



CITY of NOVI CITY COUNCIL

Agenda Item D
January 25, 2016

SUBJECT: Approval to award engineering design services to URS Corporation (AECOM) for the Fire Station 4 Parking Lot and Police Entrance Drive Rehabilitation project in the amount of \$9,350.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division *BTC RJA*

CITY MANAGER APPROVAL: *[Signature]*

EXPENDITURE REQUIRED	\$ 6,598 (Fire Station #4) \$ 2,752 (Police Entrance Drive) \$ 9,350 TOTAL
AMOUNT BUDGETED	\$ 29,972 (Fire Station #4) \$ 47,600 (Police Entrance Drive) \$ 77,572 TOTAL
LINE ITEM NUMBER	101-442.10-981.002 (Fire Station #4) 101-442.10-981.003 (Police Entrance Drive)

BACKGROUND INFORMATION:

The Improvements to the Fire Station 4 Parking Lot and the Police Department East Entrance were recommended by the Parking Lot Inventory and Maintenance Plan completed in January 2014. Improvements to the Police Department east Entrance will include repairs followed by a hot-mixed-asphalt overlay of the entire entrance. Improvements to the Fire Station 4 Parking Lot will include joint sealing and intermittent concrete pavement repairs.

URS'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 \$9,350 (9.5% of the estimated construction cost for both areas, \$98,417). The construction phase engineering fees will be awarded at the time of construction award and will be based on the construction contractor's bid price and the fee percentage established in the Agreement for Professional Engineering Services for Public Projects. A draft of the Supplemental Professional Engineering Services Agreement for this project is enclosed and includes the project scope and schedule.

The project will be designed over the winter months and constructed in summer 2016.

RECOMMENDED ACTION: Approval to award engineering design services to URS Corporation (AECOM) for the Fire Station 4 Parking Lot and Police Entrance Drive Rehabilitation project in the amount of \$9,350.

	1	2	Y	N
Mayor Gatt				
Mayor Pro Tem Staudt				
Council Member Burke				
Council Member Casey				

	1	2	Y	N
Council Member Markham				
Council Member Mutch				
Council Member Wrobel				

Section 4 Police Department

The Police Department is located on parcel 50-22-27-100-005, at 45175 Ten Mile Road (see Figure 4.1).

The police department site was divided into two sites, the east entrance roadway and parking lot and the west entrance roadway and parking lot.

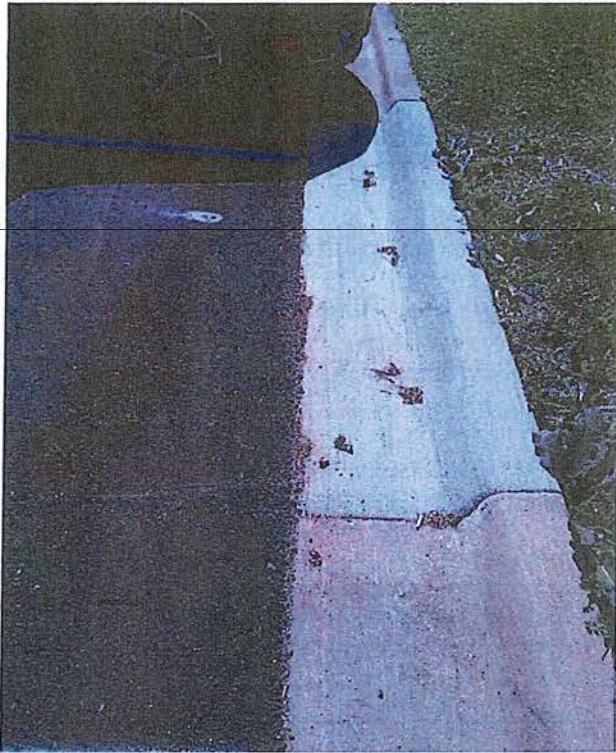
Both areas have asphalt pavement with curb and gutter and enclosed drainage.

