

## AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT is entered into between The City of Norman (OWNER) and Meshek and Associates, LLC (CONSULTANT) for the following reasons:

1. OWNER intends to prepare construction plans for storm sewer improvements between Creston Way and Schulze Drive (Project 1); 36<sup>th</sup> Avenue NW and W. Tecumseh Rd (Project 2); Upper Merkle Creek (Project 3) and,
2. OWNER requires certain professional survey, design, analysis and engineering services in connection with the Projects (the Services); and,
3. CONSULTANT is prepared to provide the Services.

In consideration of the promises contained in this Agreement, OWNER and CONSULTANT agree as follows:

### ARTICLE 1 - EFFECTIVE DATE

The effective date of this Agreement shall be 25th day of APRIL, 2017.

### ARTICLE 2 - GOVERNING LAW

This Agreement shall be governed by the laws of the State of Oklahoma.

### ARTICLE 3 - SCOPE OF SERVICES

CONSULTANT shall provide the Services described in Attachment A, Scope of Services.

### ARTICLE 4 - SCHEDULE

CONSULTANT shall exercise its reasonable efforts to perform the Services described in Attachment A according to the Schedules set forth in Attachment B.

### ARTICLE 5 - COMPENSATION

OWNER shall pay CONSULTANT in accordance with Attachment C, Compensation. Invoices shall be due and payable upon receipt. OWNER shall give prompt written notice of any disputed amount and shall pay the remaining amount.

### ARTICLE 6 - OWNER'S RESPONSIBILITIES

OWNER shall be responsible for all matters described in Attachment D, OWNER'S Responsibilities. OWNER hereby represents that it owns the intellectual property rights in any plans, documents or other materials provided by OWNER to CONSULTANT. If OWNER does not own the intellectual property rights in such plans, documents or other materials, prior to providing same to CONSULTANT, OWNER shall obtain a license or right to use, including the right to sublicense to CONSULTANT. OWNER hereby grants CONSULTANT the right to use the intellectual property associated with plans, documents or other materials it owns or has the right to use for the limited purpose of performing the Services. OWNER represents that CONSULTANT'S use of such documents will not infringe upon any third parties' rights.

#### **ARTICLE 7 - STANDARD OF CARE**

The same degree of care, skill, and diligence shall be exercised in the performance of the Services as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances. No other warranty, express or implied, is included in this Agreement or in any drawing, specification, report, opinion, or other instrument of service, in any form or media, produced in connection with the Services.

#### **ARTICLE 8 - INDEMNIFICATION AND LIABILITY**

Indemnification. To the fullest extent permitted by law, CONSULTANT shall indemnify and hold harmless OWNER, and OWNER'S officers, directors, members, partners, agents, consultants, and employees from reasonable claims, costs, losses, and damages arising out of or relating to the Project, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of CONSULTANT or CONSULTANT'S officers, directors, members, partners, agents, employees, or Consultants. OWNER shall indemnify and hold harmless CONSULTANT and its officers, directors, members, partners, agents, employees, and Consultants as required by Laws and Regulations.

Survival. The terms and conditions of this Article shall survive completion of the Services, or any termination of this Agreement.

#### **ARTICLE 9 - INSURANCE**

During the performance of the Services under this Agreement, CONSULTANT shall maintain the following insurance:

- (a) General Liability Insurance, with a limit of \$1,000,000 per occurrence and \$2,000,000 annual aggregate.
- (b) Automobile Liability Insurance, with a combined single limit of \$1,000,000 for each person and \$1,000,000 for each accident.
- (c) Workers' Compensation Insurance in accordance with statutory requirements and Employers' Liability Insurance, with a limit of \$500,000 for each occurrence.
- (d) Professional Liability Insurance, with a limit of \$1,000,000 per claim and annual aggregate.

CONSULTANT shall, upon written request, furnish OWNER certificates of insurance which shall include a provision that such insurance shall not be canceled without at least thirty days' written notice to OWNER. OWNER shall require all Project contractors to include OWNER, CONSULTANT, and its parent company, affiliated and subsidiary entities, directors, officers and employees, as additional insureds on their General and Automobile Liability insurance policies, and to indemnify both OWNER and CONSULTANT, each to the same extent

**ARTICLE 10 - LIMITATIONS OF RESPONSIBILITY**

CONSULTANT shall not be responsible for (a) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project; (b) the failure of any contractor, subcontractor, vendor, or other Project participant, not under contract to CONSULTANT, to fulfill contractual responsibilities to OWNER or to comply with federal, state, or local laws, regulations, and codes; or (c) procuring permits, certificates, and licenses required for any construction unless such procurement responsibilities are specifically assigned to CONSULTANT in Attachment A, Scope of Services. In the event the OWNER requests CONSULTANT to execute any certificates or other documents, the proposed language of such certificates or documents shall be submitted to CONSULTANT for review at least 15 days prior to the requested date of execution. CONSULTANT shall not be required to execute any certificates or documents that in any way would, in CONSULTANT's sole judgment, (a) increase CONSULTANT'S legal or contractual obligations or risks; (b) require knowledge, services or responsibilities beyond the scope of this Agreement; or (c) result in CONSULTANT having to certify, guarantee or warrant the existence of conditions whose existence CONSULTANT cannot ascertain.

**ARTICLE 11 - OPINIONS OF COST AND SCHEDULE**

Because CONSULTANT has no control over the cost of labor, materials, or equipment furnished by others, or over the resources provided by others to meet Project schedules, CONSULTANT'S opinion of probable costs and of Project schedules shall be made on the basis of experience and qualifications as a practitioner of its profession. CONSULTANT does not guarantee that proposals, bids, or actual Project costs will not vary from CONSULTANT'S cost estimates or that actual schedules will not vary from CONSULTANT'S projected schedules.

**ARTICLE 12 - REUSE OF DOCUMENTS**

All documents, including, but not limited to, plans, drawings, and specifications prepared by CONSULTANT as deliverables pursuant to the Scope of Services are instruments of service in respect to the Project. They are not intended or represented to be suitable for reuse by OWNER or others on modifications or extensions of the Project or on any other project. Any reuse without prior written verification or adaptation by CONSULTANT for the specific purpose intended will be at OWNER'S sole risk and without liability or legal exposure to CONSULTANT. OWNER shall indemnify and hold harmless CONSULTANT and its subconsultants against all judgments, losses, damages, injuries, and expenses, including reasonable attorneys' fees, arising out of or resulting from such reuse. Any verification or adaptation of documents will entitle CONSULTANT to additional compensation at rates to be agreed upon by OWNER and CONSULTANT.

