# AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT is entered into between The City of Norman (OWNER) and CP&Y, Inc. (CONSULTANT) for the following reasons:

- 1. OWNER intends to construct 36<sup>th</sup> Avenue from Tecumseh Road to Market Place and all associated roadway and drainage as required (the Project); and,
- 2. OWNER requires certain professional survey, design, analysis and engineering services in connection with the Project (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	day of	, 201

# **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 schedule 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. The CONSULTANT and the OWNER each hereby agree to defend, indemnify, and hold harmless the other party, its officers, servants, and employees, from and against any and all liability, loss, damage, cost, and expense (including attorneys' fees and accountants' fees) caused by an error, omission, or negligent act of the indemnifying party in the performance of services under this Agreement. The CONSULTANT and the OWNER each agree to promptly serve notice on the other party of any claims arising hereunder, and shall cooperate in the defense of any such claims. In any and all claims asserted by any employee of the CONSULTANT against any indemnified party, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONSULTANT or any of the CONSULTANT'S employees under workers' compensation acts, disability benefit acts, or other employee benefit acts. The acceptance by OWNER or its representatives of any certification of insurance providing for coverage other than as required in this Agreement to be furnished by the CONSULTANT shall in no event be deemed a waiver of any of the provisions of this indemnity provision. None of the foregoing provisions shall deprive the OWNER of any action, right, or remedy otherwise available to the OWNER at common law.

<u>Survival.</u> 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:

John R. Clink, P.E. Capital Projects Manager City of Norman P.O. Box 370 Norman, OK 73070

#### CONSULTANT:

CP&Y, Inc. Jeremy C. Boswell, P.E. 1000 W. Wilshire Blvd., Suite 224 Oklahoma City, OK 73116

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 CP&Y, Inc. have executed this Agreement.

DATED this 15 day of MARCH, 2013.	
The City of Norman (OWNER)	CP&Y, Inc (CONSULTANT)
Signature	Signature Jumy C. Sawell
NameCindy Rosenthal	Name JEREMY C BOSWELL
TitleMayor	Title VICE PRESIDENT
Date	Date 3/15/13
Attest:	Attest:
	Kurda Singson
City Clerk	Secretary

Approved as to form and legality this 3 day of April 2013.

City Attorney

# ATTACHMENT "A" SCOPE OF SERVICES

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

#### PART I – DESCRIPTION OF PROJECT

The CONSULTANT shall provide SERVICES in connection with the development of design, right-of-way acquisition, utility coordination and relocations, bidding, and construction documents for the following improvements located within the City of Norman, Oklahoma;

Widening of 36<sup>th</sup> Avenue NW from Tecumseh Road north to Market Place from two to four lanes including bicycle lanes.

## **PROJECT Extents:**

The beginning of PROJECT (BOP) shall be approximately 300' north of the intersection of Tecumseh Road and 36<sup>th</sup> Avenue. The PROJECT shall extend approximately 11,270' fee north (2.1 miles) to Market Place the End of PROJECT (EOP).

#### **Incidental Construction:**

The PROJECT shall include grading, sidewalk, reconstruction, drainage structures, and other ancillary construction as required, tying the proposed construction to adjacent improvements. The PROJECT shall also include any relocation plans for City public water and/or sewer lines.

#### **Specific PROJECT Requirements:**

Design criteria and other requirements specific to this PROJECT include:

 The design speed will be determined by consultation with City Traffic Engineer prior to preparation of construction documents.

- The design shall include a typical section based on: 4-lane, curb & gutter with an integral 5' bicycle lane north of Franklin Road. South of Franklin Road the section shall include a 10' multi-use path on the east side of the roadway. Paving recommendations are anticipated to require pc concrete throughout the project.
- Reconstructed pavement shall be designed for a 30-year life. The pavement life shall assume normal routine maintenance and one major maintenance/restoration event at approximately the 15<sup>th</sup> year of service as is ordinary for the type of pavement specified.
- The design shall include all associated drainage structures and associated calculations.
- The design shall include the construction and signalization of 36<sup>th</sup> Avenue NW & Franklin Road as well as 36<sup>th</sup> Avenue NW & Indian Hills Road. The intersection shall include standard stacking length and taper lengths for single turn lanes. The intersection will be lighted by standard street lights on signal poles.
- Engineering reports, bidding, construction, and supporting documents developed by CONSULTANT shall comply with the established requirements of OWNER, the Association of Central Oklahoma Governments (ACOG), Oklahoma Department of Transportation (ODOT), and Federal Highway Administration (FHWA) for the purpose of seeking/securing federal construction funds by CONSULTANT makes no representations,

warranties, or guarantees with regard to the success of OWNER in securing said funds.