The east lot was rehabilitated in the late summer of 2013. PASER rating estimated for this area is 8. Overband crack sealing is recommended in the near term to keep this pavement in good condition. An HMA overlay with patching is also recommended for the entrance roadway along with drainage improvements. Cost of this work is estimated at \$36,000.

The west lot is connected to the Civic Center campus and was rehabilitated in the fall of 2013. We recommend overband crack sealing to keep this pavement in good condition. Cost for the overband crack sealing is estimated at \$1,200.



Police Station East Lot



Police Station East Lot



Police Station West Lot



Police Station West Lot



Police Station West Lot



Police Station West Lot



Police Station West Lot



Police Station West Lot



Section 10 Fire Station #4

Fire Station #4 is located on parcel 50-22-29-101-003, at 49375 Ten Mile Road (see Figure 10.1).

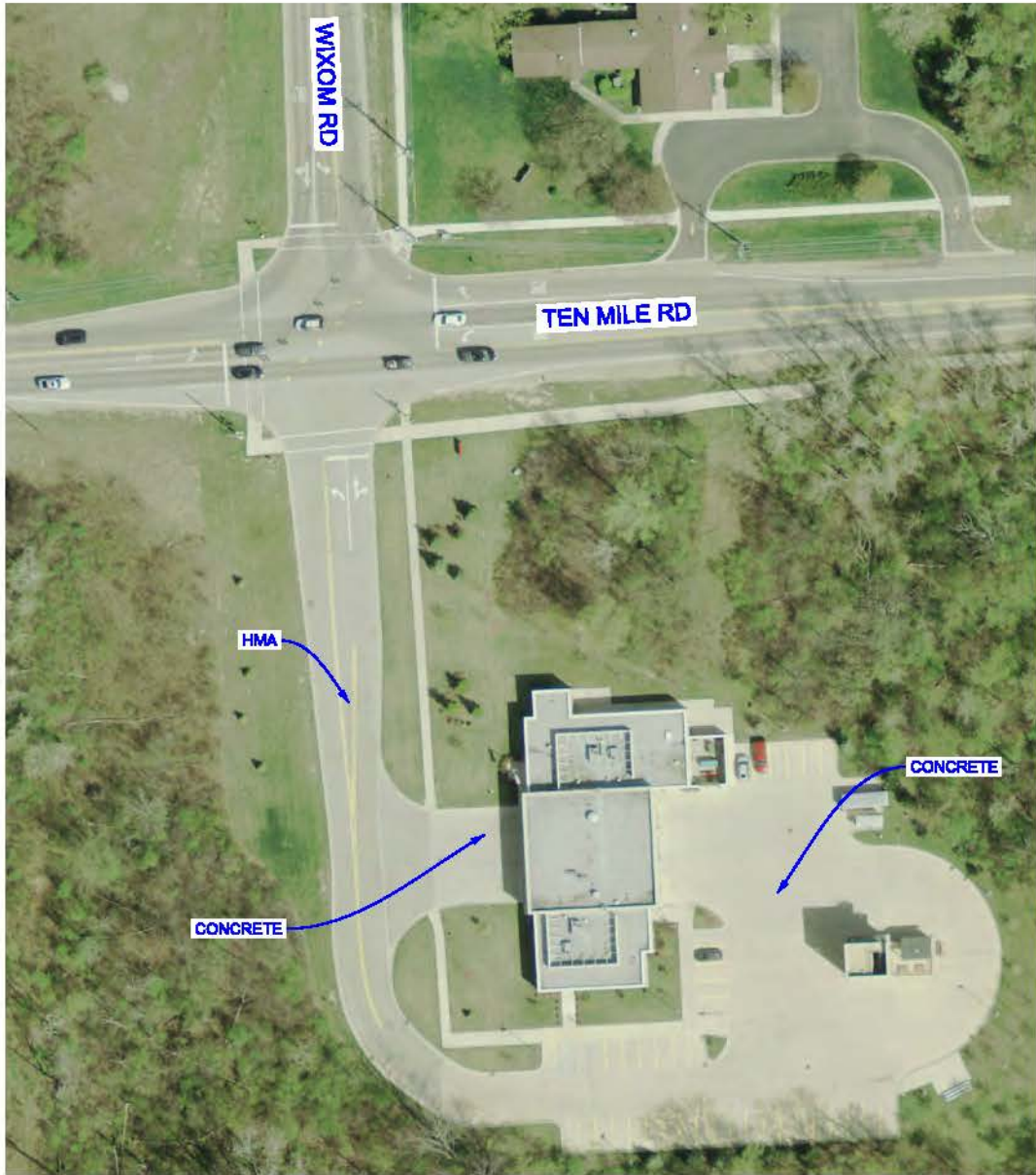
The asphalt entrance roadway is Wixom Road and not part of the site.

