

CITY of NOVI CITY COUNCIL

Agenda Item G February 11, 2013

SUBJECT: Approval to award a contract for design engineering services for the Novi Road and Old Novi Road Signal Replacement and Modernization project to URS Corporation for a design fee of \$16,905.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division

CITY MANAGER APPROVAL:

EXPENDITURE REQUIRED	\$ 16,905
AMOUNT BUDGETED	\$230,734 (Budget Amendment 2013-3)
LINE ITEM NUMBER	202-202.00-865.115

BACKGROUND INFORMATION:

The traffic signal at the intersection of Novi Road and Old Novi Road/Sandstone Drive was irreparably damaged by a vehicular crash on January 1, 2013. The crash caused major damage to the signal's electrical equipment (control panel, traffic detection system, communications, signals, etc.) requiring a complete replacement of the signal. The traffic signal is owned by the City, but is maintained by the Road Commission for Oakland County (RCOC) under a maintenance agreement. A temporary traffic signal was installed by RCOC to maintain the safe movement of traffic at the intersection, which is located on a curve with limited sight distance (location map, attached). The temporary signal was installed as a as a short term solution for this intersection using salvaged equipment and should be replaced in a timely manner. Additionally, the temporary signal is unable to communicate with the Oakland County Traffic Operations Center and does not include left turn phases for Novi Road; therefore, the operation of the temporary signal is not optimized.

The design for the new signal will include any appropriate upgrades and modernization as necessary to bring the intersection up to current standards. This project will also include improvements to the sidewalk and ramps at the intersection as necessary to comply with the American's with Disabilities Act standards. The reconstruction of the signal provides an opportunity to upgrade the signal with the installation of mast arm signal poles at this intersection; because Novi Road is one of the three corridors in the City designated for mast arm traffic signals. (Grand River Avenue and 12 Mile Road are the other two). There is a long lead time to procure the mast arms; therefore staff will work with the selected consultant to publicly advertise and procure the mast arms in advance of awarding the construction contract to expedite the installation of the permanent signal.

Staff is working with the City's insurer to recoup costs for the reconstruction of the signal.

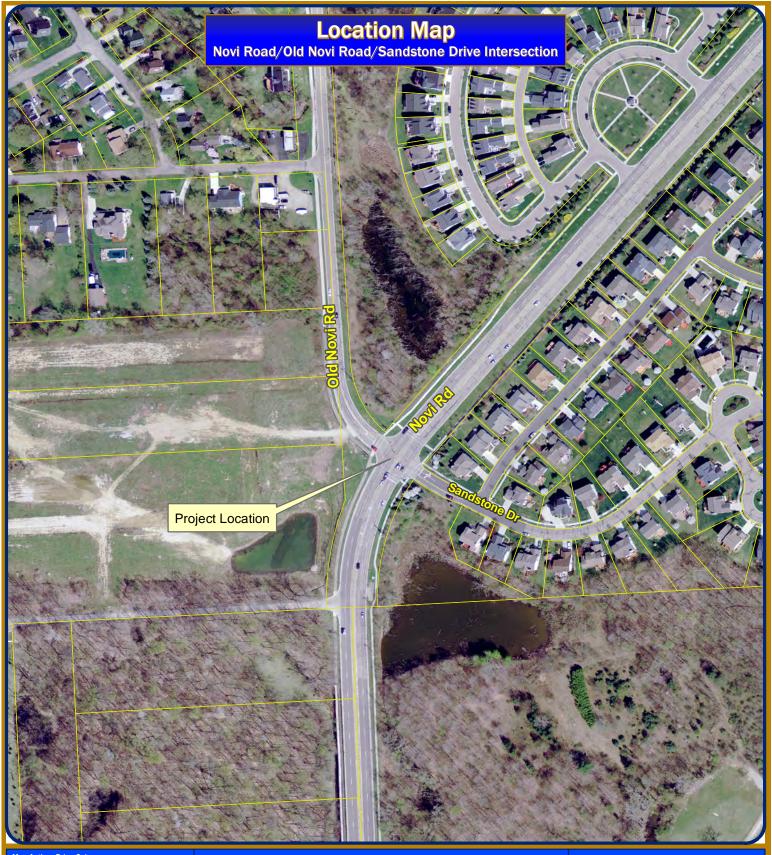
URS' engineering fees are based on the fixed fee schedule established in the Agreement for Professional Engineering Services for Public Projects. The design fees for this project will be \$14,805 (8.00% of the estimated construction cost of \$185,058), plus an additional \$2,100 fee for URS for a total design fee of \$16,905. 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. A draft of the Supplemental Professional Engineering Services Agreement for this project is enclosed and includes the project scope and schedule.

It is anticipated that the project would be ready for construction in summer 2013.

