

AMENDATORY AGREEMENT No. 3
to
PRELIMINARY ENGINEERING AGREEMENT
between
CITY OF ROCHESTER HILLS
and
ORCHARD, HILTZ & McCLIMENT, INC.
for
HAMLIN ROAD WIDENING AND RECONSTRUCTION
CROOKS ROAD TO LIVERNOIS ROAD

CS: STU 63459
JN: 359082
Fed Proj#: STP-1993 (001)
Fed Item#: HJ0900
93-1141/51/A3

THIS AMENDATORY AGREEMENT made and entered into this _____ day of _____, A.D., 2007, by and between the CITY OF ROCHESTER HILLS, hereinafter referred to as the "LOCAL AGENCY" and ORCHARD, HILTZ & McCLIMENT, INC., of Livonia, Michigan, hereinafter referred to as the "CONSULTANT", for the purpose of amending the Preliminary Agreement, dated March 1, 1996, said Agreement being hereinafter referred to as the "AGREEMENT".

WITNESSETH:

WHEREAS, the parties to the Amendment have heretofore, by a Contract dated March 1, 1996 (MDOT Contract 95-2396) as amended on November 4, 1997, and October 31, 2002, hereinafter referred to as the "AGREEMENT" that provided for preliminary engineering services, hereinafter referred to as "SERVICES", required in connection with the following road improvements, said improvements to be hereinafter referred to as the "PROJECT" and described as follows:

"Reconstruction of Hamlin Road from approximately 200' east of Crooks Road to 1,800' east of Livernois Road and reconstruction of Livernois Road from approximately 1,500' south of Hamlin Road to 1,500' north of Hamlin Road";
and

WHEREAS, the LOCAL AGENCY has requested that the SERVICES be revised to include the Scope of Services outlined in Exhibit B-3 and, therefore, it is necessary to increase the total amount of the AGREEMENT to compensate the CONSULTANT for said SERVICES; and

WHEREAS, the LOCAL AGENCY and CONSULTANT having appropriate authority desire to amend the AGREEMENT to provide for the additional SERVICES and the increase in cost.

NOW, THEREFORE, it is hereby agreed by and between the parties hereto that:

1. In order to set forth the additional SERVICES requested by the LOCAL AGENCY pursuant to this Amendatory Agreement, Exhibit "B" of the AGREEMENT is hereby amended by adding Exhibit "B-3", dated April 20, 2007, as attached hereto and made a part hereof and all references to Exhibit "B" shall hereby be construed to mean as amended with Exhibit "B-3".
2. In order to increase the total amount of the AGREEMENT by Two Hundred Thirty-Nine Thousand, Seventy-Four Dollars and Zero Cent (\$239,074.00) to compensate the CONSULTANT for the additional SERVICES, the first paragraph of Section 20 of the AGREEMENT is hereby amended to read as follows:
 20. For and in consideration of the SERVICES rendered by the CONSULTANT as set forth in this Agreement, pay the CONSULTANT on the basis of actual cost plus a fixed fee (profit) which amount shall not exceed Nine Hundred Ninety-One Thousand, Three Hundred Fifty-Six Dollars and Ninety-Six Cents (\$991,356.96). The fixed fee (profit) shall be the amount of Ninety-Two Thousand, Eight Hundred Ninety Dollars and Twelve Cents (\$92,890.12), which amount is included in the total amount of Nine Hundred Ninety-One Thousand, Three Hundred Fifty-Six Dollars and Ninety-Six Cents (\$991,356.96) as shown in Exhibit "A-3", attached hereto and made a part hereof.

3. The revised schedule is included and shown as Exhibit "C-3".
4. In order to include an additional subconsultant, Section 20.f, is hereby amended to read as follows:

20.f Those costs incurred by the CONSULTANT in the utilization of the subcontracted services of Mansell Associates, Inc., MTJ Engineering, LLC., Applied Science and Technology, Inc., Engineering Graphics Co., Schleede Hampton Associates, Inc., and Northwest Consultants, Inc. shall be excluded from the calculation of the CONSULTANT'S percentage of PROJECT work completed, as set forth in Section 21a., but will be reimbursed.....The PROJECT costs attributable to Mansell Associates, Inc., MTJ Engineering, LLC., Applied Science and Technology, Inc., Engineering Graphics Co., Schleede Hampton Associates, Inc. and Northwest Consultants, Inc. is estimated to be Two Hundred Thirty-One Thousand, Three Hundred Two Dollars and Sixty-Seven Cents (\$231,302.67).

5. Exhibits A, B and C of the AGREEMENT is superseded by Exhibit "A-3", "B-3" and "C-3" revised, dated April 20, 2007, attached hereto and made a part hereof. Any references to Exhibits A, B and C in the AGREEMENT shall be construed to mean Exhibit "A-3", "B-3" and "C-3" revised, including attachments.
6. Except as amended by the provisions herein, all of the provisions, covenants, and obligations of the parties contained in the AGREEMENT shall remain in full force and effect.
7. The CONSULTANT waives any and all claims it has or may have against the LOCAL AGENCY which arise out of the need to amend the AGREEMENT.