The concrete areas have an estimated PASER rating of 7. There is some minor spalling and several broken concrete slabs.

For the concrete pavement areas, we recommend joint sealing and intermittent concrete pavement repairs. We also recommend intermittent sidewalk repairs for broken sidewalk slabs.

Cost for the recommended improvements is \$19,600.





**CITY OF NOVI - 2013 PARKING LOT INVENTORY
AND MAINTENANCE PLAN**
FIRE STATION #4
PARCEL 50-22-29-101-003

FIGURE
10.1



WEST LOT (HMA)

EAST LOT (HMA)



URS
Surface Transportation
Grand Rapids · Southfield ·
Troy · Westland · Ypsilanti

**CITY OF NOVI - 2013 PARKING LOT INVENTORY
AND MAINTENANCE PLAN**
POLICE DEPARTMENT
PARCEL 50-22-27-100-005

FIGURE

4.1

SUPPLEMENTAL PROFESSIONAL ENGINEERING SERVICES AGREEMENT

FIRE STATION 4 PARKING LOT AND POLICE DEPARTMENT EAST ENTRANCE REHABILITATION

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 URS Corporation – Great Lakes., whose address is 27777 Franklin Road, Suite 2000, Southfield, MI 48034, 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 December 18, 2012.

The project includes the design and the preparation of plans and specifications for rehabilitation of the parking lot and drive aisle for Fire Station No. 4 and the Police Department East Entrance.

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 \$9,350, which is 9.5% of the estimated construction cost (\$98,417) 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 hold harmless and indemnify the City, its officers, agents, employees from and against all claims, demands, suits liability, losses, damages or costs (including reasonable attorney fees and costs) arising out, of or resulting from the Consultant's tortious or negligent acts, errors, or omissions in performing this Agreement.

B. The City agrees, to the extent permitted by law, to indemnify and hold harmless the Consultant, its officers, partners, employees, stockholders, and sub-consultants (collectively Consultant) from and against any and all claims, suits, demands, liability, losses, damages or costs, including reasonable attorney's fees and costs arising out of or resulting from the City's tortious or negligent acts or errors in performing this Agreement.

C. Section 8(B) of this Agreement shall not apply to individual design and/or construction management projects.

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: Sean Kelsch, 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

URS Corporation – Great Lakes

By:
Its:

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

Notary Public
_____ County, Michigan
My Commission Expires: _____

WITNESSES

CITY OF NOVI

By: Robert J. Gatt
Its: Mayor

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.



January 6, 2016

Mr. Adam Wayne, PE
City of Novi
Field Services Complex
26300 Lee Begole Drive
Novi, MI 48375

**Reference: Proposal for Engineering Services
2016 Police Station and Fire Station No. 4 Parking Lot Rehabilitation**

Dear Mr. Wayne,

AECOM is pleased to submit this proposal for the above referenced project. We understand that the project includes rehabilitation of the parking lots at Fire Station Number 4 and the easterly entrance road to the Police Station. The work at the fire station includes concrete pavement repairs and resealing existing joints with hot poured rubber. The access road for the east police station parking area is to receive HMA patching and HMA milling and overlay.

Estimates for the work are attached.

The following tasks will be completed for the project:

Initial Meeting and Scope Verification

The intent of this task is to meet with the City and verify the limits and scope of work for the project. The need for soil borings and pavement cores will be discussed, as will the scope, schedule, and budget for the two contracts. The need for drainage improvements and work in addition to pavement reconstruction/rehabilitation will also be identified and discussed at the meeting. Upon completion of this task, we will move forward with the surveying and preliminary design.

