceptance for this 4,988 SF single-story restaurant with a patio area, drive thru, and parking lot.

Clark Road Pump Station Improvements, Superior Township, MI (2021)
Construction Inspector provided daily inspection and documentation of construction activities and the collection of GPS data for this federally funded project consisting of 682 lft of 12-inch sanitary sewer, 43 lf of 18 inch sanitary sewer, and four (4) new manhole structures, a 14 ft diameter wet well, and a new approximately 554 SF pump station. Based on groundwater conditions, a dewatering system was installed consisting of five (5) deep wells prior to the start of construction.

Clark Road Force Main Replacement, Superior Township, MI (2021)
Construction Inspector provided daily inspection and documentation of construction activities and collection of GPS data for this project consisting of 1,097 ft of 10-inch sanitary force main connecting to the existing 10-inch AC sanitary force main with a gate valve for future connection to the proposed pump station on the west and the existing sanitary manhole on the east.

SOMMER GUY

CONSTRUCTION INSPECTOR

Education
Bachelor of Science in Environmental & Earth Science, Eastern Michigan University, 2019

Experience
With OHM since 2019

Certifications
- MCA Concrete Field Testing Technician, Level 1
- ACI Concrete Field Testing Technician, Grade 1
- EGLE, Stormwater Management - Construction Site
- EGLE, SESC Comprehensive Part 91
- FieldManager
- Materials Acceptance Seminar
- OSHA 10-Hour Safety

Ms. Guy joined OHM in 2019, and has gained significant experience performing as a Construction Inspector primarily involved with MDOT project delivery. She has provided observation of many projects throughout the Detroit Metro Region and Mid-Michigan. Diversity in her experience has been from time spent observing water main and underground construction with the OHM Municipal group. Past project responsibilities include coordination of field technicians and testing professionals, monitoring materials compliance, enforcing proper installation methods used by Contractors, and adherence by contractors to maintenance and traffic control requirements. She brings experience with E-Construction and is proficient in using MDOT ProjectWise.

Select Relevant Experience

M-18 from Midland/Gladwin County Line north to Burgess Rd., City of Beaverton, MI (2020)
Construction Inspector on this project that consisted of 5.4 miles of joint repairs, HMA micro cold milling and an ultra-thin overlay on M-18 through Midland and Gladwin counties. After pavement rehabilitation, the roadway was completed with new pavement markings and centerline corrugations. OHM technicians performed lead inspection duties for MDOT on this project.

M-30 from US-10 WB off ramp to just north of the Midland County Line, Midland & Gladwin Cos., MI (2020)
Construction Technician on this project that consisted of 9.7 miles of HMA cold milling and resurfacing. Guardrail improvements were included on this project along with new pavement markings and the replacement of centerline corrugations and re-establishment of numerous monument boxes. OHM technicians supported the MDOT lead technician by performing onsite inspection material testing for this project.

Schuman Sidewalk, City of Westland, MI (2020)
Construction Inspector for this construction project of 0.37 miles of new concrete sidewalk in Westland, MI. Also included were concrete driveways, installation of sidewalk and ADA ramps, aggregate base, drainage improvements and pavement markings along the west side of Schuman Street from Palmer Road to Fairchild Street. Communication and coordination between OHM, residents and school maintenance supervisors in the vicinity were required for driveway interruption and periodic project updates. OHM was responsible for full construction engineering services. This was a Small Business Project.

Freedom Road Reconstruction, City of Farmington, MI (2020)
Construction Inspector on full construction Engineering, inspection, survey, and testing services for 1.38 mi of hot mix asphalt surface removal and resurfacing, concrete pavement repairs, curb, gutter, sidewalk and ramps, drainage and pavement markings on Freedom Road from M-5 to Hillview Court and from Gill Road to Nine Mile Road in the city of Farmington, Oakland County. This was an MDOT Local Agency project. This project included full reconstruction and widening of the existing composite roadway including improved pedestrian access along

Select Relevant Experience Continued

the project corridor. During construction, the project team coordinated maintenance of traffic with multiple adjacent projects under construction by the City of Farmington, Farmington Hills, the Oakland County Road Commission, and the Michigan Department of Transportation. The existing storm sewer drainage at the Freedom Road and Farmington Road intersection was improved with a new catch basin structure and crossing. Pedestrian facilities at each intersection were improved with new ADA Ramps and sidewalks, and concrete approaches were also reconstructed. Finally, all the existing signage and pavement markings were replaced and upgraded. The project included two categories with funding being from Federal, State, and Local revenues.

Detroit RiverWalk Cummings Parcel, City of Detroit, MI (2020)
Construction Inspector on 0.05 mi of Detroit Riverfront enhancements which included concrete sidewalk and ramp, seawall cap, lighting, fence, site furnishings and landscaping on the Detroit West Riverfront at Cummings Parcel, west of Joe Louis Arena in the City of Detroit, Wayne County. This was the first phase of the Detroit waterfront transformation of three-and-a-half miles of the east riverfront, from Joe Louis Arena to Gabriel Richard Park. The project included two categories with funding being from Federal, State, and Local revenues.

Auburn Road Reconstruction, City of Rochester Hills, MI (2020)
Construction Inspector for this project consisted of 0.45 mi of hot mix asphalt pavement, earth excavation, aggregate base, concrete curb and gutter, sidewalk, storm sewer, crosswalks, landscaping, rain gardens, street furniture and pavement markings along Auburn Road from Culbertson Avenue to Hessel Avenue in the City of Rochester Hills. OHM provided all construction engineering services and oversaw the testing activities of a sub-consultant. This project was coordinated with the locally funded Auburn Road Alley and Parking Lot Improvement project that was concurrently being constructed.

Nine Mile Road Diet, City of Oak Park, MI (2020)
Construction Inspector on this 1.63 mi of shared use path, sidewalk ramps, drainage, signing and pavement markings on West 9 Mile Road from Pinecrest Drive to McClain Drive in the City of Oak Park, Oakland County. This is a Local Agency project. In 2018, the City of Oak Park received approval of TAP Grant funding for the Nine Mile Road Diet and Non-Motorized Facilities with a total construction budget of $1,405,436. The project improvements include a road diet on Nine Mile Road, the addition of parallel and back-in angled parking with green infrastructure, proposed mid-block crossings, bike lanes and trailhead. Drainage, signing and pavement markings were also included. The project limits for improvements are from McClain Drive to Pinecrest Drive. OHM completed the final engineering plans based on the concepts submitted as part of the approved TAP Grant improvements within the Oak Park and Ferndale city limits.

US-24 (Telegraph) at Van Born Road Intersection Repairs and Upgrades, Wayne Co., MI (2019)
Construction Inspector on this project that consisted of 0.13 miles of concrete pavement, curb, gutter, and sidewalk ramps, aggregate base, drainage, signing, signal modernization and pavement markings on southbound US-24 at Van Born Road in the Cities of Taylor and Dearborn Heights, Wayne County. OHM was also responsible for a subconsultant who perfomed material testing on this project.

US-24 (Telegraph) from Hayes Street to Ecorse Road Sidewalk Upgrades, City of Taylor, MI (2020)
Construction Inspector on this project that consisted of 0.50 mi of sidewalk construction, signing and pavement markings along US-24 from Hayes Street to north of Ecorse Road ramps in the City of Taylor, Wayne County. OHM was also responsible for a subconsultant who performed material testing on this project.

Newburgh Road over Tonquish Creek & Ann Arbor Trail over Middle River Rouge, Wayne Co., MI (2019)
Construction Inspector on deck patching, epoxy deck overlay, concrete deck overlay, bridge railing repair and approach work on Ann Arbor Trail over Middle River Rouge and Newburgh Road over Tonquish Creek, Wayne County. This is a Local Agency project.

TOM BALDWIN

CONSTRUCTION INSPECTOR

Education

- Bachelor of Science in Construction Management, Florida State University, 1989
- Associates Building Construction Technology, Florida State University, 1989

Experience

With OHM since 2014
25 years prior experience

Certifications

- MDOT HMA Paving Operations, expires 02/28/2022
- Concrete Paving Inspection, MDOT, received 01/26/2017
- Confined Spaces Training, OSHA, expires 01/19/2019.
- Storm Water Management Operator, MDEQ, expires 7/1/2021
- OSHA 10-Hour Construction Safety Expires 3/26/16
- First Aid/CPR/AED, American Red Cross, expires 8/1/2017

Professional Development

Constructing Pedestrian Facilities for Accessibility, attended 03/07/2017

Mr. Baldwin had been a Construction Inspection in OHM Advisors Construction Group for seven years. His responsibilities include the inspections of construction and rehabilitation of storm sewers, sanitary sewers, water mains, and roadways for both Capital Improvement projects and private development projects. Mr. Baldwin's duties include record keeping of daily events, tracking of contract quantities, identifying concerns with the contractor's work and being a liaison between the contractor, residents, and the community. Prior to working with OHM, Tom was a Construction Technician ll for PEA. Inc.

Select Relevant Experience

Novi Sanitary Sewer Rehab Improvements, City of Novi, MI (2020)
Construction Inspector for the sanitary sewer rehabilitation project in the City of Novi, which consisted of over 16,000 ft. of sanitary pipe that was videoed and cleaned for condition assessment. The project included over 6,000 ft of full length Cured In Place Plastic Pipe (CIPP), over 70 spot liners, grouting of joints, and manhole rehabilitation utilizing an epoxy coating and chimney seals, along with manhole adjustments.

Romulus 2019 Water Main Replacement Program, City of Romulus, MI (2019-2020)
Construction Inspector for this water main replacement project on Ecorse Road that included over 3,700 feet of water main replacement and 23 new water services, along with multiple tie-ins at street returns and industrial properties. The existing water main was aging and deteriorating and in need of replacement. The existing water main was replaced using Pipe Bursting trenchless technology methods. Pre-chlorination of the new water main was utilized to minimize water service disruption to the residents and businesses in the area. The project also included horizontal directional drilling of a 12" water main under Middlebelt Road at Beverly Road to replace a section of aging water main under Middlebelt Road.

Chubb Rd Sanitary sewer forced main, Salem Township, MI (2020)
Construction Inspector for the installation of 1,600 feet of 4" HDPE of sanitary forcemain using horizontal directional drilled methods, and the replacement of six new sanitary sewer service laterals along Chubb Road in Salem Township. This relocation work was required due to a conflict with a road reconstruction project and needed resolution prior to the paving of the roadway. Due to the grade changes of the proposed road construction project, the existing sanitary force main was relocated from within the influence of the pavement and the force main and services were installed at a new depth to allow for proper maintenance, and to prevent potential freeze issues in the future.

