



CITY of NOVI CITY COUNCIL

Agenda Item O
January 25, 2016

SUBJECT: Approval to award an amendment to the engineering services agreement with Orchard, Hiltz & McCliment for additional design engineering services for drainage improvements along Quince and the portion of Tamara between Quince and Orchard Hills School as part of the 2015 Neighborhood Road Program in the amount of \$30,163, and approval of an additional appropriation in the amount of \$30,163 for this budget line item within the Drain Fund.

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

CITY MANAGER APPROVAL: *[Signature]*

EXPENDITURE REQUIRED	\$ 30,163
AMOUNT BUDGETED	\$ 0
APPROPRIATION REQUIRED	\$ 30,163
LINE ITEM NUMBER	210-211.00-805.435 (Drain Fund)

BACKGROUND INFORMATION:

This project involves drainage improvements and partially enclosing the existing ditches in Orchard Hills subdivision on Quince Drive and a portion of Tamara Drive. The proposed drainage work would be completed as part of the Neighborhood Road Program in summer 2016, which will reconstruct Quince and a portion of Tamara once school is out of session to avoid disruption of school traffic. The project will include the installation of storm sewer and drainage structures in the existing ditch line to raise the surface elevation and capture storm water runoff from the roadway and residential front yards using shallower swales and catch basins to decrease the depth of the ditches. This project is the first of its kind and will be a pilot for potential projects in the future for streets that have ditches. The goal is to not only improve roadside drainage but also increase property values in neighborhoods where these types of improvements are made by eliminating unsightly and difficult to maintain ditches.

OHM's engineering fees are based on the fixed fee schedule established in the Agreement for Professional Engineering Services for Public Projects. The design fees for this project will be \$30,163 (9.5% of the estimated construction cost of \$317,500). The construction phase engineering fees will be awarded after design is complete and will be a percentage based on the construction contractor's total bid price after the contract change order is approved. The construction phase engineering fee percentage was established in the Agreement for Professional Engineering Services for Public Projects. A draft of the Second Amendment to the Supplemental Professional Engineering Services Agreement for this project is enclosed and includes the project scope and schedule.

Design of this project would begin following award with construction to begin in summer 2016 as part of the continuation of the 2015 Neighborhood Roads Program.

RECOMMENDED ACTION: Approval to award an amendment to the engineering services agreement with Orchard, Hiltz & McCliment for additional design engineering services for drainage improvements along Quince and the portion of Tamara between Quince and Orchard Hills School as part of the 2015 Neighborhood Road Program in the amount of \$30,163, and approval of an additional appropriation in the amount of \$30,163 for this budget line item within the Drain Fund.

	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				

RESOLUTION

NOW, THEREFORE BE IT RESOLVED that the following Budget Amendment for additional design engineering services for drainage improvements along Quince and the portion of Tamara between Quince and Orchard Hills School as part of the 2015 Neighborhood Road Program is authorized:

	INCREASE (DECREASE)
DRAIN FUND	
APPROPRIATIONS	
Capital Outlay	30,163
TOTAL APPROPRIATIONS	<u>\$ 30,163</u>
Net Increase (Decrease) to Fund Balance	<u><u>\$ (30,163)</u></u>

I hereby certify that the foregoing is a true and complete copy of a resolution adopted by the City Council of the City of Novi at a regular meeting held on January 25, 2016

Maryanne Cornelius
City Clerk

Orchard Hills Ditch Enclosure

Location Map

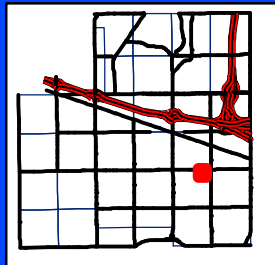


Map Author: A. Wayne
Date: 1/14/2016
Project:
Version #:

Amended By:
Date:
Department:

MAP INTERPRETATION NOTICE

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



City of Novi

Engineering Division
Department of Public Services
26300 Lee BeGole Drive
Novi, MI 48375
cityofnovi.org

Feet
0 30 60 120 180

1 inch = 150 feet



**SECOND AMENDMENT TO THE
SUPPLEMENTAL PROFESSIONAL ENGINEERING SERVICES AGREEMENT**

2015 NEIGHBORHOOD ROAD PROGRAM

First Amended Agreement between the City of Novi, 45175 W. Ten Mile Road, Novi, MI 48375-3024, hereafter, "City," and Orchard, Hiltz & McCliment, Inc., whose address is 34000 Plymouth Road, Livonia, Michigan 48150, hereafter, "Consultant," relating to modifications of the fee basis for engineering services. The following sections of the Supplemental Professional Engineering Services Agreement, as made and entered into on December 22, 2014 shall be amended as follows:

Section 2. Payment for Professional Engineering Services. The following Paragraphs shall be amended as follows:

1. Basic Fee.
 - a. Delete 1.a. in its entirety and replace with the following language:
Design Phase Services: The Consultant shall complete the design phase services as described herein for a lump sum fee of \$114,300, which is 6.35% of the estimated construction cost (\$1,800,000) and \$30,163, which is 9.5% of the estimated ditch enclosure cost of construction (\$317,500) 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. *Unchanged*
2. *Unchanged*

Except as specifically set forth in this Second Amendment, the Supplemental Professional Engineering Services Agreement remains in full force and effect.