This Amendatory Agreement shall become binding on the parties hereto and of full force and effect upon the signing thereof by the duly authorized officials for the parties hereto; upon the adoption of the necessary resolution approving said contract and authorizing the signatures thereto of the respective officials of the LOCAL AGENCY and CONSULTANT, a certified copy of which resolution shall be attached to this Agreement.

In Witness Whereof, the parties hereto have made and executed this Amendment No. 3 as of the day and year first written above.

CITY OF ROCHESTER HILLS

By: _____
 Bryan K. Barnett
 Mayor

_____ In the presence of

By: _____
 Jane Leslie
 Clerk

_____ In the presence of

ORCHARD, HILTZ & McCLIMENT, INC.

By: _____
 Russell A. Gronevelt, P.E.
 President

_____ In the presence of

By: _____
 Daniel G. Fredendall, P.E.
 Executive Vice President

_____ In the presence of

EXHIBIT "A-3"

Hamlin Road Widening and Reconstruction
Crooks Road to Livernois Road
City of Rochester Hills

Additional Preliminary Engineering

FEE SUMMARY

	Total Direct Labor	Overhead	Direct Exp Sub Cost	Fixed Fee	Amount
Agreement	\$ 83,194.00	\$ 128,701.12	\$ 138,126.24	\$ 25,427.41	\$ 375,448.77
Amendment No. 1	\$ 1,198.00	\$ 1,853.31	\$ 5,809.80	\$ 366.16	\$ 9,227.27
Amendment No. 2	\$ 95,697.93	\$159,614.59	\$ 74,254.47	\$ 38,039.93	\$ 367,606.92
Amendment No. 3	\$73,098.42	\$123,806.80	\$ 13,112.16	\$ 29,056.62	\$ 239,074.00
TOTALS:	\$253,188.35	\$413,975.82	\$ 231,302.67	\$ 92,890.12	\$ 991,356.96

Hourly Rates – Revise the labor rates presented in Amendatory Agreement No. 2 to current labor rates for 2007 and projected to 2008 using a labor escalation factor. See attached Derivation of Cost Proposal.

The subconsultants for the project have submitted revised priced proposals for the remaining work and is referenced in Attachments 1-5.

EXHIBIT "B-3"
Hamlin Road Widening and Reconstruction
Crooks Road to Livernois Road
City of Rochester Hills

Additional Preliminary Engineering

SCOPE OF SERVICES

Public Information Process and Environmental Assessment Support

Additional scope of services for preliminary study (environmental assessment) - Assist the LOCAL AGENCY and the Road Commission for Oakland County in preparation of the Environmental Assessment for the proposed corridor. CONSULTANT shall attend meetings, prepare exhibits, prepare alternative design solutions required to obtain approval from the Michigan Department of Transportation and Federal Highway Administration.

Right-of-Way Engineering

Preliminary Right-of-Way plans will be revised to reduce the amount of right-of-way required due to the deletion of road work on Livernois Road. This change will require the CONSULTANT to revise the Preliminary Right-of-Way Plans (50% complete to-date) to incorporate the revised intersection geometry and required right-of-way and submit preliminary plans.

Detailed Design

Project plans and specifications will be revised to incorporate the design of a roundabout at the intersection of Livernois and Hamlin. This change will require the CONSULTANT to revise the Base Plans (30% complete design plans) to incorporate the intersection geometrics and resubmit base plans. Following base plan approval, the design of the intersection will be completed as a roundabout, eliminating the boulevard reconstruction work on Livernois Road.

