



DEPARTMENT OF PUBLIC WORKS
 3505 N. DRIES LANE
 PEORIA IL 61604-1210
 (309) 494-8800

CONSULTANT: Hanson
 WO NO.: 16-05 Hanson
 PROJECT: Northmoor Road Design Eng
 MASTER AGREEMENT DATE: 04-12-2016

**ENGINEERING WORK ORDER
 ASSIGNMENT AGREEMENT**

MASTER AGREEMENT APPROVAL DATE: 04-12-2016	WORK ORDER NO.: 16-05 Hanson
DATE OF ASSIGNMENT: 01-09-2017	
CONSULTANT: Hanson Professional Services, Inc.	CITY PROJECT NO. M14302
Consultant's Job No.: 13L0171	

PROJECT NAME AND LOCATION:
Northmoor Road (Allen Road to University Street) additional design engineering

DESCRIPTION OF WORK INVOLVED:
Design engineering for the Northmoor Road project

ESTIMATED START DATE: 01/09/2017	ESTIMATED COMPLETION DATE: 05-30-17
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NOT TO EXCEED TOTAL COST OF THIS WORK ORDER =	\$30,000
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SUBMITTED: Hanson Professional Services Inc.	_____
CONSULTANT	
<i>Jucinda A. Loos</i> Vice President	03/20/2017
Consultant's Signature and Title	DATE
AUTHORIZED: _____	_____
CITY OF PEORIA, CITY ENGINEER	DATE

See attached Master Service Agreement Work Order Budget Summary

Hanson Master Service Agreement Work Order Budget Summary

Date approved by Council: 4/12/2016
 Original Contract Amount (not to exceed): \$1,500,000

WO#	Date	Description	Initial Estimate	Final Cost	Status	City PM
16-01	10/4/16	Sheridan Bridge	\$50,000		In Construction	AMK
16-02	10/4/16	Sheridan Road – South	\$375,000		In Progress	AMK
16-03	11/9/16	Sheridan Road – North	\$37,000		In Construction	AMK
16-04	12/22/16	Northmoor Road	\$120,000		In Progress	JG
16-05	03/20/17	Northmoor Road	\$30,000		In Progress	JG
		Total Cost of Work Orders:	\$612,000			
		Remaining Contract Amount:	\$888,000			

Municipality City of Peoria	L O C A L A G E N C Y	Preliminary Engineering Services Agreement For Motor Fuel Tax Funds Supplement No. 1	C O N S U L T A N T	Name Hanson Professional Services
Township Peoria				Address 7625 N. University St.. Suite 200
County Peoria				City Peoria
Section 05-00302-00-PV				State IL

THIS AGREEMENT is made and entered into this _____ day of _____, 2017 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Motor Fuel Tax Funds, allotted to the LA by the State of Illinois under the general supervision of the State Department of Transportation, hereinafter called the "DEPARTMENT", will be used entirely or in part to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

Section Description

Name Northmoor Road

Route FAU 6647 Length 0.97 Mi. 5,115 FT (Structure No. 072-8001)

Termini Allen Road (FAU 6584) to approximately 400 feet west of University Street

Description:
Full-depth pavement removal/replacement; curb, sidewalk, and retaining wall reconstruction; roadway width changing from ex. 4-lanes to proposed 3-lanes for length of project. Two intersections to be reconstructed. (See TIP Sheet)

