

## CITY of NOVI CITY COUNCIL

Agenda Item K November 9, 2015

**SUBJECT:** Approval to award engineering design services to URS Corporation (AECOM) for the Civic Center Main Parking and Novi Way Rehabilitation Project in the amount of \$32,194.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division BTC







EXPENDITURE REQUIRED	\$ 32,194	
AMOUNT BUDGETED	\$ 260,105 (FY15-16)	
LINE ITEM NUMBER	101-442.10-981.004	

#### BACKGROUND INFORMATION:

Improvements to the Civic Center Main Parking Lot and Novi Way were recommended by the Parking Lot Inventory and Maintenance Plan completed in January 2014. Improvements will include crack repair and patching followed by a hot-mixed-asphalt overlay of the entire parking lot and entrance roadway (Novi Way). Half of the project is funded in FY15-16 and the other half of the project is recommended for funding in FY16-17.

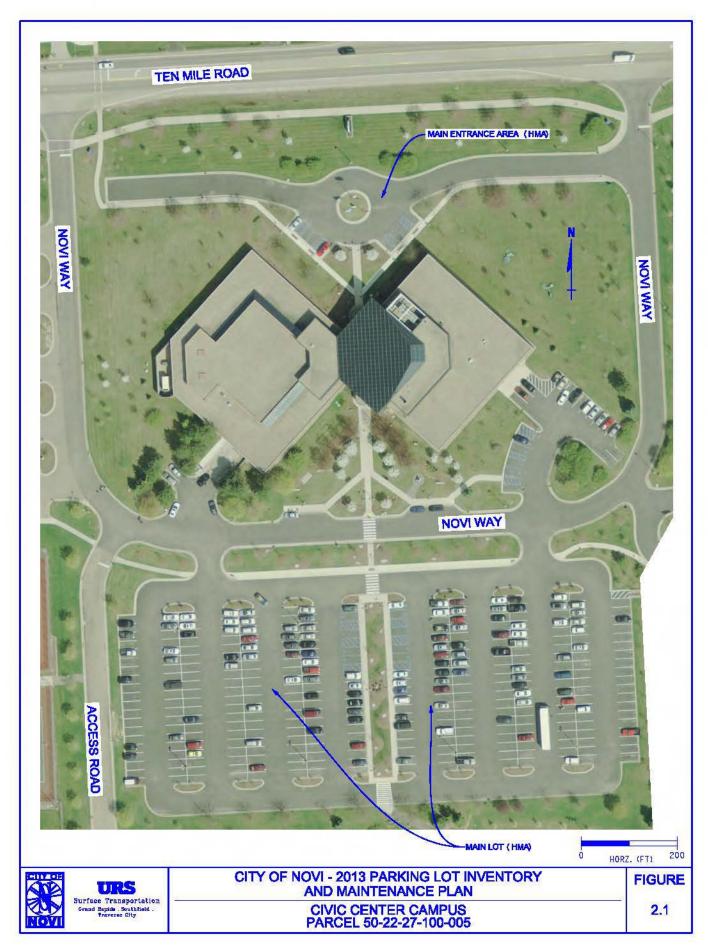
URS's engineering fees are based on the fixed fee schedule established in the Agreement for Professional Engineering Services for Public Projects. The design fees for this project will be \$32,194 (7.00% of the estimated construction cost of \$459,914 for the Civic Center Main parking lot and Novi Way). 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.

Staff is recommending the award of design entire project at this time and awarded in two parts: one portion in FY14-15 and the second portion in FY15-16. The project will be designed over the fall and winter months and constructed in summer/fall 2016.

RECOMMENDED ACTION: Approval to award engineering design services to URS Corporation (AECOM) for the Civic Center Main Parking and Novi Way Rehabilitation Project in the amount of \$32,194.

	1	2	Y	N
Mayor Gatt				
Council Member Burke				
Council Member Casey				
Council Member Markham				

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



# **Section 2 Civic Center Campus**

The Civic Center Campus is located on parcel 50-22-27-100-005, at 45175 Ten Mile Road (see **Figure 2.1**). The pavement condition is estimated at 6 on a PASER rating scale of 0 to 10 (0 is poor condition and 10 is just constructed).