Grand River (M-5) Streetscape from Southfield Road to Berg Road, City of Detroit, MI (2020)
Construction Inspector on this MDOT partnership with Detroit Water and Sewerage Department (DWSD) to upgrade 2.8 miles of Grand River (M-5) from Southfield Road (M-39) to Berg Road within the City of Detroit. This project entailed aesthetic and functional enhancements that make up over one mile of streetscape improvements including approximately 5 miles of water main, water main services, pavement resurfacing, curb gutter, ADA ramps, bus stops, site furniture, traffic signals and a two-way bike lane, the first of its kind in Michigan. The biggest challenge faced on this project was maintenance of vehicular and pedestrian traffic throughout this business

Select Relevant Experience Continued

district. Heavy coordination was also required with DWSD, City of Detroit representatives and utility companies. As part of our service, we also fulfilled the roles of Project Engineer, Office Technician, and Field Inspection. OHM was the prime consultant and was responsible for two sub-consultants.

Merriman Place Water Main, City of Romulus, MI (2019)
Construction Inspector for the installation of 600 feet of 8" ductile iron water main via the open cut method along with the installation of 8 new water services. The existing water supply for the residents along Merriman Place was an existing 2" water line that was in poor condition. The project also included the restoration of the existing roadway and close coordination with the resident along this roadway, as there was only one point of access.

Canterbury Gardens & Bonnie Acres Paving & Water Main Improvements, City of Southfield, MI (2019)
Construction Inspector for paving and water main improvements for a 0.40 square mile area in Section 13 of Southfield, Michigan. The project included installation of approximately 25,000 feet of 8" water main, 16,000 square yards of full depth concrete pavement repairs, 2.48 miles of HMA pavement reconstruction through crush and shape methods, 0.93 miles of HMA pavement reconstruction through pavement removal and replacement, and 20,000 square feet of sidewalk and ADA improvements. Communication and coordination between OHM and residents were required for updates for water service interruption and periodic project updates. OHM was responsible for full construction engineering services on this project.

Evergreen Trail Water Main and Paving Improvements, City of Southfield, MI (2018)
Construction Inspector for paving and water main improvements for several routes in the Evergreen Trail subdivision within Section 15 of Southfield, Michigan. The project included installation of approximately 11,500 feet of 8" water main, 5,200 square yards of full depth concrete pavement repairs, 1.19 miles of HMA pavement reconstruction, roundabout intersection construction, and 15,000 square feet of sidewalk and ADA improvements. Communication and coordination between OHM and residents were required for updates for water service interruption and periodic project updates. OHM was responsible for full construction engineering services.

Pennsylvania Road Water Main Placement, City of Romulus, MI (2016)
Construction Inspector for the construction of this project that included the installation of a new 12" water main along the north side of Pennsylvania Road between Wayne Road and Wahrman Road in Romulus Michigan. The project included the installation of over 3,500 feet of 12" watermain using both Open-Cut and Horizontal Directional Drilling methods.

Wickham Road Water Main Improvements, City of Romulus, MI (2016)
Construction Inspector for the construction of this project that included the installation of a new 8" water main along the Wickham Road corridor in Romulus Michigan. The project was designed to provide a redundant line paralleling the existing 24" water main to eliminate the possibility of service interruption in the case of future repairs needing to be made on either line. The work was done using both Open Cut and Horizontal Directional Drilling methods as well as seven live taps minimizing the need to shut down water service to the local hotels during construction.

Inkster- Annapolis Pump Station and Force Main, City of Westland, MI (2015)
Construction Inspector for this pump station and force main project where OHM provided construction administration and construction engineering/observation on replacement of a 12" cast iron force main, and pump station improvements.

Section 31 Water Main Improvements, City of Southfield, MI (2015)
Construction Inspector for water main replacement and existing streets reconstruction. The existing water main was replaced with an 8" C909 PVC water main, fire hydrants and other appurtenances were used to replaced to meet current City standards on this project. The roads were pulverized, reshaped and paved with 4" of HMA surface.

DEBBIE GIBSON

CONSTRUCTION INSPECTOR

Education

- Coursework, University of Michigan Dearborn, 1991-1994
- Associates Degree Liberal Arts, Oakland Community College, 1990

Experience

With OHM since 2006
16 years prior experience

Autodesk Experience

- 25 years of experience using Autodesk products.
- Experience working with AutoCAD Civil 3d

Certifications

- Roadsoft LDC Quick Start Guide, completed 06/13/19
- PASER Training, completed 03/28/19
- IBR System for Rating Unpaved Roads Webinar, completed 02/13/19
- OSHA 10 Hour Outreach Program- Construction, 360 Training, completed 3/25/2016
- Confined Space Training, attended 1/26/2016
- PACP & MACP Certified, NASSCO, expires 3/27/2018
- Stormwater Management, Construction Site, MDEQ, expires 7/1/2022
- ACI Concrete Field Testing Technician – Grade 1, expires 01/10/2024

Debbie Gibson has 32 years of experience with municipal and private engineering firms, predominantly Civil Engineering. Ms. Gibson has been a Construction Inspector for the last 10 years, providing construction inspection services for utility improvement projects in various Southeastern Michigan communities. These responsibilities include record keeping of daily events, tracking of contract quantities, identifying concerns with the contractor's work and being a liaison between the contractor, residents, and the community. Most recently her responsibilities have been to assist Construction Field Engineers with contract administration, quality control of construction daily reports, managing project meetings, assisting with project paperwork, and training new inspectors. Debbie has experience managing larger programs like Footing drain disconnection and Lead and Copper service replacement programs that are labor and communication heavy. She is an expert a coordinating construction and communication with GIS platforms through the creation and use of tablet forms for field data input and GIS dashboards for review and use of the information. Prior to construction inspection duties, Debbie was a Cadd Technician for a Consulting engineer, preparing residential and commercial civil engineering plans.

Select Relevant Experience

Contract Administrative Assistance (Ongoing)
Construction Technician assisting Field Engineers with contract administration through review of construction daily reports for several communities. Projects include:

- **Plymouth Township** - Litchfield Road SAD Road Reconstruction (6,000 syd of concrete pavement, Storm and Sanitary sewer upgrades), and General Drive SAD Road Reconstruction (11,000 syd of concrete pavement, and Storm sewer upgrades).
- **City of Romulus** - Smith Road & Vining Road Rehabilitation (11.500 syd of concrete pavement repair, 1,425' of curb and gutter repair, 50 drainage structure reconstructions), 2020 HMA Paving Program (2,800 tons of asphalt placed), and several Site Development projects.
- **City of Farmington Hills** - Canfield Gravel Road Conversion Project (2000' of Asphalt Pavement, 2,280' of Storm Sewer placement) Cora Avenue and Haynes Street Road Reconstruction Project (2,700' of Concrete Pavement, 1000' of Storm Sewer placement) and Belfast Gravel Road Conversion Project (1,400' of Asphalt Pavement).
- **City of Novi** - Neighborhood Road Program (3,000' of Concrete placement, 9,000' of Asphalt pavement, 425 Sft of Sidewalk Ramps) and the 2020 Pathways and ADA Compliance Program (700' of Sidewalk placement).
- **City of Livonia** - 2020 Paving Program (Over 6 miles of Asphalt/Concrete Pavement)

2020 Sanitary Sewer Rehabilitation – City of Romulus, MI (2020)
Construction Inspector on this contract that includes cleaning and televising 32,500' of sanitary sewer, 4,800' of CIPP sanitary sewer lining, and 30 spot lines ranging from 8" dia. to 18" dia. The project also includes chemical grouting of mainline sewers and sewer lateral

Select Relevant Experience Continued

connections. OHM performed the condition assessment from the sewer videos and developed a work-plan for the necessary sewer rehabilitation.

Y.C.U.A. Lead Service Replacement Program, City of Ypsilanti, MI (Ongoing)
Construction Inspector for the replacement of private property water services containing lead or galvanized that was connected to lead. Debbie coordinates contact and communication with the private property owners, coordinates inspections, prepares work plans for replacement of water service laterals, coordinates review, approval, and signature of the work plan, and coordinates construction with the property owners, contractor, and the client for lead service line replacement program.

Developer Offset Mitigation Program, City of Ann Arbor, MI (Ongoing)
Construction Inspector conducting inspections of existing sites, determining footing drain discharge locations on behalf of the City of Ann Arbor. Debbie coordinates inspections with developers, review of their sanitary videos, and prepares reports and sketches of property existing conditions which are provided to the City with recommendations for potential Developer Offset Mitigation credits for removing storm from sanitary flow.

SAW Grant / Asset Management Projects, Various Clients (2016-2018)
Construction Inspector performing over 150 MACP manhole inspections. MACP and PACP data brought back into the office is processed and analyzed. Sanitary and storm flow metering was performed, data collected and QC'd for many of these projects.

City of Livonia
Superior Township
YCUA
City of Novi
City of Auburn Hills
City of Rochester Hills

Livonia Footing Drain Disconnection Program, City of Livonia, MI (Ongoing)
Construction Inspector and project management, assisting the City of Livonia in conducting inspections of residential homes for footing drain disconnection, work plans with signatures for installation of sump pump and external discharge, and coordination of that construction. Debbie oversaw construction of open-cut and directional drilled 6" curb drain for underground collection systems, and the sump pump and collection system installation at each property that connected to the public curb drain. She prepared pay applications and coordinated with homeowners, contractor, and the client for inspections and construction.

Sump Pump Installation Modification Project, City of Ann Arbor, MI (2016-2017)
Construction Inspector for the work plan creation and inspection of construction in homes that had previously participated in the City of Ann Arbor Footing Drain Disconnection Program. These homes had reported water in their basements and the SPIM Project was an effort to identify improvements which resolved specific individual issues, upgrading the systems to best practices to alleviate the residents' concerns with the sump pump systems on their property.

The Tile Shop, City of Farmington Hills, MI (2016)
Construction Inspector at an existing site for the construction of site improvements, including storm water management, parking lot, retaining wall repairs and water main improvements.

Community Choice Credit Union, City of Milford, MI (2016)
Construction Inspector for the construction of on-site storm sewer, including an underground storm detention system for this existing facility located on Milford Road.

SHELDON GATES

CONSTRUCTION INSPECTOR

Experience
With OHM since 2015

Certifications
- Michigan Certified HMA Sampling Local Agency, Ferris State University, Expires 02/28/2025
- Bridge Construction, Rehabilitation and Painting, MDOT
- Michigan HMA Local Agency Sampling
- MDOT Bridge Construction, Rehabilitation and Painting

Sheldon's started with OHM in 2015 as a survey intern with OHM Advisors, acquiring knowledge on construction and becoming familiar with various types of tools for collecting information. In the spring of 2020, Sheldon began performing full-time inspection with OHM's Construction Department, and has since been on a multitude of projects to becoming well versed in several facets of the construction industry.

Sheldon's desires to attain new information pertaining to inspection in all of its facets, makes him a valuable asset to have on a job. Sheldon continues to pursue certification and training opportunities in the winter months, showing his willingness to acquire new information to gain a strong understanding of the industry.

Select Relevant Experience

Bridge on I-75 over River Raisin, Monroe County, MI (2020)
Construction Inspector on this MDOT Bridge project which consisted of Bridge rehabilitation including epoxy overlay, concrete deck, barrier and substructure patching, replacement and rehabilitation of expansion joints, structural steel repairs and partial cleaning and coating of the structural steel on I-75 over inactive Port of Monroe Railroad, Front Street, the Raisin River and Elm Avenue in the City of Monroe.

