



CITY of NOVI CITY COUNCIL

Agenda Item I
September 13, 2010

SUBJECT: Approval to award a contract for design engineering services for the Nine Mile Pathway (Meadowbrook Road to Haggerty Road) to Orchard, Hiltz & McCliment (OHM) for a not-to-exceed design fee of \$26,710.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division *BT*

CITY MANAGER APPROVAL:

EXPENDITURE REQUIRED	\$26,710
AMOUNT BUDGETED	\$46,500 (Engineering and Right-of-way acquisition)
LINE ITEM NUMBER	204-204.00-974.421

BACKGROUND INFORMATION:

The City of Novi was awarded \$146,220 in federal funding through the Michigan Department of Transportation (MDOT) Transportation Enhancement grant program to construct a non-motorized pathway along the north side of Nine Mile between Meadowbrook and Haggerty (the attached map shows the location of the pathway, which consists of two separate sections). This project (Segment #83) was identified as the top priority by the Walkable Novi Committee and documented in the latest version of the Pathway & Sidewalk Prioritization Analysis and Process report. Completion of this segment will provide an alternate means of transportation that will benefit residents and businesses in Novi by connecting a large residential area with nearby non-motorized pathway systems such as the I-275 pathway. As a condition of the grant, the pathway will be ten feet wide in accordance with the American Association of State Highway and Transportation Officials (AASHTO) design standards. There is an existing 5-foot wide sidewalk between two proposed pathway sections that may be replaced with a 10-foot wide path if project funding is available at the time of construction. The funding for construction of the new pathway is available in 2011, however there are several easements that must be acquired by the city, prior to construction. For this reason, advanced engineering of the project was included in the FY2010-11 budget. Once the preliminary design is completed, Engineering staff will begin to make contact with the affected property owners to begin the easement acquisition process.

OHM's engineering fees are based on the fixed fee schedule established in the Agreement for Professional Engineering Services for Public Projects. The design fees for this project will be \$26,710 (10.00% of the estimated construction cost of \$267,092). The construction phase engineering fees will be awarded at the time of construction award and will be based on the contractor's bid price and the fee percentage established in the Agreement for Professional Engineering Services for Public Projects. The Supplemental

Professional Engineering Services Agreement for this project is enclosed and includes the project scope and estimate.

OHM has recently completed engineering services for the federally funded roads project on Meadowbrook Road and Nine Mile Road, and our current 2010 road capital preventative maintenance program. The project is anticipated to begin in summer 2011 and completed in fall 2011.

RECOMMENDED ACTION: Approval to award a contract for design engineering services for the Nine Mile Pathway (Meadowbrook Road to Haggerty Road) to Orchard, Hiltz & McCliment (OHM) for a not-to-exceed design fee of \$26,710.

	1	2	Y	N
Mayor Landry				
Mayor Pro Tem Gatt				
Council Member Crawford				
Council Member Fischer				

	1	2	Y	N
Council Member Margolis				
Council Member Mutch				
Council Member Staudt				

