



CITY of NOVI CITY COUNCIL

Agenda Item J
April 18, 2016

SUBJECT: Approval to award engineering design services to Spalding DeDecker Associates for the Village Oaks Lake and Village Wood Lake Stormwater Improvements in the amount of \$56,200.

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

CITY MANAGER APPROVAL: *[Signature]*

EXPENDITURE REQUIRED	\$ 56,200
AMOUNT BUDGETED	\$ 929,710
LINE ITEM NUMBER	210-211.00-865.139

BACKGROUND INFORMATION:

This project involves the acquisition of easements and subsequent repair and replacement of the drainage and outlet control structures in Village Oaks Lake and Village Wood Lake. The 2013 Storm Water Master Plan Update identified this area for proposed repair. This project will also include locating buried storm sewer structures and eliminating public access to the outlet and overflow structures in Village Wood Park. The attached figure shows the locations of Village Wood Lake and Village Oaks Lake.

Spalding DeDecker Associates (SDA) will be assisting the Engineering Division with the design and construction engineering services for this project. Since there isn't an established fee schedule for this type of task in the Agreement for Professional Engineering Services for Public Projects for the City's three pre-qualified engineering consultants, the design fee was based on actual hours estimated at the hourly rates provided in the agreement. The design fees for this project will be \$56,200 per SDA's proposal dated March 25, 2016. The construction phase engineering fees will be awarded at the time of construction award and will be based on the contractor's bid and the fee percentage in the Agreement for Professional Engineering Services for Public Projects. A draft of the Supplemental Professional Engineering Services Agreement for this project is enclosed.

The design for this project will begin following engineering award. The timing of construction of this project will be dependent upon acquisition of the easements required.

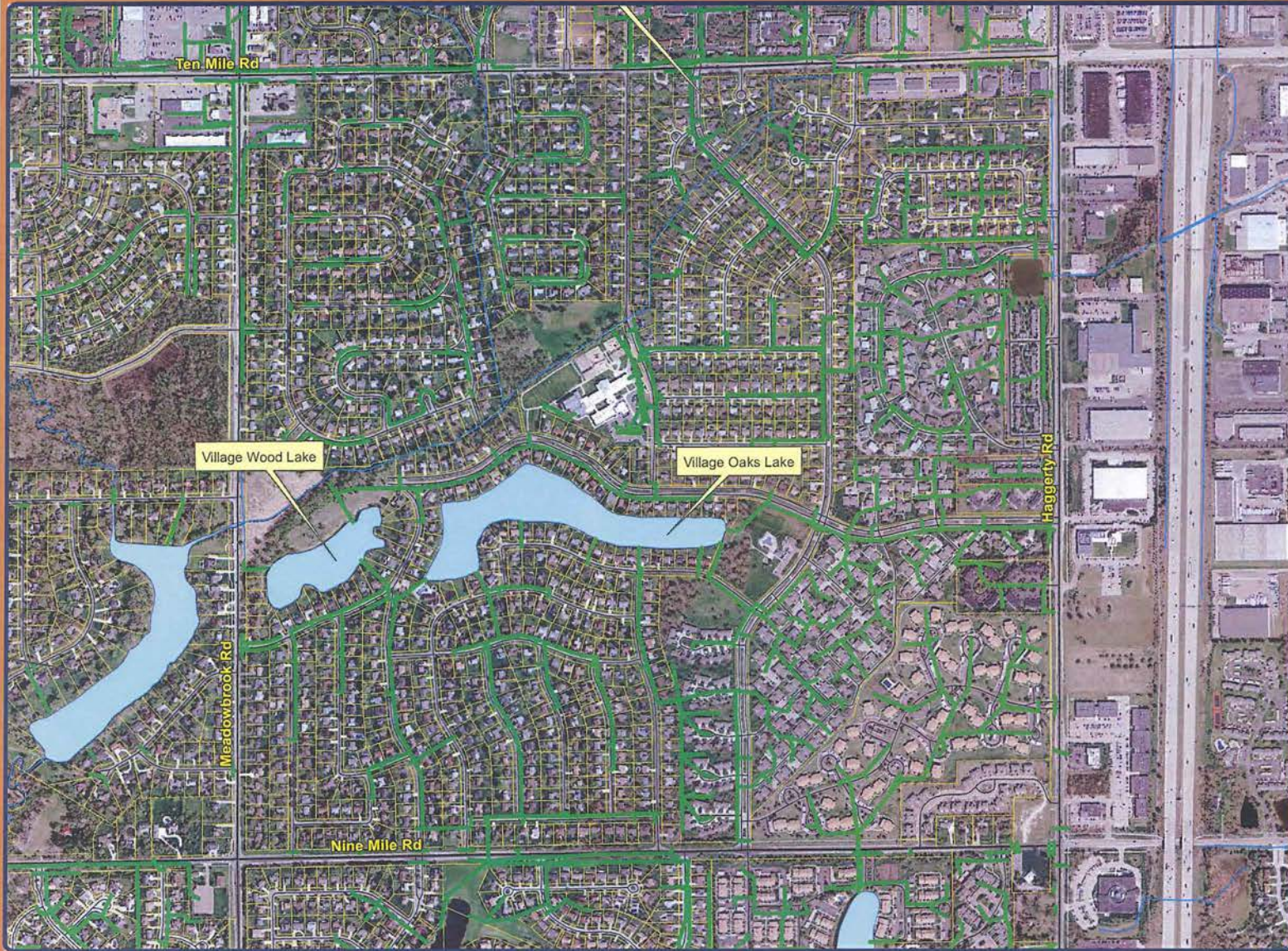
RECOMMENDED ACTION: Approval to award engineering design services to Spalding DeDecker Associates for the Village Oaks Lake and Village Wood Lake Stormwater Improvements in the amount of \$56,200.

