



CITY COUNCIL AGENDA ITEM

September 21, 2015

TO: Brian Kischnick, City Manager

FROM: Tom Darling, Financial Services Director
Mark F. Miller, Director of Economic and Community Development
Steven J. Vandette, City Engineer

SUBJECT: Agenda Item – Approval of Contract with MDOT for Preliminary Engineering Services for the Reconstruction and Widening of John R, Long Lake to South Boulevard – Project No. 02.203.5 and 02.204.5

History

The John R, Long Lake to South Boulevard project was originally funded as a 5-lane widening and reconstruction project in 2002. The Environmental Assessment (EA) was completed and a Finding of No Significant Impact (FONSI) was issued by the FHWA on January 18, 2005. The project moved forward with preliminary engineering based on the approved FONSI and a 5-lane cross section.

Due to the length of time between the original EA and today, a revised EA was required. This provides for a review of changes in laws or regulations, endangered species and the purpose and need for the project. The purpose and need for the project is primarily based on traffic volumes and crash rates.

The findings of the revised EA are that a 3-lane cross section will be adequate for the existing and projected traffic volumes. This is in large part due to the downturn in the economy and growth rates that are slower than projected into the future. During the downturn in the economy, traffic volumes dropped and have yet to return to their previous levels. Projected growth in traffic volumes over the next 25 years is also lower (6.5% over the 25 year period) for Troy based on SEMCOG projections (see attached). Road widening projects completed or soon to be completed on other north-south routes are expected and to a certain degree have already helped to “spread” traffic to other roads. Motorists choose the path of least resistance and would prefer to drive a straight route if there is less congestion on a particular road.

Staff was successful in working with the Oakland County Federal Aid Committee, SEMCOG and MDOT in receiving federal funding approval of \$900,000 for a new design phase. Of this amount, \$736,650 in federal funds (81.85%) will be used with a corresponding City match of \$163,350. The design phase includes costs incurred as part of the EA revision as well as final design work, all by OHM Advisors. OHM Advisors was selected using a QBS selection process back in 2002 and it makes sense to utilize their services moving forward for the redesign so that continuity is retained as well as not having to recreate data previously acquired and used in the original design.

The revised EA is still being evaluated (primarily revised noise analysis of the 3-lane section) and will be presented at a public meeting to solicit input from interested residents. A date for this meeting

has not been set, but is anticipated later this fall or early winter 2015 pending completion of the revised EA.

The right-of-way phase commenced in 2005. All right-of-way required for the project has been acquired. Right-of-way was acquired based on the original 5-lane cross section (i.e. 120' right-of-way) but is still appropriate for a 3-lane section due to the numerous public (sidewalks, water main, sanitary and storm sewer) and private utilities located within the right-of-way as well as the 3-lane cross section plus turn lanes required at intersections. Temporary grading permits will be acquired, as needed, based on final design.

The private utility relocation phase of the project has been ongoing in preparation for the construction phase. The construction phase has been deferred to 2017/18 which will allow for a redesign of the project to a 3-lane cross section. A summary of the redesign effort is attached.

Financial

The format and content of the MDOT contract and 3rd party agreement is consistent with past preliminary engineering contracts and agreements approved by City Council. The agreement as well as OHM Advisor's cost proposal will be reviewed and approved by MDOT before reimbursements begin. The MDOT contract formalizes the agreement between the City and MDOT and provides a path for federal funds to flow to the City via MDOT. A separate 3rd party agreement with OHM Advisors is included that formalizes the agreement between the City and OHM Advisors for the design work.

The MDOT contract and 3rd party agreement, as submitted, is based on estimated costs, as is standard with all MDOT agreements, since these agreements are prepared before actual costs are known. The city's cost is based on the actual cost incurred by the consultant's work within the parameters of the agreement with 81.85% of the cost reimbursable by Federal Transportation Economic Development Category C funds. The federal share is estimated at \$736,650 and the city's share is estimated at \$163,350.

OHM Advisors fee for the scope of services listed is \$702,501.13 or 4.68% of the estimated \$15,000,000 construction cost. The city's share of the design phase, based on OHM Advisors cost proposal, is estimated at \$127,504 with the federal share estimated at \$574,997.

Funds are available in the 2015/16 Major Road fund.

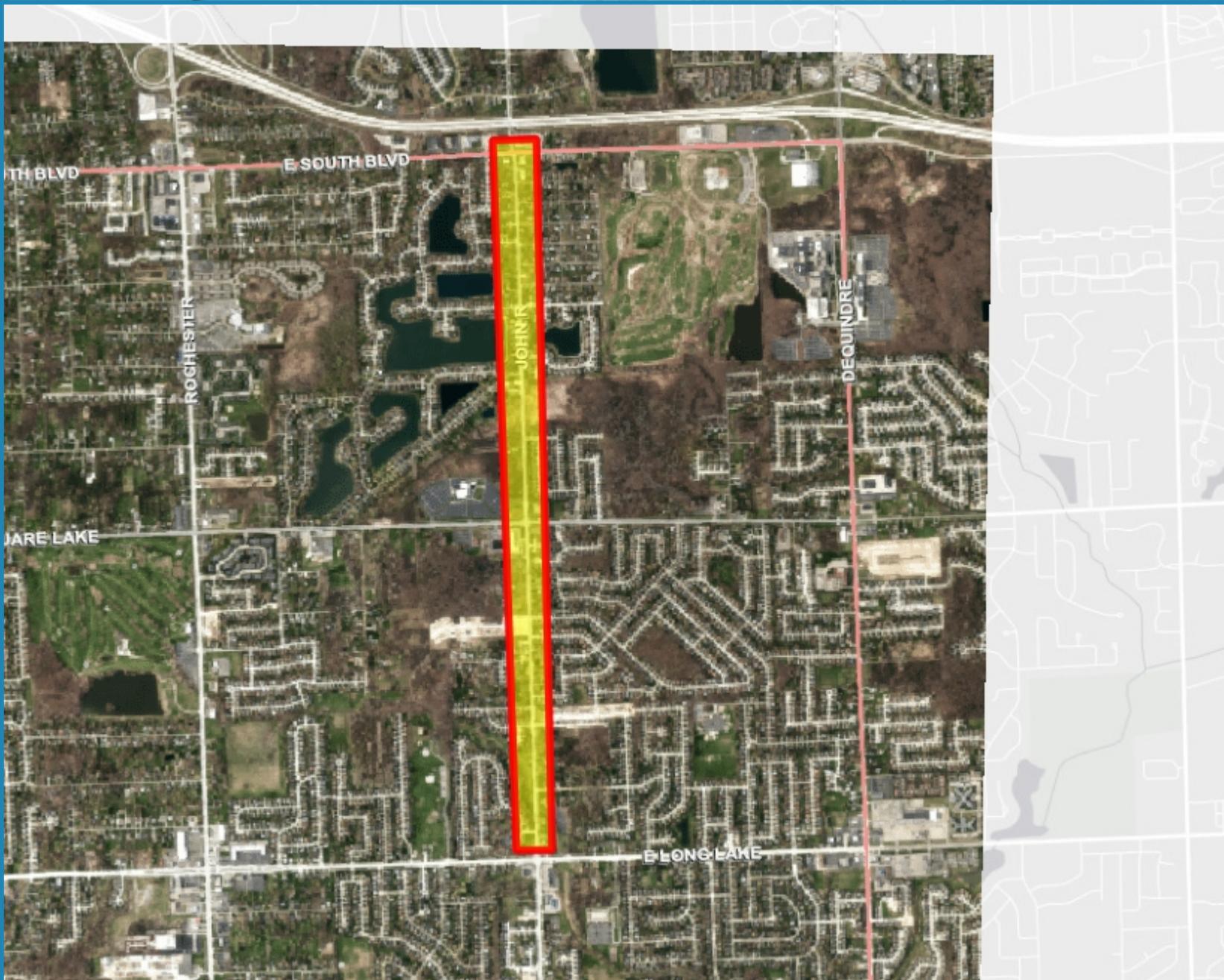
Recommendation

Staff recommends that City Council approve the attached contract with MDOT for preliminary engineering services for the reconstruction and widening of John R, from Long Lake to South Boulevard to a three (3) lane pavement along with associated utilities. Furthermore, staff recommends that the Mayor and City Clerk are authorized to execute the agreement.

Legend:

Aerial

-  Red: Band_1
-  Green: Band_2
-  Blue: Band_3



Notes:

John R, Long Lake to South Blvd.





RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
LANSING

KIRK T. STEUDLE
DIRECTOR

September 3, 2015

Ms. Aileen Dickson, City Clerk
City of Troy
500 West Big Beaver Road
Troy, Michigan 48084

Dear Ms. Dickson:

RE: MDOT Contract Number: 15-5468
Control Section: EDFC
Job Number: 128571C

Enclosed are the original and one copy of the above described contract between your organization and the Michigan Department of Transportation (MDOT). Please take time to read and understand this contract. If this contract meets with your approval, please complete the following checklist:

_____ **Do not date the contracts.** MDOT will date the contracts when they are executed. A contract is not executed unless it has been signed by both parties.

_____ **Secure the necessary signatures on the enclosed contracts.**

_____ **Include two (2) certified resolutions.** The resolution should specifically name the officials who are authorized to sign the contract and include the contract number.

_____ **Return the original and copy of the contract to:**

Attention: Kathy J. Fulton
MDOT – Development Services Division, 2nd Floor
425 West Ottawa Street, P.O. Box 30050
Lansing, MI 48909

In order to ensure that the work and payment for this project is not delayed, the contracts need to be returned within 35 days from the date of this letter. A copy of the executed contract will be forwarded to you.

If you have any questions, please feel free to contact me at fultonk@michigan.gov or (517) 373-4161.

Sincerely,

Kathy J. Fulton
Contract Monitoring/Reporting Technician
Development Services Division

Enclosure

(ADVANCE CONSTRUCTION CONTRACT)		COM
TED (C)	Control Section	EDCF 63459
FED	Job Number	128571C
PRELIMINARY ENGINEERING	Project	STP 1563(056)
MODIFIED PART II	Federal Item No.	HK 0533
	CFDA No.	20.205 (Highway Research Planning & Construction)
	Contract No.	15-5468

PART I

THIS CONTRACT, consisting of PART I and PART II (Modified Standard Agreement Provisions), is made and entered into this date of _____, by and between the MICHIGAN DEPARTMENT OF TRANSPORTATION, hereinafter referred to as the "DEPARTMENT"; and the CITY OF TROY, MICHIGAN, hereinafter referred to as the "REQUESTING PARTY"; for the purpose of fixing the rights and obligations of the parties in agreeing to the performance by the REQUESTING PARTY of preliminary engineering, consisting of the preparation of reports and studies, as well as the surveys and design, necessary for the construction of the following improvements in the City of Troy, Michigan, which preliminary engineering is hereinafter referred to as the "PROJECT":

The performance of preliminary engineering activities for roadway reconstruction work along John R. Road from Long Lake Road northerly to South Boulevard; and all together with necessary related work.