In addition, PROJECT shall be designed in accordance with the general criteria identified in PART III – Design Criteria.

# PART II – SERVICES PROVIDED BY OTHERS

Engineering and ancillary services including but not limited to those identified below, shall be the responsibility of others:

- <u>Utility relocation design</u> Relocation design for utility systems not owned by the CITY in conflict with the proposed construction are not included in CONSULTANT'S SERVICES. Relocation designs shall be the responsibility of each Utility Owner.
- Certificates of title and Right-of-Way Appraisals & Acquisitions Certificates of title and right-of-way appraisals & acquisitions required for the proposed construction and/or utility relocations are not included in CONSULTANT's SERVICES. Certified title information provided by OWNER to CONSULTANT prior to the Plan-in-Hand review shall be incorporated into the right-of-way drawings, plats, misery reports, and other instruments as required at no additional cost to the OWNER.
- Environmental Clearance CONSULTANT responsibility for Environmental clearance shall be limited to preparing/completing ODOT's National Environmental Policy Act (NEPA) Checklist Form in collaboration with OWNER. The NEPA clearance necessary to acquire right-of-way and construct PROJECT shall be submitted & obtained by ODOT as is the ordinary practice ACOG/ODOT/FHWA funded projects. CONSULTANT responsible for facilitating and assisting the OWNER in conducting and documenting the associated Public Meeting.

 Bidding, Construction Management, and Inspection Services - Bidding, Construction Management, and Inspection Services ordinarily provided/administered by ODOT are not included in CONSULTANT's SERVICES.

#### PART III - DESIGN CRITERIA

The design and plans shall conform to current State and AASHTO policies and standards (as modified under the direction of OWNER in writing) including:

- Manual on Uniform Traffic Control Devices for Streets and Highways, U.S. Department of Transportation, FHWA, 2009 Edition;
- An International Guide for Roadway Lighting, American Association of State Highway and Transportation Official, (latest revision);
- LRFD Bridge Design Specifications for Highway Bridges, AASHTO, 2012, and all current interim specifications;
- ANSI/AASHTO/AWS DI.5 Bridge Welding Code (latest revision);
- A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials, 2011 Edition;
- Standard Specifications for Highway Construction, and Supplementals, Oklahoma Department of Transportation, 2009;
- Highway Capacity Manual, Transportation Research Board, 2000 Edition;
- Policy on Driveway Regulations for Oklahoma Highways, Oklahoma Department of Transportation, 1996 Edition;

- Roadside Design Guide, American Association of State Highway and Transportation Officials, 2011 Edition;
- Right-of-way Specifications Manual for Preparation of Plans and Documents, Oklahoma Department of Transportation, (latest revision);
- Oklahoma Administrative Code (OAC), Title 730;
- Drainage Design Manual, Oklahoma Department of Transportation, 1988 Edition;
- Roadway Design Manual, Oklahoma Department of Transportation, 1992 Edition;
- Roadway Safety and Convenience Design Guide for Oklahoma Cities, Oklahoma Department of Transportation, 1991 Edition;
- Checklist for Local Government Urban Plans, Oklahoma Department of Transportation, 2009 Edition.

# PART IV – GENERAL PERFORMANCE REQUIREMENTS

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

- 1. To compute and place upon the construction plans, right-of-way ties to the survey line or a construction reference line, whichever is the most feasible, for the purpose of staking the right-of-way line for construction operations.
- 2. To prepare and furnish complete and detailed final construction plans as called for in "DESCRIPTION OF PROJECT".
- To prepare and furnish all field surveys and mapping, including topographic survey of PROJECT area, control survey to establish section corners and section lines, ties to local