Woodside Village Sub-division, Superior Township, MI (2020)
Construction Inspector of the installation of HMA paving, concrete curb & gutter, ductile iron water main, truss pipe sanitary sewer and reinforced concrete storm sewer. The inspection included the installation and testing of all utilities.

Utilities Instrumentation Service Inc, City of Dexter, MI (2020)
Construction Inspector of a concrete storm sewer and ductile iron water main. The storm installation utilized the jack and bore method under a HMA road and tied into an existing storm sewer system.

MacArthur Water Main Replacement, Superior Township, MI (2020)
Construction Inspector of a force sanitary sewer that was fused together. This job included directional drilling instead of an open trench. The inspection included the installation and testing of the sanitary force main.

The Farm at St Joe's, Superior Township, MI (2020-2021)
Lead inspector of a water service lead, and a storm sewer system. Site improvements included construction of a new building and parking lot, as well as on-site stormwater management with a forebay and retention basin.

CITY OF ANN ARBOR – LANDFILL SCALE CONTRACT ADMINISTRATION / CONSTRUCTION ENGINEERING

ANN ARBOR, MICHIGAN

OHM Advisors was contracted by the City of Ann Arbor Public Works Unit to provide Contract Administration and Construction Engineering services for a project designed by others. OHM Advisors involvement began at the contract award and pre-construction meeting stage of the project.

The proposed scale installed at the location of the former landfill in City of Ann Arbor is from an entrance/exit to Platt Road, south of Elsworth Road, and will now serve as a scale for three separate City solid waste facilities. These include waste transfer, materials recovery, and compost. The City will also use this scale for weighing materials such as sand, salt, gravel, and aggregate that may be used as part of ongoing City maintenance operations.

The scope of work provided by OHM Advisors consisted of the following:

- Assisted with coordinating/facilitating of a pre-construction meeting with the Contractor and City.
- Reviewed shop drawing submittals for relevant project materials.
- Coordinated with the City Public Works Unit and Contractor's Superintendent throughout the project.
- Coordinated bi-weekly progress meetings with the City and Contractor during the course of the project. Meetings were held in the field due to the nature of the project scope.
- Made recommendations for payment from the City to the Contractor, based on approved quantities for each pay period.
- Provided construction staking services for site improvements and site changes including field re-design of the entrance and exit lanes to accommodate 70-foot trucks.
- Provided a field measured drawing of as-built conduit and changes from the proposed plans. GPS coordinates were obtained by OHM Advisors in the field for this purpose.
- Performed daily construction observation/inspection of the site work by the Contractor.
- Provided spot check oversight of the installation of the communications and electrical system for the gated entrance in coordination with the City IT Department.
- Provided field engineering support as required to the daily inspector for field issues that arose, and for communication with the City.
- Provided daily inspection reports consistent with a format agreed upon by the City and OHM Advisors.
- Performed project walkthrough for punch list purposes, and provided follow-up inspection with the Contractor to verify that all items were completed for final payment.
- Through a geotechnical subconsultant, provide material testing where necessary to verify backfill compaction and pavement quality control.

COMPLETION

CE
04.2020 - 12.2020

Construction
05.2020 - 11.2020

COST

CE
$115,000

Construction
$1,900,000

CLIENT INFORMATION

City of Ann Arbor

Molly Maciejewski,
Public Works Unit Manager

4251 Stone School Rd
Ann Arbor, MI 48108

734.794.6350

SERVICES PROVIDED

Contract Administration
Construction Engineering
Material Testing Coordination
Inspection
Oversight
Coordination with Client

CITY OF ANN ARBOR – FULLER ST EMERGENCY CULVERT REPLACEMENT

ANN ARBOR, MICHIGAN

City of Ann Arbor requested OHM Advisors assist with an initial site evaluation and emergency response to the developing sinkhole and potentially failing box culvert within the railroad Right-of-way (ROW) within the City of Ann Arbor, directly adjacent to Fuller Street and the Huron River. Initially OHM Advisors staff performed an inspection of the existing box culvert between the guardrail on Fuller Street and the existing outlet to the Huron River. A portion of the entire 80 feet of culvert was part of the originally constructed box culvert with stone and mortar walls and a timber truss roof system. OHM Advisors structural engineering staff confirmed that the failing portion of the box culvert was within the originally constructed stone/timber culvert section, with a partial collapse of the timber truss roof.

Initially OHM Advisors performed hydraulic network analysis (HNA) of the City storm sewer system to evaluate options for replacing a portion or the entire stretch of culvert from the upstream storm structure near the Fuller St. guardrail and the outlet to the Huron River. Furthermore, OHM Advisors evaluated various alternatives for rehabilitation or replacement of the culvert, as well as providing engineering solutions for soil erosion at the existing outlet of the culvert to the Huron River.

After the analysis stage, preliminary engineering was performed to select the method of rehabilitation/replacement of the culvert, while also providing recommendations for various aspects such as culvert materials, proposed structures, proposed culvert slope, and culvert outlet design at the Huron River to improve the current erosion issues. Once recommendations were accepted by both City and MDOT, OHM Advisors expedited the final design, plan preparation, and special provisions, accommodating an emergency MDOT bid letting. During this time, permitting efforts were also being coordinated and finalized between MDOT, OHM Advisors, and Michigan Department of Environment, Great Lakes and Energy (EGLE) for an expedited Part 303 Permit for work within the Huron River floodplain.

COMPLETION

Design
05.2020

CE + Construction
06.2020

CLIENT INFORMATION

City of Ann Arbor

Troy Baughman,
Project Manager

301 E. Huron St.
Ann Arbor, MI 48104

734.323.8428

COST

Design
$26,000

CE
$36,000

Construction
$456,000

SERVICES PROVIDED

Hydraulic Analysis
Structural Evaluation
Preliminary Engineering
Design
Bid Assistance
Contract Administration
Construction Engineering
Material Testing
Inspection
Oversight
Agency Coordination

CITY OF ANN ARBOR – STORMWATER BMP INSPECTION AND MAINTENANCE, TRAINING & CONSULTATION -PIONEER HIGH DETENTION BASIN

ANN ARBOR, MICHIGAN

OHM Advisors provide training and oversight regarding inspection and maintenance of City Stormwater BMP Structures. The intent is that OHM Advisors time spent as part of this work statement would allow City DPW staff to perform future inspections on BMP structures in various locations throughout the City, and determine future required maintenance activities without the need for further guidance from OHM. Kick off meeting was conducted with City Public Works and Systems Planning Department staff to identify the structures and provide a power point overview of the previous construction of the underground detention system. On-site meetings with Public Works staff were held to perform a visual inspection, break the system into operations listed below, and review the work efforts needed for each system.

- **Slide Gate inspection, maintenance, and operation** - OHM Advisors provided guidance on Neoprene seal maintenance and replacement if needed, shaft inspection and greasing, and gear box inspection and greasing of both inlet and both outlet slide gates.
- **Weir Wall inspection and operation** - OHM Advisors provided guidance on elevation inspection and verification in the inlet, diversion, and outlet for both basin systems.
- **Swirl Unit maintenance coordination** - OHM Advisors coordinated with City Public Works staff performed maintenance with guidance/feedback from OHM Advisors staff. This includes floatable and sediment chamber inspection and "window" inspection.

- **Confined space entry and inspection of BMP system** - City Public Works staff performed entry and inspection with guidance/feedback from OHM Advisors staff. This includes sediment measurement in "solid" chambers, sediment measurement in the "infiltration" portion, and measurement of sediment migration across the "infiltration" portion of both systems.

Provided summary documentation of efforts performed by City staff and their reported findings and results. OHM made recommendations for repair, cleaning, and future maintenance of system.

COMPLETION
09.2020 - 05.2021

COST
$2,600

CLIENT INFORMATION
City of Ann Arbor DPW

Ron Hoeft,
Public Works Engineer

4251 Stone School Rd
Ann Arbor, MI 48108

734.794.6350

SERVICES PROVIDED
Contract Administration
Construction Engineering
Material Testing Coordination
Inspection
Oversight
Coordination with Client

WCWRC – PIONEER HIGH SCHOOL BMPS

WASHTENAW COUNTY, MICHIGAN

Pioneer High School was the first of several stormwater project sites to undergo improvements within the Allen Creek Watershed. The stormwater improvements were determined during 2008 with the development of the Allen Creek SRF Project Plan. The Project Plan highlighted ideal locations within the watershed to perform stormwater improvements to improve water quality.

The high school site includes "enclosed" sections of Allen Creek with an upstream drainage area of approximately 308 acres. The contributing area generates approximately 325,000 cubic feet of runoff during a first flush event (the first half-inch of rainfall).

Underground infiltration and storage facilities were designed to mitigate approximately 78% of the first flush runoff volume. Treatment occurs from grit separation as well as stormwater infiltration and storage, therefore reducing sediment, nutrients and E. coli concentrations to Allen Creek and the downstream Huron River. Stormwater detention is also provided through restricted outlet structures.

The EPA SWMM program was used to evaluate treatment system hydraulic performance. The project also required an extended period analysis using EPA SWMM to verify diversion structure impact did not cause upstream adverse hydraulic grade lines.

Finish grading of the site was critical due to its proximity to the University of Michigan Football Stadium and the site use as a parking lot on game days. OHM Advisors and the contractor devised a strategy to ensure precise topography; they installed a GPS device on top of the dozer. The dozer operator used the GPS positioning system to automatically set the blade of the dozer to achieve design grade.

The planning and design for the project required extensive coordination between the City of Ann Arbor, Ann Arbor Public Schools, Washtenaw County Water Resources Commissioner, the Allen Creek Advisory Group and local residents and businesses.

2010 APWA METRO DETROIT BRANCH PROJECT OF THE YEAR AWARD

COMPLETION
Design 06.2009
Construction 06.2011

CLIENT INFORMATION
Washtenaw County Water Resources Commissioner

Harry Sheehan, Sr.
Environmental Manager

P.O. Box 8645
Ann Arbor, MI 48170

734.995.0200

COST
Design $425,000
Construction $3,300,000

AWARDS
2010 APWA Metro Detroit Branch Project of the Year Award

SERVICES PROVIDED
Survey Services
Geotechnical Engineering
Roadway, Storm Sewer & Culvert Design
Water Main Design & Rehabilitation
Construction Engineering
Materials Testing
Stormwater Management
Hydrologic & Hydraulic Modeling
Innovative BMPs
Multi-Agency Coordination & Permitting
ARRA Funding
SRF Funding
Design & Construction
SWMM Modeling
Multi-Stakeholder Coordination
Green Infrastructure

CITY OF LIVONIA – 2020 DWRF WATER MAIN REPLACEMENT (PROJECT AREAS 1-3)

LIVONIA, MICHIGAN

The 2020 DWRF Water Main Replacement is a result of OHM's previous assistance to the City of Livonia for the submission of a project plan to the State of Michigan's Drinking Water State Revolving Fund (DWSRF). This submission allowed for several phases of water main replacement and rehabilitation within Livonia. DWSRF was administered by Michigan EGLE and used for this project. Trenchless installation was utilized in order to minimize disruption in the neighborhoods. OHM worked with the City of Livonia to design a cost-effective replacement method for approximately 4.5 miles of water main replacement.