RECOMMENDED ACTION: Approval to award a contract for design engineering services for the Novi Road and Old Novi Road Signal Replacement and Modernization project to URS Corporation for a design fee of \$16,905.

	1	2	Υ	Ν
Mayor Gatt				
Mayor Pro Tem Staudt				
Council Member Casey				
Council Member Fischer				

	1	2	Υ	Z
Council Member Margolis				
Council Member Mutch				
Council Member Wrobel				



Map Author: Brian Coburn Date: 2/4/13

MAP INTERPRETATION NOTICE





City of Novi

Engineering Division

Department of Public Service
26300 Lee BeGole Drive

Novi, MI 48375

cityofnovi.org

			Feet		
0	45	90	180	270	360

1 inch = 227 feet

SUPPLEMENTAL PROFESSIONAL ENGINEERING SERVICES AGREEMENT

NOVI ROAD AND OLD NOVI ROAD SIGNAL REPLACEMENT

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 17, 2012.

The project includes the design and the preparation of plans and specifications for the replacement of the traffic signal at the intersection of Novi Road and Old Novi.

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. <u>Basic Fee</u>.

- a. Design Phase Services: The Consultant shall complete the design phase services as described herein for a lump sum fee of \$14,805, which is 8.0% of the estimated construction cost (\$185,058) as indicated on the Design and Construction Engineering Fee Curve.
- b. Advanced Procurement of Mast Arm Signal Poles: The consultant prepare and administer a separate bid package to procure the mast arm signal poles in

advance of the remainder of the project for a lump sum fee of \$2,100, as indicated in the attached Scope of Services.

c. 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 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. <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 claim and/or aggregate, and Environmental Impairment coverage. The retroactive date indicated on the policy shall either be unlimited, or, shall be the date that the Consultant established its initial coverage.

In the event that Consultant is sold or dissolved, Consultant shall provide purchase, at its expense, a "tail" or extended reporting period for the professional liability coverage for a period not less than 5 years.

- 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. <u>Nondiscrimination</u>.

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. <u>Compliance With Laws</u>.

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. <u>Notices</u>.

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: Jan M. Hauser, P.E., Vice President Water/Wastewater

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. <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	URS Corporation – Great Lakes
	By: Jan M. Hauser Its: Vice President
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
WIII (ESSES	
	By: Its:
The foregoing w	vas 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.

1. 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.

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January 28, 2013

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

Reference: Novi Road at Old Novi Road Traffic Signal Project

Dear Mr. Croy:

URS is pleased to submit this proposal for the above referenced project. The following tasks will be completed:

Task 1 - 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 will also be discussed and determined at the scope verification meeting.

Upon completion of this task, the URS team will move forward with the surveying and preliminary design.

Task 2 - Survey and Base Plans

The intent of this task is to provide topographic survey and base mapping as needed for the proposed design work. A full topographic survey will be completed for the project area.

After the necessary survey is completed, URS 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 design. An estimate will be included with the submittal.

URS will distribute the base plan design set to the utility companies that have indicated that they have facilities in the project area. URS will incorporate the additional information that utility companies provide to URS into the plan set. On-site meetings may be necessary to further clarify coordination and clearance of particular overhead and underground utility facilities.

Task 3 - Preliminary Plans

Incorporating the information obtained from the above tasks, URS will prepare the preliminary plan set (90%) and proposal package. This submission will include items such as utility locations, materials/quantities and boring logs. The preliminary plan submittal will also include the Project Manual and an estimate of cost.

Task 4 Final Plans and Proposal

Incorporating comments from the City, URS will develop the Final Plans, Project Manual, and Cost Estimate.



Task 5 Advertising

URS will respond to any final comments received from the City and will prepare the advertisement for bids. URS will distribute the contract documents to plan rooms and prospective bidders and answer questions and prepare addenda, as required, during the bidding.

Tasks 6 and 7- Bid Opening and Award

URS will attend the bid opening, if requested, and analyze the bids received. A tabulation of bids and a letter with recommendations on award of a contract will then be prepared and submitted.

Tasks 8 and 9 - Construction

URS will provide full time inspection, contract administration, and staking as required for the project and will solicit and coordinate the efforts of the Materials Testing firm hired for the construction phase.

Schedule

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

Task 1 – Scope Verification Meeting February 8, 2013
Task 2 – Survey & Base Plans Submittal March 1, 2013
Task 2 – Proliminary Plans Submittal March 20, 2013

Task 3 – Preliminary Plans Submittal March 29, 2013
Task4 – Final Plans Submittal April 18, 2013

Task 6 – Advertise for Bids April 25, 2013 through May 14, 2013?