Survey and Base Plans

The intent of this task is to provide the base mapping as needed for the proposed design work. We anticipate that field surveys will not be required for this project. Base drawings will be created using aerial photos and a detailed field review of the site.

AECOM will prepare base plans (30%-40% complete) to identify the major design features. These plans will also be used to further the utility investigation and resolution of potential conflicts and *geotechnical* investigations.

Preliminary Plans

Incorporating the information obtained from the above tasks, we will prepare the preliminary plan set (90%) in accordance with City requirements. This submittal will include items such as the typical cross sections, materials/quantities and details. A Project Manual and preliminary updated cost estimate will also be prepared and submitted.

Final Plans and Proposal

Incorporating comments from the City, AECOM will develop the final plans submittal, including the plan set, Project Manual, and cost estimate.



Mr. Adam Wayne, PE
January 6, 2016
Page 2

Advertising and Award

We will respond to any final comments received from the City and submit the Advertisement for Bids to the City for publication. Contract Documents will be made available to bidders by AECOM. AECOM will respond to bidder inquiries during the advertising period and prepare addenda as required. Following the bid opening AECOM will submit the Bid Tabulation and a letter with recommendations regarding contract award

Construction

AECOM will provide full time inspection, contract administration, and staking as required for the project.

Schedule

We anticipate that the following schedule can be maintained:

Notice To Proceed	February 1, 2016
Base Plans Submittal	March 18, 2016
Preliminary Plans Submittal	February 18, 2016
Final Plans Submittal	March 11, 2016
Contract Award	Early May 2016
Begin Construction	Early June, 2016
End Construction	Late July, 2016

Estimated Cost of Construction and Design Fees

Cost estimates for the two locations are attached.

The work at the Police Department is estimated at \$28,962.

The work at Fire Station Number 4 is estimated at \$69,455

The total estimated cost is \$98,417.

The design fee (using the Engineering Fee Chart for Road Rehabilitation is 9.50% of construction cost.

$9.50\% \times \$98,417 = \$9,350.$

We understand that fees for construction phase services will be determined after a construction contract is awarded.

Please contact me if you have any questions or wish to discuss this submittal.

Sincerely,

AECOM Great Lakes, Inc.

Sean Kelsch, PE
Manager, Highway Engineering Services



January 6, 2016

Mr. Adam Wayne, PE
City of Novi
Field Services Complex
26300 Lee Begole Drive
Novi, MI 48375

**Reference: Proposal for Engineering Services
2016 Police Station and Fire Station No. 4 Parking Lot Rehabilitation**

Dear Mr. Wayne,

AECOM is pleased to submit this proposal for the above referenced project. We understand that the project includes rehabilitation of the parking lots at Fire Station Number 4 and the easterly entrance road to the Police Station. The work at the fire station includes concrete pavement repairs and resealing existing joints with hot poured rubber. The access road for the east police station parking area is to receive HMA patching and HMA milling and overlay.

Estimates for the work are attached.

The following tasks will be completed for the project:

Initial Meeting and Scope Verification

The intent of this task is to meet with the City and verify the limits and scope of work for the project. The need for soil borings and pavement cores will be discussed, as will the scope, schedule, and budget for the two contracts. The need for drainage improvements and work in addition to pavement reconstruction/rehabilitation will also be identified and discussed at the meeting. Upon completion of this task, we will move forward with the surveying and preliminary design.

Survey and Base Plans

The intent of this task is to provide the base mapping as needed for the proposed design work. We anticipate that field surveys will not be required for this project. Base drawings will be created using aerial photos and a detailed field review of the site.

AECOM will prepare base plans (30%-40% complete) to identify the major design features. These plans will also be used to further the utility investigation and resolution of potential conflicts and *geotechnical* investigations.

Preliminary Plans

Incorporating the information obtained from the above tasks, we will prepare the preliminary plan set (90%) in accordance with City requirements. This submittal will include items such as the typical cross sections, materials/quantities and details. A Project Manual and preliminary updated cost estimate will also be prepared and submitted.