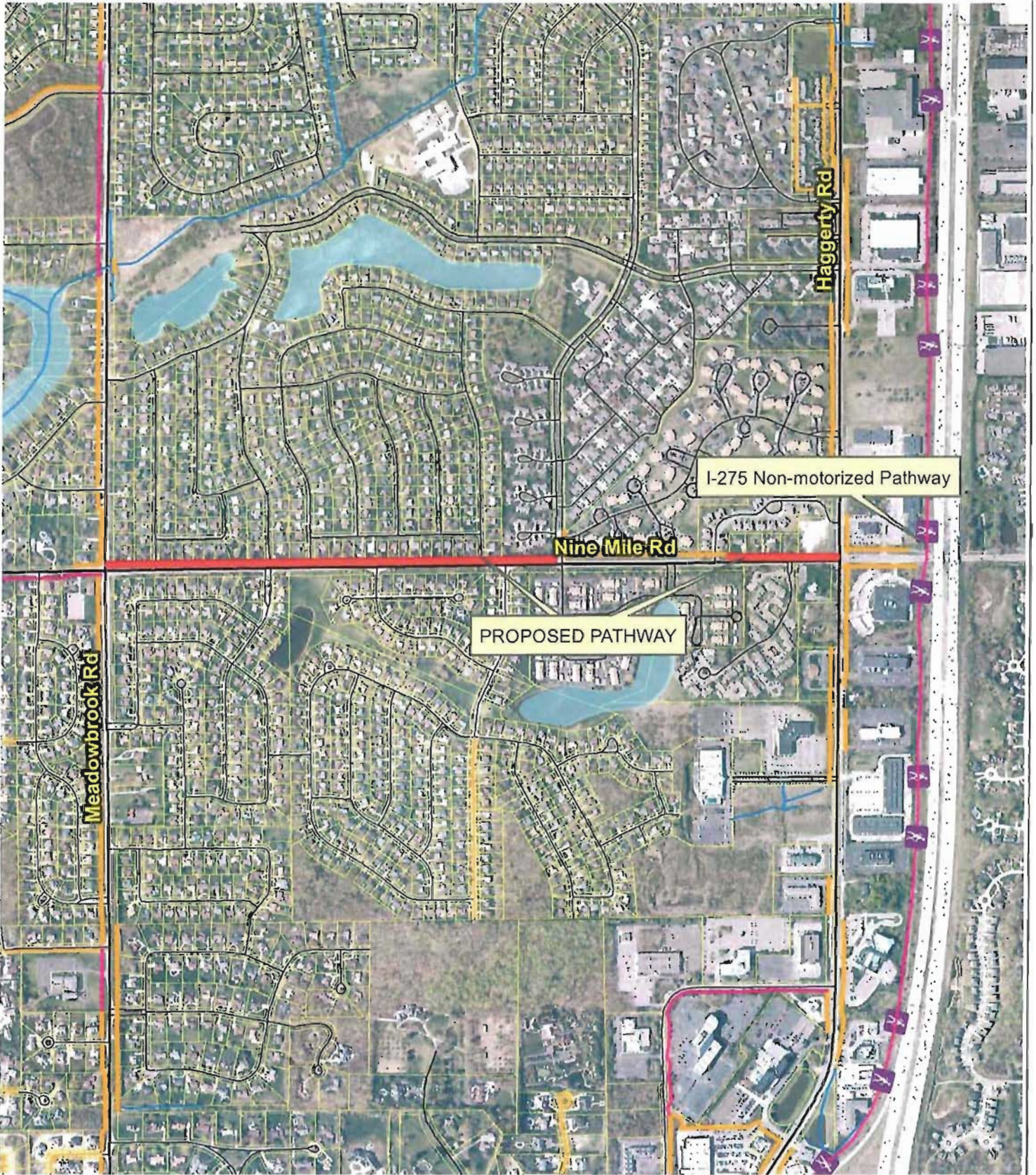
MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

City Of Novi



NINE MILE ROAD PATHWAY PROJECT Meadowbrook Road to Haggerty Road



I-275 Non-motorized Pathway

Nine Mile Rd

PROPOSED PATHWAY

Meadowbrook Rd

Haggerty Rd

SUPPLEMENTAL PROFESSIONAL ENGINEERING SERVICES AGREEMENT

NINE MILE ROAD PATHWAY
MEADOWBROOK ROAD TO HAGGERTY ROAD

This Agreement shall be considered as made and entered into as of the date of the last signature hereon, and is between the City of Novi, 45175 W. Ten Mile Road, Novi, MI 48375-3024, hereafter, "City," and Orchard, Hiltz & McCliment, Inc., whose address is 34000 Plymouth Road, Livonia, Michigan 48150, hereafter, "Consultant."

RECITALS:

This Agreement shall be supplemental to, and hereby incorporates the terms and conditions of the AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES FOR PUBLIC PROJECTS, and attached exhibits, entered into between the City and the Consultant on September 24, 2009.