Task 7 – Contract Award (By City)

Task 8 – Begin Construction

May 20, 2013

June 3, 2013

Task 9 – End Construction

July 8, 2013

Novi Road at Old Novi Road Traffic Signal Construction Cost Estimate

Item No.	Item Description	Unit	Quantity	Unit Price	Cost
1	Mobilization, Max	LS	1	\$9,000.00	\$9,000.00
2	Curb and Gutter, Rem	Ft	155	\$6.00	\$930.00
3	Pavt, Rem	Syd	35	\$4.00	\$140.00
4	Sidewalk, Rem	Syd	193	\$6.00	\$1,158.00
5	Exploratory Investigation, Vertical	Ft	40	\$11.00	\$440.00
6	Excavation, Earth	Cyd	65	\$5.00	\$325.00
7	Subbase, CIP	Cyd	22	\$9.00	\$198.00
8	Aggregate Base, 6 inch	Syd	78	\$5.00	\$390.00
9	Dr Structure Cover, Adj, Case 1	Ea	5	\$355.00	\$1,775.00
10	Hand Patching	Ton	12	\$90.00	\$1,080.00
11	Curb and Gutter, Conc, Det F2	Ft	155	\$13.00	\$2,015.00
12	Detectable Warning Surface	Ft	48	\$32.00	\$1,536.00
13	Sidewalk Ramp, Conc, 6 inch	Sft	172	\$5.00	\$860.00
14	Sidewalk, Conc, 6 inch	Sft	1557	\$4.00	\$6,228.00
15	Mast Arm	Ea	4	\$4,000.00	\$16,000.00
16	Mast Arm Std	Ea	4	\$4,875.00	\$19,500.00



17	Mast Arm Std Fdn, Cased	Ea	60	\$400.00	\$24,000.00
	Barricade, Type III, High Intensity,	Test			1 1 5 5
18	Double Sided, Lighted Furn	Ea	4	\$52.00	\$208.00
10	Barricade, Type III, High Intensity,	1227		40.44	
19	Double Sided, Lighted Oper	Ea	4	\$11.00	\$44.00
20	Lighted Arrow, Type C, Furn	Ea	2	\$350.00	\$700.00
21	Lighted Arrow, Type C, Oper	Ea	2	\$65.00	\$130.00
22	Minor Traf Devices	LS	1	\$2,000.00	\$2,000.00
23	Plastic Drum, High Intensity, Furn	Ea	50	\$15.00	\$750.00
24	Plastic Drum, High Intensity, Oper	Ea	50	\$2.00	\$100.00
25	Sign Cover	Ea	5	\$20.00	\$100.00
26	Sign, Type A, Temp, Prismatic, Furn	Sft	20	\$4.00	\$80.00
27	Sign, Type A, Temp, Prismatic, Oper	Sft	20	\$1.00	\$20.00
28	Sign, Type B, Temp, Prismatic, Furn	Sft	400	\$3.50	\$1,400.00
29	Sign, Type B, Temp, Prismatic, Oper	Sft	400	\$1.00	\$400.00
30	Slope Restoration, Type B	Syd	310	\$3.00	\$930.00
31	Conduit, DB, 1, 1 1/4 inch	Ft	120	\$7.00	\$840.00
32	Conduit, DB, 2, 3 inch	Ft	50	\$11.00	\$550.00
33	Conduit, DB, 4, 3 inch	Ft	10	\$10.50	\$105.00
34	Hh, Rem	Ea	4	\$132.50	\$530.00
35	Hh, Round, 3 foot Dia.	Ea	1	\$1,324.00	\$1,324.00
36	Hh, Round	Ea	3	\$686.00	\$2,058.00
37	Cable, Sec, 600V, 1, 3/C#6	Ft	100	\$3.50	\$350.00
38	Conduit, Directional Bore, 1, 3 inch	Ft	200	\$16.00	\$3,200.00
39	Conduit, Directional Bore, 2, 3 inch	Ft	100	\$21.00	\$2,100.00
40	Case Sign, Rem	Ea	5	\$76.00	\$380.00
41	Controller and Cabinet, Rem	Ea	1	\$150.00	\$150.00
42	Controller and Cabinet, Digital Type	Ea	1	\$15,900.00	\$15,900.00
43	Controller Fdn, Base Mount	Ea	1	\$1,200.00	\$1,200.00
44	Controller Fdn, Rem	Ea	1	\$162.00	\$162.00
45	Fdn, Rem	Ea	2	\$395.00	\$790.00
46	Pedestal, Alum	Ea	4	\$636.00	\$2,544.00
47	Pedestal, Fdn	Ea	4	\$607.00	\$2,428.00
48	Pedestal Fdn, Rem	Ea	2	\$150.00	\$300.00
49	Pedestal, Rem	Ea	2	\$73.00	\$146.00
50	Power Co. (Est. Cost to Contractor)	Dir	1000	\$1.00	\$1,000.00
51	Pushbutton and Sign	Ea	8	\$370.00	\$2,960.00
52	Pushbutton, Rem	Ea	8	\$69.00	\$552.00
53	Pushbutton Pedestal, Alum	Ea	1	\$508.00	\$508.00
54	Serv Disconnect	Ea	1	\$765.00	\$765.00
55	Serv Disconnect, Rem	Ea	1	\$82.00	\$82.00
56	Span Wire, Rem	Ea	1	\$119.00	\$119.00
57	Steel Pole, Rem	Ea	2	\$215.00	\$430.00
58	TS, Bracket Arm Mtd, Rem	Ea	2	\$72.00	\$144.00