	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				

Village Oaks Lake and Village Wood Lake Location Map

2013 Storm Water Master Plan



Map Legend

- Storm Sewer
- Rivers
- Lakes



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

Map Author: Brian Coburn
 Date: 5/16/13
 Project: 2013 Storm Water Study
 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.

SECTION 5 – VILLAGE OAKS LAKE AND VILLAGE WOOD LAKE Infrastructure Access and Maintenance Concerns

BACKGROUND

In 1984, the City of Novi passed a resolution taking on the responsibility for the on-going maintenance (including dredging) of Village Oaks Lake and Village Wood Lake. The lakes are located east of Meadowbrook Road, north of Nine Mile. Both were constructed when the subdivisions were built in the early 1970's. The eastern half of Village Oak Lake was hydraulically dredged by the City in 2005. There has been minimal maintenance of the storm water inlet and outlet pipes and structures over the past twenty years, which has primarily been limited to repairing visible damage to structures.



FIELD INVESTIGATION

In August 2013, Environmental Consulting & Technology, Inc. (ECT) and Spalding DeDecker Associates, Inc. (SDA) met onsite with the City of Novi Department of Public Services (DPS) staff, for the inspection of the inlet and outlet structures. Currently, the City has limited easements for accessing the infrastructure around Village Oaks and Village Wood Lakes. For the field investigation, each structure was accessed through private property.

Each of the located structures were mapped using GPS and are shown on the included map. One structure (Inlet #1) was not able to be located; however, DPS staff provided us with an approximate location (east end of Village Oaks Lake). The individual structures were difficult to locate due to the landscaping, steep terrain, and improvements installed by the homeowners.



Structure surrounded by Landscaping

Structures were located in difficult to access areas, such as under large pine trees and, in one case, under a deck / overlook. Some inlet pipe end-sections were submerged, and therefore were not visible for observation.