- coordinate system, horizontal location of existing utilities, and monumentation for construction staking.
- 4. To prepare and furnish complete structural design, hydraulic (including drainage maps and design data for any storm sewer systems and other drainage included in this AGREEMENT), geometric and pay quantity computations, as follows:
  - a. CONSULTANT shall ensure that these computations are independently checked in detail by competent personnel and shall provide a written statement to that effect when the plans are submitted.
  - b. All computations shall be neat, legible, identified, indexed, and bound in a manner that is easy to follow by someone unfamiliar with PROJECT. They shall be considered a part of the work done under this AGREEMENT and shall become the sole property of the OWNER.
  - c. CONSULTANT shall furnish drainage maps and design data with computations for any storm sewer systems and other drainage involved in this AGREEMENT.
- 5. To provide a full pedological survey necessary to design all aspects of the PROJECT including but not limited to retaining walls (if applicable), bridges (if applicable), and pavement. CONSULTANT shall furnish, if requested by the OWNER, comparative estimates for Asphalt and Portland Cement Concrete pavement alternatives of comparable life, durability, and life-cycle costs.
- 6. That all preliminary designs, final plans, and reports submitted for review by the OWNER shall be accompanied by a written statement signed and sealed by a professional engineer attesting that a prior detailed check has been made of the plans and reports.

- 7. To prepare the right-of-way studies, legal descriptions and instruments of conveyance for partial and total take parcels in accordance with the "Right-of-Way Specifications Manual and Associated Materials".
- 8. To provide public involvement participation. coordination and support between the OWNER, the effected local business owners, residents, and community based organizations. Such services shall include, but not limited to. attendance participation meetings, at gatherings, assemblies or hearings as requested by the OWNER.
- 9. To be available for such conferences as the OWNER may deem necessary in connection with the work. The OWNER shall have the right to inspect the work at all reasonable times at CONSULTANT's office.
- 10. To coordinate its CONSULTANT's work with other consultants on adjoining projects, if any, and to furnish and share survey and plan data identified in the scope of services in such a manner as to facilitate and expedite the completion of AGREEMENTS for adjacent work.
- 11. To prepare and/or update CONSULTANT's Opinion of Probable Cost at each submittal milestone.
- 12. To furnish a legible copy of all computations used in developing cost estimates which are neatly arranged, bound and are properly identified and indexed. The computations shall be submitted when the documents are submitted to the OWNER.
- 13. To furnish monthly progress reports to the OWNER and attend monthly progress meetings with OWNER. These monthly reports shall be prepared in accordance with the OWNERS requirements. In the event of any delay in performing the work and/or increase in anticipated construction costs of the resulting PROJECT provided for in this

AGREEMENT, CONSULTANT shall immediately notify the OWNER and shall fully explain the nature, time, and reason for the delay.

# PART V – WORK BREAKDOWN STRUCTURE & WORK PRODUCT REQUIREMENTS

The following Work Breakdown Structure (WBS) and Work Product Requirement are an outline and understanding of the scope of services supports CONSULTANT's PROJECT schedule. The WBS is an expansion on the general requirements presented in PARTS I through IV. All requirements set forth in PARTS I through IV shall be met regardless of whether or not more specific requirements are stipulated herein. A list of the sizes and number of sets of plans included in the AGREEMENT is provided in **PART** VI **PLAN** REQUIREMENTS.

# PHASE 1 – PRE-DESIGN SERVICES

Pre-design services include field surveying, geotechnical exploration, traffic projections and analysis necessary to commence the design. The tasks to be performed by the CONSULTANT include:

#### Task 1A – Design Survey

Surveying shall be in accordance with the minimum standards for land surveying as stipulated by the Oklahoma State Board of Professional Engineers and Land Surveyors. Tract ownerships are to be based on observable evidence and reasonable public record research. Ownerships shown will not be conclusive to actual land title.

a. CONSULTANT shall establish horizontal and vertical control within PROJECT limits necessary to collect all topographic and planimetric features, boundaries, right-of-way/easement information, etc. and to serve