Subconsultant Services Revised

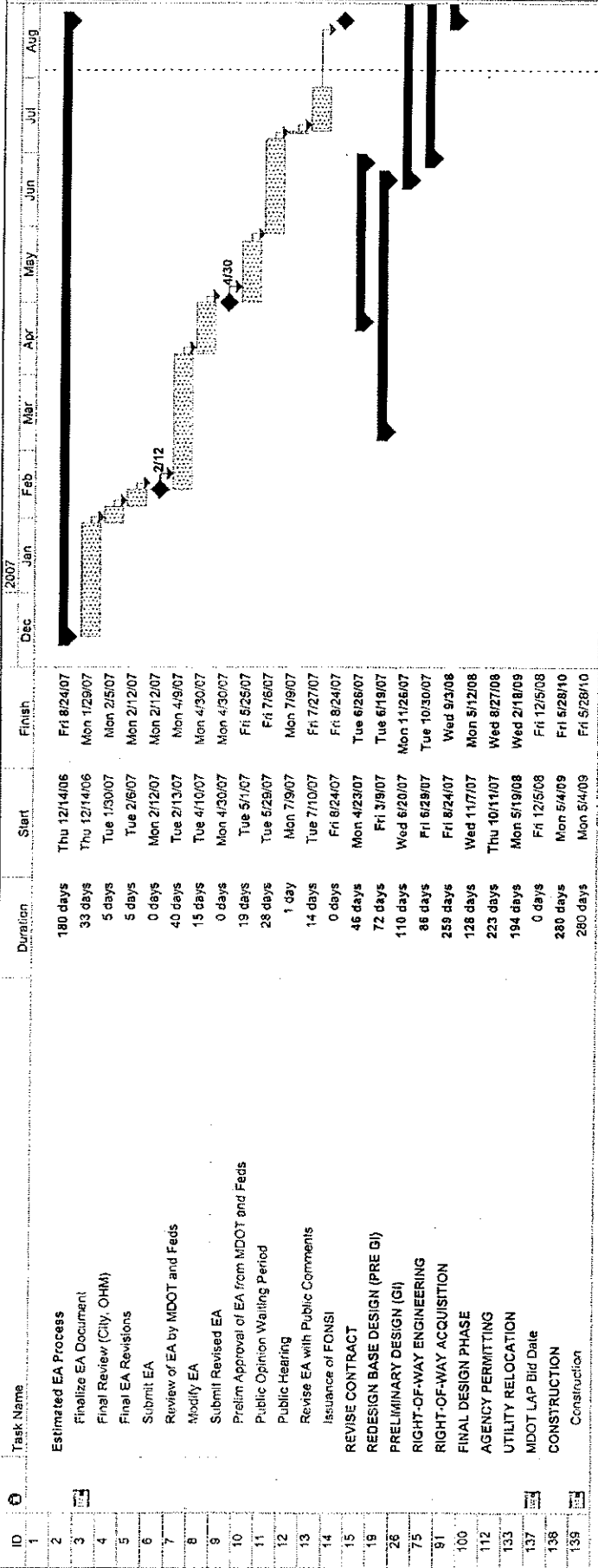
Mansell Associates, Inc.'s original three permanent signals have been deleted, only requiring one stage signal to be designed. ASTI Environmental, Inc.'s original scope of services is being modified by deleting Task 1 - Westland Delineation and Resource Assessment and Task 3 - Endangered Species Permit Application (Task 3).

EXHIBIT A-3

DERIVATION OF COST PROPOSAL							
(PRE-CONSTRUCTION DESIGN SERVICES)							
E-FILE		PROJECT DESCRIPTION:					
E92-023		Hamlin Road - Crooks to Livernois Amendatory Agreement #3					
CONSULTANT NAME:							
ORCHARD, HILTZ & McCLIMENT, INC.							
DIRECT LABOR:							
Classification	Person Hours	x	2007 MDOT Hourly Rates	=	Labor Cost		
Principal	30		\$72.93	\$	2,187.90		
Associate	211		\$40.71	\$	8,589.81		
Consultant Manager	10		\$45.32	\$	453.20		
Professional Engineer IV	51		\$44.27	\$	2,257.77		
Professional Engineer II	413		\$33.08	\$	13,662.04		
Graduate Engineer II	373		\$23.61	\$	8,806.53		
Engineering Technician III	76		\$31.61	\$	2,402.36		
Engineering Technician II	79		\$19.67	\$	1,553.93		
Computer Technician III	20		\$35.48	\$	709.60		
Computer Technician II	0		\$18.51	\$	0.00		
Computer Technician I	0		\$16.49	\$	0.00		
Professional Surveyor	60		\$34.33	\$	2,059.80		
Surveyor II	0		\$21.25	\$	0.00		
Surveyor I	0		\$18.68	\$	0.00		
Surveyor Aide	0		\$13.99	\$	0.00		
Clerical Aide	2		\$9.00	\$	18.00		
	<u>Total Hours</u>		<u>Subtotal</u>	\$	<u>42,700.94</u>		
LABOR ESCALATION (new work anticipated 2008 labor rates)							
\$	42,700.94	/2	x	4	% =	\$	854.02
					Total Escalation	\$	<u>854.02</u>
LABOR ESCALATION (2007 and 2008 labor rates for unused labor hours from 2002)							
Part of Amendment #2							
\$	109,420.24		x	12	% =	\$	13,130.43
\$	109,420.24		x	15	% =	\$	<u>16,413.04</u>
					Total Escalation	\$	<u>29,543.46</u>
OVERHEAD:							
\$	73,098.42	x	165	% =	\$	<u>120,612.40</u>	
					Subtotal	\$	<u>193,710.82</u>
FACILITIES COST OF CAPITAL							
\$	73,098.42	x	4.37	% =	FCC	\$	3,194.40
DIRECT EXPENSES:							
					\$	<u>0.00</u>	
					Total Direct Expenses	\$	<u>0.00</u>
SUBCONSULTANT FEES (Adjusted Fees)							
	Mansell Associates, Inc. (Attachment #1)				\$	-18,323.22	
	MTJ Engineering, LLC (Attachment #2)				\$	13,320.00	
	Applied Science and Technology, Inc. (Attachment #3)				\$	-11,656.77	
	Schleede Hampton Associates (Attachment #4)				\$	12,936.58	
	Northwest Consultants, Inc. (Attachment #5)				\$	<u>16,835.57</u>	
					Total Subconsultant Costs	\$	<u>13,112.16</u>
FIXED FEE:							
\$	193,710.82	x	15	% =	Total Fixed Fee	\$	29,056.62
CONTRACT AMENDMENT TOTAL							
					\$	<u>239,074.00</u>	