Agreement Provisions

The Engineer Agrees,

1. To perform or be responsible for the performance of the following engineering services for the LA, in connection with the proposed improvements herein before described, and checked below:
 - a. Make such detailed surveys as are necessary for the preparation of detailed roadway plans
 - b. Make stream and flood plain hydraulic surveys and gather high water data, and flood histories for the preparation of detailed bridge plans.
 - c. Make or cause to be made such soil surveys or subsurface investigations including borings and soil profiles and analyses thereof as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations are to be made in accordance with the current requirements of the DEPARTMENT.
 - d. Make or cause to be made such traffic studies and counts and special intersection studies as may be required to furnish sufficient data for the design of the proposed improvement.
 - e. Prepare Army Corps of Engineers Permit, Department of Natural Resources-Office of Water Resources Permit, Bridge waterway sketch, and/or Channel Change sketch, Utility plan and locations, and Railroad Crossing work agreements.
 - f. Prepare Preliminary Bridge design and Hydraulic Report, (including economic analysis of bridge or culvert types) and high water effects on roadway overflows and bridge approaches.
 - g. Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with five (5) copies of the plans, special provisions, proposals and estimates. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at his actual cost for reproduction.
 - h. Furnish the LA with survey and drafts in quadruplicate of all necessary right-of-way dedications, construction easement and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.

Note: Four copies to be submitted to the Regional Engineer

- i. Assist the LA in the tabulation and interpretation of the contractors' proposals
 - j. Prepare the necessary environmental documents in accordance with the procedures adopted by the DEPARTMENT's Bureau of Local Roads & Streets.
 - k. Prepare the Project Development Report when required by the DEPARTMENT.
 - l. See Exhibit A.
2. That all reports, plans, plats and special provisions to be furnished by the ENGINEER pursuant to the AGREEMENT, will be in accordance with current standard specifications and policies of the DEPARTMENT. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA and the DEPARTMENT.
 3. To attend conferences at any reasonable time when requested to do so by representatives of the LA or the Department.
 4. In the event plans or surveys are found to be in error during construction of the SECTION and revisions of the plans or survey corrections are necessary, the ENGINEER agrees that he will perform such work without expense to the LA, even though final payment has been received by him. He shall give immediate attention to these changes so there will be a minimum delay to the Contractor.
 5. That basic survey notes and sketches, charts, computations and other data prepared or obtained by the Engineer pursuant to this AGREEMENT will be made available, upon request, to the LA or the DEPARTMENT without cost and without restriction or limitations as to their use.
 6. That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by him and will show his professional seal where such is required by law.

The LA Agrees,

1. To pay the ENGINEER as compensation for all services performed **on a time and expense basis. The upper limit of compensation for these services shall not exceed \$150,000 without authorization from the LA. The attached Cost Estimate of Consultant Services (Exhibit B) provides an estimate of the work tasks and the fee calculation based on the attached Scope of Services (Exhibit A). This estimate of work and effort is the basis of the upper limit of compensation.** ~~as stipulated in paragraphs 1a, 1g, 1i, 2, 3, 5 and 6 in accordance with one of the following methods indicated by a check mark:~~

~~a. A sum of money equal to _____ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.~~

~~b. A sum of money equal to the percent of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:~~

~~Schedule for Percentages Based on Awarded Contract Cost~~

Awarded Cost		Percentage Fees	
Under	\$50,000	=====	(see note)
		=====	%
		=====	%
		=====	%
		=====	%
		=====	%

~~Note: Not necessarily a percentage. Could use per diem, cost plus or lump sum.~~

~~2. To pay for services stipulated in paragraphs 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k of the ENGINEER AGREES at actual cost of performing such work plus _____ percent to cover profit, overhead and readiness to serve "actual cost" being defined~~

~~as material cost plus payrolls, insurance, social security and retirement deductions. Traveling and other out of pocket expenses will be reimbursed to the ENGINEER at his actual cost. Subject to the approval of the LA, the ENGINEER may subcontract all or part of the services provided under the paragraph 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus a five (5) percent service charge.~~

~~"Cost to Engineer" to be verified by furnishing the LA and the DEPARTMENT copies of invoices from the party doing the work. The classifications of the employees used in the work should be consistent with the employee classifications for the services performed. If the personnel of the firm, including the Principal Engineer, perform routine services that should normally be performed by lesser salaried personnel, the wage rate billed for such services shall be commensurate with the work performed.~~

2. That payments due the ENGINEER for services rendered in accordance with this AGREEMENT will be made **without retainage upon receipt of monthly invoices from the ENGINEER. Such invoices shall be for partially completed work less all previous partial payments paid to the ENGINEER. Payments shall be made as soon as practicable after receipt of each invoice.** ~~the services have been performed in accordance with the following schedule:~~