WITNESSETH:

WHEREAS, the PROJECT will be performed as an advance construction project; and

WHEREAS, the PROJECT has been approved for financing in part with funds appropriated to the Transportation Economic Development Fund, hereinafter referred to as "TED FUNDS", pursuant to PA 234 of the Public Acts of 1987, MCL 247.660; and

WHEREAS, it was determined that the PROJECT as described by this contract qualifies for funding pursuant to PA 231, Section 11(3)(c); Public Act of 1987 and categorized as:

C FUNDED PROJECT

WHEREAS, the reference "FHWA" in PART I and PART II refers to the United States Department of Transportation, Federal Highway Administration; and

WHEREAS, the PROJECT, or portions of the PROJECT at the request of the REQUESTING PARTY, are being programmed with the FHWA, for implementation with the use of Federal Funds under the following Federal program(s):

EQUITY BONUS FUNDS

WHEREAS, the Federal Equity Bonus Funds will be used as TED FUNDS Category C;
and

WHEREAS, the parties hereto have reached an understanding with each other regarding the performance of the PROJECT work and desire to set forth this understanding in the form of a written contract.

NOW, THEREFORE, in consideration of the premises and of the mutual undertakings of the parties and in conformity with applicable law, it is agreed:

1. The parties hereto shall undertake and complete the PROJECT in accordance with the terms of this contract.

The part of the PROJECT work that shall be performed as an advance construction PROJECT shall meet applicable Federal requirements set forth on 23 CFR Subpart G; 23 U.S.C. 115 and state requirements governing TED FUNDS.

It is understood that authorization to undertake the performance of the work under this contract as an advance construction PROJECT does not constitute any commitment of DEPARTMENT or Federal Funds for this PROJECT.

Expenditures incurred on the portions of this PROJECT as advance construction will not be subject to reimbursement with Federal Funds until the PROJECT is converted to a regular Federal-aid project as provided under 23 CFR 630.705(2); CFR 630.709.

2. The term "PROJECT COST", as herein used, is hereby defined as all the costs necessary for the performance of the PROJECT work, including the costs of design, design surveys, final construction plans and specifications, and any costs incurred by the DEPARTMENT as a result of this contract.

3. The REQUESTING PARTY will perform or cause to be performed all the PROJECT work. A separate work authorization will be issued to the REQUESTING PARTY by the DEPARTMENT for the commencement of the PROJECT work. The method of performing the work will be indicated on the work authorization.

4. The PROJECT COST shall be met 100 percent by the REQUESTING PARTY.

Contingent upon availability of Federal Funds and Federal approval, Federal Equity Bonus Funds being used as TED FUNDS Category C, in the future, may be applied to the cost incurred as advance construction in an amount such that the Federal Funds equal a participation ratio of 81.85 percent. The PROJECT COST and cost participation are estimated to be as follows:

<u>ESTIMATED COST</u>	<u>Federal Equity Bonus Funds Being Used As TED FUNDS</u>	<u>REQUESTING PARTY'S SHARE</u>
\$900,000	\$736,650	\$163,350

Any items of PROJECT COST or advance expenditure not reimbursed by Federal Funds and/or TED FUNDS will be the sole responsibility of the REQUESTING PARTY.

5. The construction of the improvements for which the PROJECT work is being performed and the construction engineering work related thereto will be covered by a separate contract.

6. A working capital deposit is not required for the PROJECT.

7. The contracting parties do hereby agree to be bound by all of the provisions and conditions set forth in PART II hereof which are applicable to the PROJECT.

In the event of any discrepancies between PART I and PART II of this contract, the provisions of PART I shall prevail.

8. The DEPARTMENT'S sole reason for entering into this contract is to enable the REQUESTING PARTY to obtain and use funds provided by the state and/or FHWA.

Any and all approvals of, reviews of, and recommendations regarding contracts, agreements, permits, plans, specifications, or documents, of any nature, or any inspections of work by the DEPARTMENT pursuant to the terms of this contract are done to assist the REQUESTING PARTY in meeting program guidelines in order to qualify for available funds. Such approvals, reviews, inspections and recommendations by the DEPARTMENT shall not relieve the REQUESTING PARTY and the local agencies, as applicable, of their ultimate control and shall not be construed as a warranty of their propriety or that the DEPARTMENT is assuming any liability, control or jurisdiction.

The providing of recommendations or advice by the DEPARTMENT does not relieve the REQUESTING PARTY and the local agencies, as applicable, of their exclusive jurisdiction of the highway and responsibility under MCL 691.1402 et seq., as amended.

When providing approvals, reviews and recommendations under this contract, the DEPARTMENT is performing a governmental function, as that term is defined in MCL 691.1401 et seq., as amended, which is incidental to the completion of the PROJECT.

9. The DEPARTMENT, by executing this contract, and rendering services pursuant to this contract, has not and does not assume jurisdiction of the highway, described as the PROJECT for purposes of MCL 691.1402 et seq., as amended. Exclusive jurisdiction of such highway for the purposes of MCL 691.1402 et seq., as amended, rest with the REQUESTING PARTY and other local agencies having respective jurisdiction.

10. The REQUESTING PARTY agrees that the costs reported to the DEPARTMENT for this contract will represent only those items that are properly chargeable in accordance with this contract. The REQUESTING PARTY also certifies that it has read the contract terms and has made itself aware of the applicable laws, regulations, and terms of this contract that apply to the reporting of costs incurred under the terms of this contract.

11. This contract shall become binding on the parties hereto and of full force and effect upon the signing thereof by the duly authorized officials for the parties hereto; upon the adoption of the necessary resolutions approving said contract and authorizing the signatures thereto of the respective officials of the REQUESTING PARTY, a certified copy of which resolution shall be attached to this contract; and with approval by the State Administrative Board.

IN WITNESS WHEREOF, the parties hereto have caused this contract to be executed the day and year first above written.

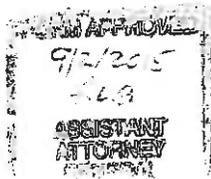
CITY OF TROY

MICHIGAN DEPARTMENT
OF TRANSPORTATION

By _____
Title:

By _____
Department Director MDOT

By _____
Title:



LGB
2015

DOT

BUREAU OF HIGHWAYS
NON CONSTRUCTION
03-15-93

PART II
MODIFIED

STANDARD AGREEMENT PROVISIONS

SECTION I COMPLIANCE WITH REGULATIONS AND DIRECTIVES

SECTION II PROJECT ADMINISTRATION AND SUPERVISION

SECTION III ACCOUNTING AND BILLING

SECTION IV SPECIAL PROGRAM AND PROJECT CONDITIONS

SECTION I

COMPLIANCE WITH REGULATIONS AND DIRECTIVES

- A. All work shall be performed in accordance with the requirements and procedures of the DEPARTMENT.
- B. All work on projects for which reimbursement with Federal funds is requested shall be performed in accordance with the requirements and guidelines set forth in the Directives of the Federal-Aid Policy Guide (FAPG) of the FHWA, as applicable, and as referenced in pertinent sections of Title 23 and Title 49 of the Code of Federal Regulations (CFR), and all supplements and amendments thereto.
- C. In conformance with FAPG (23 CFR 630C): Project Agreements, the parties to this contract, on those Federally funded projects which exceed a total cost of \$100,000.00 stipulate the following with respect to their specific jurisdictions:
 - 1. That any facility to be utilized in performance under or to benefit from this contract is not listed on the Environmental Protection Agency (EPA) List of Violating Facilities issued pursuant to the requirements of the Federal Clean Air Act, as amended, and the Federal Water Pollution Control Act, as amended.
 - 2. That they each agree to comply with all of the requirements of Section 114 of the Federal Clean Air Act and Section 308 of the Federal Water Pollution Control Act, and all regulations and guidelines issued thereunder.
 - 3. That as a condition of Federal aid pursuant to this contract they shall notify the DEPARTMENT of the receipt of any advice indicating that a facility to be utilized in performance under or to benefit from this contract is under consideration to be listed on the EPA List of Violating Facilities.
- D. Ensure that the PROJECT is constructed in accordance with and incorporates all committed environmental impact mitigation measures listed in approved environmental documents unless modified or deleted by approval of the FHWA.
- E. All the requirements, guidelines, conditions and restrictions noted in all other pertinent Directives and Instructional Memoranda of the FHWA will apply to this contract and will be adhered to, as applicable, by the parties hereto.

SECTION II

PROJECT ADMINISTRATION AND SUPERVISION

- A. The DEPARTMENT shall provide such administrative guidance as it determines is required by the PROJECT in order to facilitate the obtaining of available federal and/or state funds.
- B. On those projects funded with Federal monies, the DEPARTMENT shall, as may be required, secure from the FHWA approval of plans and specifications, and such cost estimates for FHWA participation in the PROJECT COST.
- C. Should it be necessary or desirable that portions of the work covered by this contract be accomplished by a consulting firm, a railway company, or governmental agency, firm, person, or corporation, under a subcontract with the REQUESTING PARTY at PROJECT expense, such subcontracted arrangements will be covered by formal written agreement between the REQUESTING PARTY and that party.

This formal written agreement shall: include a reference to the specific prime contract to which it pertains; include provisions which clearly set forth the maximum reimbursable and the basis of payment; provide for the maintenance of accounting records in accordance with generally accepted accounting principles, which clearly document the actual cost of the services provided; provide that costs eligible for reimbursement shall be in accordance with clearly defined cost criteria such as 49 CFR Part 18, 48 CFR Part 31, 23 CFR Part 140, OMB Circular A-87, etc. as applicable; provide for access to the department or its representatives to inspect and audit all data and records related to the agreement for a minimum of three years after the department's final payment to the local unit.

All such agreements will be submitted for approval by the DEPARTMENT and, if applicable, by the FHWA prior to execution thereof, except for agreements for amounts less than \$100,000 for preliminary engineering and testing services executed under and in accordance with the provisions of the "Small Purchase Procedures" FAPG (23 CFR 172), which do not require prior approval of the DEPARTMENT or the FHWA.

Any such approval by the DEPARTMENT shall in no way be construed as a warranty of the subcontractor's qualifications, financial integrity, or ability to perform the work being subcontracted.

- D. No PROJECT work for which reimbursement will be requested by the REQUESTING PARTY is to be subcontracted or performed until the DEPARTMENT gives written notification that such work may commence.
- E. The REQUESTING PARTY shall be responsible for the payment of all costs and expenses incurred in the performance of the work it agrees to undertake and perform.