EXHIBIT C-3

Hamlin Road Schedule Crooks Road to Livernois 8/05/2007



Project: RevSchedule 07.07
Date: Sat 8/4/07

Task Split

Progress Milestone

Summary Project Summary

External Tasks External Milestone

Deadline

Page 1

ATTACHMENT 1

MANSELL ASSOCIATES, INC.

Engineering Consultants

33608 Grand River . Farmington, MI 48335
(248) 473-7070 . fax (248) 473-8190

April 5, 2007

Mr. Mark Loch, P.E.
Orchard, Hiltz & McCliment, Inc.
34000 Plymouth Road
Livonia, Michigan 48150

RE: Proposal for Design of Traffic Control Devices
Hanlin Road Reconstruction
City of Rochester Hills, Michigan

Dear Mr. Loch:

We are pleased to submit this proposal to provide the traffic signal design services required for the above referenced Project.

SCOPE OF WORK

Mansell Associates, Inc. will prepare construction drawings, technical specifications, engineer's cost estimate and attend any meetings required for the installation of the traffic signals.

Electrical service points will be coordinated with the local utility.

We will also attend and coordinate any field meetings required.

The City of Rochester Hills and Road Commission for Oakland County guidelines and details be used for the Traffic Signal Installations.

MANSELL ASSOCIATES, INC.

Engineering Consultants

33608 Grand River . Farmington, MI 48335
(248) 473-7070 . fax (248) 473-8190

Page 2

Mr. Mark Loch, P.E.

April 5, 2007

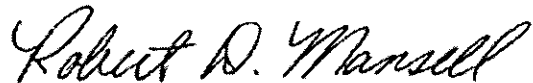
Our fee for these services would be as shown below inclusive of all costs, paid on a lump sum basis upon acceptance of final plans, specifications and estimate.

City of Rochester Hills, Michigan

Hamlin Road and Livernois (Staged)	\$	6,200.00
Hamlin Road and Rochester Industrial Drive (New)	\$	<u>5,200.00</u>
TOTAL	\$	<u>11,400.00</u>

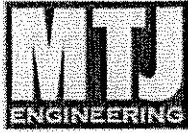
We are prepared to meet all schedules in a professional and timely manner. We are looking forward to working with you on this project. If you have any further questions please contact me

Sincerely,



Robert D. Mansell
President

ATTACHMENT 2



MTJ Engineering, LLC

Achieving traffic & transportation solutions
Through excellence in Modern Roundabout Design

4513 Vernon Blvd #214
Madison, WI 53705
Phone: 608 / 238-5000
Fax: 866 / 846 - 5552
www.mtjengineering.com

January 19, 2007

James Marcinkowski, P.E.
Project Manager
Orchard, Hiltz & McCliment, Inc.
34000 Plymouth Road
Livonia, MI 48150

James:

On behalf of MTJ Engineering I am very pleased to team with Orchard, Hiltz & McCliment, Inc to provide roundabout analysis, design expertise and implementation for the intersection along the Hamlin Road Corridor located in Rochester Hills, MI.

Mark T. Johnson of MTJ Engineering brings the foremost experience available in the U.S. on high capacity modern roundabouts. In addition Mark's experience encompasses all aspects of traffic engineering associated with roadway and intersection projects ensuring quality and reliability of the final design.

Effective communication of information in an easily understand manner is the cornerstone of successful projects. Mark's experience with controversial and challenging projects allows for communication of information in an easily understood manner that has proven very effective for successful project implementation.

Mark's presentations, and training courses are very effective in providing sound information on modern roundabouts (Please see examples of Mark's presentations at MTJ Engineering's web site, <http://mtjengineering.com/outreach>)

Introduction

Roundabouts are not homogenous. Each is designed specifically to address the traffic flows, site constraints, context, and project objectives of the particular intersection or corridor. The designer's task is to develop an appropriate design that balances these competing objectives while adhering to specific roundabout design 'principles' to balance safety, capacity and costs or impacts.

Proposed Scope of Work (Tasks):

- A. Review/Perform capacity analysis using 'Rodel' for both the design year traffic flows (am / pm /off peak hour)
 - Provide sensitivity analysis to determine optimal balance between long range LOS, safety and impacts.

- B. Review/Develop 'preliminary' design to meet project objectives and to ascertain relative costs, impacts and other measures of effectiveness for comparison purposes.