Overall, this project included the replacement of 23,900 linear feet of 8", 12" and 16" water main, valves and hydrants. Water main in these project areas has been subject to several breaks attributable to age and material type. The new water main was installed primarily through pipe bursting with High Density Polyethylene (HDPE) pipe, but also included some directional drilling.

Project Areas 1-3 are located in Sections 14 and 35 of the City of Livonia. These areas were chosen based on the City of Livonia's CIP Project Plan. Area 1 consisted of replacement of 12" water main on 6 Mile and Middlebelt Roads in Section 14. Areas 2 and 3 included mainly residential water main replacement between Merriman and Middlebelt Roads, from Plymouth Road to Joy Road in Section 35 of the City.

COMPLETION

Design
03.2020
Construction
07.2021

CLIENT INFORMATION

City of Livonia

Todd Zilincik,
City Engineer

3300 Civic Center Drive
Livonia, MI 48154

734.466.2561

COST

Design
$467,000
Construction
$8,050,000

SERVICES PROVIDED

Engineering Design
Contact Administration
Trenchless Technology
Value Engineering
DWRSF Administration

CITY OF SOUTHFIELD – SECTION 12 & 13 WATER MAIN REPLACEMENT

SOUTHFIELD, MICHIGAN

The City's Water System Master Plan led to the development of a prioritized Capital Improvement Program, and this area of the City was a high priority. The 50+ year-old water mains had a history of frequent breaks and such significant mineral build-up that system reliability, water quality, and fire protection was severely compromised. OHM Advisors evaluated various trenchless rehabilitation options and found that an open-cut replacement with PVC pipe was the most cost-effective.

The project site is located primarily in the Sections 12 & 13 of the City. The work completed under the project included the replacement of the existing water mains along the streets listed below with the approximate linear footage of each section.

Section 13
(Approximately 10,400 lf)

1. Brentwood: from Catalpa to 12 Mile, approximately 2,600 lf of existing 6" water main
2. Marshall: from Catalpa to 12 Mile, approximately 2,600 lf of existing 6" water main
3. Fairfax: from Catalpa to 12 Mile, approximately 2,600 lf of existing 6" water main
4. Everett: from Catalpa to 12 Mile, approximately 2,600 lf of existing 6" water main

Section 12
(Approximately 5,800 lf)

1. Edwards: from Southfield to Greenfield, approximately 5,200 lf of existing 6" water main
2. 12 Mile: Connect two existing 6" dead end water mains to an existing 12" water main in Twelve Mile, approximately 600' of new 8" water main.

The existing water main is being replaced with an 8" PVC pipe water main, fire hydrants and other appurtenances will be replaced to meet current City standards. OHM Advisors worked closely with the contractor and City staff to coordinate water tie-ins and shutdowns to minimize service disruptions to the residents, and a school within the project limits.

COMPLETION
Design
02.2012 - 07.2012
Construction
2013

COST
Design
$160,000
Construction
$2,700,000

CLIENT INFORMATION
City of Southfield

Leigh Schultz PE,
City Engineer

26000 Evergreen Road
Southfield, MI 48037

248.796.4812

SERVICES PROVIDED
Water Main Replacement
Capital Improvement Planning

CITY OF SOUTHFIELD – SECTION 15 PAVING & WATER MAIN IMPROVEMENTS

SOUTHFIELD, MICHIGAN

In recent years, OHM Advisors has assisted the City of Southfield in the development and execution of its capital improvement program. As many portions of the city exceed 50 years in age, the focus of this effort is targeted towards water and roadway infrastructure. To help the city prioritize projects, OHM has developed models to identify subdivision projects that will be most effective in reducing annual maintenance and repair efforts of water main while also targeted roadway improvements by utilizing asset management principals.

As part of a two-phase project (2016 and 2018), this process directed focus to Section 15 of the City. Within this section, OHM developed targeted infrastructure improvements that addressed water and pavement needs. OHM also performed a traffic study of a cross street within the section due to widespread reports of speeding from residents. The end product from the study was targeted neighborhood traffic calming measures including medians, intersection bump-ins as well as a compact urban roundabout. Due the condition of pavements, OHM worked wherever possible to preserve pavements, curbs and driveways through concrete patching and pavement inlay designs.

Streets found to be beyond rehabilitation due to PASER or where water main replacement required significant pavement impacts were replaced.

OHM also oversaw the construction of the project which impacted nearly 600 parcels in total. OHM's construction phase services emphasized communication between the project team and residents with continual notification during the project. OHM also performed value engineering based on the contractor's unit prices to optimize the improvement relative to client budgets and project goals.

COMPLETION

Phase I Design
08.2015 - 02.2016
Phase I CE
04.2016 - 06.2017
Phase I Construction
04.2016 - 06.2017
Phase II Design
07.2016 - 02.2017
Phase II CE
04.2018 - 06.2019
Phase II Construction
07.2018 - 06.2019

COST

Phase I Design
$235,000
Phase I CE
$580,000
Phase I Construction
$3,900,000
Phase II Design
$287,000
Phase II CE
$720,000
Phase II Construction
$3,800,000

CLIENT INFORMATION

City of Southfield

Leigh Schultz PE,
City Engineer

26000 Evergreen Road
Southfield, MI 48037

248.796.4812

SERVICES PROVIDED

Water Main Replacement
Water Modeling
Pavement Asset Management
Roadway Engineering
Traffic Engineering
Construction Engineering

CITY OF NOVI – SANITARY SEWER PIPE & MANHOLE REHABILITATION

NOVI, MICHIGAN

In 2018, OHM Advisors assisted the City of Novi with an analysis of its sanitary sewer system as a part of the Stormwater, Asset Management, and Wastewater (SAW) Grant provided by the Department of Environment, Great Lakes, and Energy (EGLE). The analysis included televising a majority of the sanitary sewer pipes and about half of the manholes within the study area. The study area included GPS locating and condition assessment of approximately 450,000 feet of 6”-18” sanitary sewer and 1,300 structures throughout the City.

The condition of the pipes and manholes was assessed through review of the inspection videos and record drawings. Based on in-depth condition assessment and deterioration forecasting, a phased capital improvement plan was created containing rehabilitation recommendations and estimated costs for both sanitary sewer pipe and manholes identified as needing repair. The most urgent areas to rehabilitate were included in this initial phase.

With the capital improvement plan in place, OHM Advisors assisted the City of Novi with the preparation of contract documents for bidding and providing full-time construction engineering, administration and observation services in order to complete the recommended rehabilitation for Phase 1.

The rehabilitation project included a combination of the following major work items for sewers and structures in both greenbelt areas and within paved surfaces.

Manholes:

- 180 structures - minor/major point repairs, partial & full depth rebuilds, and adjustments
- 390 vft of structure lining
- 350 gallons of structure and pipe connection grouting

Sewer:

- 90 feet of 8”-10” open cut point repairs over multiple locations
- 125 each of 8”-12” pipe joint grouting
- 85 each of 8”-12” sewer spot liners
- 8,200 feet 8”-12” full-length CIPP liners
- Miscellaneous lateral connection grouting and repair

Associated work also included traffic control measures, business and resident notification, bypass pumping, pavement and sidewalk repairs, tree removals and/or protection, cleaning and surface preparation efforts, and surface restoration for impacted commercial and residential properties.

COMPLETION

Study
09.2016 - 12.2018
Design
05.2019 - 12.2019
Construction
09.2020 - 12.2020

COST

Study
$263,800
Design
$41,550
Construction
$1,100,000

CLIENT INFORMATION

City of Novi

Ben Croy,
City Engineer

45175 W. Ten Mile Road
Novi, MI 48375-3024

248.735.5635

SERVICES PROVIDED

Condition Assessment
Asset Management
GIS Mapping
Design & Bidding
Construction Administration
Construction Observation

CITY OF NOVI – PATHWAY GAP AND ADA COMPLIANCE PROGRAM

NOVI, MICHIGAN

OHM Advisors was hired by the City of Novi to design and construct missing links of pedestrian infrastructure to increase connectivity throughout the City. The project included construction of nine different pathway segments over various areas throughout the City. The connections were designed to fill in gaps that once constructed will provide continuous access to schools and commercial businesses along major and local City routes. Along with these sidewalk gap infills, the project also included associated ADA upgrades, pedestrian signal upgrades, storm sewer and drainage improvements, and retaining wall design and construction. Major work items included the following quantities:

- 22,070 square feet of 6 to 8-feet wide concrete pathway
- 2,320 square feet of ADA ramps
- 1,200 square feet of modular block wall
- 14 pedestrian push buttons

The project included easement acquisition for over a dozen parcels and close coordination with local utility companies to address utility conflicts critical to completion of the missing pedestrian infrastructure links. Due to the existing terrain, two retaining walls were constructed along Haggerty Road to construct an at grade pathway that met ADA requirements. Of specific complexity was coordination for construction activities near a dual high-pressure oil pipeline that ran in parallel to the pathway and retaining walls constructed along these segments.

The team was also responsible for contract administration, observation of construction activities, field engineering, and layout/staking during construction.

COMPLETING MISSING LINKS OF PEDESTRIAN INFRASTRUCTURE

COMPLETION

Design
2019 - 2020

Construction
2020-Ongoing

CLIENT INFORMATION
City of Novi

Ben Croy, PE,
City Engineer

45175 Ten Mile Road
Novi, MI 48375

248.347.0460

COST

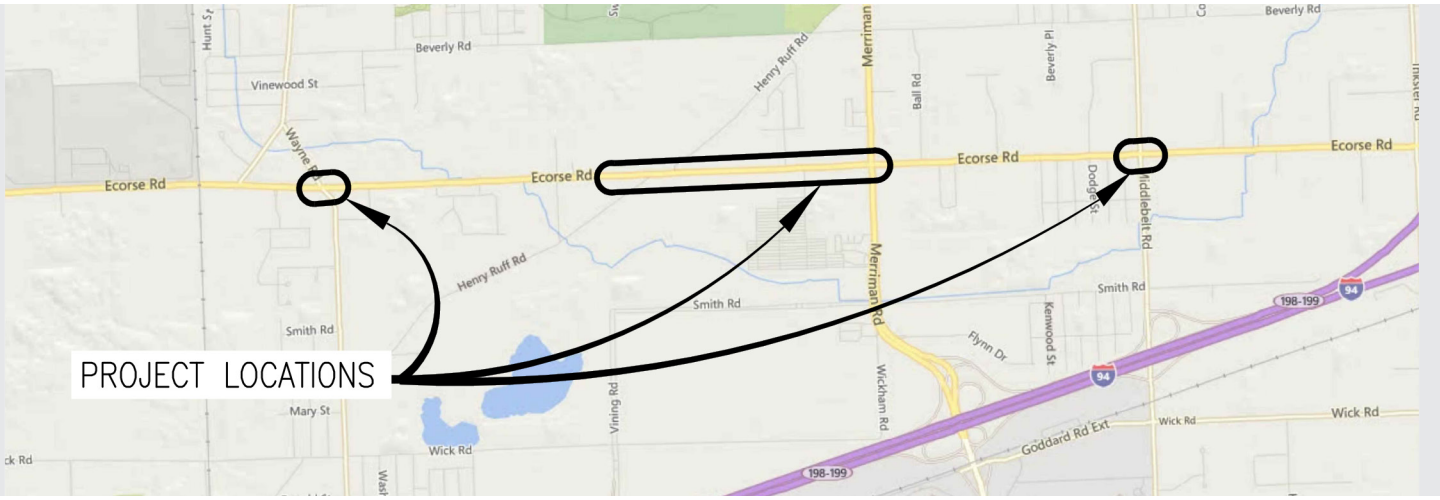
Design
$148,000

Construction
$823,127

SERVICES PROVIDED
Professional Survey Contract Document Creation
Sidewalk Design
Easement Acquisition
Contract Administration
Construction Engineering

CITY OF ROMULUS – ECORSE ROAD RECONSTRUCTION

ROMULUS, MICHIGAN



OHM Advisors was contracted by the City of Romulus to expedite the design of Ecorse Road between Vining Road and Merriman Road (1.13 miles) in order to meet the opening date of a new Amazon warehouse being built along the corridor. OHM completed the design in a little over three months, and also combined the Ecorse bid plans with road design plans for the construction of Vining Road, designed by another consultant.