- F. The REQUESTING PARTY shall pay directly to the party performing the work all billings for the services performed on the PROJECT which are authorized by or through the REQUESTING PARTY.
- G. The REQUESTING PARTY shall submit to the DEPARTMENT all paid billings for which reimbursement is desired in accordance with DEPARTMENT procedures.
- H. All work by a consulting firm will be performed in compliance with the applicable provisions of 1980 PA 299, Subsection 201, MCL 339.2001; MSA 18.425(2001), as well as in accordance with the provisions of all previously cited Directives of the FHWA.
- I. The project engineer shall be subject to such administrative guidance as may be deemed necessary to ensure compliance with program requirement and, in those instances where a consultant firm is retained to provide engineering and inspection services, the personnel performing those services shall be subject to the same conditions.
- J. The DEPARTMENT, in administering the PROJECT in accordance with applicable Federal and State requirements and regulations, neither assumes nor becomes liable for any obligations undertaken or arising between the REQUESTING PARTY and any other party with respect to the PROJECT.
- K. In the event it is determined by the DEPARTMENT that there will be either insufficient Federal funds or insufficient time to properly administer such funds for the entire PROJECT or portions thereof, the DEPARTMENT, prior to advertising or issuing authorization for work performance, may cancel the PROJECT, or any portion thereof, and upon written notice to the parties this contract shall be void and of no effect with respect to that canceled portion of the PROJECT. Any PROJECT deposits previously made by the parties on the canceled portions of the PROJECT will be promptly refunded.
- L. Those projects funded with Federal monies will be subject to inspection at all times by the DEPARTMENT and the FHWA.

SECTION III

ACCOUNTING AND BILLING

A. Procedures for billing for work undertaken by the REQUESTING PARTY:

1. The REQUESTING PARTY shall establish and maintain accurate records, in accordance with generally accepted accounting principles, of all expenses incurred for which payment is sought or made under this contract, said records to be hereinafter referred to as the "RECORDS". Separate accounts shall be established and maintained for all costs incurred under this contract.

The REQUESTING PARTY shall maintain the RECORDS for at least three (3) years from the date of final payment of Federal Aid made by the DEPARTMENT under this contract. In the event of a dispute with regard to the allowable expenses or any other issue under this contract, the REQUESTING PARTY shall thereafter continue to maintain the RECORDS at least until that dispute has been finally decided and the time for all available challenges or appeals of that decision has expired.

The DEPARTMENT, or its representative, may inspect, copy, or audit the RECORDS at any reasonable time after giving reasonable notice.

If any part of the work is subcontracted, the REQUESTING PARTY shall assure compliance with the above for all subcontracted work.

In the event that an audit performed by or on behalf of the DEPARTMENT indicates an adjustment to the costs reported under this contract, or questions the allowability of an item of expense, the DEPARTMENT shall promptly submit to the REQUESTING PARTY, a Notice of Audit Results and a copy of the audit report which may supplement or modify any tentative findings verbally communicated to the REQUESTING PARTY at the completion of an audit.

Within sixty (60) days after the date of the Notice of Audit Results, the REQUESTING PARTY shall: (a) respond in writing to the responsible Bureau or the DEPARTMENT indicating whether or not it concurs with the audit report, (b) clearly explain the nature and basis for any disagreement as to a disallowed item of expense and, (c) submit to the DEPARTMENT a written explanation as to any questioned or no opinion expressed item of expense, hereinafter referred to as the "RESPONSE". The RESPONSE shall be clearly stated and provide any supporting documentation necessary to resolve any disagreement or questioned or no opinion expressed item of expense. Where the documentation is voluminous, the REQUESTING PARTY may supply appropriate excerpts and make alternate arrangements to conveniently and reasonably make that documentation available for review by the DEPARTMENT. The RESPONSE shall refer to and apply the

language of the contract. The REQUESTING PARTY agrees that failure to submit a RESPONSE within the sixty (60) day period constitutes agreement with any disallowance of an item of expense and authorizes the DEPARTMENT to finally disallow any items of questioned or no-opinion expressed cost.

The DEPARTMENT shall make its decision with regard to any Notice of Audit Results and RESPONSE within one hundred twenty (120) days after the date of the Notice of Audit Results. If the DEPARTMENT determines that an overpayment has been made to the REQUESTING PARTY, the REQUESTING PARTY shall repay that amount to the DEPARTMENT or reach agreement with the DEPARTMENT on a repayment schedule within thirty (30) days after the date of an invoice from the DEPARTMENT. If the REQUESTING PARTY fails to repay the overpayment or reach agreement with the DEPARTMENT on a repayment schedule within the thirty (30) day period, the REQUESTING PARTY agrees that the DEPARTMENT shall deduct all or a portion of the overpayment from any funds then or thereafter payable by the DEPARTMENT to the REQUESTING PARTY under this contract or any other agreement, or payable to the REQUESTING PARTY under the terms of 1951 PA 51, as applicable. Interest will be assessed on any partial payments or repayment schedules based on the unpaid balance at the end of each month until the balance is paid in full. The assessment of interest will begin thirty (30) days from the date of the invoice. The rate of interest will be based on the Michigan Department of Treasury common cash funds interest earnings. The rate of interest will be reviewed annually by the DEPARTMENT and adjusted as necessary based on the Michigan Department of Treasury common cash funds interest earnings. The REQUESTING PARTY expressly consents to this withholding or offsetting of funds under those circumstances, reserving the right to file a lawsuit in the Court of Claims to contest the DEPARTMENT'S decision only as to any item of expense the disallowance of which was disputed by the REQUESTING PARTY in a timely filed RESPONSE.

The REQUESTING PARTY shall comply with the Single Audit Act of 1984, as amended, including, but not limited to, the Single Audit Amendments of 1996 (31 USC 7501-7507).

The REQUESTING PARTY shall adhere to the following requirements associated with audits of accounts and records:

- a. Agencies expending a total of \$500,000 or more in federal funds, from one or more funding sources in its fiscal year, shall comply with the requirements of the federal Office of Management and Budget (OMB) Circular A-133, as revised or amended.

The agency shall submit two copies of:

- The Reporting Package
- The Data Collection Form
- The management letter to the agency, if one issued by the audit firm

The OMB Circular A-133 audit must be submitted to the address below in accordance with the time frame established in the circular, as revised or amended.

b. Agencies expending less than \$500,000 in federal funds must submit a letter to the Department advising that a circular audit was not required. The letter shall indicate the applicable fiscal year, the amount of federal funds spent, the name(s) of the Department federal programs, and the CFDA grant number(s). This information must also be submitted to the address below.

c. Address: Michigan Department of Education
Accounting Service Center
Hannah Building
608 Allegan Street
Lansing, MI 48909

d. Agencies must also comply with applicable State laws and regulations relative to audit requirements.

e. Agencies shall not charge audit costs to Department's federal programs which are not in accordance with the OMB Circular A-133 requirements.

f. All agencies are subject to the federally required monitoring activities, which may include limited scope reviews and other on-site monitoring.

2. Agreed Unit Prices Work - All billings for work undertaken by the REQUESTING PARTY on an agreed unit price basis will be submitted in accordance with the Michigan Department of Transportation Standard Specifications for Construction and pertinent FAPG Directives and Guidelines of the FHWA.

3. Force Account Work and Subcontracted Work - All billings submitted to the DEPARTMENT for Federal reimbursement for items of work performed on a force account basis or by any subcontract with a consulting firm, railway company, governmental agency or other party, under the terms of this contract, shall be prepared in accordance with the provisions of the pertinent FAPG Directives and the procedures of the DEPARTMENT. Progress billings may be submitted monthly during the time work is being performed provided, however, that no bill of a lesser amount than \$1,000.00 shall be submitted unless it is a final or end of fiscal year billing. All billings shall be labeled either "Progress Bill Number _____", or "Final Billing".

4. Final billing under this contract shall be submitted in a timely manner but not later than six months after completion of the work. Billings for work submitted later than six months after completion of the work will not be paid.
5. Upon receipt of billings for reimbursement for work undertaken by the REQUESTING PARTY on projects funded with Federal monies, the DEPARTMENT will act as billing agent for the REQUESTING PARTY, consolidating said billings with those for its own force account work and presenting these consolidated billings to the FHWA for payment. Upon receipt of reimbursement from the FHWA, the DEPARTMENT will promptly forward to the REQUESTING PARTY its share of said reimbursement.
6. Upon receipt of billings for reimbursement for work undertaken by the REQUESTING PARTY on projects funded with non-Federal monies, the DEPARTMENT will promptly forward to the REQUESTING PARTY reimbursement of eligible costs.

B. General Conditions:

1. Pursuant to the authority granted by law, the REQUESTING PARTY hereby irrevocably pledges a sufficient amount of funds received by it from the Michigan Transportation Fund to meet its obligations as specified in PART I and PART II. If the REQUESTING PARTY shall fail to make any of its required payments when due, as specified herein, the DEPARTMENT shall immediately notify the REQUESTING PARTY and the State Treasurer of the State of Michigan or such other state officer or agency having charge and control over disbursement of the Michigan Transportation Fund, pursuant to law, of the fact of such default and the amount thereof, and, if such default is not cured by payment within ten (10) days, said State Treasurer or other state officer or agency is then authorized and directed to withhold from the first of such monies thereafter allocated by law to the REQUESTING PARTY from the Michigan Transportation Fund sufficient monies to remove the default, and to credit the REQUESTING PARTY with payment thereof, and to notify the REQUESTING PARTY in writing of such fact.
2. Upon completion of all work under this contract and final audit by the DEPARTMENT or the FHWA, the REQUESTING PARTY promises to promptly repay the DEPARTMENT for any disallowed items of costs previously disbursed by the DEPARTMENT. The REQUESTING PARTY pledges its future receipts from the Michigan Transportation Fund for repayment of all disallowed items and, upon failure to make repayment for any disallowed items within ninety (90) days of demand made by the DEPARTMENT, the DEPARTMENT is hereby authorized to withhold an equal amount from the REQUESTING PARTY'S share of any future distribution of Michigan Transportation Funds in settlement of said claim.

SECTION IV

SPECIAL PROGRAM AND PROJECT CONDITIONS

- A. Those projects for which the REQUESTING PARTY has been reimbursed with Federal monies for the performance of preliminary engineering must be under construction by the close of the tenth (10th) fiscal year following the fiscal year in which the FHWA and the DEPARTMENT projects agreement covering that work is executed, or the REQUESTING PARTY may be required to repay to the DEPARTMENT, for forwarding to the FHWA, all monies distributed as the FHWA'S contribution to that preliminary engineering.
- B. Those projects for which the REQUESTING PARTY has been reimbursed with Federal monies for the acquisition of right-of-way must be under construction by the close of the twentieth (20th) fiscal year following the fiscal year in which the FHWA and the DEPARTMENT projects agreement covering that work is executed, or the REQUESTING PARTY may be required to repay to the DEPARTMENT, for forwarding to the FHWA, all monies distributed as the FHWA'S contribution to that right-of-way acquisition.
- C. In connection with the performance of PROJECT work under this contract the parties hereto (hereinafter in Appendix "A" referred to as the "contractor") agree to comply with the State of Michigan provisions for "Prohibition of Discrimination in State Contracts", as set forth in Appendix A, attached hereto and made a part hereof. The parties further covenant that they will comply with the Civil Rights Acts of 1964, being P.L. 88-352, 78 Stat. 241, as amended, being Title 42 U.S.C. Sections 1971, 1975a-1975d, and 2000a-2000h-6 and the Regulations of the United States Department of Transportation (49 C.F.R. Part 21) issued pursuant to said Act, including Appendix "B", attached hereto and made a part hereof, and will require similar covenants on the part of any contractor or subcontractor employed in the performance of this contract.
- D. The parties will carry out the applicable requirements of the DEPARTMENT'S Disadvantaged Business Enterprise (DBE) program and 49 CFR, Part 26, including, but not limited to, those requirements set forth in Appendix C.