59	TS, Pedestal Mtd, Rem	Ea	2	\$71.00	\$142.00
60	TS, Pedestrian, Bracket Arm Mtd, Rem	Ea	2	\$64.00	\$128.00
61	TS, Pedestrian, Pedestal Mtd, Rem	Ea	2	\$64.00	\$128.00
62	TS, Span Wire Mtd, Rem	Ea	5	\$69.00	\$345.00
63	TS, One Way Mast Arm, Mtd, FYA (LED)	Ea	4	\$1,100.00	\$4,400.00
64	TS, One Way Bracket Arm Mtd, FYA (LED)	Ea	4	\$1,000.00	\$4,000.00
65	TS, Pedestrian, One Way Bracket Arm Mtd (LED) Countdown	Ea	3	\$829.00	\$2,487.00
66	TS, Pedestrian, Two Way Bracket Arm Mtd (LED) Countdown	Ea	1	\$1,233.00	\$1,233.00
67	TS, Pedestrian, One Way Pedestal Mtd (LED) Countdown	Ea	3	\$850.00	\$2,550.00
68	TS, One Way Mast Arm Mtd (LED)	Ea	8	\$897.00	\$7,176.00
69	Bracket, Truss, With 18 Foot Arm	Ea	4	\$866.00	\$3,464.00
70	Video Traffic Detection System	Ea	1	\$10,650.00	\$10,650.00
71	Video Traffic Detection Camera	Ea	4	\$3,500.00	\$14,000.00
72	Video Traffic Detection Camera, Rem	Ea	2	\$100.00	\$200.00
73	Bracket, Truss, Rem	Ea	1	\$101.00	\$101.00
	Subtotal:				\$185,058.00
	RCOC Fees:				\$30,000.00
	TOTAL CONSTRUCTION COST:				\$ 215,058.00

The following assumptions were made regarding the scope of services:

- A full topographic survey will be performed. Base plans will be created using the survey data.
- The City will provide existing traffic signal plans and existing right-of-way information.
- The City will provide a list of utility contacts for the intersection.
- Geotechnical Investigation and Materials Testing work will be solicited by and the work coordinated by URS.
 Payment for the work will be by the City and is not included in the design fee.

Estimated Fees

DESIGN (8.0% of \$185,058)	\$ 14,805
CONSTRUCTION ADMINISTRATION AND ENGINEERING (5.5% of \$185,058)	\$ 10,178
INSPECTION (20 Crew Days@ \$640.00)	\$ 12,800
TOTAL	\$ 37,783



Optional Task - Separate Early Bidding Package for Mast Arms

It is our understanding that the City would like to consider accelerating the procurement of the mast arm signal poles for the project. Since the lead time for mast arm signal poles is approximately 12-14 weeks, an early bid package for just the Mast Arms could be utilized to reduce the additional construction time associated with ordering and obtaining these materials. This is especially a concern for the Novi Road/Old Novi Road Signal because the signal received emergency repairs that are only intended as a short term solution.

It is estimated that an early bid package could shorten the construction of the project by approximately 8 weeks.

For this Optional Task, we estimate that 20 hours of additional staff time will be required to prepare and administer a separate bid package.

20 hours @ \$105.00 per hour)

\$ 2,100

If the City wishes to move forward with the Early Bidding Package, the estimated fees will breakdown as follows:

Estimated Fees

DESIGN (8.0% of \$185,058)	\$ 14,805
CONSTRUCTION ADMINISTRATION AND ENGINEERING (5.5% of \$185,058)	\$ 10,178
INSPECTION (20 Crew Days@ \$640.00)	\$ 12,800
Subtotal	\$ 37,783
OPTIONAL TASK	\$ 2,100
TOTAL	\$ 39,883

Please contact our project manager Sean Kelsch if you have any questions or wish to discuss further.

Sincerely

URS Corporation Great Lakes

Jan Hauser, PE

Vice President

Sean Kelsch, PE

Manager, Highway Engineering Services