- as survey control for construction staking by Construction Contractor.
- b. CONSULTANT shall provide field surveying in order to develop existing roadway cross sections at 50' intervals as well as at intersections and driveways throughout PROJECT.
- c. CONSULTANT shall provide field surveying along Little River Tributary (cross sections 1500' upstream and 750' downstream of culvert) for the hydraulic analysis for this FEMA Zone A stream.
- d. CONSULTANT shall create contours and a digital terrain model from the collected data to support the design.
- e. CONSULTANT shall collect topographic data including, but not limited to, surface features such as utilities, signs, (including type and reference marker, if any), headwalls, retaining walls, curb and grate inlet locations, pipe and box culvert flowlines, driveway locations and profile, and other pertinent data.
- f. CONSULTANT shall tie any soil borings and pavement cores along PROJECT, to PROJECT control, to be shown in the plans.
- g. CONSULTANT shall develop survey data and information in a format suitable to be incorporated in the Final Plan Set. The survey sheets shall be submitted to OWNER for review no later than the 30% Design Submittal.
- h. CONSULTANT shall provide survey in Oklahoma State Plane Coordinate System, South Zone. The ground/grid combined scale factor shall be computed for PROJECT and noted on the survey sheets.
- CONSULTANT shall establish adequate monumentation for construction staking including horizontal control points and vertical bench marks. The monumentation shall cover the PROJECT area with inter-

- visible control points set on prominent ground, avoiding short back sights. Points should be set where likelihood of disturbance by construction is minimized. Primary control should be brass cap in concrete. Secondary control should be iron pins with plastic cap identifying the survey company when practical.
- j. CONSULTANT shall include survey sheets in the plans sets or as a separate set of drawings (at OWNERS discretion). Survey sheets shall include contours and boundary information. Survey sheets shall be sealed by a Licensed Surveyor in the State of Oklahoma.
- k. CONSULTANT shall contact the Oklahoma One Call System "CALL OKIE" via the "Web Ticket" system and maintain records of reported utility holders. Information on Utility holders received from OKIE shall be shown on the plan sheets. Utility drawings based on surface features, flagging and record drawings shall be included in the plan sets. Any additional information received directly from the utility companies shall be included in the plan sets and be identified.

# <u>Task 1B - Geotechnical Investigation & Pavement Design</u>

- a. CONSULTANT shall provide standard geotechnical investigation sufficient to satisfy PROJECT design requirements. Geotechnical investigations shall be in accordance with AASHTO/ASTM procedures and shall include the following:
  - Shoulder Soil Survey every 500' 36" deep – 27 samples
  - Pavement Core Soil Survey 6 locations
     36" deep 6 samples
  - Auger samples evaluated for in-situ moisture content

- Soil Classifications
- Liquid Limit/Plastic
- Three bucket samples from dominant soils evaluated for Resilient Modulus (MR)
- Measurement of groundwater levels (if present) while boring and at the completion of each boring;
- Standard Proctor Densities and optimum moisture content.
- b. CONSULTANT shall provide Pavement Design based on the criteria established by the OWNER.
- c. CONSULTANT shall provide results in a written report including a site plan showing the location of each boring/sample, evaluation of each, recommended pavement designs (program printouts or workup), and recommended pavement sections including subgrade treatments.

# Task 1C - Traffic Projection Analysis

It is assumed that all traffic studies are complete throughout the project and that the CONSULTANT shall only compile the existing information provided by the OWNER. If additional information is required that work shall be done under a supplemental agreement.

- a. CONSULTANT shall review previously completed traffic studies within the general vicinity of PROJECT.
- b. CONSULTANT shall develop traffic projections based upon historical data and future land use.
- c. CONSULTANT shall utilize this data to determine all necessary turn lanes throughout the corridor.

# PHASE 2 –DESIGN ADDITIONAL SERVICES

CONSULTANT services identified in Phase 2 are services anticipated to be required. However, the specific required level of effort by the CONSULTANT will be unknown until additional information becomes better defined during the course of the PROJECT. The identified services and anticipated level of effort are educated estimates only. Services will be provided on an "as needed" and "as requested" basis according to the identified unit cost.

#### Task 2A – Utility Locates

a. As unknown underground utility locations become critical to identify, a utility locate company will be contracted by the CONSULTANT to physically locate the utility by exposing the utility and measuring critical parameters. An estimate of 30 locates under a variety of conditions was assumed for purposes of determining the contract base budget. The OWNER will be invoiced on an "as used" basis at cost plus 15%.