APPENDIX A
PROHIBITION OF DISCRIMINATION IN STATE CONTRACTS

In connection with the performance of work under this contract; the contractor agrees as follows;

1. In accordance with Public Act 453 of 1976 (Elliott-Larsen Civil Rights Act), the contractor shall not discriminate against an employee or applicant for employment with respect to hire, tenure, treatment, terms, conditions, or privileges of employment or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, height, weight, or marital status. A breach of this covenant will be regarded as a material breach of this contract. Further, in accordance with Public Act 220 of 1976 (Persons with Disabilities Civil Rights Act), as amended by Public Act 478 of 1980, the contractor shall not discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment or a matter directly or indirectly related to employment because of a disability that is unrelated to the individual's ability to perform the duties of a particular job or position. A breach of the above covenants will be regarded as a material breach of this contract.
2. The contractor hereby agrees that any and all subcontracts to this contract, whereby a portion of the work set forth in this contract is to be performed, shall contain a covenant the same as hereinabove set forth in Section 1 of this Appendix.
3. The contractor will take affirmative action to ensure that applicants for employment and employees are treated without regard to their race, color, religion, national origin, age, sex, height, weight, marital status, or any disability that is unrelated to the individual's ability to perform the duties of a particular job or position. Such action shall include, but not be limited to, the following: employment; treatment; upgrading; demotion or transfer; recruitment; advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
4. The contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, age, sex, height, weight, marital status, or disability that is unrelated to the individual's ability to perform the duties of a particular job or position.
5. The contractor or its collective bargaining representative shall send to each labor union or representative of workers with which the contractor has a collective bargaining agreement or other contract or understanding a notice advising such labor union or workers' representative of the contractor's commitments under this Appendix.
6. The contractor shall comply with all relevant published rules, regulations, directives, and orders of the Michigan Civil Rights Commission that may be in effect prior to the taking of bids for any individual state project.

7. The contractor shall furnish and file compliance reports within such time and upon such forms as provided by the Michigan Civil Rights Commission; said forms may also elicit information as to the practices, policies, program, and employment statistics of each subcontractor, as well as the contractor itself, and said contractor shall permit access to the contractor's books, records, and accounts by the Michigan Civil Rights Commission and/or its agent for the purposes of investigation to ascertain compliance under this contract and relevant rules, regulations, and orders of the Michigan Civil Rights Commission.
8. In the event that the Michigan Civil Rights Commission finds, after a hearing held pursuant to its rules, that a contractor has not complied with the contractual obligations under this contract, the Michigan Civil Rights Commission may, as a part of its order based upon such findings, certify said findings to the State Administrative Board of the State of Michigan, which State Administrative Board may order the cancellation of the contract found to have been violated and/or declare the contractor ineligible for future contracts with the state and its political and civil subdivisions, departments, and officers, including the governing boards of institutions of higher education, until the contractor complies with said order of the Michigan Civil Rights Commission. Notice of said declaration of future ineligibility may be given to any or all of the persons with whom the contractor is declared ineligible to contract as a contracting party in future contracts. In any case before the Michigan Civil Rights Commission in which cancellation of an existing contract is a possibility, the contracting agency shall be notified of such possible remedy and shall be given the option by the Michigan Civil Rights Commission to participate in such proceedings.
9. The contractor shall include or incorporate by reference, the provisions of the foregoing paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Michigan Civil Rights Commission; all subcontracts and purchase orders will also state that said provisions will be binding upon each subcontractor or supplier.

Revised June 2011

APPENDIX B
TITLE VI ASSURANCE

During the performance of this contract, the contractor, for itself, its assignees, and its successors in interest (hereinafter referred to as the "contractor"), agrees as follows:

1. **Compliance with Regulations:** For all federally assisted programs, the contractor shall comply with the nondiscrimination regulations set forth in 49 CFR Part 21, as may be amended from time to time (hereinafter referred to as the Regulations). Such Regulations are incorporated herein by reference and made a part of this contract.
2. **Nondiscrimination:** The contractor, with regard to the work performed under the contract, shall not discriminate on the grounds of race, color, sex, or national origin in the selection, retention, and treatment of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices, when the contractor covers a program set forth in Appendix B of the Regulations.
3. **Solicitation for Subcontracts, Including Procurements of Materials and Equipment:** All solicitations made by the contractor, either by competitive bidding or by negotiation for subcontract work, including procurement of materials or leases of equipment, must include a notification to each potential subcontractor or supplier of the contractor's obligations under the contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and facilities as may be determined to be pertinent by the Department or the United States Department of Transportation (USDOT) in order to ascertain compliance with such Regulations or directives. If required information concerning the contractor is in the exclusive possession of another who fails or refuses to furnish the required information, the contractor shall certify to the Department or the USDOT, as appropriate, and shall set forth the efforts that it made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the Department shall impose such contract sanctions as it or the USDOT may determine to be appropriate, including, but not limited to, the following:
 - a. Withholding payments to the contractor until the contractor complies; and/or
 - b. Canceling, terminating, or suspending the contract, in whole or in part.

6. Incorporation of Provisions: The contractor shall include the provisions of Sections (1) through (6) in every subcontract, including procurement of material and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the Department or the USDOT may direct as a means of enforcing such provisions, including sanctions for non-compliance, provided, however, that in the event a contractor becomes involved in or is threatened with litigation from a subcontractor or supplier as a result of such direction, the contractor may request the Department to enter into such litigation to protect the interests of the state. In addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

Revised June 2011

APPENDIX C

TO BE INCLUDED IN ALL FINANCIAL ASSISTANCE AGREEMENTS WITH LOCAL AGENCIES

Assurance that Recipients and Contractors Must Make (Excerpts from US DOT Regulation 49 CFR 26.13)

- A. Each financial assistance agreement signed with a DOT operating administration (or a primary recipient) must include the following assurance:

The recipient shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any US DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR Part 26. The recipient shall take all necessary and reasonable steps under 49 CFR Part 26 to ensure nondiscrimination in the award and administration of US DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR Part 26 and as approved by US DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the recipient of its failure to carry out its approved program, the department may impose sanctions as provided for under Part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. 3801 et seq.).

- B. Each contract MDOT signs with a contractor (and each subcontract the prime contractor signs with a subcontractor) must include the following assurance:

The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of US DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

ARCHITECTS. ENGINEERS. PLANNERS.



September 15, 2015

Mr. William J Huotari, P.E.
Deputy City Engineer
City of Troy
500 West Big Beaver
Troy, MI 48084

RE: John R Road, Long Lake Road to South Blvd
Roadway Design Services

Dear Mr. Huotari:

Orchard, Hiltz & McCliment, Inc. (OHM Advisors) is pleased to submit this proposal for professional engineering services (PE) to design the reconstruction of John R Road to replace the existing two-lane section with a three-lane section. We understand that these services will be processed through MDOT to take advantage of the available TEDF - Category C funding.

We have focused our Scope of Services to utilize as much information from the previous five-lane section as possible. The majority of the design will focus on the new geometry, grading, MOT changes and material changes that have been agreed upon for the three-lane concept. Our scope and costs outline the effort that is required to prepare the plans to meet current design standards for a MDOT LAP project. OHM Advisors will provide the major design services as outlined in the attached scope Exhibit A. Proposed costs are outlined in the attached cost derivation as Exhibit B.

Please review the proposed scope, hours and cost and contact us with any questions. We look forward to again working for the City on this exciting project. If you have any questions, please contact me at 734-466-4590.

Sincerely,
OHM Advisors



Scott J. Emmons, PE
Senior Project Manager

cc: Rhett Gronevelt, PE, Principal, OHM



Exhibit A - Scope of Services John R Road from Long Lake Road to South Boulevard

A. General

This contract will start the re-design of the John R reconstruction between Long Lake Road and South Boulevard to construct a 3-lane section as opposed to a 5-lane section previously desired. Changes in traffic patterns, construction material costs and public sentiment are some of the reasons which have led to the decision to reconstruct John R Road as a 3-lane section. When the project was put on hold in 2015, OHM had prepared GI-level plans to be submitted for review by the City and Road Commission for Oakland County (RCOC). OHM will utilize as much of the current design to complete the 3-lane design. The general scope of services are outlined below with additional detail provided on the following pages:

- Revise and re-submit the Environmental Assessment (EA) supplement based on a 3-lane roadway.
- Finalize the design plans to reconstruct and widen to three lanes on John R Road from the north end of radius of Long Lake Road to the north end of radius of South Boulevard in the City of Troy, including tapers and turn lanes, as appropriate, for the side streets along John R.
- Re-design the Maintenance of Traffic (MOT) plans to accommodate the 3-lane reconstruction.
- Coordinate project with RCOC's staff and submit through the RCOC permit process.
- Reconfigure the design of the bridge deck rehabilitation of John R over the Nelson Drain for the revised roadway geometry.
- Evaluate the current storm sewer design for the reduction in impervious area between the 5-lane section and the new 3-lane section.
- Re-evaluate and modify the water main and sanitary sewer designs to facilitate the 3-lane design.
- Re-evaluate and modify the street lighting design to facilitate the 3-lane design.
- Re-configure the traffic signal design at Square Lake Road and South Boulevard to accommodate the 3-lane roadway section.
- Revise pavement marking and signing plans to accommodate the revised 3-lane geometry.