The Civic Center Site was divided into two areas for purposes of the estimates. The Main Lot and Novi Way Access Roadways constitute one area and the entrance roadway and parking area on the main entrance at north end of the building constitutes the other area. Both areas have HMA pavement with curb and gutter and enclosed drainage systems.

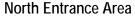
The entire site was under construction during our field review. The work under construction included sidewalk and curb and gutter. There also were a number of new patches and HMA crack repairs throughout the site. Numerous cracks were not repaired or sealed as part of this ongoing construction.

We recommend that remaining cracks be repaired and additional patching done followed by an HMA overlay over the entire site. Cold milling will be required adjacent to existing curb and gutter to maintain grades and in interior areas in order to maintain positive drainage.

A seal coat could be placed in lieu of an asphalt overlay; however, an HMA overlay presents a better appearance, which could be important for this high visibility site.

The estimated cost for the recommended improvements is \$391,000 for the Main Lot and Novi Way access roads and \$40,000 for the north entrance area.







North Entrance Area



Civic Center Main Lot Area



Civic Center Main Lot Area



Civic Center Main Lot Area



Civic Center Main Lot Area

#### SUPPLEMENTAL PROFESSIONAL ENGINEERING SERVICES AGREEMENT

## CIVIC CENTER MAIN PARKING LOT AND NOVI WAY 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 AECOM Great Lakes, Inc., 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/reconstruction of the parking lot and drive aisle for Fire Station No. 3. Drainage improvements will also be addressed as appropriate, and as budget permits.

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

## Section 1. <u>Professional Engineering Services.</u>

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 \$319,914, which is 7.0% of the estimated construction cost (\$455,913.72) 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. <u>Payment Schedule for Professional Engineering Services Fee</u>.

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. <u>Payment Schedule for Expenses.</u>

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.** <u>Termination.</u>

- 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. <u>Disclosure</u>.

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. <u>Indemnity and Hold Harmless</u>.

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:

<u>City</u>: 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. <u>Inspections, Notices, and Remedies Regarding Work.</u>

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. <u>Delays</u>.

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	AECOM Great Lakes, Inc.

			By: Its:			
The	foregoing	was ac	cknowledged befor	e me this	day of	
20,	by			on	behalf	O
			<u> </u>			_
			Notary F My Com	County	y, Michigan ires:	
WITNESSI	ES		CITY O	F NOVI		
			By: Rot Its: Ma	pert J. Gatt yor		_
The	foregoing	was ac	eknowledged befor	re me this	day of	
20, by		on	behalf of the City	of Novi.		
				Public County, Mic nmission Exp		_

#### **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.



October 28, 2015

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

Reference: Civic Center Main Parking Lot Rehabilitation Project

Dear Mr. Croy,

AECOM is pleased to submit this proposal for the above referenced project. We understand that the project includes the rehabilitation of the Civic Center Main Parking Lot area and the Novi Way access road on the site. We also understand that limited funds are available and that the project limits will need to be set to allow the work to be done within allowable budgets. We have assumed that half of the main parking lot and all of the Novi Way access road will be included in the as-bid project. The exact limits will be set to match available FY 2016 funds. The remaining portion of the main parking lot is assumed to be added as a change order to the original contract using FY 2017 funds. 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 and location of soil borings and pavement cores will also be discussed and determined at the scope verification 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 topographic survey and base mapping as needed for the proposed design work. Base drawings will be created using available aerial photography, supplemented by field surveys, as required, 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. Base plans will include the results of the survey information, utility information from response to our solicitations, and a preliminary estimate.

AECOM will distribute the base plan design set to the utility companies that have indicated that they have facilities in the project area. We will incorporate the additional information that utility companies provide to URS into the plan set.

#### **Preliminary Plans**

Incorporating the information obtained from the above tasks and City direction, we will prepare the preliminary plan set (90%) and proposal package. This submission will include items such as the utility locations, typical cross sections, materials/quantities and boring logs. The preliminary plan submittal will also include the Project Manual, including specifications, and an updated cost estimate.



Mr. Ben Croy, PE October 28, 2015

## Final Plans and Proposal

Incorporating comments from the City, we will develop the Final plans and Project Manual.