The project includes the design and the preparation of plans and specifications for a non-motorized pathway along the north side of Nine Mile Road between Meadowbrook and Haggerty. The path shall be designed in accordance with MDOT Local Agency Program guidelines and AASHTO standards as the project is being partially funded with MDOT Transportation Enhancement grant funds. The project shall include a mid-block crossing, and may or may not include the removal and replacement of the existing 5-foot wide sidewalk between the two segments identified in the grant. Per the *Schedule Milestones for TE Construction Projects* the preliminary engineering shall be complete by April 1, 2011, including the request for a GI meeting, the final design shall be complete by July 1, 2011, with an anticipated award date of September 15, 2011 and completion of project by November 30, 2011.

NOW, THEREFORE, in consideration of the foregoing, the City and Consultant agree as follows:

Section 1. Professional Engineering Services.

For and in consideration of payment by the City as provided under the "Payment for Engineering Services" section of this Agreement, Consultant shall perform the work described in the manner provided or required by the following Scope of Services, which is attached to and made a part of this Agreement as Exhibit A, all of said services to be done in a competent, efficient, timely, good and workmanlike manner and in compliance with all terms and conditions of this Agreement.

Exhibit A Scope of Services

Section 2. Payment for Professional Engineering Services.

1. Basic Fee.

- a. Design Phase Services: The Consultant shall complete the design phase services as described herein for a lump sum fee of \$26,710, which is 10.00 % of the estimated construction cost (\$267,092) as indicated on the design and construction engineering fee curve provided in Exhibit B of the Agreement for Professional Engineering Services for Public Projects.
- b. Construction Phase Services will be awarded at the time of construction award, should it occur.

2. Payment Schedule for Professional Engineering Services Fee.

Consultant shall submit monthly statements for professional engineering services rendered. The statements shall be based on Consultant's estimate of the proportion of the total services actually completed for each task as set forth in Exhibit A at the time of billing. The City shall confirm the correctness of such estimates, and may use the City's own engineer for such purposes. The monthly statements should be accompanied by such properly completed reporting forms and such other evidence of progress as may be required by the City. Upon such confirmation, the City shall pay the amount owed within 30 days.

Final billing under this agreement shall be submitted in a timely manner but not later than three (3) months after completion of the services. Billings for work submitted later than three (3) months after completion of services will not be paid. Final payment will be made upon completion of audit by the City.

3. Payment Schedule for Expenses.

All expenses required to complete the scope of services described herein, including but not limited to costs related to mileage, vehicles, reproduction, computer use, etc., shall be included in the basic fee and shall not be paid separately. However, as compensation for expenses that are not included in the standard scope of services, when incurred in direct connection with the project, and approved by the City, the City shall pay the Consultant its actual cost times a factor of 1.15.

Section 4. Ownership of Plans and Documents; Records.

1. Upon completion or termination of this agreement, 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 City.

2. The City shall make copies, for the use of the Consultant, of all of its maps, records, laboratory tests, or other data pertinent to the work to be performed by the Consultant under this Agreement, and also make available any other maps, records, or other materials available to the City from any other public agency or body.

3. The Consultant shall furnish to the City, copies of all maps, records, field notes, and soil tests that were developed in the course of work for the City and for which compensation has been received by the Consultant.

Section 5. Termination.

1. This Agreement may be terminated by either party upon 7- days' prior written notice to the other party in the event of substantial failure by the other party to fulfill its obligations under this agreement through no fault of the terminating party.

2. This Agreement may be terminated by the City for its convenience upon 90 days' prior written notice to the Consultant.

3. In the event of termination, as provided in this Article, the Consultant shall be paid as compensation in full for services performed to the date of that termination, an amount calculated in accordance with Section 2 of this Agreement. Such amount shall be paid by the City upon the Consultant's delivering or otherwise making available to the City, all data, drawings, specifications, reports, estimates, summaries, and that other information and materials as may have been accumulated by the Consultant in performing the services included in this Agreement, whether completed or in progress.

Section 6. Disclosure.

The Consultant affirms that it has not made or agreed to make any valuable gift whether in the form of service, loan, thing, or promise to any person or any of the person's immediate family, having the duty to recommend, the right to vote upon, or any other direct influence on the selection of consultants to provide professional engineering services to the City within the two years preceding the execution of this Agreement. A campaign contribution, as defined by Michigan law shall not be considered as a valuable gift for the purposes of this Agreement.