**ARTICLE 13 - OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY**

Except as otherwise provided herein, documents, drawings, and specifications prepared by CONSULTANT and furnished to OWNER as part of the Services shall become the property of OWNER; provided, however, that CONSULTANT shall have the unrestricted right to their use. CONSULTANT shall retain its copyright and Ownership rights in its design, drawing details, specifications, data bases, computer software, and other proprietary property. Intellectual property developed, utilized, or modified in the performance of the Services shall remain the property of CONSULTANT.



#### **ARTICLE 14 - TERMINATION AND SUSPENSION**

This Agreement may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement; provided, however, the nonperforming party shall have 14 calendar days from the receipt of the termination notice to cure or to submit a plan for cure acceptable to the other party. OWNER may terminate or suspend performance of this Agreement for OWNER'S convenience upon written notice to CONSULTANT. CONSULTANT shall terminate or suspend performance of the Services on a schedule acceptable to OWNER, and OWNER shall pay CONSULTANT for all the Services performed. Upon restart of suspended Services, an equitable adjustment shall be made to CONSULTANT'S compensation and the Project schedule.

#### **ARTICLE 15 - DELAY IN PERFORMANCE**

Neither OWNER nor CONSULTANT shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the nonperforming party. For purposes of this Agreement, such circumstances include, but are not limited to, abnormal weather conditions; floods; earthquakes; fire; epidemics; war, riots, and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage; judicial restraint; and delay in or inability to procure permits, licenses, or authorizations from any local, state, or federal agency for any of the supplies, materials, accesses, or services required to be provided by either OWNER or CONSULTANT under this Agreement. CONSULTANT shall be granted a reasonable extension of time for any delay in its performance caused by any such circumstances. Should such circumstances occur, the nonperforming party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement.

#### **ARTICLE 16 - NOTICES**

Any notice required by this Agreement shall be made in writing to the address specified below:  
OWNER:

Carrie J. Evenson, Ph.D., P.E.  
Stormwater Engineer  
City of Norman  
P.O. Box 370  
Norman, OK 73070

CONSULTANT:

Brandon Claborn, P.E., CFM  
Meshek and Associates, LLC  
Principal Engineer  
1437 S. Boulder Ave., Suite 1550  
Tulsa, OK 74119

Nothing contained in this Article shall be construed to restrict the transmission of routine communications between representatives of OWNER and CONSULTANT.



#### **ARTICLE 17 - DISPUTES**

In the event of a dispute between OWNER and CONSULTANT arising out of or related to this Agreement, the aggrieved party shall notify the other party of the dispute within a reasonable time after such dispute arises. If the parties cannot thereafter resolve the dispute, each party shall nominate a senior officer of its management to meet to resolve the dispute by direct negotiation or mediation.

Should such negotiation or mediation fail to resolve the dispute, either party may pursue resolution of the dispute by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association; provided, however, in the event the parties are unable to reach agreement to arbitrate under terms reasonably acceptable to both parties, either party may pursue resolution in any court having jurisdiction. During the pendency of any dispute, the parties shall continue diligently to fulfill their respective obligations hereunder.

#### **ARTICLE 18 - EQUAL EMPLOYMENT OPPORTUNITY**

CONSULTANT hereby affirms its support of affirmative action and that it abides by the provisions of the "Equal Opportunity Clause" of Section 202 of Executive Order 11246 and other applicable laws and regulations. CONSULTANT affirms its policy to recruit and hire employees without regard to race, age, color, religion, sex, sexual preference/orientation, marital status, citizen status, national origin or ancestry, presence of a disability or status as a Veteran of the Vietnam era or any other legally protected status. It is CONSULTANT'S policy to treat employees equally with respect to compensation, advancement, promotions, transfers and all other terms and conditions of employment. CONSULTANT further affirms completion of applicable governmental employer information reports including the EEO-1 and VETS-1 00 reports, and maintenance of a current Affirmative Action Plan as required by Federal regulations.

#### **ARTICLE 19 - WAIVER**

A waiver by either OWNER or CONSULTANT of any breach of this Agreement shall be in writing. Such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

#### **ARTICLE 20 - SEVERABILITY**

The invalidity, illegality, or unenforceability of any provision of this Agreement or the occurrence of any event rendering any portion or provision of this Agreement void shall in no way affect the validity or enforceability of any other portion or provision of this Agreement. Any void provision shall be deemed severed from this Agreement, and the balance of this Agreement shall be construed and enforced as if it did not contain the particular portion or provision held to be void. The parties further agree to amend this Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this Article shall not prevent this entire Agreement from being void should a provision which is of the essence of this Agreement be determined void.

#### **ARTICLE 21 - INTEGRATION**

This Agreement, including Attachments A, B, C, and D incorporated by this reference, represents the entire and integrated agreement between OWNER and CONSULTANT. It supersedes all prior and contemporaneous communications, representations, and agreements, whether oral or written, relating to the subject matter of this Agreement.

**ARTICLE 22 - SUCCESSORS AND ASSIGNS**

OWNER and CONSULTANT each binds itself and its successors, executors, administrators, permitted assigns, legal representatives and, in the case of a partnership, its partners, to the other party to this Agreement and to the successors, executors, administrators, permitted assigns, legal representatives, and partners of such other party in respect to all provisions of this Agreement.

**ARTICLE 23 - ASSIGNMENT**

Neither OWNER nor CONSULTANT shall assign any rights or duties under this Agreement without the prior written consent of the other party, which consent shall not be unreasonably withheld; provided, however, CONSULTANT may assign its rights to payment without OWNER'S consent. Unless otherwise stated in the written consent to an assignment, no assignment will release or discharge the assignor from any obligation under this Agreement. Nothing contained in this Article shall prevent CONSULTANT from engaging independent CONSULTANTS, associates, and subcontractors to assist in the performance of the Services.