~~a. Upon completion of detailed plans, special provisions, proposals and estimate of cost being the work required by paragraphs 1a through 1g under THE ENGINEER AGREES to the satisfaction of the LA and their approval by the DEPARTMENT, 90 percent of the total fee due under this AGREEMENT based on the approved estimate of cost.~~

~~b. Upon award of the contract for the improvement by the LA and its approval by the DEPARTMENT, 100 percent of the total fee due under the AGREEMENT based on the awarded contract cost, less any amounts paid under "a" above.~~

~~By Mutual agreement, partial payments, not to exceed 90 percent of the amount earned, may be made from time to time as the work progresses.~~

3. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in paragraphs 1a, through 1h and prior to the completion of such services, the LA shall reimburse the ENGINEER for ~~his actual costs plus _____ percent~~ the time and expense incurred up to the time the ENGINEER is notified in writing of such abandonment. ~~"actual cost" being defined as in paragraph 2 of THE LA AGREES.~~

4. That, should the LA require changes in any of the detailed plans, specifications or estimates except for those required pursuant to paragraph 4 of THE ENGINEER AGREES, after they have been approved by the DEPARTMENT, the LA will pay the ENGINEER for such changes on **a time and expense basis as calculated in Exhibit B.** ~~the basis of actual cost plus _____ percent to cover profit, overhead and readiness to serve "actual cost" being defined as in paragraph 2 of THE LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of his responsibility to prepare a complete and adequate set of plans and specifications.~~

It is Mutually Agreed,

- ~~1. That any difference between the ENGINEER and the LA concerning their interpretation of the provisions of this Agreement shall be referred to a committee of disinterested parties consisting of one member appointed by the ENGINEER, one member appointed by the LA and a third member appointed by the two other members for disposition and that the committee's decision shall be final.~~
1. This AGREEMENT may be terminated by the LA upon giving notice in writing to the ENGINEER at his last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LA all surveys, permits, agreements, preliminary bridge design & hydraulic report, drawings, specifications, partial and completed estimates and data, if any from traffic studies and soil survey and subsurface investigations with the understanding that all such material becomes the property of the LA. The ENGINEER shall be paid for any services completed and any services partially completed in accordance with ~~Section 4 of~~ THE LA AGREES.
- ~~3. That if the contract for construction has not been awarded one year after the acceptance of the plans by the LA and their approval by the DEPARTMENT, the LA will pay the ENGINEER the balance of the engineering fee due to make 100 percent of the total fees due under this AGREEMENT, based on the estimate of cost as prepared by the ENGINEER and approved by the LA and the DEPARTMENT.~~
2. That the ENGINEER warrants that he/she has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this contract, and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the ENGINEER, any fee, commission, percentage, brokerage fee, gifts or any other consideration, contingent upon or resulting from the award or making of this contract. For Breach or violation of this warranty the LA shall have the right to annul this contract without liability.
3. That this Work Order (WO 16-04) is subject to all terms and conditions of the Standard Agreement for Professional Services between the CITY and ENGINEER dated April 12, 2016.

IN WITNESS WHEREOF, the parties have caused the AGREEMENT to be executed in quadruplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

City of Peoria _____ of the
(Municipality/Township/County)

ATTEST:

State of Illinois, acting by and through its

By _____

City Council _____

Clerk

By _____

(Seal)

Title _____

Reviewed and Approved

REVIEWED AND APPROVED:

Corporation Counsel

Interim Public Works Director

Executed by the ENGINEER:

Hanson Professional Services Inc. _____

7625 N. University St., Suite 200 _____

ATTEST:

Peoria, IL 61614 _____

By _____

By _____

Title Associate _____

Title Vice President _____

Approved

Date
Department of Transportation

Regional Engineer

WORK ORDER NO.: 16-04&05 Hanson
EXHIBIT A: SCOPE OF SERVICES
NORTHMOOR ROAD: ALLEN ROAD TO UNIVERSITY STREET
SECTION NO. 05-00302-00-PV
SUPPLEMENT NO. 1