#### Advertising and Award

AECOM will respond to any final comments received from the City and will prepare the advertisement for bids. We will distribute the contract documents to plan rooms and prospective bidders and answer questions and prepare addenda, as required, during the bidding. AECOM will analyze the bids received. A tabulation of bids and a letter with recommendations regarding award of a contract will then be prepared and submitted.

#### Construction

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

#### Schedule

Upon notification to proceed, it is estimated that the following schedule could be maintained:

**Scope Verification Meeting December 14. 2015 Survey & Base Plans Submittal** February 12, 2016 **Preliminary Plans Submittal** April 1,, 2016 Final Plans Submittal May 6, 2016 Advertise for Bids May 30, 2016 **Open Bids** July 27, 2016 **Contract Award (By City)** August 8, 2016 **Begin Construction** September, 2016 **End Construction** November, 2016

#### **Estimated Cost of Construction and Design Fees**

Construction cost is estimated at \$455,913 for all segments of the project. See attached estimates for details. .

The design fee (using the Engineering Fee Chart for Roadway Rehabilitation work) is 7.0% of construction cost.

 $7.0\% \times $455.913.72 = $31.914.$ 

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

Please contact our project manager, Sean Kelsch, 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 Civic Center Novi Way Rehabilitation Preliminary Cost Estimate Summary 10/28/2015

Main Lot Sections A, B, and Novi Way

Location: Main L HMA Area: 19030 Conc Area: 0 Grav. Area: 0

Item No.	Item Description	Unit	Quantity	Unit Price (\$)	To	Total Cost (\$)	
1	Traffic Control and Access	LS	1	\$15,000.00	\$	15,000.00	
2	Remove HMA Surface	Syd	952	\$8.50	\$	8,087.75	
3	Cold Milling HMA Surface	Syd	19,030	\$3.50	\$	66,605.00	
4	Pavt, Cleaning	LS	1	\$3,000.00	\$	3,000.00	
5	Subgrade Undercut	Cyd	30	\$50.00	\$	1,500.00	
6	Aggregate Base, 21AA, 6-inch	Syd	476	\$20.00	\$	9,515.00	
7	Joint and Crack, Cleanout	Ft	11,500	\$1.00	\$	11,500.00	
8	Hand Patching (2-4" thick)	Ton	58	\$150.00	\$	8,625.00	
9	Pavt Joint and Crack Repair	Ft	11,500	\$2.50	\$	28,750.00	
10	HMA, 36A (2" thick)	Ton	2,198	\$90.00	\$	197,816.85	
11	HMA, 2C (2" thick)	Ton	115	\$90.00	\$	10,361.84	
12	Surface and Subgrade Drainage Improvements	LS	1	\$7,500.00	\$	7,500.00	
13	Pavement Markings	LS	1	7,500.00	\$	7,500.00	
14	Remove and Replace Signing and Post Sleeves	LS	1	7,500.00	\$	7,500.00	
	Mobilization and Misc. Items (20%)				\$	76,652.29	
	Total:				\$	459,913.72	

# City of Novi **Civic Center Main Lot Section A Rehabilitation** Preliminary Cost Estimate 10/28/2015

Location: Civic Center Main Lot Section A HMA Area: 6500

Conc Area: 0 Grav. Area: 0

Item No.	Item Description	Unit	Quantity	Unit Price (\$)	То	Total Cost (\$)	
1	Traffic Control and Access	LS	1	\$5,000.00	\$	5,000.00	
2	Remove HMA Surface	Syd	325	\$8.50	\$	2,762.50	
3	Cold Milling HMA Surface	Syd	6,500	\$3.50	\$	22,750.00	
4	Pavt, Cleaning	LS	1	\$1,000.00	\$	1,000.00	
5	Subgrade Undercut	Cyd	10	\$50.00	\$	500.00	
6	Aggregate Base, 21AA, 6-inch	Syd	163	\$20.00	\$	3,250.00	
7	Joint and Crack, Cleanout	Ft	4,000	\$1.00	\$	4,000.00	
8	Hand Patching (2-4" thick)	Ton	20	\$150.00	\$	3,000.00	
9	Pavt Joint and Crack Repair	Ft	4,000	\$2.50	\$	10,000.00	
10	HMA, 36A (2" thick)	Ton	751	\$90.00	\$	67,567.50	
11	HMA, 2C (2" thick)	Ton	39	\$90.00	\$	3,539.25	
12	Surface and Subgrade Drainage Improvements	LS	1	\$2,500.00	\$	2,500.00	
13	Pavement Markings	LS	1	2,500.00	\$	2,500.00	
14	Remove and Replace Signing and Post Sleeves	LS	1	2,500.00	\$	2,500.00	
	Mobilization and Misc. Items (20%)				\$	26,173.85	
	Total:				\$	157,043.10	