**ARTICLE 24 - NO THIRD PARTY RIGHTS**

The Services provided for in this Agreement are for the sole use and benefit of OWNER and CONSULTANT. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than OWNER and CONSULTANT.

IN WITNESS WHEREOF, OWNER and Meshek and Associates, LLC, have executed this Agreement.

DATED this 24<sup>th</sup> day of APRIL, 2017.

The City of Norman  
(OWNER)

Meshek and Associates, LLC  
(CONSULTANT)

Signature [Handwritten Signature]

Signature [Handwritten Signature]

Name Lynne Miller

Name Brandon Claborn

Title Mayor

Title Principal Engineer

Date 4/25/17

Date 4/21/17

Attest:

Attest:

[Handwritten Signature]  
City Clerk

[Handwritten Signature]  
Principal



Approved as to form and legality this 24 day of April 2017.

[Handwritten Signature]  
City Attorney



## **ATTACHMENT A SCOPE OF SERVICES**

ARTICLE 3 of the AGREEMENT is amended and supplemented to include the following agreement of the parties. The CONSULTANT shall, except as otherwise provided for herein, furnish all engineering services, labor, equipment and incidentals (SERVICES) as required for this AGREEMENT.

### **SCOPE OF SERVICES FOR PROJECT 1 - CRESTON WAY**

#### **PART I - DESCRIPTION OF PROJECT**

The CONSULTANT is to provide SERVICES in connection with the storm sewer improvements between Creston Way and Schulze Drive:

##### **Project Extents:**

The project extents will include the storm sewer and open channel system from Creston Way to the outlet at Schulze Drive. Depending on alternative analysis, the proposed improvements could extend to the drainage ditch south of Schulze Drive.

##### **Project Exceptions:**

This phase of the project will not include a 404 Permit, CLOMR/LOMR, or Ecological assessments. However, the contractor will be required to obtain OKR10 during construction.

#### **PART II - GENERAL PERFORMANCE REQUIREMENTS**

The CONSULTANT agrees to the following as appropriate and when applicable SERVICES included in this AGREEMENT:

1. Project Administration – will include scheduling, invoicing, communication, progress meetings and general project management time.
2. Survey –CONSULTANT will perform all surveying required for the completion of the project. See PART III for additional information.
3. Review – The OWNER will provide all previous drainage studies and as-built plans for the developments in this area for review by the CONSULTANT.
4. Kickoff Meeting – CONSULTANT will meet with City staff to discuss findings of the survey data and review of existing data.
5. Hydrology Modeling – CONSULTANT will develop a HEC-HMS hydrograph model to determine the flow rates to the proposed storm sewer. CONSULTANT will utilize available data from the Master Drainage Plan for comparison.
6. Hydraulic Modeling – CONSULTANT shall prepare a hydraulic model to determine the size of the proposed storm sewer that will convey the One Percent Annual Chance (100-Year) storm.

7. Develop Alternatives and Submit for Review – CONSULTANT will prepare a conceptual plan and estimate for up to three (3) alternatives, along with a recommendation for the OWNER's review.
8. Develop Final Construction Plan – After meeting with the OWNER to discuss the alternatives, CONSULTANT will prepare construction plans for the selected alternative.
  - a. Pavement replacement will be minimized to that which is necessary for the construction of the storm sewer improvements
    - i. City of Norman standard paving sections will be used for all pavement patches.
  - b. Construction plans shall include:
    - i. Cover sheet
    - ii. Pay quantities
    - iii. Pay item and general construction notes
    - iv. Drainage structure design summaries
    - v. Storm sewer plan and profile sheets
    - vi. Pavement replacement plans (as needed)
    - vii. Utility relocation plans (as needed)
    - viii. Traffic control and construction phasing plans (as needed)
    - ix. Cross-sections

### **PART III – SURVEY**

A detailed topographical survey locating all adjacent property lines, easements, fences, trees, utilities (above and below ground), and the pertinent flow information of the system will be performed. Survey data must include alignment ties to corners or monuments.

All proposed easement, Rights-of-Way, etc. required for the construction of the project will be staked.

### **PART IV – GEOTECHNICAL INVESTIGATIONS**

None.

### **PART IV – ENVIRONMENTAL CLEARANCE SUPPORT**

Environmental clearance is not anticipated for this project and is not included in the professional services. If it is necessary for these services under this project, the scope of work will be defined by an amendment to this agreement.

### **PART V - RIGHT-OF-WAY ACQUISITION SUPPORT SERVICES AND RECOUPMENT DISTRICT LEGALS & EXHIBITS**

All instruments for the acquisition of additional Right-of-Way, if needed, will be prepared.

### **PART VI - CONSTRUCTION SERVICES**

Construction services will be limited to attendance at the pre-bid meeting, attendance at the pre-work meeting, review of material submittals, responses to requests for information, and up to 3 site visits during or at the completion of construction.

### **PART VIII - PLAN REQUIREMENTS**



Drawings shall conform to ordinary drafting standard and shall be 22 x 34-inches (full size) and 11 x 17-inches (half size) prints. CONSULTANT shall provide and submit the required number of plan sets to complete the PROJECT, as well as provide all submittals in .pdf format.

### **PART VIII - MUTUAL AGREEMENTS**

The OWNER and the CONSULTANT mutually agree:

- a. SERVICES to be performed by the CONSULTANT shall include and encompass those SERVICES identified in **PART I-VIII**.
- b. The CONSULTANT shall hold the OWNER as a confidential client. The CONSULTANT shall make no statements or publish any materials regarding any investigations to any party on behalf of the OWNER without prior written authorization from the OWNER. The CONSULTANT shall refer all questions regarding this AGREEMENT and the work defined herein to the OWNER.
- c. Because the CONSULTANT has no control over the cost of labor, materials, or equipment furnished by others, the CONSULTANT's Opinion of Probable Cost shall be made on the basis of its experience and qualifications as a professional engineer. The CONSULTANT does not guarantee that proposals, bids, or actual PROJECT construction costs will not vary from the CONSULTANT's construction cost estimates.
- d. When the plans are completed to the field review stage, representatives of the OWNER will accompany the CONSULTANT on a field review investigation to mutually determine design features to be incorporated in the final plans.
- e. All tracings, plans, computations, specifications and maps prepared or obtained under the terms of the AGREEMENT shall be delivered to and become the property of the OWNER. All basic survey notes and sketches, charts, computations and other data prepared or obtained under this AGREEMENT shall be made available upon request to the OWNER without restriction or limitation on their use. When an AGREEMENT is for preliminary plans only, no commitment is made or implied that would constitute a limitation on the subsequent use of the plans or the ideas incorporated therein for preparation of construction plans.
- f. The CONSULTANT shall furnish all engineering services, labor, equipment, and incidentals as may be required to perform this AGREEMENT, except as may be otherwise specifically provided for herein.
- g. Then CONSULTANT shall sign the final product of CONSULTANT's efforts submitted to the OWNER and affix the appropriate Oklahoma seal as proof of Professional Engineer registration in the State of Oklahoma.
- h. The CONSULTANT and/or surveyor shall place his professional seal of endorsement and signature on all the documents, survey information and engineering data furnished to the OWNER when such is required by the Level or Type of Service defined by this AGREEMENT and additionally, as may be required by State Law.
- i. The CONSULTANT and it's sub-consultants are to maintain all books, documents, papers, accounting records and other evidence pertaining to costs incurred and to make such materials available at its respective offices at all reasonable times, during the AGREEMENT period and for three (3) years from the date of final payment under the AGREEMENT, for inspection by the OWNER and copies thereof shall be furnished to the OWNER.



## **SCOPE OF SERVICES FOR PROJECT 2 – 36<sup>th</sup> & TECUMSEH RD**

### **PART I - DESCRIPTION OF PROJECT**

The CONSULTANT is to provide SERVICES in connection with the hydrologic and hydraulic analysis for the unnamed tributary of the Little River west of the intersection of 36<sup>th</sup> Avenue NW and W. Tecumseh Rd:

#### **Project Extents:**

The project extents will include the storm sewer and open channel system from Tecumseh Rd to the outlet of the storm sewer north of Brownwood Lane.

#### **Project Exceptions:**

This phase of the project will not include a 404 Permit, CLOMR/LOMR, detailed Plans & Specifications or Ecological assessments. However, the contractor will be required to obtain OKR10 during construction.

### **PART II - GENERAL PERFORMANCE REQUIREMENTS**

The CONSULTANT agrees to the following as appropriate and when applicable SERVICES included in this AGREEMENT:

9. Project Administration – will include scheduling, invoicing, communication, progress meetings and general project management time.
10. Survey – CONSULTANT will perform all surveying required for the completion of the project. See PART III for additional information.
11. Review – The OWNER will provide all previous drainage studies for the developments in this area for review by the CONSULTANT.
12. Kickoff Meeting – CONSULTANT will meet with City staff to discuss findings of the survey data and review of existing data.
13. Hydrology Modeling – CONSULTANT will prepare an updated hydrology model for the upper half of basin LR-W723 identified in the City of Norman Storm Water Master Plan to the detention pond in the Castlerock subdivision. This will include the recent development south of Tecumseh Rd. CONSULTANT will review rainfall data from May 2015 to estimate flood frequency for that event for comparison with model results.
14. Hydraulic Modeling – for this task the CONSULTANT shall prepare a hydraulic analysis for:
  - a. The open channel segment from Tecumseh Rd. to the Castlerock subdivision including the box culvert under Tecumseh Rd.
  - b. The north side of the McBride Orthopedic Hospital parking lot to determine if overflow is likely to contribute to flooding in the neighborhood as reported in 2015.
  - c. A hydraulic analysis of the trunk line of the storm sewer system through the Castlerock neighborhood.
15. Develop Alternatives and Submit for Review – CONSULTANT will prepare a report of findings and recommendations for improvements and any additional study required.

16. Develop Final Report – After meeting with the OWNER to discuss the preliminary findings, a final report will be prepared detailing the recommended improvements.
17. Develop Final Construction Plans
  - a. Preparation of final construction plans for this scope includes modifications to the land between McBride Hospital and Castlerock Subdivision as well as potential grading between Tecumseh Rd and the Castlerock Subdivision. If additional improvements are recommended (i.e. additional storm sewer through or around the Castlerock subdivision), an additional scope and fee will be negotiated.
  - b. Construction plans shall include:
    - i. Cover sheet
    - ii. Pay quantities
    - iii. Pay item and general construction notes
    - iv. Drainage structure design summaries
    - v. Storm sewer improvements sheets
    - vi. Pavement replacement plans (as needed)
    - vii. Utility relocation plans (as needed)
    - viii. Traffic control and construction phasing plans (as needed)
    - ix. Cross-sections

### **PART III – SURVEY**

A detailed topographical survey locating all adjacent property lines, easements, fences, trees, utilities (above and below ground), and the pertinent geomorphological characteristics of the stream from Tecumseh Rd. to the Castlerock Subdivision. Survey data must include alignment ties to corners or monuments. Sizes and flow line elevations of the storm sewer system through the Castlerock subdivision is also included. Outlet structures for detention ponds included in the hydrology study will also be surveyed.

All proposed easement, Rights-of-Way, etc. required for the construction of the project will be staked.

### **PART IV – GEOTECHNICAL INVESTIGATIONS**

None.

### **PART IV – ENVIRONMENTAL CLEARANCE SUPPORT**

Environmental clearance is not anticipated for this project and is not included in the professional services. If it is necessary for these services under this project, the scope of work will be defined by an amendment to this agreement.

### **PART V - RIGHT-OF-WAY ACQUISITION SUPPORT SERVICES AND RECOUPMENT DISTRICT LEGALS & EXHIBITS**

All instruments for the acquisition of additional Right-of-Way, if needed, will be prepared.

### **PART VI - CONSTRUCTION SERVICES**

Construction services will be limited to attendance at the pre-bid meeting, attendance at the pre-work meeting, review of material submittals, responses to requests for information, and up to 3 site visits during or at the completion of construction.

**PART VIII - PLAN REQUIREMENTS**

Drawings shall conform to ordinary drafting standard and shall be 22 x 34-inches (full size) and 11 x 17-inches (half size) prints. CONSULTANT shall provide and submit the required number of plan sets to complete the PROJECT, as well as provide all submittals in .pdf format.