Section 7. Insurance Requirements.

1. The Consultant shall maintain at its expense during the term of this Agreement, the following insurance:

- A. Worker's Compensation insurance relative to all Personnel engaged in performing services pursuant to this Agreement, with coverage not less than that required by applicable law.
- B. Comprehensive General Liability insurance with maximum bodily injury limits of \$1,000,000 (One Million Dollars) each occurrence and/or aggregate and minimum Property Damage limits of \$1,000,000 (One Million Dollars) each occurrence and/or aggregate.
- C. Automotive Liability insurance covering all owned, hired, and non-owned vehicles with Personal Protection insurance to comply with the provisions of the Michigan No Fault Insurance Law including Residual Liability insurance with minimum bodily injury limits of \$1,000,000 (One Million Dollars) each occurrence and/or aggregate minimum property damage limits of \$1,000,000 (One Million Dollars) each occurrence and/or aggregate.
- D. The Consultant shall provide proof of Professional Liability coverage in the amount of not less than \$1,000,000 (One Million Dollars) per occurrence and/or aggregate, and Environmental Impairment coverage.

2. The Consultant shall be responsible for payment of all deductibles contained in any insurance required hereunder.

3. If during the term of this Agreement changed conditions or other pertinent factors should in the reasonable judgment of the City render inadequate insurance limits, the Consultant will furnish on demand such additional coverage as may reasonably be required under the circumstances. All such insurance shall be effected at the Consultant's expense, under valid and enforceable policies, issued by the insurers of recognized responsibility which are well-rated by national rating organizations and are acceptable to the City.

4. All policies shall name the Consultant as the insured and shall be accompanied by a commitment from the insurer that such policies shall not be canceled or reduced without at least thirty (30) days prior notice to the City.

With the exception of professional liability, all insurance policies shall name the City of Novi, its officers, agents, and employees as additional insured. Certificates of Insurance evidencing such coverage shall be submitted to Sue Morianti, Purchasing Manager, City of Novi, 45175 West Ten Mile Road, Novi, MI 48375-3024 prior to commencement of performance under this Agreement and at least fifteen (15) days prior to the expiration dates of expiring policies.

5. If any work is sublet in connection with this Agreement, the Consultant shall require each subconsultant to effect and maintain at least the same types and limits of insurance as fixed for the Consultant.

6. The provisions requiring the Consultant to carry said insurance shall not be construed in any manner as waiving or restricting the liability of the Consultant under this Agreement.

Section 8. Indemnity and Hold Harmless.

A. The Consultant agrees to indemnify and hold harmless the City, its elected and appointed officials and employees, from and against any and all claims, demands, suits, losses and settlements, including actual attorney fees incurred and all costs connected therewith, for any damages which may be asserted, claimed or recovered against the City by reason of personal injury, death and/or property damages which arises out of or is in any way connected or associated with the actions or inactions of the Consultant in performing or failing to perform the work.

The Consultant agrees that it is its responsibility and not the responsibility of the City to safeguard the property and materials used in performing this Agreement. Further, this Consultant agrees to hold the City harmless for any loss of such property and materials used pursuant to the Consultant's performance under this Agreement.

Section 9. Nondiscrimination.

The Consultant shall not discriminate against any employee, or applicant for employment because of race, color, sex, age or handicap, religion, ancestry, marital status, national origin,

place of birth, or sexual preference. The Consultant further covenants that it will comply with the Civil Rights Act of 1973, as amended; and the Michigan Civil Rights Act of 1976 (78. Stat. 252 and 1976 PA 4563) and will require a similar covenant on the part of any consultant or subconsultant employed in the performance of this Agreement.

Section 10. Applicable Law.

This Agreement is to be governed by the laws of the State of Michigan and the City of Novi Charter and Ordinances.

Section 11. Approval; No Release.

Approval of the City shall not constitute nor be deemed release of the responsibility and liability of Consultant, its employees, associates, agents and subconsultants for the accuracy and competency of their designs, working drawings, and specifications, or other documents and services; nor shall that approval be deemed to be an assumption of that responsibility by the City for any defect in the designs, working drawings and specifications or other documents prepared by Consultant, its employees, subconsultants, and agents.