B. Design Phase Service

1. Preliminary & Start Up
 - a. Attend pre-design meeting with the City to confirm project work plan, critical dates and scope of work. Prepare summary of action items and distribute minutes after the meeting.
 - b. Walk project corridor to review previous topographic mapping to current conditions
 - c. Provide additional topographic survey to collect changes to the existing conditions.
 2. Revise the current EA supplement to reflect the change to the 3-lane section. This will involve updates to the traffic section, MOT section and the noise analysis section of the EA supplement. We have teamed with our partner, Somat Engineering to provide the updates to the noise analysis. Once the revision are incorporated, we will complete an overall review of the revision of the EA supplement and submit to the City and RCOC for review and comment, then the final document will be sent to MDOT for review and then to FHWA for final approval. OHM will follow up with MDOT and FHWA during their review and incorporate any comments required to reach approval of the EA supplement.
 3. Studies
 - a. Study the traffic at the intersections of all side streets to determine the appropriate intersection treatment (i.e. no taper, taper or turn lane) based on RCOC guidelines.
-



Exhibit A - Scope of Services John R Road from Long Lake Road to South Boulevard

- b. Complete the Traffic Mobility Plan (TMP) checklist as required by MDOT to verify if the project will have a significant impact on traffic during construction. We anticipate that this project will have a significant impact, therefore mitigation items will be required during construction to educate the public about this project and its impacts to the local transportation system.
4. Preliminary Plan Stage (GI Phase)
- a. Design
 - i. Complete and submit Federal Programming Forms.
 - ii. Reconfigure the roadway geometry to facilitate a 3-lane section, **assess** turn lane configurations at the major intersections and add turn lanes as appropriate. We anticipate being able to utilize the horizontal and vertical alignments from the previous design, however the vertical alignment may be revised to improve grading under the 3-lane section design.
 - iii. We anticipate the sidewalk alignment will remain in the same location as the 5-lane design, however, we will review the sidewalk alignment in relation to the 3-lane design to determine if any re-alignment of the sidewalk is beneficial to the project.
 - iv. Review and update the detailed construction plans for the reconstruction of John R Road between Long Lake and South Boulevard to accommodate the 3-lane section.
 - v. Review and update the maintenance of traffic plans and coordinate the project with the City and RCOC. Special attention will be paid to schools, churches and large residential complexes within the project limits. The maintenance of traffic scheme will be revised from the 5-lane design. We anticipate that the MOT will be established to provide one-way traffic during construction. However, we have provided adequate hours for the effort to prepare two-way MOT plans if required by MDOT or the FHWA.
 - vi. Revise and update the permanent striping and signing plans to accommodate the revised geometry and lane use.
 - vii. Review and update the Engineer's Opinion of Probable Construction Cost for review by the City.
 - viii. Coordinate and attend the Grade Inspection meeting with the City and MDOT.
 - ix. Participate in one public meeting with the City. Format to be determined. OHM will provide exhibits for this meeting for the public to review.
 - x. As part of the roadway design, submit a permit application to RCOC for the roadway construction and construction signing outside of the reconstruction limits. Since John R is a RCOC-owned roadway, it is anticipated that several coordination meetings will occur prior to the permit being submitted, therefore the permit application should be simplified.
 - b. Drainage
 - i. Revise the existing catch basin locations and catch basin leads to accommodate the 3-lane section.
 - ii. Evaluate the storm sewer design to determine if re-sizing of the storm sewer to handle the 3-lane section versus the 5-lane section is cost effective for the City. If a re-design and re-sizing of the storm sewer truck line is determined to be the best solution, we have included effort to re-design the storm sewer. Investigate replacing the existing 36" storm sewer outlet at the Nelson Drain. If the outlet is determined for replacement, we will submit the permit application to the Oakland County Water Resources



Exhibit A - Scope of Services John R Road from Long Lake Road to South Boulevard

- Commission (OCWRC) for the work to replace the outfall.
 - iii. Accommodate changes to the storm sewer design specifically related to the changes necessary to accept the as-built design of the storm water detention facilities at the recently reconstructed Bridgewater Estates subdivision.
- c. Water Main
- i. Review and update the current water main plans to accommodate the 3-lane section. We will review the current location of the water main to determine if a location change is warranted to better situate the proposed main in the area between the curb and the right-of-way.
 - ii. Submit plans to the MDEQ for approval of the Act 399 Permit. Permit plans will be submitted within the time frame necessary to receive comments, if any, from the reviewing agency, make any modifications that are requested, resubmit and incorporate the approved permit in the proposal book.
- d. Sanitary Sewer
- i. Review and update the current sanitary sewer plans to accommodate the 3-lane section. We will review the current location of the water main to determine if a location change is warranted to better situate the proposed sanitary sewer in the area between the curb and the right-of-way.
 - ii. Submit plans to the MDEQ for approval of the Part 41 Permit. Permit plans will be submitted within the time frame necessary to receive comments, if any, from the reviewing agencies, make any modifications that are requested, resubmit and incorporate the approved permit in the proposal book.
- e. Bridge Rehabilitation
- i. Revise the current bridge plans accordingly to accommodate the 3-lane design. Major changes are not anticipated for the bridge design. However, the details related to the geometry changes will need to be incorporated into the bridge plans.
 - ii. Incorporate additional comments received from MDOT and RCOC for the bridge improvements. The comments requiring changes to the current design include stream bed armoring for scour protection and repair of the existing crack in the existing abutment identified in the most recent bridge inspection report.
 - iii. Submit the required MDEQ and Oakland County Water Resources Commission (OCWRC) permits for the work that will take place in the limits of the drain. Revise and re-submit based on comments received to secure necessary permit for the work to include in the bidding documents.
- f. Detailed Grading
- i. Provide revised detail grading plans for the project limits. Revisions will be necessary at each driveway, intersection and sidewalk ramp to update the detailed grading plans.
- g. Soil Erosion & Sedimentation Control (SESC)
- i. Revise the current SESC plans for placement of inlet filters, silt fence, drainage outlet features for both temporary erosion control and permanent erosion control and water treatment. A water treatment device is thought to be required and time and effort have been included to size and develop plans and specifications for this work. No permit is
-



Exhibit A - Scope of Services John R Road from Long Lake Road to South Boulevard

required for Soil Erosion from Oakland County however a permit may be required from the City.

h. Traffic Signal Design

- i. Revise the current traffic signal plans to incorporate the geometric changes for the 3-lane section. Minor changes are anticipated at the intersections with Long Lake Road and South Boulevard with more extensive changes at the Square Lake intersection. Pole locations and push button locations will be revised along with any other elements that are impacted by the geometric changes.
- ii. Revise the traffic signal staging plans to accommodate the 3-lane construction and the proposed one-way MOT scheme.

i. Lighting Design

- i. Revise the lighting design to accommodate the 3-lane design. This will involve re-evaluation of the lighting placement and may result in the lights being located on both sides of the roadway, as opposed to the west side only under the 5-lane design. We will review the photometrics and adjust spacing accordingly for the 3-lane geometry.
- ii. We will coordinate with DTE for any power service changes resulting from the re-design.

j. Utility Coordination

- i. Communicate with all parties determined during the 5-lane design for the continued utility coordination on the project. Inform all parties of the change to the road reconstruction for re-evaluation of the proposed relocation and conflict points. We anticipate up to two additional utility meetings for the 3-lane design.

k. Right-of-Way

- i. Evaluate the need for temporary grading permits at all parcels affected by construction with the expectation that the number of areas impacted by construction 3-lane section will be reduced in relation to the 5-lane design. However, potential areas still may include street corners for ADA ramps or driveways. OHM will develop the necessary legal instruments to allow the City to acquire the grading permits. The legal instruments are anticipated to include parcel sketches of the proposed grading permits and legal descriptions of the property and permit boundaries. The exact number of grading permits is unknown. Five (5) are included for this proposal.

l. Wetlands

- i. We will complete the MDEQ/USACE Joint Permit Application Form for the wetland impacts anticipated for the project, including submittal of the revised 3-lane plans. Permit plans will be submitted within the time frame necessary to receive comments, if any, from the reviewing agencies, make any modifications that are requested, resubmit and incorporate the approved permit in the proposal book. We assume that the mitigation measures outlined in the original EA remain valid and that no additional permanent mitigation measures will be required for the project.

m. Final Plans & Bidding

- i. Final submittal will include the following to the City and/or MDOT:



Exhibit A - Scope of Services John R Road from Long Lake Road to South Boulevard

- a. Three sets (11" x 17") of reproducible plans
- b. Electronic plans in pdf and Microstation format
- c. Project Specifications (8 ½" x 11" Special Provisions)
- d. Engineer's Opinion of Probable Construction Cost in MERL/SAPW format
- e. Field notes and copies of quantity calculations, if required
- ii. Answer questions during the bidding process as required by the MDOT.
- iii. Review bids and discuss the low bid contractor and bid results with City.

C. Additional Services (Not Included)

1. Design of public utility relocations, other than the planned water main replacement between Long Lake Road and Square Lake Road the sanitary sewer additions noted above.
2. Acquisition of grading permits or additional right-of way.
3. Development of wetland mitigation plans.
4. Landscape design is not proposed or anticipated.
5. Design of sprinkler system relocations.

D. City Responsibilities

1. Provide additional water, storm and sanitary sewer record plan and GIS information for project area as needed for design.
2. Review and comment on interim project submittals.
3. Coordination with police, fire and schools.
4. Coordinate and lead public information component.
5. Attend all review meetings with MDOT, RCOC and permitting agencies.
6. Attend all utility coordination meetings and furnish necessary authorizations for design by private utilities if required, including proposed street lighting.
7. Provide known problem drainage and pavement maintenance areas from DPS records.
8. Provide existing record plan information, as received, for projects built and/or planned for this corridor.
9. Pay all permit and review fees.
10. Acquisition of right-of-way and easements.

E. Design Criteria and Standards

1. Posted Speed: 45 mph
2. Design Speed: 50 mph
3. Road Classification: All Weather
4. General Design Standards: MDOT 4R Design Standards, RCOC Standards and Michigan Manual of Uniform Traffic Control Devices Standards.
5. Specifications: MDOT: "2012 Standard Specifications for Construction", including the current "MDOT Standard Plans for Roads and Bridges", supplemented by MDOT frequently used and previously approved Special Provisions along with locally authored Special Provisions.
6. Water Main & Sanitary Sewer Standards: City of Troy, Detroit Water and Sewerage Department, Michigan Department of Environmental Quality,
7. Drainage: Follow MDOT drainage standards as applicable unless modified by the City and/or OCWRC.

EXHIBIT B - DERIVATION OF COST PROPOSAL

PROJECT DESCRIPTION:

John R Reconstruction - Conversion to 3-Lane Section

CONSULTANT:

OHM Advisors, Inc.

DATE: 9/15/2015

<u>Classification</u>	<u>Person Hours</u>	x	<u>Hourly Rates</u>	=	<u>Labor Cost</u>
Sr. Associate	66		\$55.09		\$3,635.94
Associate	251		\$48.59		\$12,196.09
Professional Engineer IV	1144		\$48.50		\$55,484.00
Professional Engineer III	704		\$40.26		\$28,343.04
Professional Engineer II	1232		\$34.81		\$42,885.92
Graduate Engineer III	1210		\$33.95		\$41,079.50
Technician IV	1122		\$35.60		\$39,943.20
Technician II	77		\$23.60		\$1,817.20
Professional Surveyor II	9		\$32.92		\$296.28
Surveyor III	44		\$30.50		\$1,342.00
Surveyor II	44		\$23.17		\$1,019.48
Administrative Support	50		\$20.44		\$1,022.00
	Total Hours		5,953		Subtotal Labor
					\$229,064.65
Overhead					
	\$229,064.65	X	174.49%	=	Total Overhead
					\$399,694.91
					Total Labor and Overhead
					\$628,759.56
Facilities and Cost of Capital					
	\$229,064.65	X	0.85%	=	Total FCC
					\$1,947.05
					\$1,947.05
Subconsultants					
Somat - EA Supplement Noise Analysis update					\$2,630.97
					Total Subconsultant Fees
					\$2,630.97
Direct Costs					
None					\$0.00
					\$0.00
Fixed Fee					
	\$628,759.56	X	11.0%	=	Total Fixed Fee
					\$69,163.55
					TOTAL
					\$702,501.13

SUBCONTRACT NO. _____
CONTROL SECTION NO. EDCF 63459
JOB NO. 128571C
FED. PROJECT NO. STP 1563(056)
FED. ITEM NO. HK 0533

PRELIMINARY ENGINEERING CONTRACT

A TEDF – CATEGORY C PROJECT

THIS CONTRACT, made and entered into as of this date of _____, by and between Orchard, Hiltz & McCliment, Inc., a Consultant Engineering Corporation, of 34000 Plymouth Road, Livonia, Michigan, hereinafter referred to as the "CONSULTANT", and the City of Troy, Michigan, hereinafter referred to as the "LOCAL AGENCY".