Hanson Professional Services Inc. shall prepare project development studies and design plans, specifications and estimates for the reconstruction of Northmoor Road from Allen Rd. to University St., in the City of Peoria for the City of Peoria (CITY). The work will consist of removing the existing two lane roadway section and adjacent sidewalk and constructing a new 3-lane concrete roadway section with curb and gutter, sidewalks along the north side of the road and a multiuse path along the south side, roadway profile and alignment adjustment, retaining walls, storm sewers, green infrastructure to help reduce storm water runoffs as appropriate and feasible, traffic signals at the Allen Road and Rosemead Drive intersections, roadway lighting, and box culvert and stream repairs.

The Project shall be designed in accordance with Motor Fuel Tax (MFT) standards and Specifications of the Illinois Department of Transportation, except as may be modified or approved by the City of Peoria Public Works Department.

Plans will be prepared in English units (feet) using Microstation software in accordance with CAD conventions of the Illinois Department of Transportation (IDOT) in IL State Plane Coordinates (West Zone).

SERVICES: The Scope of Services will be limited to the following:

- A. Study Surveying and Mapping (Quigg Engineering)
 - 1. Pickup survey for Expo Gardens development and new roadway
 - 2. Utility Survey – stake out potential conflict points and survey elevations marked by utility companies
 - 3. Update base map with additional survey.

- B. Coordination with Expo and Peoria Public Schools (PPS) for new public roadway
 - 1. Monthly meetings to discuss new combined entrance across from Rosemead
 - i. Prepare Exhibits for meetings
 - ii. Coordination with City
 - iii. Follow-up information requested at meetings
 - 2. Design options for new roadway alignment
 - i. Create Existing Horizontal/Vertical Alignments
 - ii. Identify Horizontal/Vertical Alignment Controls
 - iii. Refine Horizontal/Vertical Alignments
 - iv. Corridor Modeling
 - v. Intersection Model
 - vi. Sidewalk Ramp Modeling
 - vii. Drainage Design
 - viii. Lighting Design
 - ix. Revise design based on comments from Expo & PPS
 - 3. Create Subdivision Plat for Expo
 - 4. Attend Zoning hearing
 - i. Prepare exhibits for the City
 - 5. Prepare Prefinal and Final Plans for new roadway

- i. Quantity calculations, schedules and summary sheet
 - ii. Typical Sections
 - iii. ROW plans
 - iv. Removals
 - v. Plan & Profile Sheets
 - vi. Drainage plans
 - vii. Erosion Control Plans
 - viii. Intersection Details
 - ix. Sidewalk Ramp Details
 - x. Pavement Marking Plans
 - xi. Grading Details
 - xii. Cross Sections
 - 6. Sanitary Sewer Extension
 - i. Coordination with GPSD
 - ii. Design layout of sewer extension
 - iii. Prepare Plan Sheets, Details and Specifications
 - iv. Prepare IEPA permit
 - 7. Water main extension for future connection
 - i. Coordination with Illinois American Water Company
 - ii. Design layout of extension
 - iii. Prepare Plan Sheets, details and Specifications
 - iv. Prepare IEPA Permit
 - 8. Bi-Monthly Coordination Meeting
 - i. Prepare packet for meeting
 - ii. Print Exhibits
 - iii. Attend Meeting
 - iv. Prepare Meeting Minutes
- C. Box Culvert Repair
- 1. Prepare BCR Report for approval by IDOT
 - 2. Prepare PDBHR form for approval by IDOT
 - 3. Design modifications to culvert face to provide better inlet hydraulics
 - 4. Prepare plan sheets, quantities and specifications
- D. Hydraulics for Culvert Revisions
- 1. Hydraulic modeling: prepare several iterations to determine what is feasible for permitting to repair the culvert to avoid floodplain impacts.
 - 2. Additional coordination with IDNR to review options for inlet hydraulics
 - 3. Prepare submittal for review by IDOT in addition to IDNR
- E. Retaining Walls (Milhouse Engineering)
- 1. Additional plan sheets for soldier pile wall
 - 2. Additional cost estimates to compare wall types
 - 3. Additional wall type studies for Wall 3
 - 4. Look at changing cast in-place wall to large modular block retaining wall
- F. Traffic Signal Plans
- 1. IDS @ Northmoor & Rosemead
 - i. Coordination with IDOT on warrant analysis
 - ii. Prepare traffic memo on warrant analysis
 - iii. Reprint IDS for approval