After acceptance of final plans and special provisions by the City, Consultant agrees, prior to and during the construction of this project, to perform those engineering services as may be required by City to correct errors or omissions on the original plans prepared by Consultant and to change the original design as required.

Section 12. Compliance With Laws.

This Contract and all of Consultants professional services and practices shall be subject to all applicable state, federal and local laws, rules or regulations, including without limitation, those which apply because the City is a public governmental agency or body. Consultant represents that it is in compliance with all such laws and eligible and qualified to enter into this Agreement.

Section 13. Notices.

Written notices under this Agreement shall be given to the parties at their addresses on page one by personal or registered mail delivery to the attention of the following persons:

City: Rob Hayes, P.E., Director of Public Services and Maryanne
Cornelius, Clerk, with a copy to Thomas R. Schultz, City Attorney

Consultant: James Stevens, P.E.

Section 14. Waivers.

No waiver of any term or condition of this Agreement shall be binding and effective unless in writing and signed by all parties, with any such waiver being limited to that circumstance only and not applicable to subsequent actions or events.

Section 15. Inspections, Notices, and Remedies Regarding Work.

During the performance of the professional services by Consultant, City shall have the right to inspect the services and its progress to assure that it complies with this Agreement. If such inspections reveal a defect in the work performed or other default in this Agreement, City shall provide Consultant with written notice to correct the defect or default within a specified number of days of the notice. Upon receiving such a notice, Consultant shall correct the specified defects or defaults within the time specified. Upon a failure to do so, the City may terminate this Agreement by written notice and finish the work through whatever method it deems appropriate, with the cost in doing so being a valid claim and charge against Consultant; or, the City may preserve the claims of defects or defaults without termination by written notice to Consultant.

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 City. All questions as to the satisfactory and acceptable fulfillment of the terms of this agreement shall be decided by the City.

Section 16. Delays.

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 agreement, except as hereinafter provided.

In case of a substantial delay on the part of the City 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 City 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.

When delays are caused by circumstances or conditions beyond the control of the Consultant as determined by the City, 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 City of any of its rights herein set forth.

Section 17. Assignment.

No portion of the project work, heretofore defined, shall be sublet, assigned, or otherwise disposed of except as herein provided or with the prior written consent of the City. 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 agreement.

Section 18. Dispute Resolution.

The parties agree to try to resolve any disputes as to professional engineering services or otherwise in good faith. In the event that the parties cannot resolve any reasonable dispute, the parties agree to seek alternative dispute resolution methods agreeable to both parties and which

are legally permissive at the time of the dispute. The parties agree to use their best efforts to resolve any good faith dispute within 90 (ninety) days notice to the other party. In the event the parties cannot resolve that dispute as set forth above, they may seek such remedies as may be permitted by law.

WITNESSES

Orchard, Hiltz & McCliment, Inc.

Tracey R. Poteat

Vytautas P. Kaunelis
By: Vytautas P. Kaunelis, PE
Its: Principal

The foregoing Agreement was acknowledged before me this 31st day of August,
2010, by Vytautas P. Kaunelis on behalf of
Orchard, Hiltz & McCliment, Inc.



Tracey R. Poteat
Notary Public
Oakland County, Michigan
My Commission Expires: January 21, 2014

WITNESSES

CITY OF NOVI

By:
Its:

The foregoing _____ was acknowledged before me this ____ day of _____,
20____, by _____ on behalf of the City of Novi.

Notary Public
Oakland County, Michigan
My Commission Expires: _____

EXHIBIT A - SCOPE OF SERVICES

Consultant shall provide the City professional engineering services in all phases of the Project to which this Agreement applies as hereinafter provided. These services will include serving as the City's professional engineering representative for the Project, providing professional engineering consultation and advice and furnishing customary civil, structural, mechanical and electrical engineering services and customary engineering services incidental thereto, as described below.