As part of the design phase, OHM designed the roadway improvements and assisted the City in bidding the project (local bid). Some private property impacts were required due to the close proximity of the work to the property lines. Utility impacts were encountered as well. Several resident meetings were required to coordinate the grading impacts and to discuss the construction schedule.

Due to the flatness of the area, and the shallow drainage outlets, a unique concept for drainage was incorporated in the project. To encourage drainage, OHM designed back of curb swales and ditches, that were fed by spillways in the curb and gutter. This concept allowed the drainage system to be below 5' deep. Two county drains were affected.

OHM Advisors performed full construction engineering services for both the Capital Improvements around the warehouse, including signal upgrades, and for all the infrastructure for the private development of the warehouse.

The project required close coordination with the Amazon site developer, the City, Wayne County, and the second consultant. Permits were required from Wayne County Drain Office and NPDES.

amazon.com

COMPLETION

Design
06.2017 - 08.2017

CE
09.2017 - 06.2019

Construction
09.2017 - 06.2019

COST

Design
$521,000

CE
$566,300

Construction
$9,231,543

CLIENT INFORMATION

City of Romulus

Bob McCraight,
Economic Development Dir.

11111 Wayne Road
Romulus, MI 48174

734.955.4537

SERVICES PROVIDED

Engineering Design
Survey Services
Utility Coordination
Maintenance of Traffic
Markings & Signings
Traffic Signal Design
Permitting Assistance
Bidding Assistance

CITY OF FARMINGTON HILLS – 13 MILE RD; DRAKE TO FARMINGTON

FARMINGTON HILLS, MICHIGAN

OHM Advisors provided design engineering services on the section of 13 Mile Road from Drake Road to Farmington Road for this federally funded project. The project adhered to MDOT's 3R (Rehabilitation, Resurfacing, and Restoration) Guidelines for roadway construction, making it eligible for federal funding that was administered by MDOT's Local Agency Program.

The scope of the project included one mile of cold milling and HMA resurfacing, pavement widening for a continuous 3-lane section, new bike lanes, new curb & gutter, ADA-compliant sidewalk ramps, enclosed drainage, 1500 feet of new sanitary sewer, permanent signing, pavement markings, pedestrian pushbuttons at the Mayfair Drive traffic signal, and the associated maintaining traffic. The project also included replacement of the Minnow Pond Drain culvert with a new 10-foot by 8-foot precast concrete box culvert. Right-of-way impacts were limited to a few Consents to Grade. A challenge on this project was to develop feasible pavement rehabilitation measures that fit within the client's budget while still providing a lasting improvement. This project will be a vast betterment in the corridor allowing pedestrian and bicycle connectivity, along with improved traffic operations with a continuous center left turn lane.

OHM provided Construction Administration services for the MDOT LAP contract, in cooperation with the City's on-site inspectors and surveyors.

COMPLETION

Design
01.2017 - 11.2017
CE
02.2018 - 09.2018
Construction
02.2018 - 09.2018

COST

Design
$229,000
Construction
$193,540
Construction
$3,154,510

CLIENT INFORMATION

City of Farmington Hills

James Cubera, PE,
City Engineer

31555 W. 11 Mile Road
Farmington Hills, MI 48336

248.871.2569

SERVICES PROVIDED

Road Design Engineering
Storm Sewer Design
Culvert Design
Utility Coordination
Right of Way
Maintenance of Traffic
ADA Compliance
Pavement Markings & Signing
Traffic Signal Design
Construction Administration

CITY OF FARMINGTON HILLS – GREENCASTLE SUBDIVISION WATER MAIN

FARMINGTON HILLS, MICHIGAN

The City of Farmington Hills desired to improve its utility infrastructure in the Greencastle Subdivision, south of Twelve Mile Road between Middlebelt Road and Inkster Road by providing public water to the subdivision which was largely supplied by private well systems.

The project design incorporated primarily directional drill construction of HDPE water main (5450 feet), with open cut areas to install gate valves and wells, fire hydrants, and any necessary fittings to complete the system. The water system as per the Oakland County requirements transitions to ductile iron pipe at each gate well location. Ductile iron was continued in the open cut areas to allow for simpler connections for hydrants and other pipe fittings.

The geotechnical report identified a high water table in much of the subdivision. This was anticipated to cause some difficulty in construction of the main in the open cut areas. OHM contacted contractors who had completed other work in the area to determine the extent of there efforts required to deal with the high water table, and it was determined that including dewatering in the contract would be the best approach to allow for proper water main construction and provide the best product to the City.

The design incorporates four (4) connections to the existing public water system which will not only provide a consistent clean water source to the residents of the subdivision but improve the water system in that area as a whole.

Final contract documents and plans were delivered to the City in September 2017 and the contract was awarded in October.

COMPLETION

Design
09.2017

Construction
12.2017

CLIENT INFORMATION

City of Farmington Hills

James Cubera, PE
City Engineer

3155 W Eleven Mile Road,
Farmington Hills, MI 48336

248.871.2560

COST

Design
$83,700

Construction
$900,000

SERVICES PROVIDED

Topographic Survey
Utility Coordination
Geotechnical Study
Construction Documents
Cost Estimating

CITY OF FARMINGTON – BEL-AIRE SANITARY SEWER LINING

FARMINGTON, MICHIGAN

In 2019, the City of Farmington desired to improve its sanitary sewer infrastructure, primarily in the Bel-Aire Subdivision, located west of Orchard Lake Road between Ten Mile Road and Shiawassee Road, due to known aging and failing sewer responsible for extensive inflow and infiltration (I&I) into the City's Sanitary Sewer System.

In order to determine rehabilitation methods, the sewer was televised and assessed. Televising determined that the necessary improvements included lining (12,762 feet) and an open-cut repair section. Two years prior to this assessment eight (8) other sections were open cut repaired due to collapse and failure. Open-cut repairs in 2020 were limited to one (1) section of sewer. This repair was made prior to lining improvements and was coordinated with the impacted residents accordingly. Other repair methods performed include pipe grouting, service grouting, and tee-liners.

Additionally, the manholes located throughout the project area were video inspected and logged by OHM Advisors, using a high-definition camera, to define their condition and determine what repairs were necessary. In total, sixty-seven (67) manholes had their bench rebuilt and various other maintenance repairs were identified and performed. These repairs included manhole liners, epoxy injection, and casting frame removal and resets. This rehabilitation was made in conjunction with the lining rehabilitation efforts.

After the final contract documents and plans were complete and the contract awarded, OHM provided full construction engineering services including construction inspection of all the lining and repairs. Overall, the project came in under budget, which then allowed the City to televise and line approximately 1,250 additional feet of sanitary sewer as part of this project.

COMPLETION

Design
12.2019

Construction
07.2020

COST

Design
$71,000

Construction
$881,000

CLIENT INFORMATION

City of Farmington

David Murphy,
City Manager

23600 Liberty St
Farmington, MI 48335

248.474.5500

SERVICES PROVIDED

Televising Sanitary Sewer
Construction Documents
Construction Inspection
Sanitary Sewer Infrastructure Assessment

CITY OF LIVONIA – GENERAL ENGINEERING SERVICES

LIVONIA, MICHIGAN

OHM Advisors provides general consulting engineering services to the City of Livonia, located in Wayne County, MI. Livonia has a current population of approximately 100,000 people and is primarily developed. The city obtains water from the Detroit Water and Sewerage Department. Sewage generated is received by the North Huron Valley/ Rouge Valley System. Our team has performed general engineering services and has assisted the city with their infrastructure needs. This has included analysis, design, layout, construction observation, special studies, and needs assessments for roads, water and sanitary sewer utilities, storm water management, bridges, parks, traffic and corridor studies, etc.

ADVANCING THE LIVONIA COMMUNITY SINCE 1962

OHM Advisors has assisted the city with the engineering for the annual road program since 2002. The city renewed the millage for an additional ten years in 2012. Our team has assisted the city with the planning, prioritization, design, and construction of the projects under the program. OHM Advisors assists the city on an as-needed basis to supplement the city's resources in the Engineering Department by assisting with the review and inspection of private development projects in the city.

Recently, our team performed a Sanitary Sewer Evaluation Survey in the system. The study involved field investigations, CCTV pipe inspections, temporary sewer metering, rehabilitation design, contract management, and development of a capital improvement program and schedule for operations maintenance activities.

In the last decade OHM Advisors prepared a comprehensive Stormwater Master Plan for the city. We have assisted the city each year by seeking grant opportunities to help fund the projects identified in the Master Plan. The Water and Sanitary Planning documents were used to apply for project funding from the State's Drinking Water and Sewer Revolving Loan Fund programs in 2014 and 2015.

COMPLETION
1962-Ongoing

ANNUAL COST
$700,000 - $1,200,000

CLIENT INFORMATION
City of Livonia

Todd Zilincik, PE,
City Engineer

33000 Civic Center Drive
Livonia, MI 48154-3097

734.466.2561

SERVICES PROVIDED
Road Reconstruction
Site Plan Review
Construction Observation
Stormwater Mgmt.
Master Plans
Traffic Consulting

CITY OF NOVI – GENERAL ENGINEERING SERVICES

NOVI, MICHIGAN

OHM Advisors provides general consulting engineering services to the City of Novi, located in Oakland County, MI. Novi has a current population of 55,224 people with residential growth anticipated in the coming years. The city obtains water from the Detroit Water and Sewerage Department. Sewage generated is received by the North Huron Valley/Rouge Valley System.