2. Remove RRFB from plans and add Wig-Wag for pedestrian crossings
 - i. Update design
 - ii. Update plan sheets
 - iii. Update specifications
 - iv. Update quantities and estimates
3. Add Wig-Wag early warning system on Allen Road
 - i. Add design to intersection plans
 - ii. Calculate quantities
 - iii. Update estimate
4. Coordination with lighting plans to place wires in lighting conduit
5. Meeting with IDOT & City

G. Lighting Plans

1. Add pedestrian lighting from end of project to University Street
2. Update plan sheets
3. Update quantities
4. Coordination with traffic signals to add signals to lighting controller.

H. Roadway design & plans

1. Review additional information received from utilities
 - i. AT&T
 - ii. Windstream
 - iii. Ameren gas & electric
2. Update utility drawing with new information
3. Update cross sections with new utility information
4. Revise drainage plans to avoid utility conflicts
5. Plot full size plans for submittal

I. Public Involvement

1. Create traffic simulation video for public meeting

J. Additional Coordination for Land Acquisition

K. Project Coordination/Management

1. Additional utility coordination to avoid conflicts
 - i. Meet with companies individually to discuss conflicts
 - ii. Coordinate with Ameren to locate utilities along Expo and services to Expo
 - iii. Coordinate with Ameren on location for new services to Expo
 - iv. Coordination with surveyor
2. Additional Coordination with City for design & MOT
3. Bi-Monthly Coordination Meeting
 - i. Prepare packet for meeting
 - ii. Print Exhibits
 - iii. Attend Meeting
 - iv. Prepare Meeting Minutes

L. The following items are not included in the scope of work but could be provided as an addendum to the contract:

1. Construction observation activities
2. Attendance at pre-bid or pre-construction meetings

3. Shop drawing review
4. Sewer televising
5. Section 106 statement or mitigation for cultural resource impacts
6. Section 4(f) evaluation
7. NEPA documentation, i.e., EA, EIS
8. Mitigation planning and design for impacts to threatened and endangered species, wetlands/waters, or historic/archaeological resources.
9. Preparation of and coordination for an individual Section 404 permit and Section 401 Water Quality Certification.
10. Utility relocation plans
11. Necessary permitting and/or mitigation for floodplain impacts.
12. Preparation of any NEPA documentation including Environmental Assessment (EA) or Environmental Impact Statement (EIS).
13. Implementation of traffic signal timings after construction.
14. IEPA Permit fees are not included. Permit fees will be paid directly by the client.

WORK ORDER NO.: 16-04&05 Hanson
EXHIBIT A: SCOPE OF SERVICES
NORTHMOOR ROAD: ALLEN ROAD TO UNIVERSITY STREET
SECTION NO. 05-00302-00-PV
SUPPLEMENT NO. 1

Charges for additional professional services performed by our firm for all services listed in the Scope of Services will be made on the basis of hourly rates using the multiplier of 3.0. The compensation for these services shall not exceed \$150,000 without authorization from the LA. Billings will be issued at least monthly, and will be based upon total services completed and expenses incurred at the time of billing.

Task	Fee
Additional Survey	\$12,000
Expo/PPS new Public Roadway	\$80,000
Culvert Repair	\$ 8,000
Hydraulics	\$ 8,000
Retaining Walls	\$ 8,000
Traffic Signals	\$ 5,845
Lighting	\$ 2,960
Roadway Plans	\$ 4,856
Public Involvement	\$ 4,133
Land Acquisition	\$ 4,206
Project Coordination/ Management	\$12,000
Total Fee	\$150,000