**PART VIII - MUTUAL AGREEMENTS**

The OWNER and the CONSULTANT mutually agree:

- j. SERVICES to be performed by the CONSULTANT shall include and encompass those SERVICES identified in **PART I-VIII**.
- k. The CONSULTANT shall hold the OWNER as a confidential client. The CONSULTANT shall make no statements or publish any materials regarding any investigations to any party on behalf of the OWNER without prior written authorization from the OWNER. The CONSULTANT shall refer all questions regarding this AGREEMENT and the work defined herein to the OWNER.
- l. Because the CONSULTANT has no control over the cost of labor, materials, or equipment furnished by others, the CONSULTANT's Opinion of Probable Cost shall be made on the basis of its experience and qualifications as a professional engineer. The CONSULTANT does not guarantee that proposals, bids, or actual PROJECT construction costs will not vary from the CONSULTANT's construction cost estimates.
- m. When the plans are completed to the field review stage, representatives of the OWNER will accompany the CONSULTANT on a field review investigation to mutually determine design features to be incorporated in the final plans.
- n. All tracings, plans, computations, specifications and maps prepared or obtained under the terms of the AGREEMENT shall be delivered to and become the property of the OWNER. All basic survey notes and sketches, charts, computations and other data prepared or obtained under this AGREEMENT shall be made available upon request to the OWNER without restriction or limitation on their use. When an AGREEMENT is for preliminary plans only, no commitment is made or implied that would constitute a limitation on the subsequent use of the plans or the ideas incorporated therein for preparation of construction plans.
- o. The CONSULTANT shall furnish all engineering services, labor, equipment, and incidentals as may be required to perform this AGREEMENT, except as may be otherwise specifically provided for herein.
- p. Then CONSULTANT shall sign the final product of CONSULTANT's efforts submitted to the OWNER and affix the appropriate Oklahoma seal as proof of Professional Engineer registration in the State of Oklahoma.
- q. The CONSULTANT and/or surveyor shall place his professional seal of endorsement and signature on all the documents, survey information and engineering data furnished to the OWNER when such is required by the Level or Type of Service defined by this AGREEMENT and additionally, as may be required by State Law.
- r. The CONSULTANT and it's sub-consultants are to maintain all books, documents, papers, accounting records and other evidence pertaining to costs incurred and to make such materials available at its respective offices at all reasonable times, during the AGREEMENT period and for three (3) years from the date of final payment under the AGREEMENT, for inspection by the OWNER and copies thereof shall be furnished to the OWNER.



## **SCOPE OF SERVICES FOR PROJECT 3 – MERKLE CREEK**

### **PART I- DESCRIPTION OF PROJECT**

The CONSULTANT is to provide SERVICES in connection with the development of updated hydrology and hydraulic analysis for the upper Merkle Creek basin, preliminary and final design for bank stabilization and stream restoration for approximately 700 ft of Merkle Creek located upstream of Iowa Street within the City of Norman, Oklahoma:

#### **Project Extents:**

The drainage study will be limited to the Merkle Creek drainage basin upstream of Iowa Street. The stream restoration area is between the Westwood Golf Course and Iowa Street though the hydraulic model will be continued downstream to Crestmont Street to ensure reasonable starting conditions downstream.

#### **Project Exceptions:**

None.

### **PART II - GENERAL PERFORMANCE REQUIREMENTS**

The CONSULTANT agrees to the following as appropriate and when applicable SERVICES included in this AGREEMENT:

18. Project Administration – will include scheduling, invoicing, communication, progress meetings and general project management time.
19. Kickoff Meeting – the project will begin with a kickoff meeting with the consultant and City staff to discuss the primary concerns and goals of the project. This work item will also include a channel walk to discuss specific concerns and share conceptual design ideas. Some stream inventory will be performed during this task.
20. Data Collection/Processing – the CONSULTANT will collect all previous study data from FEMA and the City of Norman for the Merkle Creek basin. This will also include determining the existing easements and ownership along this corridor of Merkle Creek.
21. Hydrology Modeling – as part of this task the CONSULTANT shall develop new existing conditions hydrology for Merkle Creek to Iowa Street. The CONSULTANT shall create a new HEC-HMS model of the Merkle Creek Watershed using detailed methods in accordance with FEMA Guidelines & Specifications. The CONSULTANT shall delineate subbasin boundaries using GIS processes from topography supplied by City. The subbasin boundaries shall be reviewed and adjusted as appropriate based on supplemental stormwater data or development plans supplied by City and the aerial imagery. Applicable storage areas, soil infiltration losses, channel routing, and urban runoff characteristics shall be included in the HEC-HMS model with sufficient detail to compute runoff peak discharges and flow hydrographs for the 10-year, 25-year, 50-year, 100-year, 100-year Plus, and 500-year storm events along Merkle Creek. The resulting discharges shall be input into the hydraulic HEC-RAS model that will also be developed as part of this project to create representative floodplain boundaries of the historical storm events which shall be compared to any available City staff and historical flood observations.