WITNESSETH:

WHEREAS, the LOCAL AGENCY is desirous of proceeding with preparation of plans for a Roadway Reconstruction project within its limits; and

WHEREAS, the LOCAL AGENCY desires to engage the professional services and assistance of the CONSULTANT to perform certain preliminary engineering services and other related work, said work to be hereinafter referred to as the "SERVICES", required in connection with the construction of the following Roadway Reconstruction improvements under the TEDF – Category C, said improvements to be hereinafter referred to as the "PROJECT".

Reconstruction of an existing two-lane pavement with a three-lane asphalt pavement including curb & gutter, sidewalks, driveways, approaches, storm sewer, sanitary sewer, water main, traffic signals, roadway lighting between Long Lake Road and South Boulevard, and

WHEREAS, the LOCAL AGENCY has programmed the PROJECT with the Michigan Department of Transportation, hereinafter referred to as the "DEPARTMENT" for construction with the use of TEDF – Category C Funds administered by the United States Department of Transportation, Federal Highway Administration, hereinafter referred to as the "FHWA"; and

WHEREAS, the CONSULTANT is willing to render the SERVICES desired by the LOCAL AGENCY for the considerations hereinafter expressed; and

WHEREAS, the CONSULTANT was selected utilizing a qualifications based selection (QBS) process; and

WHEREAS, the terms and conditions of the prime contract between the DEPARTMENT and the LOCAL AGENCY for the PROJECT shall be incorporated by reference as part of this subcontract to ensure that if any discrepancies occur between the prime contract and subcontract, the prime contract shall prevail; and

WHEREAS, the parties hereto have reached an understanding regarding the performance of the SERVICES on the PROJECT and desire to set forth this understanding in the form of a written contract;

NOW THEREFORE, it is hereby agreed by and between the parties hereto that:

THE CONSULTANT SHALL:

1. Design and prepare studies, preliminary plans, final plans, specifications, quantity sheets, estimates of cost, and do other related work necessary to develop the complete design for the PROJECT. Also perform right-of-way requirements, recommendations, land surveys and computations. Right-of-way

plans are to be shown by the CONSULTANT on the construction plans. Boring and supplemental specialized services, as required, are to be made by others under the CONSULTANT's supervision.

2. Govern all SERVICES by the applicable codes and practices of the LOCAL AGENCY and the DEPARTMENT and the FHWA.

3. Submit for approval by the LOCAL AGENCY and the DEPARTMENT, studies and preliminary plans showing the proposed layouts of the PROJECT.

4. After approval and acceptance of the studies and preliminary plans and preliminary cost estimates by the LOCAL AGENCY and the DEPARTMENT, prepare and submit complete detailed construction plans (final plans), supplemental specifications, estimates of quantities, design calculations if requested, and engineer's final estimates of cost for all necessary construction and other work, such as utility relocations, included in the complete design of the PROJECT.

5. During the preparation of the plans, make such changes and revisions in said plans and supporting material as are considered necessary and desirable by the LOCAL AGENCY and the DEPARTMENT to assure conformance of plans to good design and standard practices, and to have said plans and other material in proper form for receiving bids.

6. During construction, make all corrections and alterations in the detailed plans for the PROJECT as may be deemed necessary by the LOCAL AGENCY and the DEPARTMENT as a result of errors and omissions. The CONSULTANT and the LOCAL AGENCY specifically agree that in the event problems arise that may be the result of errors and/or omissions by the CONSULTANT or due to a failure of the CONSULTANT to otherwise perform in accordance with this contract, that the CONSULTANT will be held responsible with no cost to the LOCAL AGENCY or in accordance with the LOCAL AGENCY'S dispute resolution process if applicable.

7. Check all shop drawing details for items of construction, as may be submitted to the LOCAL AGENCY for approval by the LOCAL AGENCY and the DEPARTMENT in order to insure compliance with plans and specifications.

8. Supply all materials, including incidental blueprints required.

9. During the performance of the SERVICES, be responsible for any loss or damage to the documents, hereinafter enumerated as belonging to the LOCAL AGENCY while they are in its possession. Restoration of lost or damaged documents shall be at the CONSULTANT'S expense.

10. Attend conferences and make such trips to the offices of the LOCAL AGENCY and to the site of the work to confer with representative of the LOCAL AGENCY or the DEPARTMENT or the FHWA as may be necessary in the carrying out of the work under this contract.

11. Follow standard accounting practices and permit representatives of the LOCAL AGENCY and the DEPARTMENT and the FHWA to audit and inspect its PROJECT books and records at any reasonable time. Such records are to be kept available for three (3) years from the date of the final payment for work conducted under this contract.

- a. The CONSULTANT shall establish and maintain accurate records, in accordance with generally accepted accounting principals, of all expenses incurred for which payment is sought or made under this Contract, and said records to be hereinafter referred to as the "RECORDS". Separate accounts shall be established and maintained for all costs incurred under this Contract.
- b. The CONSULTANT shall maintain the RECORDS for at least three (3) years from the date of final payment of federal aid or state aid made by the DEPARTMENT to the LOCAL AGENCY under this Contract. In the event of a dispute with regard to the allowable expenses or any other issue under this Contract, the CONSULTANT shall thereafter continue to maintain the RECORDS at least until that dispute has been

finally decided and the time for all available challenges or appeals of that decision has expired.

- c. The DEPARTMENT, or their representative, may inspect, copy, or audit the RECORDS at any reasonable time after giving reasonable notice.
- d. If any part of the work is subcontracted, the CONSULTANT shall assure compliance with subsections (a), (b), and (c) above for all subcontracted work.

12. Have in its employ a sufficient number of qualified employees available to complete the design of the PROJECT and to submit prints of the preliminary plans for the review of the LOCAL AGENCY and the DEPARTMENT by April 21, 2017, and further submit the tracings of the final plans to the LOCAL AGENCY within six (6) weeks after receipt of the review comments. The date, as specified and determined, will be considered as the latest date for acceptable submission of plans unless an extension of time is granted as provided in Section 31.

13. Permit the LOCAL AGENCY, the DEPARTMENT, the FHWA, and other public agencies interested in the plans and designs for the PROJECT to have full access thereto during the progress of the SERVICES being performed thereon.

14. Upon completion of the design of the PROJECT and final approval thereof by the LOCAL AGENCY and the DEPARTMENT, deliver to the LOCAL AGENCY the following:

- a. One (1) set of final construction plans which meet current DEPARTMENT standards concerning: the use of ink or pencil, scale of drawing, and type of reproducible drawing material used.
- b. One (1) reproducible copy of the special provisions.
- c. One (1) set each of the criteria for Supplemental Specifications indicating the appropriate items for the PROJECT.
- d. One (1) set of estimates of cost of construction.
- e. One (1) set of reproducibles of design calculations, if requested.
- f. Upon request by the LOCAL AGENCY, make available thereto, all notes utilized in the preparation of the plans, supplemental specifications, and cost estimates.

15. Have their professional endorsement upon all plans, specifications, estimates, and engineering data furnished to the LOCAL AGENCY.

16. Show evidence of Workers' Compensation Insurance, said insurance to be as required by law.

17. Commence SERVICE as set forth in this contract only upon receipt of written notice from the LOCAL AGENCY'S PROJECT manager that the CONSULTANT'S SERVICES are desired.

18. Submit billings to the LOCAL AGENCY, as hereinafter set forth in Section 21.

THE LOCAL AGENCY SHALL:

19. Furnish for the use of the CONSULTANT, the DEPARTMENT'S standards for bridge and road design and such other information as may be needed in a particular instance.

20. For and in consideration of the SERVICES rendered by the CONSULTANT as set forth in this contract, pay the CONSULTANT on the basis of actual cost plus a fixed fee (profit) amount which shall not exceed Seven-Hundred Two Thousand Five Hundred and One Dollars and Thirteen Cents (\$702,501.13). The fixed fee (profit) shall be the amount of Sixty-Nine

Thousand One Hundred Sixty-Three Dollars and Fifty-Five Cents (\$69,163.55), which amount is included in the total amount of **Seven-Hundred Two Thousand Five Hundred and One Dollars and Thirteen cents (\$702,501.13)**. as shown in Exhibit "A", attached hereto and made a part hereof.

Actual costs for SERVICES required and preformed will be determined in accordance with the following terms, subject to the cost criteria set forth in the Federal Acquisition Regulations, 48 CFR, Part 31:

- a. Direct Salary Costs: Actual labor costs of personnel performing the SERVICES. This cost will be based on the employees' actual hourly rate of pay and the actual hours of performance on the PROJECT as supported by employee time records.
- b. Direct Costs: Actual costs of materials and services, other than salaries, as may be required hereunder but which are not normally provided as a part of the overhead of the CONSULTANT. All actual costs shall be itemized and certified as paid to specifically named firms or individuals, and shall be supported by proper receipts.
- c. Overhead (Indirect Costs): A pro-rated portion of the actual overhead incurred by the CONSULTANT during performance of the SERVICES. The amount of overhead payment, including payroll overhead, will be calculated as a percentage of all direct labor costs related to staff personnel and members of the firm. Overhead shall include those costs which, because of their incurrence for common or joint objectives, are not readily subject to treatment as a direct cost. The provisional overhead rate, which will be applied to direct labor costs for progress payments, is set forth in Exhibit A.

It is agreed that the use of the provisional rate set forth in Exhibit A sets neither a minimum nor maximum to the actual overhead costs to be paid the CONSULTANT. Any overpayments or underpayments made to the CONSULTANT for SERVICES performed resulting from usage of the provisional overhead rate, will be corrected subject to the contract maximum in the first paragraph of Section 20, in the first billing submitted subsequent to the CONSULTANT'S calculation of an actual overhead rate for the financial year end applicable to the reported direct labor cost. The audit at the completion of this contract, or at such time as this contract is terminated, will verify the propriety of reported overhead.

Facilities Cost of Capital: A pro-rated portion of the actual facilities cost of capital incurred by the CONSULTANT during work is reimbursable only if the estimated facilities cost of capital was specifically identified in the cost proposal for this work (Exhibit A).