# Task 2B – Supplemental Survey Needs

The OWNER and CONSULTANT will have several needs for additional survey services after the initial design survey is complete. The level of effort required is unknown. An estimate of required man hours is included in the contract amount to be used "as needed" and "as requested". The anticipated items are listed below:

- a. Survey underground utility locates
- b. Survey previously unmarked utilities
- c. Survey additional development changes
- d. Stake existing right-of-way
- e. Stake proposed right-of-way
- f. Additional legal descriptions & exhibits

g. Miscellaneous other surveys required by the OWNER or CONSULTANT.

The OWNER will be invoiced on an "as used" basis at Standard Rates.

## PHASE 3 – DESIGN SERVICES

The following Design Services will be provided by the CONSULTANT as necessary to complete the PROJECT as defined above:

#### Task 3A - Traffic Engineering

Traffic Engineering design & plan preparation will include the following:

- a. Signalization and intersection lighting of 36<sup>th</sup> Avenue NW and Franklin Road. The scope of the design of this intersection is to be based on the traffic studies conducted utilizing the future 2040 design year traffic volumes.
- b. Signalization and intersection lighting of 36<sup>th</sup> Avenue NW and Indian Hills Road. The scope of the design of this intersection is to be based on the traffic studies conducted utilizing the future 2040 design year traffic volumes.
- c. Traffic signal interconnect for the above signalized intersections. The design of the interconnect shall be in accordance with the City of Norman's current interconnect standards and specifications.

#### Task 3B – Preliminary Design & Report

The CONSULTANT shall conduct the following preliminary design functions during the Preliminary Design task:

- a. Develop Typical Sections.
- Prepare preliminary horizontal and vertical alignments and associated Plan & Profile sheets.

- c. Prepare a Preliminary Engineers Estimate of Probable Cost and Budget Review.
- d. Document existing utilities and possible design conflicts.
- e. Identify significant design issues.
- f. Document existing drainage characteristics in a drainage report indicating all existing drainage boundaries, areas, runoff coefficients, flow quantities, flow velocities, etc. for all points of concentrated drainage entering and exiting the existing and proposed PROJECT right-of-ways for each design storm event.
- g. Document existing FEMA Floodplain/Floodway conditions within the PROJECT extents. CONSULTANT will create an existing conditions hydraulic model of the creek and roadway crossing in HECRAS. The effective level of 36<sup>th</sup> Avenue NW will be determined.
- h. CONSULTANT shall create an iterative process to balance the cost and hydraulic impacts of different culvert and bridge configurations and vertical profiles to optimize the design.
- i. CONSULTANT shall provide results in a written report.
- j. This scope does not include any CLOMR or LOMR applications. If these services are deemed necessary, it shall be done as supplemental services.

# Task 3C - 60% Design

The CONSULTANT shall complete design analysis and prepare all design documents necessary to conduct a Plan-in-Hand PROJECT review with ODOT and the OWNER and to provide subsequent OWNER TIP's application assistance with ACOG. These tasks are anticipated to include the following:

- a. Verify PROJECT Scope
- b. Confirm horizontal and vertical alignments
- c. Confirm typical sections
- d. Field verify survey
- e. Initiate environmental clearance
- f. Identify drainage issues
- g. Identify construction sequencing
- h. Identify preliminary Right-of-Way needs and Utility Conflicts
- i. Revise P&P Sheets
- j. Prepare Cross Section Sheets
- k. Revise Drainage Structure Tables
- 1. Prepare Summary Tables
- m. Prepare Driveway Schedules
- n. Prepare Pay Items & Notes
- o. Prepare Signalization Plan Sheets
- p. Prepare Signing & Striping Plan Sheets
- q. Prepare Detail Sheets
- r. Revise Engineer's Estimate of Probable Cost
- s. Prepare Right-of-Way Sheets
- t. Prepare Survey Data Sheets

#### Task 3D - Final Plans

Upon receiving Plan-in-Hand comments from the OWNER and ODOT, the CONSULTANT shall prepare final Construction Plans suitable for ODOT bid letting. These tasks are anticipated to include the following:

- a. Finalize P & P Sheets
- b. Finalize Cross Section Sheets
- c. Finalize Drainage Structure Tables
- d. Finalize Summary Table
- e. Finalize Driveway Schedules
- f. Finalize Pay Items, Bid Quantities & Pay Notes
- g. Prepare any Special Provisions
- h. Finalize Signalization Plan Sheets
- i. Finalize Signing & Striping Plan Sheets
- j. Finalize Detail Sheets
- k. Finalize Construction Sequence Plans
- 1. Finalize Engineer's Estimate of Probable Cost
- m. Finalize Right-of-Way Sheets