Our team has performed general engineering services and has assisted the city with their infrastructure needs. This has included analysis, design, layout, construction observation, special studies, and needs assessments for roads, water and sanitary sewer utilities, storm water management, bridges, parks, traffic and corridor studies, etc.

Our team has completed numerous projects involving major and local road resurfacing, reconstruction and capital preventative maintenance. We recently completed the design and construction phase services for three miles of federally funded major asphalt road rehabilitation. Currently we are working to assist the city in developing a neighborhood road rehabilitation project that implements a number of cost effective solutions to meet the city's allocated budget and meet their desired goals.

Our team has also performed sanitary sewer Capacity, Management, Operation, and Maintenance (CMOM) studies in the city to reinforce confidence in the current state and capacity of the system and identify improvements needed to maintain optimal sewer performance and expansion. These studies involved field investigations, CCTV pipe inspections, temporary sewer metering, rehabilitation design, contract management, and development of a capital improvement program and schedule for operations maintenance activities. These projects included 76,000 feet of pipe ranging from 8-15 inches, with 476 manholes inspected and 325 manholes rehabilitated. Our team also prepared an antecedent moisture model, hydraulic model and capacity assessment of the system and developed an application called iTrack that combines the results of the capacity analysis, EPA-SWMM and the City's GIS data through Arc-IMS into a Part 41 Sewer Permit tracking tool.

PERFORMED GENERAL ENGINEERING SERVICES & ASSISTED CITY WITH INFRASTRUCTURE NEEDS

COMPLETION
2004 - Ongoing

CLIENT INFORMATION
City of Novi

Pete Auger,
City Manager

45175 W. Ten Mile Road
Novi, MI 48375-3024

248.347.0454

COST
$300,000 - $600,000

SERVICES PROVIDED
Site Plan Review
Road Reconstruction
Stormwater Mgmt.
Traffic Consulting
CMOM Studies
Capital Improvement Program
GIS Development

CITY OF FENTON – GENERAL ENGINEERING SERVICES

FENTON, MICHIGAN

OHM Advisors provides general consulting engineering services to the City of Fenton since 2010 and this includes service to the city's DDA and LDFA. Work has consisted of providing construction inspection numerous commercial and office sites, and an S2 grant application for stormwater quality improvements with a $100,000 grant received to be used in conjunction with a major downtown streetscape project.

Work with the LFDA has included a study and general conceptual layout for extending a major industrial park collector drive. Our team has also assisted the city in applying to the Michigan Critical Bridge Program to replace the Silver Lake Road Bridge over the Shiawassee River. In May 2016, the downtown streetscape was completed.

WIDE RANGE OF SERVICES TO MEET THE NEEDS OF THE CITY

This vital project was designed to improve the walkability, safety, infrastructure, green technology, and aesthetics of the area in order to increase the vibrancy and improve the economic development opportunity of the downtown. A six block section of S. Leroy Street was reconstructed, including all underground utilities, complete makeover of the roadway and newer streetscape segments.

Essentially, our team performs all general engineering services which include site plan review, construction inspection on both Capital Improvement projects and private development projects, pavement maintenance programs, site design, GIS development, Phase II stormwater compliance, flow metering, IT services, engineering standards and traffic consulting. Our team attends City Council meetings as needed, and select Planning Commission, and Downtown Development Authority meetings.

COMPLETION
2010-Ongoing

CLIENT INFORMATION
City of Fenton

Lynn Markland,
City Manager

301 S. Leroy Street
Fenton, MI 48430

810.629.2261

ANNUAL COST
$300,000

SERVICES PROVIDED
Downtown Redevelopment
Site Plan Reviews
Site inspections
Road Reconstruction
Municipal Meetings

CITY OF SOUTHFIELD – GENERAL ENGINEERING SERVICES

SOUTHFIELD, MICHIGAN

Since 1993, OHM Advisors has been one of two firms providing engineering consulting services to the City of Southfield. During this period, our team has designed numerous road reconstruction projects, updated the city's Water System Master Plan, and provided Southfield with an innovative design for a $1.1M project to reconstruct a large portion of the Southfield Civic Center parking lot. Our team's work has not been limited to design only but has included survey, staking, construction inspection and contract administration.

The Water System Master Plan study results have led the city to take on a new and fresh look at what was thought to be a large and expensive approach to water line replacement. Our team's conclusions and advice have now allowed Southfield to look at considerable cost savings and to move into a true asset management approach for water line replacement and system enhancements. This has led to development of expanded asset management analysis for sanitary sewer, storm facilities and roads. Our team has been authorized to proceed with asset management planning for most of the city's infrastructure needs.

One unique challenge of the Water System Master Plan update was the establishment of a collaborative team between the city, our engineers, and the source water providers, the Southeastern Oakland County Water Authority (SOCWA). SOCWA provided all the boundary conditions for the approximately 10 connections within the city's distribution system. Close collaboration and planning continued throughout the project when recommending changes in the city which may influence the SOCWA system and vice versa.

Another unique aspect of this project was the development and utilization of a unique water main infrastructure prioritization matrix. This matrix takes into account not only hydraulic information, such as flow rate and pressure variations, but also operational information including water main break rates, water main age, material and soil condition in order to develop a capital improvements project priority list. This list is also complemented with risk management factors such as 'consequence of failure' calculations. In the end, a comprehensive water master plan was developed, which also included trenchless technology recommendations for improving water infrastructure system.

COMPLETION
1993-Ongoing

CLIENT INFORMATION
City of Southfield

Leigh Schultz,
City Engineer

26000 Evergreen Road

PO Box 2055
Southfield, MI 48037-2055

248.796.4812

ANNUAL COST
$200,000 - $1,000,000

SERVICES PROVIDED
Road Reconstruction
Master Plans
Survey Services
Construction Inspection
Asset Management Program

SCIO TOWNSHIP – GENERAL ENGINEERING SERVICES

SCIO TOWNSHIP, MICHIGAN

OHM Advisors provides general consulting engineering services to Scio Township, located west of Ann Arbor. Scio Township has a population of 16,000 people, and is still growing. The township obtains water from the City of Ann Arbor and discharges wastewater to the Ann Arbor sewer system. Several new developments along the Jackson Road corridor have necessitated township improvements to existing infrastructure. The township has large areas that are fairly rural. The township desires to preserve these rural characteristics, but faces pressures from developers especially along Jackson Road. Our team helps the community keep projects consistent with the adopted Master Land Use Plan, helping to preserve much of the township's rural character.

Our team has worked closely with the township since 2002 to develop infrastructure solutions that meet the township's needs. Our team has developed the water system model which allows the township to actively plan for improvements by analyzing the effects of new developments, increased demands, and proposed improvements. Our team performs analysis and design for projects as needed, which includes the Jackson Road Sanitary Sewer, which was a $3M project. Our team has been very involved with the township and its ongoing discussions with the City of Ann Arbor over contract compliance issues involving required water distribution system capital improvements and wastewater volume/capacity growth. OHM Advisors has worked with the township in analyzing its water and sewer rates, to ensure the township is paying a fair rate, as well as proposing infrastructure improvements to help reduce rates. We have prepared a Capital Improvement Program that considers improvements Ann Arbor will require of the township.

OHM Advisors performs general engineering services that include site plan review, construction inspection for private site and capital improvement projects, development of special assessment districts, special studies as needed, GIS system planning, and traffic consulting.

ACTIVELY ADVANCING THIS RURAL BUT GROWING COMMUNITY

COMPLETION
2002-Ongoing

CLIENT INFORMATION
Scio Township

Will Hathaway,
Supervisor

827 N. Zeeb Road
Ann Arbor, MI 48103

734.665.2123

ANNUAL COST
$200,000 - $500,000

SERVICES PROVIDED
Site Plan Review
Construction Observation
Special Assessment Districts
GIS Development
Road Reconstruction
Municipal Meetings

CITY OF FARMINGTON HILLS – GENERAL ENGINEERING SERVICES

FARMINGTON HILLS, MICHIGAN

OHM Advisors has provided a multitude of professional services to the City of Farmington Hills for general engineering support and various capital improvement projects for over 30 years. Since 2014, these services have been structured around support for the City's robust capital improvement program, including replacement or rehabilitation of major and local City roadways, water main, sanitary sewer, as well as road and utility system planning. This work is currently being performed under an ongoing General Engineering Services Contract for the City, and includes some of the following efforts:

- Yearly Local Road HMA Paving Rehabilitation Planning and Contract Documents
- Yearly as-needed Construction Inspection Support Services for Site Plan Development
- Yearly PASER Rating Support As-needed
- 2018 Water Main and Sanitary Sewer Master Plan (in conjunction with OCWRC)
- Greencastle Subdivision Water Main Replacement
- 13 Mile Road Replacement from Drake Road to Farmington Road
- Nine Mile Road Rehabilitation from Hawthorn Street to City Limit
- Quaker Valley Lane Water Main and Sanitary Sewer Extension
- Richland Gardens Subdivision Local Road Replacement
- Briar Hill Subdivision Local Road Replacement
- Pleasant Valley & Old Homestead East Local Road Replacement

COMPLETION
1992 - Ongoing

ANNUAL COST
$500,000-$1,00,000

CLIENT INFORMATION
City of Farmington Hills

Karen Modora, PE,
Director of Public Services

31555 Eleven Mile Road
Farmington Hills, MI 48336

248.871.2530

SERVICES PROVIDED
Road Reconstruction
Asset Mgmt.
Water main Design
Sanitary Sewer Design
Stromwater Mgmt.
Contract Administration
Construction Engineering

B. PAST INVOLVEMENT WITH SIMILAR PROJECTS

OHM Advisors has provided various types of civil, environmental, transportation, and general engineering services to various operating units with the City. Here is a sampling of some recent work we have performed in the City of Ann Arbor.