WITNESSES

Orchard, Hiltz & McCliment, Inc.

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 – Addendum to Engineering Scope of Services

2015 Neighborhood Roads Asphalt Program –Additional Engineering Services for Quince Street & Tamara Drive Road Ditch Enclosure

OHM Advisors is pleased to provide engineering services to the City of Novi. We understand that the City wishes to explore the possibility of enclosing the roadside ditches along Quince Street and Tamara Drive, within the limits of the ongoing 2015 Neighborhood Roads Asphalt Program (Orchard Hills Subdivision). We further understand that this work is assumed to be additional services to the current scope of the 2015 Neighborhood Roads Asphalt Program design, and may be incorporated into the remainder of the road work for these streets on this project, to be completed in the summer of 2016 by Cadillac Asphalt.

The scope of engineering services shall include the following tasks:

1. Attend an initial kick-off meeting with City Staff to discuss the scope and expectations related to this task.
2. Conduct a site visit to evaluate the feasibility of these drainage improvements along these existing routes, currently drained via shallow open ditch drainage, and several existing shallow storm drainage structures on Tamara Drive.
3. Evaluate current level of topographic survey along the road ROW. It is anticipated that some minor supplemental survey may be necessary to evaluate storm drainage outlets or provide additional survey data along existing ditches in certain areas. Up to one day of additional field surveying is assumed.
4. Provide a quick engineering analysis to establish the approximate tributary area to the ditch enclosures, to assist in confirming the proper size of the proposed storm sewer. It is assumed that GIS contours can be used for this exercise, along with minimal supplemental survey data obtained as noted above in Item 3. It should be noted that available depth of the existing ditches may also affect the final decision of storm sewer sizing, which would be discussed with the City prior to final design.
5. Prepare a preliminary design and cost estimate for the ditch enclosures.
6. Meet with the City to review preliminary findings for the enclosure of these road ditches.
7. If authorized, prepare final design plan sheets, specification, and a ditch enclosure detail to allow for establishment of a change order cost to install ditch enclosures, storm sewer, and shallow drainage basins/structures.
8. Assist the City with soliciting a change order cost from the current Contractor for the 2015 Neighborhood Roads Asphalt Program.

The following services are not anticipated to be required for this project and have not included:

1. Permit or application fees – to be paid by the City if necessary
2. Coordination or design for utility relocations or repairs
3. Right-of-way and/or easement acquisitions – to be acquired by the City if necessary
4. Remediation or removal of contaminated or hazardous soils or materials.
5. Geotechnical Analysis/Report

In the event any of these services are required, an addendum to the supplemental engineering agreement will be submitted for your approval prior to performing said services.

Schedule:

1. Plan Sheets and Specification completed by May 6, 2016.
2. Change Order Fee negotiated/established with Cadillac Asphalt by May 20, 2016.
3. Construction to begin by June 1, 2016, to allow for installation of the storm sewer prior to the commencement of road construction on Quince Street and Tamara Road in July 2016 (after school year is completed). Substantial Completion of construction by mid-August 2016.

Fee:

We have based our attached preliminary opinion of construction cost on an anticipated approximate length of 4,500 feet of ditch enclosure on both sides of Quince Street and Tamara Drive, including the installation of storm sewer pipe and shallow drainage basins/structures. We assume that our design and construction phase fees would be based on the standard fee schedule for storm sewer improvements per our current contract agreement. At this time, we anticipate the construction cost of the improvement to be approximately \$350,000.

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



**ENGINEER'S OPINION OF PROBABLE
CONSTRUCTION COST
CONCEPTUAL PHASE ESTIMATE**

OHM ADVISORS

34000 Plymouth Road, Livonia, Michigan, 48150

CLIENT: City of Novi

PROJECT: 2015 Neighborhood Roads Asphalt Program - Ditch Enclosure

LOCATION: Quince Street and Tamara Drive

Telephone: (734) 522-6711 FAX: (734) 522-6427

DATE: Jan 12, 2016

PROJECT NO. 0163-15-0020

ESTIMATOR: G. Tsakoff

CHECKED BY: _____

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	TOTAL COST
1	Mobilization	1	LS	\$ 14,000.00	\$ 14,000
2	Traffic Control	1	LS	\$ 10,000.00	\$ 10,000
3	Ditch Regrade	4,500	FOOT	\$ 10.00	\$ 45,000
4	8" PVC or HDPE Storm Sewer	4,500	FOOT	\$ 27.00	\$ 121,500
5	18" Dia PVC Drainage Basins	32	EA	\$ 2,000.00	\$ 64,000
6	Restoration	10,500	SYD	\$ 6.00	\$ 63,000
7	10% Contingency				31,750
				TOTAL COST	\$ 350,000