22. Hydraulic Modeling – for this task the CONSULTANT shall utilize the peak discharges and flow hydrographs from the hydrologic phase of this project to develop a new detailed hydraulic analysis of the existing conditions for Merkle Creek from Robinson Street to Iowa Street in accordance with FEMA Guidelines & Specifications. The CONSULTANT shall create a new steady-state HEC-RAS model of Merkle Creek utilizing both new data and data from past studies. The HEC-RAS model from the 2009 City of Norman Storm Water Master Plan shall be used as the primary source of supplemental data for this analysis. The CONSULTANT shall utilize GIS processes to generate cross sections throughout the detailed study area. Cross section geometry information shall be derived from topography provided by the City and supplemented with detailed stream survey taken as part of this project or in channel survey data from past studies. All input parameters such as Manning’s “n” Values and bank stations shall be reviewed and updated to match existing conditions. Structure data shall be included in this detailed analysis by using automated methods to derive information from the 2009 Storm Water Master Plan HEC-RAS study and updating the data to match data provided by the City. Upon validating the hydraulic analyses a floodway analysis shall be performed. The resulting floodway and floodplain boundaries for the hydraulic profiles shall be developed. Base Flood Elevations of the 1% annual chance event shall be created along with a FEMA Floodway Data Tables and Profiles. In addition the CONSULTANT shall also, if appropriate, produce up to two sets of alternative analyses that support and potentially validate possible solutions to stabilize the descending right bank of Merkle Creek through the project area.
23. Develop Alternatives and Submit for Review – using the information from the stream walk, the 2009 Storm Water Master Plan and the updated models, the CONSULTANT will prepare conceptual designs for natural stream restoration options to maintain bed elevation and stabilize the banks to provide continued protection for property of the citizens of Norman as well as to enhance habitat and environmental conditions within the stream channel while allowing for ease of maintenance. In addition, access for the project and future maintenance will be accounted for in the design. This also includes identifying Right-of-Way that would be needed. A recommendation will also be provided for the channel between Cleveland Elementary School and Westwood Golf Course.
24. Develop Final Report – After meeting with the City to select from the alternatives presented, a final report including a conceptual cost estimate will be submitted to the City for review. Updated hydrology and hydraulic models will be included with this submittal as will updated existing and proposed floodplain maps.
25. Develop a conceptual cost estimate for construction. The conceptual cost estimate will be based on the recommended conceptual design.
26. CONSULTANT will develop Final Construction Plans for the Proposed Project improvements for Merkle Creek and the ditch draining from Sherry Avenue.

### **PART III – SURVEY**

Perform topographic survey of Merkle Creek from Robinson Street to Iowa Street. Laterally the survey will extend from top of bank to top of bank. The survey area will also include the small channel draining from Sherry Avenue between the Westwood Golf Course and Cleveland Elementary School. Inventory of the outlet structures for the detention ponds upstream of Robinson Street will also be included.



The survey will include:

- Perform a detailed topographical survey locating all adjacent property lines, easements, fences, trees, utilities (above and below ground), and the pertinent geomorphological characteristics of the stream. Survey data must include alignment ties to corners or monuments.
- Creek flowline profile
- DTM of the creek including the structures at Robinson Street and Iowa Street
- AutoCAD drawing/data set
- The survey will be tied to the following datum:
  - Horizontal: Oklahoma State Plane NAD83(CORS96) – South Zone – US Foot
  - Vertical: NGVD88

#### **PART IV – GEOTECHNICAL INVESTIGATIONS**

Geotechnical Investigation will be performed based on the selected alternative. Detailed scope will be submitted at that time.

#### **PART IV – ENVIRONMENTAL CLEARANCE SUPPORT**

Environmental clearance is not anticipated for this project and is not included in the professional services. If it is necessary for these services under this project, the scope of work will be defined by an amendment to this agreement.

#### **PART V - RIGHT-OF-WAY ACQUISITION SUPPORT SERVICES AND RECOUPMENT DISTRICT LEGALS & EXHIBITS**

If additional right of way is necessary, these services will be added to the agreement by written amendment.

#### **PART VI - CONSTRUCTION SERVICES**

Construction services will be limited to attendance at the pre-bid meeting, attendance at the pre-work meeting, review of material submittals, responses to requests for information, and up to 3 site visits during or at the completion of construction.

#### **PART VIII - PLAN REQUIREMENTS**

Drawings shall conform to ordinary drafting standard and shall be 22 x 34-inches (full size) and 11 x 17-inches (half size) prints. CONSULTANT shall provide and submit the required number of plan sets to complete the PROJECT, as well as provide all submittals in .pdf format.

#### **PART VIII - MUTUAL AGREEMENTS**

The OWNER and the CONSULTANT mutually agree:

- s. SERVICES to be performed by the CONSULTANT shall include and encompass those SERVICES identified in **PART I-VII**.
- t. The CONSULTANT shall hold the OWNER as a confidential client. The CONSULTANT shall make no statements or publish any materials regarding any investigations to any party on behalf of the OWNER without prior written authorization from the OWNER. The CONSULTANT shall refer all questions regarding this AGREEMENT and the work defined herein to the OWNER.
- u. Because the CONSULTANT has no control over the cost of labor, materials, or equipment furnished by others, the CONSULTANT's Opinion of Probable Cost shall be made on the basis of its experience and qualifications as a professional engineer. The CONSULTANT does



- not guarantee that proposals, bids, or actual PROJECT construction costs will not vary from the CONSULTANT's construction cost estimates.
- v. When the plans are completed to the field review stage, representatives of the OWNER will accompany the CONSULTANT on a field review investigation to mutually determine design features to be incorporated in the final plans.
  - w. All tracings, plans, computations, specifications and maps prepared or obtained under the terms of the AGREEMENT shall be delivered to and become the property of the OWNER. All basic survey notes and sketches, charts, computations and other data prepared or obtained under this AGREEMENT shall be made available upon request to the OWNER without restriction or limitation on their use. When an AGREEMENT is for preliminary plans only, no commitment is made or implied that would constitute a limitation on the subsequent use of the plans or the ideas incorporated therein for preparation of construction plans.
  - x. The CONSULTANT shall furnish all engineering services, labor, equipment, and incidentals as may be required to perform this AGREEMENT, except as may be otherwise specifically provided for herein.
  - y. Then CONSULTANT shall sign the final product of CONSULTANT's efforts submitted to the OWNER and affix the appropriate Oklahoma seal as proof of Professional Engineer registration in the State of Oklahoma.
  - z. The CONSULTANT and/or surveyor shall place his professional seal of endorsement and signature on all the documents, survey information and engineering data furnished to the OWNER when such is required by the Level or Type of Service defined by this AGREEMENT and additionally, as may be required by State Law.
  - aa. The CONSULTANT and it's sub-consultants are to maintain all books, documents, papers, accounting records and other evidence pertaining to costs incurred and to make such materials available at its respective offices at all reasonable times, during the AGREEMENT period and for three (3) years from the date of final payment under the AGREEMENT, for inspection by the OWNER and copies thereof shall be furnished to the OWNER.

**ATTACHMENT B  
 PROJECT SCHEDULE**

ARTICLE 4 of the AGREEMENT is amended and supplemented to include the following agreement of the parties.