Final Plans and Proposal

Incorporating comments from the City, AECOM will develop the final plans submittal, including the plan set, Project Manual, and cost estimate.



Mr. Adam Wayne, PE
January 6, 2016
Page 2

Advertising and Award

We will respond to any final comments received from the City and submit the Advertisement for Bids to the City for publication. Contract Documents will be made available to bidders by AECOM. AECOM will respond to bidder inquiries during the advertising period and prepare addenda as required. Following the bid opening AECOM will submit the Bid Tabulation and a letter with recommendations regarding contract award

Construction

AECOM will provide full time inspection, contract administration, and staking as required for the project.

Schedule

We anticipate that the following schedule can be maintained:

Notice To Proceed	February 1, 2016
Base Plans Submittal	March 18, 2016
Preliminary Plans Submittal	February 18, 2016
Final Plans Submittal	March 11, 2016
Contract Award	Early May 2016
Begin Construction	Early June, 2016
End Construction	Late July, 2016

Estimated Cost of Construction and Design Fees

Cost estimates for the two locations are attached.

The work at the Police Department is estimated at \$28,962.

The work at Fire Station Number 4 is estimated at \$69,455

The total estimated cost is \$98,417.

The design fee (using the Engineering Fee Chart for Road Rehabilitation is 9.50% of construction cost.

$9.50\% \times \$98,417 = \$9,350.$

We understand that fees for construction phase services will be determined after a construction contract is awarded.

Please contact me if you have any questions or wish to discuss this submittal.

Sincerely,

AECOM Great Lakes, Inc.

Sean Kelsch, PE
Manager, Highway Engineering Services

City of Novi
Police Station East Parking Lot Entrance Road Rehabilitation
Cost Estimate

1/7/2016

Location: Police Department East Lot Entrance Roadway
Patching, HMA Crack Repair & HMA Overlay

Item No.	Item Description	Unit	Quantity	Unit Price (\$)	Total Cost (\$)
1	Traffic Control and Access	LS	1	\$1,000.00	\$ 1,000.00
2	Remove Pavement	Syd	100	\$8.50	\$ 850.00
3	Cold Milling HMA Surface	Syd	1,150	\$4.00	\$ 4,600.00
4	Subgrade Undercut	Cyd	5	\$25.00	\$ 125.00
5	Aggregate Base, 21AA, 6-inch	Syd	50	\$12.00	\$ 600.00
6	Joint and Crack, Cleanout	Ft	500	\$1.25	\$ 625.00
7	Hand Patching (2-4" thick)	Ton	2	\$150.00	\$ 300.00
8	Pavt Joint and Crack Repair	Ft	500	\$2.75	\$ 1,375.00
9	HMA, 4C (2" thick)	Ton	132	\$95.00	\$ 12,540.00
10	HMA, 2C (2" thick)	Ton	18	\$90.00	\$ 1,620.00
11	Stop Bar	LS	1	500.00	\$ 500.00
	Mobilization and Misc. Items (20%)				\$ 4,827.00
	Total:				\$ 28,962.00

City of Novi
Fire Station 4 Parking Lot Rehabilitation
Cost Estimate

1/7/2016

Location: Fire Station No. 4
Concrete Joint Sealing, & Concrete Repair, Sidewalk Repair

Item No.	Item Description	Unit	Quantity	Unit Price (\$)	Total Cost (\$)
1	Traffic Control and Access	LS	1.00	\$1,000.00	\$ 1,000.00
2	Remove Pavement	Syd	500	\$10.00	\$ 5,000.00
3	Remove and Replace Sidewalk	Sft	200	\$7.00	\$ 1,400.00
4	Resawing and Sealing Joints	Ft	1,500	\$3.00	\$ 4,500.00
5	Concrete Pavement Repair	Syd	500	\$70.00	\$ 35,000.00
6	Pavement Markings	LS	1	\$1,000.00	\$ 1,000.00
	Mobilization and Misc. Items (20%)				\$ 9,580.00
	Engineering (25%)				\$ 11,975.00
	Total:				\$ 69,455.00