A. Basic Services.

[see attached]

B. Performance.

1. The Consultant agrees that, immediately upon the execution of this Agreement, it will enter upon the duties prescribed in this agreement, proceed with the work continuously, and make the various submittals on or before the dates specified in the attached schedule. The City is not liable and will not pay the Consultant for any services rendered before written authorization is received by the Consultant.
2. The Consultant shall submit, and the City shall review and approve a timeline for submission of plans and/or the completion of any other work required pursuant to this Scope of Services. The Consultant shall use its best efforts to comply with the schedule approved by the City.
3. If any delay is caused to the Consultant by order of the City to change the design or plans; or by failure of the city to designate right-of-way, or to supply or cause to be supplied any data not otherwise available to the Consultant that is required in performing the work described; or by other delays due to causes entirely beyond the control of the Consultant; then, in that event, the time schedules will be adjusted equitably in writing, as mutually agreed between the City and the Consultant at the moment a cause for delay occurs.
4. Since the work of the Consultant must be coordinated with the activities of the City (including firms employed by and governmental agencies and subdivisions working with the City), the Consultant shall advise the City in advance, of all meetings and conferences between the Consultant and any party, governmental agency, political subdivision, or third party which is necessary to the performance of the work of the Consultant.

EXHIBIT A - Scope of Services

City of Novi Nine Mile Road Non-motorized Pathway Project

Orchard, Hiltz & McCliment, Inc. is pleased to provide engineering services to the City of Novi. We understand that the City wishes to construct a non-motorized pathway on the north side of Nine Mile Road between Meadowbrook and Haggerty Roads. We also understand the City has been approved for a Transportation Enhancement grant through the Michigan Department of Transportation (MDOT) for the construction of this project.

The scope of engineering services shall include the following tasks:

1. Conduct a site visit and develop a preliminary alignment map identifying existing and proposed right-of-way.
2. Prepare a preliminary engineer's opinion of probable construction costs.
3. Perform a complete topographic survey of the project area including all significant surface features (manholes, trees, pavement edge, etc.) from the 9 Mile Road centerline to the north right-of-way line.
4. Prepare preliminary plans and specifications in accordance with MDOT local agency program (LAP) guidelines for projects administered through MDOT.
5. Attend one meeting with the City to review the plans and specifications and address any requested revisions.
6. Prepare a permit application (if needed) for submittal to the Road Commission for Oakland County.
7. Prepare a Section 106 review application for submittal to the State Historic Preservation Office (SHPO).
8. Submit program application materials as required by MDOT LAP guidelines.
9. Submit preliminary plans, specifications and engineer's estimate to MDOT LAP office for Grade Inspection (GI) review.
10. Attend the GI review meeting with MDOT and the City to review the plans and specifications and address any requested revisions.
11. Submit final plans and specifications per MDOT guidelines, including a final engineer's opinion of probable construction costs using the Michigan Engineers Resource Library (MERL) program per MDOT requirements.
12. Prepare a letter to the City pertaining to the bid results and contract award by MDOT.

The following services have not been included. In the event any of these services are required, an addendum to the supplemental engineering agreement will be submitted for your approval prior to performing said services.

1. Permit or application fees
2. Coordination or design for utility relocations or repairs
3. Right-of-way and/or easement acquisition documents

The schedule will follow the MDOT LAP project planning guide and the start date is contingent on the City's acquisition of the necessary easements and/or right-of-way.

We thank you for this opportunity to provide professional engineering service and we look forward to continuing to serve the City of Novi.