It is understood and agreed that the date of beginning, rate of progress, and the time of completion of SERVICES under this AGREEMENT are essential provisions of this AGREEMENT. It is further understood and agreed that the SERVICES under this AGREEMENT shall commence upon execution of the AGREEMENT between the OWNER and the CONSULTANT and after receipt of a written Notice to Proceed from the CONSULTANT. The parties mutually agree that time is of the essence in the performance of this AGREEMENT in order for the OWNER to take advantage of existing funding. The CONSULTANT agrees to provide SERVICES for each task/phase of the PROJECT as stated in **Attachment A - Scope of Services**, in accordance with the time frame as stated below:

<b>1. CRESTON WAY TASK MILESTONE</b>	<b>ANTICIPATED DATE</b>
Notice to Proceed	May 2017
Surveying	June 2017
Hydrologic & Hydraulic Alternative Analysis	July 2017
Preliminary Plans Submittal	September 2017
Final Plans Submittal	November 2017

<b>2. 36<sup>th</sup> &amp; TECUMSEH TASK MILESTONE</b>	<b>ANTICIPATED DATE</b>
Notice to Proceed	May 2017
Surveying	June 2017
Hydrologic & Hydraulic Alternative Analysis	August 2017
Preliminary Plans Submittal	October 2017
Final Plans Submittal	January 2018

<b>3. MERKLE CREEK TASK MILESTONE</b>	<b>ANTICIPATED DATE</b>
Notice to Proceed	May 2017
Surveying	July 2017
Preliminary Hydrologic & Hydraulic Alternative Analysis	September 2017
Final Hydrologic & Hydraulic Alternative Analysis	December 2017
Preliminary Plans Submittal	February 2018
Final Plans Submittal	April 2018

The parties further agree that the CONSULTANT will meet this schedule using standards and procedures for their submissions consistent with those currently used by Engineers/Surveyors practicing in Oklahoma. This schedule excludes the governing agency review time (except as provided above) and anytime lost while the CONSULTANT is waiting for direction either by a government agency or the OWNER, and any excusable delays as described in ARTICLE 15 of the AGREEMENT.

Dates indicated are dependent upon timely review by the OWNER, environmental clearance, Right-of-Way acquisitions, utility relocations and other factors beyond direct control of the CONSULTANT.



**ATTACHMENT C  
 COMPENSATION**

ARTICLE 5 of the AGREEMENT is amended and supplemented to include the following agreement of the parties.

The CONSULTANT agrees to perform the SERVICES identified in **Attachment A - Scope of Services**, in accordance with the limitations and conditions set forth in the AGREEMENT. The OWNER agrees, in accordance with the limitations and conditions set forth in the AGREEMENT to pay an amount not to exceed \$243,504 (Two Hundred & Fourty Three Thousand, Five Hundred and Four dollars) unless changed or modified by a mutually executed contact amendment between the OWNER and the CONSULTANT.

The OWNER shall pay the CONSULTANT for completion of the SERVICES of each task identified in **Attachment A - Scope of Services**, in accordance with the amounts stated below:

<b>1. CRESTON WAY</b>	<b>COMPENSATION</b>
Project Management	\$7,950.00
Surveying	\$11,764.00
Hydrologic & Hydraulic Alternative Analysis	\$3,260.00
Preliminary Design	\$14,640.00
Final Design	\$11,040.00
Bidding & Construction Services	\$6,440.00
<b>CRESTON WAY SUB TOTAL</b>	<b>\$55,094.00</b>
<b>2. 36<sup>TH</sup> &amp; TECUMSEH</b>	
Project Management	\$7,040.00
Surveying	\$8,635.00
Hydrologic & Hydraulic Alternative Analysis	\$14,280.00
Preliminary Design	\$13,120.00
Final Design	\$11,320.00
Bidding & Construction Services	\$6,440.00
<b>36<sup>th</sup> &amp; TECUMSEH SUB TOTAL</b>	<b>\$60,835.00</b>
<b>3. MERKLE CREEK</b>	
Project Management	\$8,600.00
Surveying	\$11,675.00
Hydrologic & Hydraulic Analysis	\$38,280.00
Geotechnical Investigation	\$5,000.00
Preliminary Design	\$18,100.00
Final Design	\$11,040.00
CLOMR Preparation, Submittal, Fee	\$13,470.00
Bidding & Construction Services	\$6,440.00
LOMR Preparation, Submittal, Fee	\$14,970.00
<b>MERKLE CREEK SUB TOTAL</b>	<b>\$127,575.00</b>
<b>PROJECT TOTAL</b>	<b>\$243,504.00</b>

An additional breakdown of the proposed fee is included as Exhibit C-1.

Payment claims or invoices for incremental work completed on each task may be submitted by the CONSULTANT to the OWNER for prompt payment on a monthly basis.

Final payment shall not be deemed to waive any rights or obligation of the OWNER or the CONSULTANT to this AGREEMENT.