- d. Travel and Subsistence: Actual costs in accordance with and not to exceed the amounts set forth in the State of Michigan Standardized Travel Regulations, incorporated herein by reference as if the same were repeated in full herein.
- e. Fixed Fee (Profit): In addition to the payments for direct and overhead costs as hereinbefore provided, the LOCAL AGENCY agrees to pay the CONSULTANT a fixed amount for profit for the SERVICES performed. It is agreed and understood that such amount constitutes full compensation to the CONSULTANT for profit and will not vary because of any differences between the estimated cost and the actual cost for work performed, except that in the event this contract is terminated, payment of a fixed fee (profit) in respect to the PROJECT shall be in an amount which can be established by the CONSULTANT from its accounts and records and subject to the provisions of Section 22.
- f. Subconsultant Costs: Actual costs of subconsultants performing SERVICES under this Contract. Amounts for fixed fees paid by the CONSULTANT to the

subconsultant will not be considered an actual cost of the CONSULTANT, but will be considered a part of the fixed fee of the CONSULTANT

- g. Those costs incurred by the CONSULTANT in the utilization of the subcontracted services of **Somat Engineering, Inc.** shall be excluded from the calculation of the CONSULTANT'S percentage of SERVICES completed, as set forth in Section 21a, but will be reimbursed by the LOCAL AGENCY. Payment by the LOCAL AGENCY will be made directly to the CONSULTANT. The PROJECT cost attributable to **Somat Engineering, Inc.** is estimated to be **\$2,630.97.**

The maximum amount, including the fixed fee (profit), hereinbefore set forth in this Section, shall not be exceeded except by the execution of an amendment to this contract by and between the parties hereto and with approval by the DEPARTMENT and the FHWA. Payment shall be made as set forth hereinafter.

21. Make payments to the CONSULTANT in accordance with the following procedures:

- a. Progress payments may be made for reimbursement of amounts earned to date and shall include direct costs, other direct costs, calculated amounts for overhead using overhead, and facilities cost of capital using applied rates, set forth hereinbefore, plus a portion of the fixed fee.

The portion of the fixed fee which may be included in progress payments shall be equal to the total fixed fee multiplied by the percentage of the work which has been completed to date of billing.

- b. Partial payments will be made upon the submission by the CONSULTANT of a billing, accompanied by properly completed reporting forms and such other evidence of progress as may be required by the LOCAL AGENCY. Partial payments shall be made only once a month.
- c. Final billing under this contract shall be submitted in a timely manner but not later than three (3) months after completion of the SERVICES. Billing for work submitted later than three (3) months after completion of SERVICES will not be paid. Final payment, including adjustments of direct salary costs, other direct costs and overhead costs, will be made upon completion of audit by the LOCAL AGENCY and/or as appropriate, by representatives of the DEPARTMENT and the FHWA. In the event such audit indicates an overpayment, the CONSULTANT will repay the LOCAL AGENCY within **30** days of the date of the invoice.

22. If SERVICES, or any part thereof, are terminated before completed, pay the CONSULTANT as follows:

- a. Pay the CONSULTANT actual cost plus overhead, as defined herein, incurred for the work to be terminated up to the time of termination, as set forth in Section 20. The amount included for overhead and profit shall be subject to approval by the DEPARTMENT and the FHWA. The LOCAL AGENCY will receive the work product produced by the CONSULTANT under this Contract up to the time of termination, prior to the CONSULTANT being reimbursed.
- b. In no case, shall the compensation paid to the CONSULTANT for SERVICES, or any part thereof, exceed the amount the CONSULTANT would receive had the SERVICES, or the terminated portion thereof been completed.

IT IS FURTHER AGREED THAT:

23. Approval of this contract by the DEPARTMENT in no way obligates the DEPARTMENT for any costs or other responsibilities, except as fiscal agent for the FHWA with respect to making federal

funds available for the SERVICES performed by the CONSULTANT for the LOCAL AGENCY.

24. Upon completion or termination of this contract, all documents prepared by the CONSULTANT, including tracings, drawings, estimates, specifications, field notes, investigations, studies, etc., as instruments of SERVICE shall become the property of the LOCAL AGENCY.

25. No portion of the PROJECT work, hereto before defined, shall be sublet, assigned, or otherwise disposed of except as herein provided or with the prior written consent of the LOCAL AGENCY and approval by the DEPARTMENT and the FHWA. Consent to sublet, assign or otherwise dispose of any portion of the SERVICES shall not be construed to relieve the CONSULTANT of any responsibility for the fulfillment of this contract.

26. All questions which may arise as to the quality and acceptability of work, the manner of performance and rate of progress of the work, and the interpretation of plans and specifications shall be decided by the LOCAL AGENCY'S PROJECT Manager. All questions as to the satisfactory and acceptable fulfillment of the terms of this contract shall be decided by the LOCAL AGENCY.

27. Any change in SERVICES to be performed by the CONSULTANT involving extra compensation must be authorized in writing by the LOCAL AGENCY and approved by the DEPARTMENT and the FHWA prior to the performance thereof by the CONSULTANT and requires an amendment to this Contract.

28. In addition, the CONSULTANT shall comply with, and shall require any contractor or subcontractor to comply with, the following:

- a. In connection with the performance of this contract, the CONSULTANT (hereinafter in Appendix "A" referred to as the "contractor") agrees to comply with the State of Michigan provisions for "Prohibition of Discrimination in State Contracts", as set forth in Appendix "A", attached hereto and made a part hereof.
- b. During the performance of this contract, the CONSULTANT for itself, its assignees, and successors in interest (hereinafter in Appendix "B" referred to as the "contractor") agrees to comply with the Civil Rights Act of 1964, being P.L. 88-352, 78 Stat. 241, as amended, being Title 42 U.S.C. Sections 1971, 1975a-1975d, and 2000a-2000h-6, and the Regulations of the United States Department of Transportation (49 CFR Part 21) issued pursuant to said Act, including Appendix "B", attached hereto and made a part hereof.
- c. The parties hereto further agree that they accept the DEPARTMENT'S Minority Business Enterprises/Women's Business Enterprises (MBE/WBE) Program with respect to the PROJECT and will abide by the provisions set forth in Appendix "C" attached hereto and made a part hereof, being an excerpt from Title 42 CFR Part 23, more specifically 23.43(a)(1) and (2) thereof.

29. The CONSULTANT warrants that it has not employed or retained any company or person other than bona fide employees working solely for the CONSULTANT, to solicit or secure this contract, and that he has not paid or agreed to pay any company or person, other than bona fide employees working solely for the CONSULTANT, any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon, or resulting from the award, or making of this contract. For breach or violation of this warranty, the LOCAL AGENCY shall have the right to annul this contract without liability or, at its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gifts or contingent fee.

30. The CONSULTANT specifically agrees that in the performance of SERVICES herein enumerated by it, or by an approved subcontractor, or anyone acting in its behalf, they will, to the best of their professional knowledge and ability, comply with any and all applicable state, federal, and local statutes, ordinances, and regulations.

31. No charges or claims for damages shall be made by the CONSULTANT for delays or hindrances from any cause whatsoever during the progress of any portions of the SERVICES specified in this contract, except as hereinafter provided.

In case of a substantial delay on the part of the LOCAL AGENCY in providing to the CONSULTANT either the necessary information or approval to proceed with the work, resulting, through no fault of the CONSULTANT, in delays of such extent as to require the CONSULTANT to perform its work under changed conditions not contemplated by the parties, the LOCAL AGENCY will consider supplemental compensation limited to increased costs incurred as a direct result of such delays. Any claim for supplemental compensation must be in writing and accompanied by substantiating data. Authorization of such supplemental compensation shall be by an amendment to this contract subject to prior approval by the DEPARTMENT and the FHWA.

When delays are caused by circumstances or conditions beyond the control of the CONSULTANT as determined by the LOCAL AGENCY, the CONSULTANT shall be granted an extension of time for such reasonable period as may be mutually agreed upon between the parties, it being understood, however, that the permitting of the CONSULTANT to proceed to complete the SERVICES, or any part of them, after the date to which the time of completion may have been extended, shall in no way operate as a waiver on the part of the LOCAL AGENCY of any of its rights herein set forth.

32. In case the CONSULTANT deems extra compensation will be due it for work or materials not clearly covered in this contract, or not ordered by the LOCAL AGENCY as a change, or due to changed conditions, the CONSULTANT shall notify the LOCAL AGENCY in writing of its intention to make claim for such extra compensation before beginning such work. Failure on the part of the CONSULTANT to give such notification will constitute a waiver of the claim for such extra compensation. The filing of such notice by the CONSULTANT shall not in any way be construed to establish the validity of the claim. Such extra compensation shall be provided only by amendment to this contract with approval of the DEPARTMENT and the FHWA.

33. The CONSULTANT agrees to obtain the necessary liability insurance, acceptable to the LOCAL AGENCY and the DEPARTMENT, naming the City of Troy, Michigan, the Michigan State Transportation Commission, and the Michigan Department of Transportation as insured, and to provide the LOCAL AGENCY with evidence of said insurance, and to indemnify and save harmless the LOCAL AGENCY, the Michigan State Transportation Commission, and the DEPARTMENT, their officers, agents and employees from any and all claims and losses occurring or resulting to any person, firm or corporation furnishing or supplying work, services, materials, or supplies in connection with the performance of this contract, and from any and all claims and losses occurring or resulting to any person, firm, or corporation who may be injured or damaged by the CONSULTANT in the performance of this contract.

34. This contract shall be terminated upon advisement to the CONSULTANT by the LOCAL AGENCY that its SERVICES are completed and accepted.

35. The CONSULTANT'S signature on this Contract constitutes the CONSULTANT'S certification of "status" under penalty of perjury under the laws of the United States in respect to 49 CFR Part 29 pursuant to Executive Order 12549.

The certification, which is included as a part of this Contract as Attachment "A", is Appendix A of 49 CFR Part 29, and applies to the CONSULTANT (referred to in Appendix A of 49 CFR Part 29 as "the prospective primary participant").

The CONSULTANT is responsible for obtaining the same certification from all subcontractors under this contract by inserting the following paragraph in all subcontracts:

"The subcontractor's signature on this Contract constitutes the subcontractor's certification of 'status' under penalty of perjury under the laws of the United States in respect to 49 CFR Part 29 pursuant to Executive Order 12549. The certification, which is included as a part of this Contract as Attachment "B", is Appendix B of 49 CFR Part 29."

This certification is required of all subcontractors, testing laboratories and other lower tier participants

with which the CONSULTANT enters into a written arrangement for the procurement of goods or services provided for in this Contract.

36. The CONSULTANT hereby agrees that the costs reported to the LOCAL AGENCY for this Contract shall represent only those items which are properly chargeable in accordance with this Contract. The CONSULTANT also hereby certifies that it has read the Contract terms and has made itself aware of the applicable laws, regulations, and terms of this Contract that apply to the reporting of costs incurred under the terms of this Contract.

37. Upon execution of this contract by the parties hereto, the same shall become binding on the parties hereto and their successors and assigns, until such time as all work contemplated hereunder is complete, or until such time as this contract is terminated by mutual consent of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals by their duly authorized agents and representatives the day and year first above written.

LOCAL AGENCY NAME

BY: _____
DANE SLATER, MAYOR

BY: _____
AILEEN DICKSON, CITY CLERK

ORCHARD, HILTZ & MCCLIMENT, INC.