It is important for the preliminary design to conform to 'modern' roundabout design standards so that impacts and traffic operations are accurately evaluated and they include:

- Speed control/consistency (meeting/exceeding FHWA Guidelines)
- Site distance envelopes required that dictates landscaping opportunities and constraints
- Maintain proper entry/exit and overall geometry (to ensure full capacity and safety)
- Provide for desired truck movements (WB-65)
- Design treatments for optimum pedestrian / bicycle safety
- Develop pavement markings Provide Signing recommendations and review (detailed layout by prime civil)

- C. Complete Final horizontal design (this will be survey correct in CAD, however this does not include detailing of survey information for layout or construction details, this is the responsibility of the prime civil engineer or agency)

- D. Provide review and guidance of vertical design, signing and markings, illumination, landscaping.

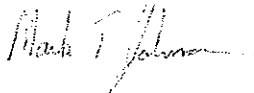
- E. Communications: Provide Brief Summary of Key Design parameters and general communications such as phone and email.

Cost:

Please see attached cost worksheet.

On behalf of MTJ Engineering I want to thank you for this opportunity and I look forward to working on this exciting and challenging project. If you require further information please do not hesitate to contact me.

Sincerely,



Mark T. Johnson, P.E.
Principle Roundabout Design Engineer

Project Fee Estimate for: MTJ Engineering, LLC

Client:	Orchard, Hiltz & McCliment, Inc.	Proj No:	
Project:	Roundabout at Rochester Hills, MI	Date:	1/19/2007
Description:	Roundabout Application and Design	Prepared By:	MTJ
Task No.	Task Description	Estimated Person Hours Required	Totals
		Principle Transportation Engineer (MTJ)	Tech
	A. Capacity Analysis / Sketch Level Design	8	8
	B. Preliminary Horizontal Design	24	24
	C. Final Horizontal Design	24	24
	D. Review and guidance for final plan set	12	12
	E. Written Summary/Communications	6	6
Total Person Hours		74	74
Billing Rate/Hr		\$ 180	
Total Billable for Charged Time		\$ 13,320	\$ 13,320
Fee Proposal for:			
Direct Expenses (at actual): @ \$0.405 per mi Trip Cost Estimate Total Project Fees \$ 13,320			
MTJ Engineering, LLC 4514 Vernon Blvd Suite # 203 Madison, WI 53704			

ATTACHMENT 3

SCOPE OF WORK

ASTI ENVIRONMENTAL INC.

HAMLIN ROAD IMPROVEMENTS; CROOKS TO LIVERNOIS ROADS

February 5, 2007

Understanding of the Project

ASTI Environmental Inc. (ASTI) has reviewed the work needed for environmental clearance for the Hamlin Road Improvements Project from Crooks to Livernois Roads. These improvements entail two concepts for widening the road: a five-lane roadway and a boulevard.

The project corridor contains regulated wetlands which will be impacted by the project. Although impacts are expected to be reduced to those which are unavoidable, a wetland permit under Part 303, Wetland Protection will be necessary.

In addition, because the project contains a culvert which may require upgrading or replacement, ASTI expects that review under Part 301, Inland Lakes and Streams, will be triggered. While this part of the statute will be addressed along with Part 303 in one, combined permit application, it is possible that hydraulic analyses will be required as part of the application for the project.

In summary this project contains two different types of issues:

1. Natural resources to be impacted and required permits.
2. Making permitting coincide with schedule for engineering submittals and construction.

Natural Resource Issues

ASTI's preliminary assessment indicates the project may cause up to one acre of unavoidable wetland loss. Because this project will be funded with federal funds, it is certain that wetland mitigation planning will be part of the work to secure permits. In this case, wetland mitigation will include site selection at an off-site location. This, in turn will

require some topographic survey and soil borings/monitor wells. Finally, preliminary design and specifications are included in the Scope of Work.

Scheduling Issues

ASTI has identified a potential scheduling issue: Because the time for processing Michigan DEQ permits can be lengthy, it is important to manage the permitting phase of the project so that engineering construction drawings can reflect relevant conditions and stipulations of the permits.

Therefore, in order to complete the project, ASTI and OHM will need to identify preliminary wetland impacts before construction plans are finalized. Finally, hydraulic analyses, if required, must be started early so that permits are in place as soon as possible. ASTI's strategy for obtaining permits in a timely fashion is described below.

Scope of Work

In view of this understanding of the project, ASTI proposes the following Scope of Work. This plan of work is divided into tasks to correspond to stages anticipated in the engineering work.

Task 1: Combined Stream Crossing and Wetland (Parts 301/303) Permit Application

ASTI will develop a complete application to Michigan DEQ for a single Part 301/Part 303 permit. ASTI will be task leader in this phase of work. Documentation required by the statutes will be prepared; ASTI will rely on OHM for preliminary plans and profiles and some typical sections.

For the stream crossing permit (under Part 301), hydraulic analyses may be needed. This suggests that the hydraulic analyses task, to be completed by OHM, needs to be completed in the early stages of the project. A report of findings and design criteria will be required for issuance of the permit.