Nixon / Green / DhuVarren Roundabout

COMPLETION
Design
03.2016 - 01.2017
CE
06.2017 - 10.2017
Construction
06.2017 - 09.2017

COST
Design
$560,000
CE
$140,000
Construction
$2,426,797

CLIENT INFORMATION
City of Ann Arbor
Igor Kotlyar, PE
Senior Project Engineer
301 E. Huron Street
Ann Arbor, MI 48104
734.794.6410

SERVICES PROVIDED
Design Engineering
Survey Services
Multi-Modal Analysis
Non-Motorized Pathway
Public Engagement
Construction Engineering

Nixon Road Corridor Study

COMPLETION
Study
02.2016 - 05.2017

COST
Study
$165,000

CLIENT INFORMATION
City of Ann Arbor
Igor Kotlyar, PE
Senior Project Engineer
301 E. Huron Street
Ann Arbor, MI 48104
734.794.6410

SERVICES PROVIDED
Traffic Study

B. PAST INVOLVEMENT WITH SIMILAR PROJECTS

Seventh Street Speed Management Study

COMPLETION
Study
03.2017 - 05.2017

CLIENT INFORMATION
City of Ann Arbor

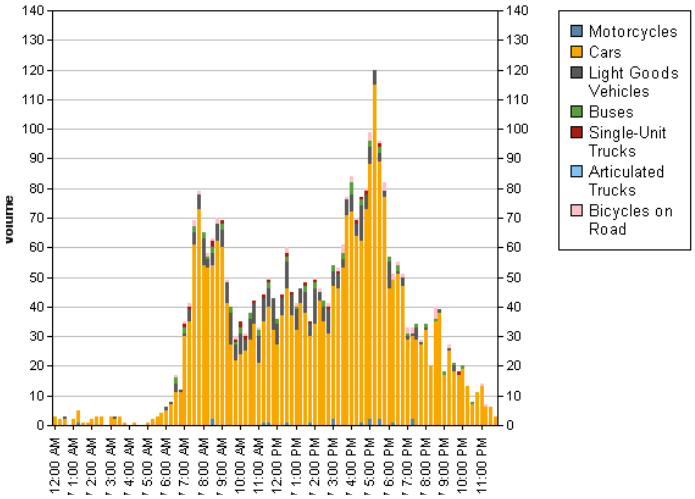
Nick Hutchinson, PE
City Engineer

301 E. Huron Street
Ann Arbor, MI 48104

734.794.6411

COST
Study
$23,000

SERVICES PROVIDED
Traffic Study
Traffic Count
Recommendations
Stakeholder Meetings



Lower Town Mobility Study (Project Pending)

COMPLETION
Study
TBD

CLIENT INFORMATION
City of Ann Arbor

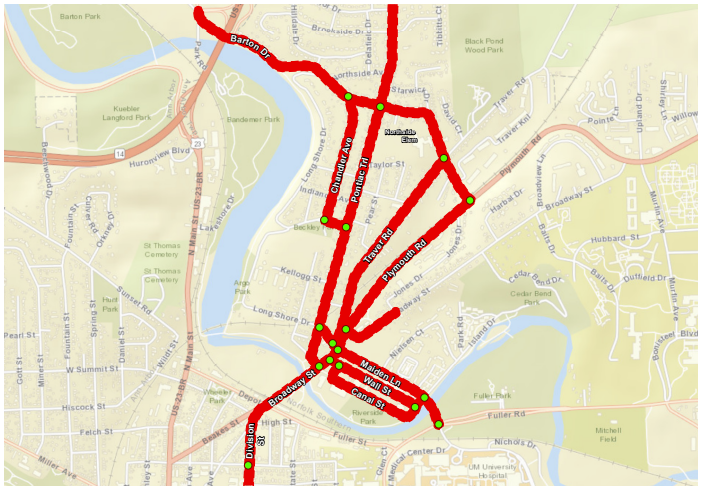
Luke Liu, PE, PTOE
Traffic Engineer

301 E Huron Street
Ann Arbor, MI 48104

734.794.6410

COST
Study
$579,000 (Estimated)

SERVICES PROVIDED
Traffic Study
Traffic Count
Crash Analysis
Recommendations
Public Engagement



Northside Interceptor Condition Assessment

COMPLETION
Design
09.2017 - 11.2017

CLIENT INFORMATION
City of Ann Arbor

Chris Elenbaas, PE
Public Works Engineer

4251 Stone School Road
Ann Arbor, MI 48108

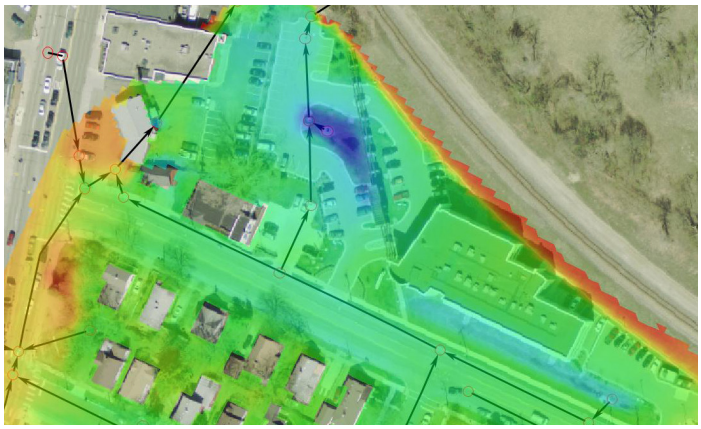
734.794.6350 ext 43311

COST
Design
$53,000

SERVICES PROVIDED
Pipeline Condition Assessment
Manhole Condition Assessment
Surveying Drone

B. PAST INVOLVEMENT WITH SIMILAR PROJECTS

Allen Creek Berm Opening Feasibility Study



COMPLETION
04.2013

COST
$50,000

CLIENT INFORMATION
City of Ann Arbor

Jerry Hancock, CFM
Stormwater and Floodplain Programs Coordinator

301 E. Huron Street
Ann Arbor, MI 48104

734.794.6430

SERVICES PROVIDED
Storm Drainage Systems
Water Supply Systems & Modeling

Sanitary Sewer Wet Weather Evaluation Project

COMPLETION
06.2014 – 12.2014

COST
$1,160,000

CLIENT INFORMATION
City of Ann Arbor

Nick Hutchinson, PE
City Engineer

301 E. Huron Street
Ann Arbor, MI 48104

734.794.6411

SERVICES PROVIDED
Flow Metering
Hydrologic Modeling
Hydraulic Modeling
Capacity Assessment
Alternative Evaluation
Public Engagement

Sanitary Sewer Improvements & Preliminary Engineering Project

COMPLETION
Study
01.2016 - Ongoing

COST
Study
$934,417

CLIENT INFORMATION
City of Ann Arbor

Brian Slizewski, PE
Senior Project Engineer

301 E Huron Street
Ann Arbor, MI 48104

734.794.6410

SERVICES PROVIDED
Flow Metering
Manhole Condition Assessment
Pipeline Condition Assessment
Hydraulic Modeling
Capacity Assessment
Alternative Evaluation
Preliminary Engineering
Public Engagement

Stormwater & Wastewater Asset Management Plan

COMPLETION
2016 - 2019

COST
Grant Budget
$1,170,000

CLIENT INFORMATION
City of Ann Arbor

Jennifer Lawson, CSM
Water Quality Manager

301 E. Huron Street
Ann Arbor, MI 48104

734.794.6430

SERVICES PROVIDED
Asset Inventory
Condition Assessment
Remaining Life Determination
Life Cycle Cost Analysis
Level of Service Assessment
System Criticality Assessment
O&M Optimization
CIP Development
AMP Development

B. PAST INVOLVEMENT WITH SIMILAR PROJECTS

Professional Engineering Construction Services (Developer Offset Mitigation)

COMPLETION
Study
04.2016 - Ongoing

COST
Study
$175,000

CLIENT INFORMATION
City of Ann Arbor

Alison Heatley
Private Developer Coordinator

301 E Huron Street
Ann Arbor, MI 48104

734.794.6410

SERVICES PROVIDED
Construction Inspection

Sump Pump Installation Modification Project

COMPLETION
Study
05.2015 - 08.2018

COST
Study
$960,249

CLIENT INFORMATION
City of Ann Arbor

Nick Hutchinson, PE
City Engineer

301 E Huron Street
Ann Arbor, MI 48104

734.794.6411

SERVICES PROVIDED
Construction Inspection

Veteran's Park Ice Arena Cooling Tower / Condenser Replacement

COMPLETION
Design
02.2015 - 04.2015
Construction
06.2015 - 07.2015

COST
Design
$12,500
Construction
$105,000

CLIENT INFORMATION
City of Ann Arbor

Chris Elenbaas, PE
Public Works Engineer

4251 Stone School Road
Ann Arbor, MI 48108

734.794.6350 ext 43311

SERVICES PROVIDED
Condition Assessment
Structural Assessment
Recommendations
Equipment Selection
Permitting Assistance
Bid Documents
Construction Observation

Veteran's Park Pool Boilers / Equipment Replacement

COMPLETION
Study
06.2016 - 08.2016
Design
09.2016 - 11.2016

COST
Study
$10,000
Design
$22,000

CLIENT INFORMATION
City of Ann Arbor

Chris Elenbaas, PE
Public Works Engineer

4251 Stone School Road
Ann Arbor, MI 48108

734.794.6350 ext 43311

SERVICES PROVIDED
Condition Assessment
Recommendations
Equipment Selection
Permitting Assistance
Bid Documents

Streetlight Condition Assessment

COMPLETION
01.2017 - 06.2017

COST
$143,296

CLIENT INFORMATION
City of Ann Arbor

Chris Elenbaas, PE
Public Works Engineer

4251 Stone School Road
Ann Arbor, MI 48108

734.794.6350 ext 43311

SERVICES PROVIDED
GIS Services
Streetlight Assessment
Prepared Recommendations

2019 Streetlight Replacement Program

COMPLETION
Design
08.2018 - 11.2018
Construction
04.2019 - 07.2019

COST
Design
$40,000
Construction
$546,924

CLIENT INFORMATION
City of Ann Arbor

Chris Elenbaas, PE
Public Works Engineer

4251 Stone School Road
Ann Arbor, MI 48108

734.794.6350 ext 43311

SERVICES PROVIDED
Engineering Design
Electrical Engineering
Cost Estimating
Bid Documents
Contract Administration

PROPOSED WORK PLAN

To meet the expectations of the City and the requirements of this RFP, the selected consultants will require a commitment to teamwork, sharing, and responsiveness. OHM is uniquely qualified for this contract because we provide a highly qualified and motivated team of managers, engineers, and technicians, under an organizational structure and culture which promotes innovation, efficiency, and exceptional service to our clients. This allows OHM Advisors to build longstanding relationships with our clients, as partners in their ongoing efforts to provide a high level of public service to their community. We look forward to following this model of success and continuing our positive relationship with the City of Ann Arbor Public Services Area and Engineering Unit. The following sections describe how OHM Advisors intends to provide the professional services described in the RFP.

SCOPE OF SERVICES

The professional services that may be required as part of this contract with the City as noted in Section II of the RFP consist of construction inspection services on an as-needed basis for both Private Development Projects and Capital Improvement Projects (CIP's), both of which OHM Advisors is fully qualified and extremely experienced in providing to our many municipal clients. The type of efforts that would be required from our construction discipline would include engineering supervision, construction administration, and full-time site/project inspection related to constructed improvements.

The construction administration and site inspection services required by this RFP would include verifying that provided materials and work performed by the Contractor is in conformance with the project plans and specifications, as well as preparation of Inspector's Daily Reports (IDR's) (based on the guidelines provided in Attachment B of the RFP).