City of Novi - Nonmotorized Pathway

9 Mile Road (Meadowbrook Rd to Haggerty Rd)

Preliminary Engineer's Opinion of Probable Construction Cost



10-Aug-10

Pay Item	Description	Unit	Unit Price	Quantity	Cost	Notes and Assumptions
1000001	Mobilization, Max. 5%	LS	\$12,718.00	1	\$12,718.00	
2020002	Tree, Rem, 19 inch to 36 inch	Ea	\$650.00	5	\$3,250.00	quantity could increase or decrease based on topo survey and alignment of path
2020004	Tree, Rem, 6 inch to 18 inch	Ea	\$300.00	10	\$3,000.00	quantity could increase or decrease based on topo survey and alignment of path
2040006	Curb and Gutter, Rem	Ft	\$8.00	100	\$800.00	for new ramp cuts at intersections
2040011	Pavt, Rem	Syd	\$5.00	312	\$1,560.00	contingency if needed when removing curb; residential driveways
2040013	Sidewalk, Rem	Syd	\$6.00	695	\$4,170.00	for existing 5 feet wide walk between Cranbrooke and Trillium
2080006	Erosion Control, Inlet Protection, Fabric Drop	Ea	\$80.00	8	\$640.00	for catchbasins on 9 Mile and side streets
2080025	Erosion Control, Silt Fence	Ft	\$3.00	2450	\$7,350.00	along shoulder/ditch areas
4020603	Sewer, Cl E, 24 inch, Tr Det B	Ft	\$45.00	500	\$22,500.00	enclosure proposed between Heatherbrae and Brook Forest
5020061	HMA Approach	Ton	\$80.00	10	\$800.00	three asphalt residential drives to replace
8010005	Driveway, Nonreinf Conc, 6 inch	Syd	\$30.00	50	\$1,500.00	one concrete residential drive to replace
8020040	Curb and Gutter, Conc, Det F6	Ft	\$15.00	100	\$1,500.00	for new ramp cuts at intersections
8030011	Sidewalk Ramp, ADA	Sft	\$8.00	850	\$6,800.00	one 10x5 panel per side at each intersection
8067001	_Nonmotorized Path, Grading	Ft	\$5.00	5210	\$26,050.00	includes excavation and embankment
8067021	_Nonmotorized Path, Conc	Syd	\$26.00	5789	\$150,514.00	10 feet wide; cost includes 4" sand base; quantity includes midblock crossing
8110200	Pavt Mktg, Polyurea, 6 inch, Crosswalk	Ft	\$3.00	650	\$1,950.00	three crossings on 9 Mile plus six side streets
8120001	Barricade, Type III, High Intensity, Furn	Ea	\$100.00	2	\$200.00	for ends of path before open for use
8120002	Barricade, Type III, High Intensity, Oper	Ea	\$2.00	2	\$4.00	for ends of path before open for use
8120030	Flag Control	LS	\$2,000.00	1	\$2,000.00	for shoulder/lane closure when working on ramps
8120040	Lighted Arrow, Type B, Furn	Ea	\$500.00	2	\$1,000.00	for shoulder/lane closure when working on ramps
8120041	Lighted Arrow, Type B, Oper	Ea	\$100.00	2	\$200.00	for shoulder/lane closure when working on ramps
8120050	Minor Traf Devices	LS	\$4,000.00	1	\$4,000.00	
8120100	Plastic Drum, High Intensity, Furn	Ea	\$30.00	50	\$1,500.00	for shoulder/lane closure when working on ramps
8120101	Plastic Drum, High Intensity, Oper	Ea	\$5.00	50	\$250.00	for shoulder/lane closure when working on ramps
8120120	Sign, Type B, Temp, Prismatic, Furn	Sft	\$5.00	400	\$2,000.00	M0030a 156 sft (2 sets); 2 sft each sidewalk closed signs; M0110a 240 sft (2 sets)
8120121	Sign, Type B, Temp, Prismatic, Oper	Sft	\$1.00	400	\$400.00	M0030a 156 sft (2 sets); 2 sft each sidewalk closed signs; M0110a 240 sft (2 sets)
8160027	Mulch Blanket	Syd	\$1.00	1156	\$1,156.00	probably needed along open ditch areas
8167011	Surface Restoration, Seeding	Syd	\$5.00	1156	\$5,780.00	topsoil, seed, mulch, fertilizer and watering
8200337	TS, Pedestrian, One Way Bracket Arm Mid (LED)	Ea	\$1,250.00	2	\$2,500.00	needed for crossing N/S at Haggerty
8257001	_Irrigation Piping	Ft	\$5.00	100	\$500.00	contingency item if needed
8257050	_Sprinkler Head, Adj	Ea	\$50.00	5	\$250.00	contingency item if needed
8257050	_Sprinkler Head, Relocate	Ea	\$50.00	5	\$250.00	contingency item if needed

Subtotal = \$267,092.00
 10% Contingency = \$26,710.00
 Total = \$293,802.00