To expedite the permitting process, ASTI will provide drawings containing conceptual and typical details and other data sufficient to establish the application as administratively and technically complete. This work will be completed in collaboration with OHM engineers to ensure that design/engineering options to be addressed later by the engineers are not at variance with the application. In other words, the application data and drawings will be as conceptual as possible yet still meet the information needs of Michigan DEQ. ASTI has followed this strategy in other projects to obtain permits as quickly as possible in the project design process.

ASTI will, as part of this task, supply the necessary discussion of "feasible and prudent alternatives" as required by MCL 324 Part 303, Wetland Protection, and address all DEQ review criteria in both the Rules and guidance.

Task 2: Optional - Wetland Mitigation Plan

ASTI will develop a wetland mitigation plan in sufficient detail to obtain Michigan DEQ approval. ASTI will assist OHM and City representatives in selecting a site capable of providing wetland mitigation of the proper type. Appropriate wetland mitigation will replace the wetland functions of the wetland impacted by the project.

ASTI will conduct test borings sufficient to characterize soil hydrology and soil quality at the selected mitigation site. Approximately six borings no more than 30 ft deep are expected to be necessary. These will be completed at monitor wells. Insofar as possible, static water levels will be measured for a period of six months, as recommended by DEQ. This information will be the basis of design of the basin of the mitigation wetland.

A limited topographic survey will be conducted by OHM if the site lacks one. The survey will provide information and data for estimating earthwork and quantities.

From these studies a conceptual mitigation plan will be designed and presented to OHM and the City for review and discussion. Upon acceptance by the City, ASTI will present the plan to Michigan DEQ for review and discussion.

Upon acceptance of the mitigation plan ASTI will finalize drawings and complete specifications in a format as specified by OHM. In addition, ASTI will provide OHM with technical services to support the preparation of a bid package for the project.

ASTI will assist the City in providing a conservation easement if one is stipulated as a condition of the wetland permit.

Other Services Offered by ASTI

If wetland mitigation is required, two subsequent phases of the project need to be addressed by a Wetland Ecologist at ASTI: (1) construction, inspection and supervision of the wetland mitigation/stream improvements work, and (2) annual monitoring, if such is required by Michigan DEQ. The monitoring component is a significant opportunity to minimize total project cost because, under the terms of the wetland permit, the City will be held responsible for providing 'corrective measures' that may be necessary to make the mitigation site function properly as a wetland.

Frequently, corrective measures require no more than manually re-seeding with materials available from specialty plant nurseries. Many times, these small-scale corrections can be accomplished in conjunction with regular monitoring work. ASTI's success elsewhere in this stage of mitigation projects makes it a valuable addition to the project team.

Cost Estimate

ASTI's cost estimate is based on information contained in the sections above. Costs are presented for Task 1 (Combine Stream Crossing and Wetland (Parts 301/303) Permit Application) and Task 2 (Optional - Wetland Mitigation Plan) Costs are not

presented for *Other Services Offered by ASTI* (described above) because these tasks might best be accomplished under separate contracting arrangements.

Task 1 is estimated not to exceed \$12,018.00. Activities within this task - DEQ coordination and permit application—are essential to the project. The itemization of the cost estimate in labor and direct expenses is in Table 1. The basis for the level of effort is the relative complexity of the project corridor and the issues to be addressed in Michigan statutes.

Task 2 is optional but certainly necessary and is expected to not exceed \$25,111.00. This estimate contains substantial allowance for soil borings/monitor wells (\$6,000.00) and for topographic survey (\$3,000.00) at the selected mitigation site. Since the mitigation site has not yet been identified, the number and depth of borings is also unknown, and the need for additional topographic survey is uncertain. However, these elements have been included in the estimate.

Actual costs for hydrogeology and topographic data, however, may be considerably less due to a number of factors, e.g., actual depth to groundwater, type of soils, hydrologic regime at the mitigation site, and prior topographic survey (if one exists).

Since the mitigation site has not yet been identified, and effort will be required to identify cost-effective locations, the budget for this task has been assembled conservatively to anticipate these unknowns. ASTI concludes that early coordination of project elements can minimize costs to the City of Rochester Hills in this part of the work.

In summary, Task 1 is not expected not to exceed \$12,018.00. Optional Task 2 is expected not to exceed \$25,111.00.

ATTACHMENT 4

**SCHLEEDE
HAMPTON
ASSOCIATES** INC
CONSULTING ENGINEERS

January 26, 2007

Mr. Paul Shumejko, PE, PTOE
Traffic Engineer
Department of Public Service
City of Rochester Hills
1000 Rochester Hills Drive
Rochester Hills, Michigan 48309

Regarding: A Proposal to Perform Soil Test Borings and Pavement Cores
Hamlin Road Reconstruction - Crooks Road to Livernois
City of Rochester Hills, Michigan
SHA Proposal Number 07111

Dear Mr. Shumejko:

Schleede-Hampton Associates, Inc. (SHA) proposes to perform the soil test borings and related work for the proposed Hamlin Road - Crooks Road to Livernois project in Rochester Hills. Work will be performed for Department of Public Service under the existing blanket professional services contract. SHA will function as a member of the project design team, and work at the direction of OHM. This submittal includes a proposed scope of work and budget estimate for the project.