Additional anticipated scope of work items includes the following:

- Review plans and specifications for the project prior to construction start-up to be familiar with content, requirements, sequence of construction, and other important aspects of the work.
- Communicate daily with the City Project Manager, Engineer, or Civil Engineering Specialist regarding the progress of the work and any issues that may arise on the project.
- Communicate daily with the Contractor's superintendent or supervisor to coordinate inspection activities, logistics, and schedule, and to aide in proper inspection and oversight of the work.
- Communicate with the survey crew(s) to obtain cut sheets, and aide with proper interpretation of the construction staking and coordinating daily staking needs.
- Communicate with material testing personnel to assist in the proper sampling and testing of materials during the work.
- Communicate as needed with residents, businesses, business owners and Art Fair committee to address any obstruction concerns.
- Coordinate with City Staff to inform Republic Parking of any special parking needs throughout the projects as required.
- Coordinate as needed with the Water Plant and City Public Works for shutdowns, water sampling and service interruptions.
- Help coordinate and resolve delivery conflicts to businesses and residents throughout the project.
- Coordinate with the City Staff for a trash removal plan during construction for business and residents.
- Attend weekly progress/planning meetings related to the project.

- Verify that materials to be used as part of the work meet the project specifications.
- Monitor, document, and notify responsible party(s) of potentially hazardous site conditions relating to construction crew members, motorists and pedestrians which are observed.
- Coordinate the placement of road materials using the permit to place method.
- Generate IDR's to document work by the Contractor utilizing FieldBook software.
- Review the Contractor's equipment on-site to confirm it meets the intent of the project. Also document the type and amount of equipment that is on-site on the IDR.
- Inspect the Contractor's workmanship to verify it is consistent with the means and methods, tolerances, time requirements, temperature requirements and other aspects of the specifications, and document this on the IDR.
- Inspect and document on IDR that work is competed to the line and grade, as well as elevation shown on the project plans and per the specifications.
- Document daily on the IDR the contractor workforce and weather conditions.
- Document daily on IDR contractor activities, including explanation of any downtime, damage to the site or work, work activities by others including franchised utilities, City forces, adjacent property owners, or others that may be impacting work activities.
- Provide final measurements of the work as its completed, calculate quantities, and document this on the IDR or in a field book as appropriate.
- Provide daily inspection of the temporary traffic control and maintenance of traffic throughout the construction influence area.
- Conduct periodic nighttime review and inspection of temporary traffic control and maintenance of traffic throughout the construction influence area.
- Provide certified storm water operators and conduct daily inspection of soil erosion and sedimentation control devices for proper maintenance and effectiveness.
- Perform and document NPDES inspections at required frequencies. If necessary, suspend work or reject materials not conforming to contract requirements.
- If required on CIP projects, perform and document wage rate interviews.
- Provide a field mark-up of the construction plans based on changes to the work or extra work performed during the project, to assist in City preparation of as-built drawings.
- Develop the project punch-list and work with the contractor during completion of the punch-list, including follow up inspections and documentation.
- If required on a CIP project, maintain force account documentation during the project.
- Assist with the preparation of as-built construction plans as follows:
  - Document changes to the work as the project is completed
  - Document as constructed notes based on plan changes or extra work performed
  - Submit marked up plans, drawings, and notes to the City, for the City's use in preparing as-built drawings. This information will be submitted within one (1) month of project completion and at periodic intervals throughout the project, as directed by the City.
  - If CAD level as-built plans are requested by the City, OHM Advisors would be happy to negotiate a fee for preparation of CAD As-builts Drawings prepared to City Standards, separate from the fee schedule provided as part of this proposal for field technician rates.

PROJECT APPROACH & STAFFING

Consistent with the objectives outlined in the City RFP for this project, OHM Advisors approach to the project consists of providing experienced local construction technicians under the supervision of our Project Manager, Phil Maly. Phil understands the changeable nature of construction and contractor schedules, and unanticipated staffing needs. His efforts will be billed as part of the overhead fixed rate line item of the fee schedule, consistent with the requirements of the fee proposal. Phil will be supported by additional management level staff behind the scenes as necessary to meet the needs of the City. This additional support would be provided at no additional cost to the City and is a value-added aspect of our team to showcase OHM Advisors experience and history of working with the City of Ann Arbor -- and our familiarity with City staff and processes.

Additional resumes that are included in our proposal as client level support are for Cresson Slotten, Gary Smolinski and George Tsakoff, but please note that no time from those staff would be billed to the City. The following are the list of construction technicians that will be available for this contract that all reside in our OHM Ann Arbor Office, unless otherwise approved by the City during the contract to add or remove staff:

- Tom Baldwin
- Jeff Harms
- Jon Bastin
- Debbie Gibson
- Tim Keller
- Sheldon Gates
- David Sumlin
- Sommer Guy

OHM Advisors Construction Technicians are equipped to support the inspection and documentation duties inherent in their role. Phil will regularly communicate with both the City of Ann Arbor PM/Civil Engineering Specialist and the OHM Construction Technicians to assure that each element of the project is constructed in keeping with the plans and specifications approved by the City. He will also monitor progress of the work and the forecasted schedule, to maintain the consistent assignment of OHM Advisors staff.

A large portion of our construction technicians' responsibility is to ensure a project is built in conformance to plans, City standards, and specifications. It is understood that they also play a vital role in the solution of the inevitable field challenges that arise during construction. Our technicians understand the importance of timely and accurate decision making in the field. They have been trained to objectively review the issues that arise, develop a suitable recommendation, and consult the OHM Advisors Project Manager in a timely manner. The OHM Advisors Project Manager will then communicate with the appropriate City representative(s) to promote real-time resolutions while minimizing exposure to lost time.

Our staff also takes great pride in being proactive to address possible issues before they arise. Our work is inspired by the motto, "it's better to be proactive than reactive." This mindset is crucial in all stages of construction, especially in traffic control and soil erosion control measures because of the impact each can have on the public and the surrounding environment. Although the execution of work is the responsibility of the contractor, we believe in early involvement during the initial stages of the project to ensure a thorough understanding of the staging and logistics of the contractor executing the work, bringing proper attention to any potential issues. This practice helps establish a positive working relationship with the contractor, which we believe is vital to the success of all projects.

OHM Advisors technicians will also provide the contractor guidance and approve the placement of SESC measures prior to any earth disturbance starting on projects. The SESC measures will be regularly monitored and kept current throughout the duration of the project. This will be addressed regularly by the onsite technicians, who are MDEQ certified storm water operators. This will eliminate the need to have a separate technical visit the site and review soil erosion control methods.

Ultimately, OHM Advisors will work towards complete compatibility with City standards, goals, and objectives. We intend to work as a streamlined operation that is integral to the overall City Engineering Unit and City Field Inspection effort across both private development projects and CIP's. We intend to accomplish this with a single point of contact (our Project Manager) that is familiar with City standards and processes, along with a group of experienced and talented technicians.

SAFETY

OHM Advisors takes safety seriously. The OHM Advisors Safety & Accident Prevention manual supports this commitment. Safety awareness is promoted through ongoing training. OHM Advisors Construction Technicians are furnished and expected to employ necessary Personal Protective Equipment (PPE), as dictated by site conditions, City of Ann Arbor expectations, MDOT and MIOSHA safety regulations. OHM Advisors employees will participate in Contractors' site-specific safety requirements, meetings or MIOSHA, MDOT, or City requirements.

THE CLIENT AND CONSULTANT RELATIONSHIP

This section builds upon our previous discussion related to OHM Advisors philosophy on the importance of exceptional project management, and the single point of contact. The strength of this relationship between the OHM Advisors Project Manager and the City is extremely important because it allows the City to have confidence that there is a consistent person that will not vary during any one project or task. Furthermore, there is a commitment from the OHM Project Manager to oversee the project from beginning to end, in a manner that is familiar to the City. This process ultimately builds a high level of trust between the client and consultant, as well as a high level of satisfaction for both parties by providing

highly successful CIP's and private development projects. This directly results in additional value to the City and its residents.

Although much of the discussion above is centralized around the individual that fulfills the project management and lead contact role for OHM Advisors, the one team aspect of this relationship should not be lost. It is our goal to work with the City as one team, always moving towards the common goal for advancement of the community, as true advisors during this process.

DOCUMENTATION

Our technicians in the field will be responsible for creating and exporting IDR's in a timely manner. They will also be responsible for checking the material delivered onsite and cross-referencing with the project's Material Source List (MSL). We will create and check all applicable City or MDOT forms. Our team understands the importance of documentation as one of our primary functions as part of this contract. Our technicians will utilize FieldBook to create IDR's on projects related to this contract.

EQUIPMENT

Our field technicians possess properly calibrated and updated equipment allowing them to complete field tasks timely and accurately. Our team strongly believes that the proper equipment for performing daily tasks is essential for successful project results and documentation. This includes laptops with the latest version of FieldBook software, the most recent editions of the standard specifications and materials testing guidelines, and the ability for our field technicians to complete forms and reports electronically. The technicians have wireless/cellular internet capabilities, allowing them to access resources online to stay current with the latest revisions or additions to policies, procedures, standard plan changes, and construction advisories.

Technicians will also possess smart levels, laser levels, and thermometers in addition to manual and digital measuring instruments to accurately document and quantify pay/constructed items. The following is a further list of tools and equipment that technicians will have available to them (in addition to the items already noted):

- Laptops, tablets, and cell phones
- Current MDOT Specifications for Construction
- City of Ann Arbor Public Services Department Standard Specifications
- MDOT Standard Plans
- Auto Level with tripod that meets the requirements per the RFP
- Eye level
- Right angle prism
- Plumb bob with gammon reel
- 25-foot grade pole
- 6-foot level, torpedo level and 24-inch digital level
- 100-foot cloth tape and 25-foot steel tape
- Measuring wheel
- Pickaxe, road point shovel, and sledgehammer
- Paint
- First Aid Kit
- Other miscellaneous hand tools needed to properly inspect the work

EXHIBIT B
COMPENSATION

General

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

Total compensation payable for all Services performed during the term of this Agreement, including extensions, shall not exceed $1,200,000.00.

Regular Rate	Overtime Rate	Classification	Description
$80.00/hour	$80.00/hour	Inspector Level 1	Inspector has at least one year of civil inspection experience. Inspector can read and interpret basic engineering plans; and can inspect relatively straightforward construction work.
$105.00/hour	$105.00/hour	Inspector Level 2	Inspector is familiar with plans and specifications; and has at least three years of experience inspecting public infrastructure projects.
$120.00/hour	$120.00/hour	Inspector Level 3	Inspector has a detailed understanding of complex construction work; and has at least five years of experience inspecting public infrastructure projects. Highly proficient at interpreting plans, specifications, and project requirements. Capable of being the lead inspector on projects with multiple crews and inspectors.
$150.00/day		Mobilization	Mobilization may be charged once per calendar day per inspector. Mobilization shall be charged only when the Inspector is located on-site.

Notes:

1. Billed inspector hours shall be documented by the inspector's daily reports (IDRs). Overtime shall be for documented hours worked in excess of 8 hours per day.
2. All mileage, equipment, vehicle, materials, supplies, and other similar costs shall not be billed separately; but shall be included in the mobilization cost.
3. The costs for supervisory and administrative support staff shall not be billed separately; but shall be included in the mobilization cost.
4. The above rates shall be in effect through June 30, 2022. Beginning in 2022, the rates shall be adjusted annually effective July 1, based on the consumer price index for that January.

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. If any of the above coverages expire by their terms during the term of this Agreement, 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.