# PHASE 4 – ENVIRONMENTAL CLEARANCE SUPPORT

The CONSULTANT will provide assistance to the OWNER as necessary to assist in obtaining the Environmental Clearance to be performed by ODOT. Specifically, the CONSULTANT will perform the following:

- a. Conduct the required Public Meeting at a location to be determined by the OWNER and ODOT.
- b. Prepare Power Point Presentation for OWNER and revise as requested.
- c. Attend and Present at the Public Meeting as requested by the OWNER.

- d. Prepare responses to questions raised at the Public Meeting.
- e. Prepare Meeting Minutes.
- f. Prepare various meeting exhibits.
- g. Provide one set of full-size P&P Sheets to be available at the Public Meeting.

# PHASE 5 – RIGHT-OF-WAY ACQUISITION SUPPORT SERVICES – RECOUPMENT DISTRICT LEGALS & EXHIBITS

The CONSULTANT will prepare and provide the OWNER with all the required Right-of-Way acquisition documents necessary to acquire the right-of-way to complete the PROJECT as defined. Additionally, the CONSULTANT will provide the OWNER with Recoupment District legal descriptions and exhibits as necessary. These tasks are anticipated to include the following tasks:

# <u>Task 5A - Right-of-Way Acquisition Support</u> <u>Services</u>

- a. Prepare legal descriptions
- b. Prepare exhibits
- c. Prepare Misery Sheets
- d. Attend Meetings
- e. Revise legal descriptions and exhibits as required per land owner negotiations

# <u>Task 5B – Recoupment District Legal</u> <u>Descriptions and Exhibits</u>

- a. Prepare legal descriptions
- b. Prepare exhibits
- c. Attend meetings

# PHASE 6 - UTILITY RELOCATION

The CONSULTANT will work with the OWNER's Utility Coordinator to ensure that all required utility relocations are consistent with PROJECT requirements and performed in a timely manner. These tasks are anticipated to include the following tasks:

# <u>Task 6A – Utility Relocation Coordination and</u> <u>Relocation Plan Review</u>

- a. Work with City Utility Coordinator
- b. Coordinate with each utility companies
- c. Attend meetings with each utility company to verify existing utilities and relocation plans
- d. Review utility relocation plans for compatibility with PROJECT design
- e. Maintain a color "Utility Relocation Map" showing existing and relocated utilities

# <u>Task 6B - City of Norman Utility Relocation</u> Plans

The City of Norman has both water and sewer lines along the project corridor.

If during the process of developing the PROJECT it is determined that the relocation of any City waterline or existing sewer line is deemed necessary that work will be done under a supplemental agreement.

## PHASE 7 – CONSTRUCTION SERVICES

#### Task 7A – Bid Administration

It is anticipated that ODOT will assume primary responsibility for the bidding/award process as is the ordinary practice for ACOG/ODOT/FHWA funded projects of this nature. CONSULTANT will serve OWNER in a support role during the bidding/award process. CONSULTANT shall also provide the specific services outlined herein:

- a. CONSULTANT shall prepare a signed/sealed Engineer's Estimate based on the final construction documents, pay items, and quantities. The Engineer's Estimate shall be presented to the OWNER for review prior to submission to ODOT.
- b. "Issue of Construction" Plans, approved by OWNER, shall be submitted by CONSULTANT to ODOT for reproduction and distribution by ODOT to prospective bidders.
- c. CONSULTANT shall attend the Pre-Bid Conference conducted by ODOT to discuss the PROJECT and answer questions from possible contractors. CONSULTANT shall provide written responses to questions received and submit to OWNER/ODOT. CONSULTANT shall review ODOT's minutes and provide written comments as required.
- d. It is anticipated that ODOT will assume primary responsibility for Bid Review and Tabulation as is the ordinary practice for ACOG/ODOT/FHWA funded projects of this nature.

# Task 7B - Construction Administration

It is anticipated that ODOT will assume primary responsibility for the construction administration as is the ordinary practice for ACOG/ODOT/FHWA funded projects of this nature. CONSULTANT will serve OWNER in a support role during the construction process. CONSULTANT shall also provide the specific services outlined herein:

a. CONSULTANT will attend pre-construction conference conducted by ODOT.