Scope of Work

We understand that the project consists of reconstruction of the existing two lane route into a four lane boulevard with a roundabout at the Livernois Road / Hamlin Road intersection. It is anticipated that ROW expansion will require obtaining property on both the north south sides of the route. Grade transitions with the new ROW may require retaining walls along portions of the route.

Based upon the project description, we have developed the following scope of work. We propose a soil boring program that includes the following elements:

- 6 soil borings and pavement cores along the existing route at the proposed crossover locations. Each of the borings will be drilled to a depth of 5 feet below the existing pavement surface. Pavement core samples will be collected at each location to establish the existing pavement section.
- 2 soil borings and 4 pavement cores along the existing route at the proposed roundabout location. Each of the borings will be drilled to a depth of 5 feet below the existing pavement surface. Pavement core samples will be collected at each location to

2254 COLE STREET
BIRMINGHAM, MICHIGAN 48009
248-540-3044 • FAX: 248-540-3282

establish the existing pavement section. At this time, soil borings are not anticipated along the Livernois Road portion of the route due to RCOC permit requirements.

- 18 borings beyond the edge of the existing westbound and eastbound pavement in the lane expansion, storm sewer and retaining wall areas. We anticipate that borings will be drilled to depths of 5 feet to 15 feet below grade. An additional 10 pavement core samples will be obtained from existing approaches, acceleration - deceleration lanes, and turn lanes along the route.
- A Phase I 1 environmental site assessment, in general accordance with ASTM D1527, will be performed for the approximately 75 parcels to be obtained in the ROW acquisition phase of the project.

SHA will locate the soil borings in the field prior to the drilling and coring operations. An RCOC permit, in accordance with their requirements, will be obtained prior to the commencement of the field work on Livernois Road. The schedule and costs of the RCOC permit are outside of the control of SHA.

The boring and core sample locations will be tied into project stationing once that information is available. The soil borings will each be drilled using a truck-mounted drill rig and continuous flight augers. Split barrel soil samples will be obtained at 2-1/2 foot intervals at each boring location to a depth of 10 feet and at 5 foot intervals below that depth. Soil samples will be collected and returned to SHA's Birmingham, Michigan laboratory for classification and basic soil index tests. Test holes will be backfilled with soil cuttings at completion and the pavement patched with a compacted asphalt emulsion / aggregate mixture.

Pavement cores will be performed using a 6 inch diameter thin walled diamond core barrel, and the cores will be transported to the SHA's Birmingham, Michigan laboratory for inspection, measurements and photographs. Cored holes will be patched using a compacted asphalt emulsion / aggregate mixture.

Traffic control for the borings and cores will consist of a moving lane closure and shoulder closure in accordance with MMUTCD and RCOC permit requirements. We anticipate a trailer mounted arrow board, advance warning signs, channelizing devices, and traffic regulators will be required for portions of the work in these areas.

The results of the work, including boring logs and test results, will be presented in an engineering report. This report will include a discussion of the existing pavement section for removal, recommendations for the design of retaining walls, potential for subgrade undercut or improvement as necessary, underground construction, the significance of subgrade edge drains, recommended pavement sections, results of the Phase I site assessments, and other important aspects of design and construction.

Budget Estimate

Fees for SHA's services will be based upon the unit rates in the following table. The budget has been developed based upon the scope of work outlined herein.

<u>Item</u>	<u>Quantity</u>	<u>Unit Rate</u>	<u>Extension</u>
<i>Estimated RCOC Permit Application Costs</i>			
Application Preparation, Staff Engineer, per hour	1	\$74.49	\$74.49
Application Fee	1	\$50.00	\$50.00
Construction Bond	1	\$125.00	\$125.00
Permit Fee	1	\$110.00	\$110.00
RCOC Inspection Fee	1	\$600.00	\$600.00
Total Estimated RCOC Permit Fee			\$959.49
<i>Field Services</i>			
Layout and Utility Clearance Field Engineer, per hour	8	\$74.49	\$595.92
Mobilization, lump sum	2	\$300.00	\$600.00
Pavement Cores, including inspection, Measurement and photographs, each	20	\$85.00	\$1,700.00
Soil Drilling and Sampling, per foot	220	\$16.00	\$3,520.00
Field Engineer for Logging and Overall Supervision, per hour	40	\$74.49	\$2,979.60
MMUTCD Traffic control, per day	4	\$1,250.00	\$5,000.00
<i>Laboratory Services</i>			
Visual Classification & Basic Tests on Split Barrel Soil Samples, each	88	\$10.00	\$880.00
Gradation Tests on Subgrade And Aggregate Samples, Each	10	\$50.00	\$500.00
<i>Engineering Services</i>			
Data analysis, report preparation, project meetings, as required			
Staff Engineer, per hour	8	\$74.49	\$494.40
Project Engineer, per hour	8	\$105.53	\$700.40
Project Manager, per hour	6	\$124.15	\$618.00
Estimated Project Cost (RCOC Permit Costs Excluded)			\$17,960.58
Phase 1 Environmental Site Assessment – approximately 75 parcels			
Historical Records Acquisition, lump sum	1	\$1,000.00	\$1,000.00
Project Engineer, per hour	60	\$105.53	\$6,331.80
Estimated Project Cost – Phase I Site Assessment			\$ 7,331.80
Total Estimated Project Cost (RCOC Permit Costs Excluded)			\$25,292.38