# City of Novi **Civic Center Main Lot Section B Rehabilitation** Preliminary Cost Estimate 10/28/2015

Location: Civic Center Main Lot Section B HMA Area: 6500

Conc Area: 0 Grav. Area: 0

Item No.	Item Description	Unit	Quantity	Unit Price (\$)	То	Total Cost (\$)	
1	Traffic Control and Access	LS	1	\$5,000.00	\$	5,000.00	
2	Remove HMA Surface	Syd	325	\$8.50	\$	2,762.50	
3	Cold Milling HMA Surface	Syd	6,500	\$3.50	\$	22,750.00	
4	Pavt, Cleaning	LS	1	\$1,000.00	\$	1,000.00	
5	Subgrade Undercut	Cyd	10	\$50.00	\$	500.00	
6	Aggregate Base, 21AA, 6-inch	Syd	163	\$20.00	\$	3,250.00	
7	Joint and Crack, Cleanout	Ft	4,000	\$1.00	\$	4,000.00	
8	Hand Patching (2-4" thick)	Ton	20	\$150.00	\$	3,000.00	
9	Pavt Joint and Crack Repair	Ft	4,000	\$2.50	\$	10,000.00	
10	HMA, 36A (2" thick)	Ton	751	\$90.00	\$	67,567.50	
11	HMA, 2C (2" thick)	Ton	39	\$90.00	\$	3,539.25	
12	Surface and Subgrade Drainage Improvements	LS	1	\$2,500.00	\$	2,500.00	
13	Pavement Markings	LS	1	2,500.00	\$	2,500.00	
14	Remove and Replace Signing and Post Sleeves	LS	1	2,500.00	\$	2,500.00	
	Mobilization and Misc. Items (20%)				\$	26,173.85	
	Total:				\$	157,043.10	

# City of Novi Civic Center Novi Way Rehabilitation Preliminary Cost Estimate 10/28/2015

Location: Civic Center Novi Way HMA Area: 6030

Conc Area: 0 Grav. Area: 0

Item No.	Item Description	Unit	Quantity	Unit Price (\$)	То	Total Cost (\$)	
1	Traffic Control and Access	LS	1	\$5,000.00	\$	5,000.00	
2	Remove HMA Surface	Syd	302	\$8.50	\$	2,562.75	
3	Cold Milling HMA Surface	Syd	6,030	\$3.50	\$	21,105.00	
4	Pavt, Cleaning	LS	1	\$1,000.00	\$	1,000.00	
5	Subgrade Undercut	Cyd	10	\$50.00	\$	500.00	
6	Aggregate Base, 21AA, 6-inch	Syd	151	\$20.00	\$	3,015.00	
7	Joint and Crack, Cleanout	Ft	3,500	\$1.00	\$	3,500.00	
8	Hand Patching (2-4" thick)	Ton	18	\$150.00	\$	2,625.00	
9	Pavt Joint and Crack Repair	Ft	3,500	\$2.50	\$	8,750.00	
10	HMA, 36A (2" thick)	Ton	696	\$90.00	\$	62,681.85	
11	HMA, 2C (2" thick)	Ton	36	\$90.00	\$	3,283.34	
12	Surface and Subgrade Drainage Improvements	LS	1	\$2,500.00	\$	2,500.00	
13	Pavement Markings	LS	1	2,500.00	\$	2,500.00	
14	Remove and Replace Signing and Post Sleeves	LS	1	2,500.00	\$	2,500.00	
	Mobilization and Misc. Items (20%)				\$	24,304.59	
	Total:				\$	145,827.52	