Deck built over Structure



Access hatch in deck





Village Oaks Lake Outlet Structure Hidden by Landscaping

The outlet structure of Village Oaks Lake is located under heavy brush and the pipe is not visible due to a thick layer of stone rip rap. The outlet structure of Village Wood Lake had recently been repaired by the City, and additional rip rap was placed around the structure. The outlet structure and overflow are located in the Village

Wood Park. This location is accessible to the public which has lead to safety and maintenance concerns.

CONCEPTUAL IMPROVEMENT OPTIONS

1. Acquire Easements, Repair / Replace Deteriorated Infrastructure: Drainage easements for access and maintenance should be acquired by the City from the individual homeowners and/or the Homeowners Association, as applicable. It is estimated that nine easements will be necessary to provide adequate access for both lakes. These can be negotiated individually or acquired through condemnation. Obtaining these easements would be necessary in order for the City to perform immediate and on-going maintenance. The inlet and outlet structures could then be accessed directly for heavy rehabilitation or full replacement. Significant grading will be needed to develop working areas at some structures. Due to the proximity to private property or impassible slopes, working from the water via boats or a small barge may be required.



2. Repair / Replace Village Oaks Lake Outlet Structure: The outlet structure of Village Oaks Lake is in poor condition. The structure can be replaced with a new structure of the same size in the same location assuming that there are no problems with the current outlet and capacity of the structure (none were reported). If there are known capacity issues, a hydraulic analysis should be completed for the contributing area to the lake and the new outlet structure sized accordingly to improve the hydraulics of the area.

3. Locate Buried Structure: The inlet structure that could not be located is likely buried due to landscaping. It could be located using a variety of methods: Accurate as-built plans could be utilized if they are available, televising to the structure through the pipe at the upstream structure, or advanced surveying equipment and techniques could be used to locate the structure. Once the structure is located, further investigation should be performed to evaluate the integrity of the structure and pipe.

4. Eliminate Public Access to Outlet and Overflow Structures in Village Wood Park: Due to on-going concerns of public access to the outlet structure, security fencing and warning signs can be installed to deter the public from accessing the outlet and overflow structure. This would improve safety and reduce vandalism opportunities.



PRELIMINARY ESTIMATES

Option 1. *Repair Damaged Infrastructure*

Item Description	Unit	Unit Price	Quantity	Item Cost
Mobilization	LSum	\$46,000	1	\$46,000
Locate Structure	LSum	\$2,000	1	\$2,000
Clearing (Landscape)	LSum	\$34,500	1	\$34,500
Tree Removal	Each	\$500	16	\$8,000
Deck Removal	LSum	\$2,500	1	\$2,500
Cleaning/Televising Sewer/Structure	LSum	\$59,500	1	\$59,500
Erosion Control	LSum	\$24,000	1	\$24,000
Working Platform	LSum	\$50,000	1	\$50,000
Inlet/Outlet Structure Repairs/Replacement	Each	\$9600	12	\$115,200
Sewer Pipe Replacement	Feet	\$45	1,350	\$60,750
Riprap	Syd	\$50	60	\$3,000
Deck Replacement	LSum	\$5,500	1	\$5,500
Restoration	LSum	\$100,000	1	\$100,000
Easement Acquisition	Sft	\$12	12,000	\$144,000
<i>Contingency (25%)</i>				\$164,000
Estimate =				\$818,950

NOTE – Access from the water may be the only practical option for several locations.

Option 4. *Eliminate Public Access to Outlet and Overflow Structures in Village Wood Park*

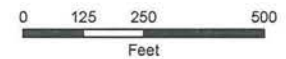
Item Description	Unit	Unit Price	Quantity	Item Cost
Mobilization	LSum	\$2,500	1	\$2,500
Chain Link Fence, 72-inch	Feet	\$30	450	\$13,500
6' Fence Gate	Each	\$750	1	\$750
Restoration	LSum	\$1,250	1	\$1,250
<i>Contingency (25%)</i>				\$4,500
Estimate =				\$22,500

Please note that the contingency is each of these estimates includes permitting costs, soil erosion control measures, and miscellaneous work items to complete the improvement. The costs do not include engineering services.