Closure

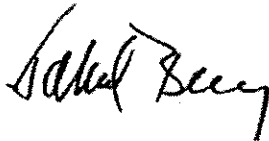
SHA is available to begin work on the project in approximately one week following authorization to proceed.

SHA appreciates this opportunity to offer professional services for this project. If you have any questions regarding this proposal, please contact us at your convenience.

Very Truly Yours,
Schleede-Hampton Associates, Inc.

A handwritten signature in black ink that reads "William West". The signature is written in a cursive style with a large, sweeping initial 'W'.

William J. West, PE
Project Engineer

A handwritten signature in black ink that reads "James Berry". The signature is written in a cursive style with a large, sweeping initial 'J'.

James Berry, PE
Project Manager

DERIVATION OF COST PROPOSAL**SUB-CONSULTANT
Northwest Consultants, Inc.****DIRECT LABOR**

<u>Classification</u>	<u>Person Hours</u>	x	<u>Hourly Rate</u>	=	<u>Labor Costs</u>
QA/QC	28		\$50.48		\$1,413.44
Project Manager	122		\$43.75		\$5,337.50
Project Engineer	252		\$34.13		\$8,600.76
Staff Engineer	324		\$24.04		\$7,788.96
	Total Hours:		726		
					Labor: \$23,140.66
					*5% Labor Escalation: \$347.11
					Total Labor: \$23,487.77

OVERHEAD

\$23,487.77 x 156.16% = Total Overhead: \$36,678.50

FACILITIES COST OF CAPITAL

(Total Labor) x _____% = Total F.C.C.: \$0.00

DIRECT EXPENSES

(Listed by Item at Actual Cost to you - NO MARKUP)

None

Total Direct Costs: \$0.00

\$60,166.27 x 15.0% = Total Fixed Fee: \$9,024.94

TOTAL COSTS: \$69,191.21

*: 5% labor escalation rate is applied to work anticipated in 2008. It's estimated about 30% of total labor.

Prepared by:

Jie Luo, P.E.
Vice President
Northwest Consultants, Inc.
44978 Ford Road, Suite A
Canton, Michigan 48187

PROPOSED PERSON HOURS

NAME OF PRIME CONSULTANT Northwest Consultants, Inc.	PROJECT DESCRIPTION Hamlin Road, City of Rochester Hills
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DESCRIPTIONS OF JOB CLASSIFICATIONS

TASK NUMBER	PPMS TASK DESCRIPTION	FIRM	QA/QC	PROJECT MANAGER	PROJECT ENGINEER	STAFF ENGINEER	TOTAL BY TASK
1	Prepare Base Plans	NCI	8	32	56	72	168
1a	Storm Sewer Design Drainage Computation	NCI		4	8	16	28
1b	Storm Sewer Plan Schematics	NCI		8	16	40	64
1c	Storm Sewer Design Drainage Area Maps	NCI			4	16	20
1d	Meetings	NCI	4	4	12		20
1e	Review, Management & Coordination	NCI	4	16	16		36
2	Prepare Preliminary Plans	NCI	12	48	128	180	368
2a	Storm Sewer Design Drainage Computation	NCI		4	8	8	20
2b	Storm Sewer Design Plans and Profiles	NCI		8	40	120	168
2c	Storm Sewer Design Drainage Area Maps	NCI			8	12	20
2d	Retaining Wall Design	NCI		8	40	40	88
2e	Meetings	NCI		12	16		28
2f	Review, Management & Coordination	NCI	12	16	16		44
3	Prepare Final Plans	NCI	8	42	68	72	190
3a	Storm Sewer Design Drainage Computation	NCI		2	4	8	14
3b	Storm Sewer Design Plans and Profiles	NCI		4	12	24	40
3c	Storm Sewer Design Drainage Area Maps	NCI			4	8	12
3d	Retaining Wall Design	NCI		8	16	32	56
3e	Meetings	NCI		12	16		28
3f	Review, Management & Coordination	NCI	8	16	16		40
TOTAL HOURS BY CLASSIFICATION			28	122	252	324	726

SUMMARY OF HOURS BY FIRMS AND BY JOB CLASSIFICATION

FIRM	TOTAL	QA/QC	PROJECT MANAGER	PROJECT ENGINEER	STAFF ENGINEER	PERCENT
Northwest Consultants, Inc.	726	28	122	252	324	100%
TOTAL HOURS BY FIRM	726	28	122	252	324	