**EXHIBIT C-1**

17NOR01 City of Norman Drainage Improvements				
Activity Type/Task	Type	Hours	Billing Rate	Amount
<b>City of Norman Drainage Improvements</b>		<b>1,862.0</b>		<b>243,504</b>
<b>17NOR01 - Creston Way</b>		<b>502.0</b>		<b>55,094</b>
Project Management		50.0		7,950
Labor	Contract Administrator	8	100.00	800
Labor	Project Principal I	10	195.00	1,950
Labor	Project Principal I	16	195.00	3,120
Labor	Project Manager	16	130.00	2,080
Survey		120.0		11,764
Expense	Per Diem - Meals & Incidentals	8	51.00	408
Expense	Per Diem - Lodging	4	89.00	356
Labor	Survey Crew Chief II	16	115.00	1,840
Labor	CAD Technician II	24	90.00	2,160
Labor	2 Man Survey Crew led by DFreeman	40	175.00	7,000
Labor	2 Man Survey Crew led by DFreeman			
H&H Analysis		28.0		3,260
Labor	Engineering Intern	16	95.00	1,520
Labor	Senior Project Engineer	8	120.00	960
Labor	Project Principal I	4	195.00	780
Preliminary Design		144.0		14,640
Labor	Engineering Intern	40	95.00	3,800
Labor	CAD Technician II	80	90.00	7,200
Labor	Project Manager	16	130.00	2,080
Labor	Project Principal I	8	195.00	1,560
Final Design		104.0		11,040
Labor	Engineering Intern	40	95.00	3,800
Labor	CAD Technician II	40	90.00	3,600
Labor	Project Manager	16	130.00	2,080
Labor	Project Principal I	8	195.00	1,560
Bidding & Construction Services		56.0		6,440
Labor	Project Manager	40	130.00	5,200
Labor	Clerical II	8	60.00	480
Labor	Engineering Intern	8	95.00	760
<b>17NOR02 - 36th &amp; Tecumseh</b>		<b>524.0</b>		<b>60,835</b>
Project Management		40.0		7,040
Labor	Contract Administrator	8	100.00	800
Labor	Project Principal I	16	195.00	3,120
Labor	Project Principal I	16	195.00	3,120
Survey		88.0		8,635
Expense	Per Diem - Meals & Incidentals	8	51.00	408
Expense	Per Diem - Lodging	3	89.00	267
Labor	Survey Crew Chief II	8	115.00	920
Labor	CAD Technician II	16	90.00	1,440
Labor	2 Man Survey Crew led by DFreeman	32	175.00	5,600
Labor	2 Man Survey Crew led by DFreeman			
H&H Analysis		104.0		14,280
Labor	Senior Project Engineer	80	120.00	9,600
Labor	Project Principal I	24	195.00	4,680
Preliminary Design		128.0		13,120
Labor	Engineering Intern	24	95.00	2,280
Labor	CAD Technician II	80	90.00	7,200
Labor	Project Manager	16	130.00	2,080
Labor	Project Principal I	8	195.00	1,560
Final Design		108.0		11,320
Labor	Engineering Intern	24	95.00	2,280
Labor	CAD Technician II	60	90.00	5,400
Labor	Project Manager	16	130.00	2,080
Labor	Project Principal I	8	195.00	1,560
Bidding & Construction Services		56.0		6,440
Labor	Project Manager	40	130.00	5,200
Labor	Clerical II	8	60.00	480
Labor	Engineering Intern	8	95.00	760



17NOR01 City of Norman Drainage Improvements				
Activity Type/Task	Type	Hours	Billing Rate	Amount
<b>17NOR03 - Merkle Creek</b>		<b>836.0</b>		<b>127,575</b>
Project Management		48.0		8,600
Labor	Contract Administrator	8	100.00	800
Labor	Project Principal I	24	195.00	4,680
Labor	Project Principal I	16	195.00	3,120
Survey		120.0		11,675
Expense	Per Diem - Meals & Incidentals	8	51.00	408
Expense	Per Diem - Lodging	3	89.00	267
Labor	Survey Crew Chief II	16	115.00	1,840
Labor	CAD Technician II	24	90.00	2,160
Labor	2 Man Survey Crew led by DFreeman	40	175.00	7,000
Labor	2 Man Survey Crew led by DFreeman			
H&H Analysis		224.0		38,280
Labor	Senior Project Engineer	120	240.00	28,800
Labor	Project Principal I	24	195.00	4,680
Labor	GIS Specialist II	40	120.00	4,800
Geotechnical Investigation				5,000
Consultant	Sub-Consultant			5,000
Preliminary Design		172.0		18,100
Labor	Engineering Intern	60	95.00	5,700
Labor	CAD Technician II	80	90.00	7,200
Labor	Project Manager	16	130.00	2,080
Labor	Project Principal I	16	195.00	3,120
Final Design		104.0		11,040
Labor	Engineering Intern	40	95.00	3,800
Labor	CAD Technician II	40	90.00	3,600
Labor	Project Manager	16	130.00	2,080
Labor	Project Principal I	8	195.00	1,560
LOMR Preparation, Submittal, Fee		56.0		13,470
Expense				6,750
Labor	Senior Project Engineer	40	120.00	4,800
Labor	GIS Specialist II	16	120.00	1,920
Bidding & Construction Services		56.0		6,440
Labor	Project Manager	40	130.00	5,200
Labor	Clerical II	8	60.00	480
Labor	Engineering Intern	8	95.00	760
LOMR Preparation, Submittal, Fee		56.0		14,970
Expense		1	8,250.00	8,250
Labor	Senior Project Engineer	40	120.00	4,800
Labor	GIS Specialist II	16	120.00	1,920

## **ATTACHMENT D OWNER'S RESPONSIBILITIES**

ARTICLE 6 of the AGREEMENT is amended and supplemented to include the following agreement of the parties.

### **OWNER RESPONSIBILITIES**

1. The OWNER shall furnish to the CONSULTANT all available information pertinent to PROJECT including previous reports, construction plans and any other data relative to design and construction of the PROJECT.
2. The OWNER shall be responsible for all permit fees.
3. The OWNER shall examine all studies, reports, sketches, estimates specifications, plan drawings, proposals and any other documents presented by the CONSULTANT and render in writing decisions pertaining thereto within a reasonable time so as not to delay the SERVICES of the CONSULTANT.
4. The OWNER shall designate in writing a person to act as its representative in respect to the work to be performed under this AGREEMENT, and such person shall have complete authority to transmit instructions, receive information, interpret, and define the OWNER's policies and decisions with respect to materials, equipment, elements and systems pertinent to the services covered by this AGREEMENT.
5. The OWNER shall furnish legal assistance as required in the preparation, review and approval of construction documents.
6. The OWNER shall furnish assistance in locating existing OWNER-owned underground utilities and expediting their relocation in preparation for construction.
7. The OWNER shall coordinate efforts with non-OWNER-owned utilities to ensure any necessary relocations in preparation for construction.
8. The OWNER shall coordinate any desired geotechnical services.
9. The OWNER shall coordinate any necessary utility potholing.
10. The OWNER shall provide for meeting facilities (or arrange for meeting facilities) for all PROJECT meetings with OWNER or Public Meetings in connection with the PROJECT.

### **SPECIAL RESPONSIBILITIES**

1. The OWNER shall furnish Certificates of Title, Appraisals and Right-of-Way Acquisition necessary for utility relocations and/or proposed construction of the PROJECT.