City of Novi
Stormwater Master Plan
Village Oaks Lake &
Village Wood Lake



- Structures
- ▲ Structures Not Found





Access to Structure #2



Access to Structure #3



Access to Structure #4



Access to Structure #5



Access to Structure #6



Access to Structure #7



Access to Structure #8



Access to Structure #10

SUPPLEMENTAL PROFESSIONAL ENGINEERING SERVICES AGREEMENT

MEADOWBROOK ROAD REHABILITATION FROM I-96 TO TWELVE MILE ROAD

This Agreement shall be considered as made and entered into as of the date of the last signature hereon, and is between the City of Novi, 45175 W. Ten Mile Road, Novi, MI 48375-3024, hereafter, "City," and Spalding DeDecker Associates, Inc., whose address is 905 South Boulevard East, Rochester Hills, MI 48307, 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 Village Oaks Lake and Village Wood Lake Stormwater Improvements.

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.

Design Phase Services: The Consultant shall complete the design phase services as described herein for a lump sum fee of \$ \$56,200, as described in the attached proposal.

2. Payment Schedule for Professional Engineering Services Fee.

Consultant shall submit monthly statements for professional engineering services rendered. The statements shall be based on Consultant's estimate of the proportion of the total services actually completed for each task as set forth in Exhibit A at the time of billing. The City

shall confirm the correctness of such estimates, and may use the City's own engineer for such purposes. The monthly statements should be accompanied by such properly completed reporting forms and such other evidence of progress as may be required by the City. Upon such confirmation, the City shall pay the amount owed within 30 days.

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

3. Payment Schedule for Expenses.

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

Section 4. Ownership of Plans and Documents; Records.

1. Upon completion or termination of this agreement, all documents prepared by the Consultant, including tracings, drawings, estimates, specifications, field notes, investigations, studies, etc., as instruments of service shall become the property of the City.

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

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

Section 5. Termination.

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

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

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

as may have been accumulated by the Consultant in performing the services included in this Agreement, whether completed or in progress.

Section 6. Disclosure.

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

Section 7. Insurance Requirements.

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

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

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

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

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

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

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

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

Section 8. Indemnity and Hold Harmless.

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

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

Section 9. Nondiscrimination.

The Consultant shall not discriminate against any employee, or applicant for employment because of race, color, sex, age or handicap, religion, ancestry, marital status, national origin, place of birth, or sexual preference. The Consultant further covenants that it will comply with the Civil Rights Act of 1973, as amended; and the Michigan Civil Rights Act of 1976 (78. Stat. 252 and 1976 PA 4563) and will require a similar covenant on the part of any consultant or subconsultant employed in the performance of this Agreement.

Section 10. Applicable Law.

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

Section 11. Approval; No Release.

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

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

Section 12. Compliance With Laws.

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

Section 13. Notices.

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

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

Consultant: Cheryl Gregory, P.E., Vice President SDA

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

Spalding DeDecker Associates, 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:
Its:

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

Notary Public
Oakland County, Michigan
My Commission Expires: _____

EXHIBIT A - SCOPE OF SERVICES

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

A. Basic Services.

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.

March 25, 2016

Adam Wayne
Department of Public Services
City of Novi
26300 Lee BeGole Drive
Novi, Michigan 48375

**Re: Engineering Services for
Village Oaks Lake and Village Wood Lake
Job No.: PR16-060**

Dear Mr. Wayne:

Spalding DeDecker (SD) is pleased to provide the following proposal for stormwater improvements at Village Oaks Lake and Village Wood Lake.

Project Overview and Understanding of Requested Services

As part of the Novi Stormwater Master Plan update completed in 2014, improvements to Village Oaks Lake and Village Wood Lake stormwater infrastructure were outlined. The report referenced the lack of access easements to the existing infrastructure and various obstacle around the inlet/outlet structures to the lakes. The report also noted that the outlet from Village Wood Lake is currently open to the public and presents maintenance and safety concerns.