BY:  _____
DAN FREDENDALL, VICE PRESIDENT

BY:  _____
RHETT GRONEVELT, PRINCIPAL



ARCHITECTS. ENGINEERS. PLANNERS.

EXHIBIT B - DERIVATION OF COST PROPOSAL

PROJECT DESCRIPTION:

John R Reconstruction - Conversion to 3-Lane Section

CONSULTANT:

OHM Advisors, Inc.

DATE:

9/15/2015

<u>Classification</u>	<u>Person Hours</u>	x	<u>Hourly Rates</u>	=	<u>Labor Cost</u>
Sr. Associate	66		\$55.09		\$3,635.94
Associate	251		\$48.59		\$12,196.09
Professional Engineer IV	1144		\$48.50		\$55,484.00
Professional Engineer III	704		\$40.26		\$28,343.04
Professional Engineer II	1232		\$34.81		\$42,885.92
Graduate Engineer III	1210		\$33.95		\$41,079.50
Technician IV	1122		\$35.60		\$39,943.20
Technician II	77		\$23.60		\$1,817.20
Professional Surveyor II	9		\$32.92		\$296.28
Surveyor III	44		\$30.50		\$1,342.00
Surveyor II	44		\$23.17		\$1,019.48
Administrative Support	50		\$20.44		\$1,022.00
	Total Hours		5,953		Subtotal Labor \$229,064.65
<u>Overhead</u>					
	\$229,064.65	X	174.49%	=	Total Overhead \$399,694.91
					Total Labor and Overhead \$628,759.56
<u>Facilities and Cost of Capital</u>					
	\$229,064.65	X	0.85%	=	Total FCC \$1,947.05
					\$1,947.05
<u>Subconsultants</u>					
Somat - EA Supplement Noise Analysis update					\$2,630.97
					Total Subconsultant Fees \$2,630.97
<u>Direct Costs</u>					
None					\$0.00
					\$0.00
<u>Fixed Fee</u>					
	\$628,759.56	X	11.0%	=	Total Fixed Fee \$69,163.55
					TOTAL \$702,501.13

APPENDIX A
PROHIBITION OF DISCRIMINATION IN STATE CONTRACTS

In connection with the performance of work under this contract; the contractor agrees as follows:

1. In accordance with Act No. 453, Public Acts of 1976, the contractor hereby agrees not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or as a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, or marital status. Further, in accordance with Act No. 220, Public Acts of 1976 as amended by Act No. 478, Public Acts of 1980 the contractor hereby agrees not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of a disability that is unrelated to the individual's ability to perform the duties of a particular job or position. A breach of the above covenants shall be regarded as a material breach of this contract.
2. The contractor hereby agrees that any and all subcontracts to this contract, whereby a portion of the work set forth in this contract is to be performed, shall contain a covenant the same as hereinabove set forth in Section 1 of this Appendix.
3. The contractor will take affirmative action to insure that applicants for employment and employees are treated without regard to their race, color, religion, national origin, age, sex, height, weight, marital status or a disability that is unrelated to the individual's ability to perform the duties of a particular job or position. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
4. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, age, sex, height, weight, marital status or disability that is unrelated to the individual's ability to perform the duties of a particular job or position.
5. The contractor or his collective bargaining representative will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice advising the said labor union or workers' representative of the contractor's commitments under this appendix.
6. The contractor will comply with all relevant published rules, regulations, directives, and orders of the Michigan Civil Rights Commission which may be in effect prior to the taking of bids for any individual state project.
7. The contractor will furnish and file compliance reports within such time and upon such forms as provided by the Michigan Civil Rights Commission, said forms may also elicit information as to the practices, policies, program, and employment statistics of each subcontractor as well as the contractor himself, and said contractor will permit access to his books, records, and accounts by the Michigan Civil Rights Commission and/or its agent, for purposes of investigation to ascertain compliance with this contract and relevant with rules, regulations, and orders of the Michigan Civil Rights Commission.
8. In the event that the Civil Rights Commission finds, after a hearing held pursuant to its rules, that a contractor has not complied with the contractual obligations under this agreement, the Civil Rights Commission may, as part of its order based upon such findings, certify said findings to the Administrative Board of the State of Michigan, which Administrative Board may order the cancellation of the contract found to have been violated and/or declare the contractor ineligible for future contracts with the state and its political and civil subdivisions, departments, and officers, and including the governing boards of institutions of higher education, until the contractor complies with said order of the Civil Rights Commission. Notice of said declaration of future ineligibility may be given to any or all of the persons with whom the contractor is declared ineligible to contract as a contracting party in future contracts. In any case before the Civil Rights Commission in which cancellation of an existing contract is a possibility, the contracting agency shall be notified of such possible remedy and shall be given the option by the Civil Rights Commission to participate in such proceedings.
9. The contractor will include, or incorporate by reference, the provisions of the foregoing paragraphs (1) through (8) in every subcontract or purchase order unless exempted by the rules, regulations or orders of the Michigan Civil Rights Commission, and will provide in every subcontract or purchase order that said provisions will be binding upon each subcontractor or seller.

APPENDIX B

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as following:

1. Compliance with Regulations: The contractor shall comply with the regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 27, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
2. Nondiscrimination: The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or natural origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
4. Information and Reports: The contractor shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities, as may be determined by the Michigan Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the Michigan Department of Transportation, or the Federal Highway Administration as appropriate, and shall set forth what efforts is has made to obtain the information.
5. Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the Michigan Department of Transportation shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - a. (a) Withholding of payments to the contractor under the contract until the contractor complies, and/or
 - b. (b) Cancellation, termination, or suspension of the contract, in whole or in part.
6. Incorporation of Provisions: The contractor shall include the provisions of paragraphs 1 through 6 of every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the Michigan Department of Transportation or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for non-compliance; provided, however that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Michigan Department of Transportation to enter into such litigation to protect the interests of the state, and, in addition, the contractor may request the United States to enter into such litigation to protect the interest of the United States.

APPENDIX C

TO BE INCLUDED IN ALL FINANCIAL ASSISTANCE AGREEMENTS WITH LOCAL AGENCIES

General Requirements for Recipients

Excerpts from USDOT Regulation 49 CFR, Part 23, Section 23.43

- A. Policy: It is the policy of the Department that MBE as defined in 49 CFR, Part 23, shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with federal funds. Consequently, the MBE requirements of 49 CFR, Part 23, apply to this contract.
- B. MBE Obligation: The recipient or its contractor agrees to ensure that MBE as defined in 49 CFR, Part 23, has the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with federal funds provided under this agreement. In this regard, all recipients or contractors shall take all necessary and reasonable steps in accordance with 49 CFR, Part 23, to ensure that MBE has the maximum opportunity to compete for and perform contracts. Recipients and their contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of departmentally-assisted contracts.
- C. If, as a condition of assistance, the recipient has submitted and the department has approved a minority business enterprise affirmative action program which the recipient agrees to carry out, this program is incorporated into this financial assistance agreement by reference. This program shall be treated as a legal obligation and failure to carry out its terms shall be treated as a violation of this financial assistance agreement. Upon notification to this recipient of its failure to carry out the approved program, the Department shall impose such sanctions as noted in 49 CFR, Part 23, Subpart E, which sanctions may include termination of the agreement or other measures that may affect the ability of the recipient to obtain future departmental, financial assistance.
- D. The Department hereby advises each recipient, contractor, or subcontractor that failure to carry out the requirements set forth in Section 23.43(a) 49 CFR, Part 23, shall constitute a breach of contract, and after the notification of the USDOT, may result in termination of the agreement or contract by the Department or such remedy as the Department deems appropriate.

SUBCONTRACT NO. _____
CONTROL SECTION NO. EDCF 63459
JOB NO. 128571C
FED. PROJECT NO. STP 1563(056)
FED. ITEM NO. HK 0533

CERTIFICATION

I hereby certify that I am Daniel G. Fredendall, PE and a duly authorized representative of the firm of Orchard, Hiltz & McCliment, Inc., whose address is 34000 Plymouth Road, Livonia, MI 48150 and that neither I nor the above firm I here represent has:

(a) employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me or the above Orchard, Hiltz & McCliment, Inc.) to solicit or secure this contract.

(b) agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out the contract, or

(c) paid, or agreed to pay, to any firm, organization or person (other than a bona fide employee working solely for me or the above Orchard, Hiltz & McCliment, Inc.) any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out the contract:

except as here expressly stated (if any):

I acknowledge that this certification is to be furnished to the Michigan Department of Transportation in connection with this contract involving participation of state and/or federal funds, and is subject to applicable state and federal laws, both criminal and civil.



Signature

September 22, 2015

Date

ATTACHMENT A

(This is a reproduction of Appendix A of 49 CFR Part 29)

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS -
PRIMARY COVERED TRANSACTIONS

Instructions for Certification

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification in addition to other remedies available to the federal government, the department or agency may terminate this transaction for cause of default.
4. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction", "debarred", "suspended", "ineligible", "lower tier covered transaction", "participant", "person", "primary covered transaction", "principal", "proposed", and "voluntarily excluded" as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules impending Executive Order 12549. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion-Lower Tier Covered Transaction", provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals.
9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally processed by a prudent person in the ordinary course of business dealings.
10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the federal government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - A. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
 - B. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;
 - C. Are not presently indicated for or otherwise criminally or civilly charged by a government entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - D. Have not within a three-year period preceding this application/proposal had one or more public transactions (federal, state, or local) terminated for cause or default.
2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

March 9, 1989

ATTACHMENT B
(This is a reproduction of Appendix B of 49 C.F.R. Part 29)
CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY
AND VOLUNTARY EXCLUSION-LOWER TIER COVERED TRANSACTIONS

Instructions for Certification

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction", "debarred", "suspended", "ineligible", "lower tier covered transaction", "participant", "person", "primary covered transaction", "principal", "proposal", and "voluntarily excluded", as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion-Lower Tier Covered Transaction", without notification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List (Telephone No. (517) 335-2513 or (517) 335-2514).
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion-Lower Tier Covered Transactions

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.



MEMO

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May 2, 2014

TO: Beata Lamparski, Hubbell, Roth and Clark
FROM: Saima Masud, Plan and Policy Development
SUBJECT: City of Troy traffic growth rates
CC: Liyang Feng and Tom Bruff, SEMCOG

SEMCOG's Travel Demand Forecast model is projecting an increase of approximately 6.5% in traffic (or vehicle miles of travel) for the City of Troy from year 2010 to 2035.

Population, households and employment estimates for the City is also showing an increase of around 1%, 6%, and 17% respectively from 2010 to 2035.

These results are based on the travel forecasting model using the regional development forecast (RDF40) adopted for SEMCOG's 2040 Regional Transportation Plan.

The travel model is designed to analyze traffic patterns and congestion on a regional level. At the community level, the data may be distorted due to several reasons: large sized regional activity zones, lack of detailed local streets in the road network, or the placement of centroid connectors along model links. It is advised that the local traffic counts are also used as a reference.

If you have any questions please give me a call at 313-324-3341 or e-mail masud@semco.org.