SD proposes to assist the City in obtaining access easements at various locations within Village Oaks Lake to access the stormwater inlet/outlets that are at the lake shore. There are currently no easements to access the structures across private property. Many of the inlet/outlets are in need of repair with a majority of the structures impacted by landscaping and other obstacles and the city desires to have these repairs made. In order to prepare documents for the repair and/or improvement of the structures, the obstacles will need to be removed so further inspections can take place. The inspection may be accomplished by further visual inspections and cleaning and televising the lines. Upon completion of the inspections, plans and specifications will be prepared, as well as any permit applications. It is anticipated that an MDEQ permit will be needed for the work around and within the lake.

Proposed Scope of Services

SD's scope will include:

- The initial task will be to identify the required easements for the project.
- Prepare easement documents for recording.
- Prepare topographic survey around the inlet/outlet structures.
- Inspect the inlet/outlet structures for required repairs after cleaning.



- Prepare 30% plans for repair and or replacement of the outlet/inlet structures and to enclose the area around outlet/overflow structure at Village Wood Lake.
- Prepare permit applications for submittal to the MDEQ for work around and within the lakes.
- Preparing 90% plans and specifications and submit to the City for final review.
- Preparing a 100% Bid Package for Advertising
- SD will assist the City during the bidding process as needed.

Construction Cost Estimate and Proposed Fees

Based on our pre-qualification status with the City, engineering design fees are typically based on a pre-determined percentage of the pre-design construction cost estimate. However, the nature of this project does not correlate to the types of services pre-established in the fee table. The fees for this project will be based on the estimated tasks and hours presented below, which, overall, results in design fees 6.7% of the Opinion of Probable Construction Costs, \$841,450.

<u>TASK</u>	<u>UNITS</u>	<u>RATE</u>	<u>Proposed Design Fee</u>
Topographic Survey	1	\$13,400	\$13,400
Prepare easement exhibits for up to 9 parcels	9	\$600/ea	\$5,400
Complete Structure Inspections	1	\$6,150	\$6,150
Prepare Plans and Specifications	1	\$23,600	\$23,600
Complete Permit applications	1	\$3,100	\$3,100
MDEQ Permit Application Fees	1	\$2,500	\$2,500
Prepare final Bid Package	1	\$2,050	\$2,050
		TOTAL:	\$56,200



Project Schedule

The following summarizes the anticipated schedule for the project:

<u>Milestone</u>	<u>Completed By</u>
Design Project Award	4/20/2016
Initial Meetings and Site Visits	4/22/2016
Survey Field Work	4/28/2015
Easement Documents	5/16/2016
60% Preliminary Plans	6/27/16
90% Final Plans	7/15/2016
100% Bid Package & Advertising	7/25/2016
Bid Opening	8/16/2016
Award by Council	8/29/2016
Construction Start	9/19/2016
Construction Completion	10/21/2016

Thank you for your selection of SD to provide design services for the Village Oaks Lake and Village Wood Lake stormwater structures improvement. Please don't hesitate to contact me if you have any questions or comments regarding this submittal.

SPALDING DEDECKER ASSOCIATES, INC.

David E. Richmond, PE
Project Manager



Project Estimated Hours

Village Oaks and Village Wood Lakes Stormwater Structure Improvements	
	Hours
Survey	
Project Manager	2
Project Surveyor	4
Survey Crew	30
Survey Crew	60
Easement Exhibits (Per Parcel)	
Project Manager	1
Mapping Specialist	5
Construction Documents	
Project Manager	20
Senior Project Engineer	35
Engineer	60
Senior Designer	140
Permitting	
Project Manager	5
Senior Project Engineer	5
Project Engineer	20
Bid Documents	
Project Manager	2
Senior Project Engineer	10
Engineer	6
Total Hours	453