The following will be considered as additional services to be provided on an as needed basis:

 a. It is not anticipated that Addenda will be required for PROJECT. If required, CONSULTANT shall revise plans as

- requested by OWNER for issuance of Addenda by ODOT.
- b. CONSULTANT will support the owner and ODOT as necessary to ensure PROJECT completion. CONSULTANT will respond to any Requests for Information (RFI's) as requested by ODOT and the OWNER.
- c. CONSULTANT will attend monthly construction meetings conducted by ODOT as requested by the OWNER.

## Task 7C - Record Drawings

Record Drawings will be prepared and submitted to the OWNER. Record Drawings will be prepared from field documents provided by ODOT. Full time inspections, periodic site visits or mapping/surveying of as-built conditions are NOT included in this AGREEMENT. If field survey is required, it will be requested by the OWNER, and invoiced, under Task 2B on an "as needed" basis.

# PART VI – PLAN REQUIREMENTS

Drawings shall conform to ordinary ODOT 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. It is currently unknown the exact number of full size and half size plan sets required. For the purposes of this contract, the following numbers of submittal plan sets (Planin-Hand and Final Plans) are included in the base fees:

- a. Full Size 10
- b. Half Size 41

Other required plan set copies will be provided as a reimbursed expense on a cost plus 15% basis. Work in progress sets and progress meeting sets will be half size and included in the base fees.

#### PART VII - MUTUAL AGREEMENTS

OWNER and CONSULTANT mutually agree:

- a. SERVICES to be performed by CONSULTANT shall include and encompass those services identified in "PART V – WORK BREAKDOWN STRUCTURE & WORK PRODUCT REQUIREMENTS".
- b. CONSULTANT shall hold the OWNER as a confidential client. 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. CONSULTANT shall refer all questions regarding this AGREEMENT and the work defined herein to the OWNER.
- c. Because CONSULTANT has no control over the cost of labor, materials, or equipment furnished by others, CONSULTANT'S Opinion of Probable Cost shall be made on the basis of its experience and qualifications as a professional engineer. CONSULTANT does not guarantee that proposals, bids, or actual PROJECT construction costs will not vary from CONSULTANT's construction cost estimates.
- d. When the plans are completed to the field review stage, representatives of the OWNER will accompany 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 All basic survey notes and sketches, charts, computations, and other data prepared obtained or under this AGREEMENT shall be made available upon request to the OWNER without restriction or limitation on their use. When 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 ideas incorporated therein for preparation of construction plans.
- f. 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. 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. CONSULTANT and/or surveyor shall place their 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.
- CONSULTANT and it's sub-consultants are to maintain all books, documents, papers, accounting records and other evidences 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, and if required, to ODOT.

# 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 CONSULTANT and after receipt of a written Notice to Proceed from the OWNER. The parties mutually agree that time is of the essence in the performance of this AGREEMENT in order for OWNER to have advantage of existing funding. CONSULTANT agrees to provide SERVICES for each phase of PROJECT as stated in Attachment "A" – Scope of Services, in accordance with the time frame as stated below:

TASK/MILESTONE	ANTICIPATED COMPLETION DATE
Preliminary Design & Engineering Report	5 Months from Notice to Proceed
60% Design	12 Months from Notice to Proceed
Final Plans	18 Months from Notice to Proceed

The parties further agree that 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 CONSULTANT is waiting on direction either by governing agency or OWNER, and any excusable delays as described in Article 15 of the AGREEMENT.

Dates indicated are dependent upon timely review by OWNER and ODOT, Environmental Clearance, Right-of-Way Acquisition, Utility Relocations, and other factors beyond direct control of CONSULTANT.

Task Description		<b>Total Cost</b>
TOTAL LABOR COSTS		
Phase 3 - Task 3B - Preliminary Engineering	6	105.000
Phase 3 - Task 3C - 60% Design	\$	125,380
Phase 3 - Task 3D - Final Plans	\$	155,300
Phase 4 - Environmental Clearance Support	\$	140,400
Phase 6 - Utility Relocation	\$	15,020
Phase 7 - Construction Services	\$	16,220
Project Management	\$	22,090 36,120
SUB-TOTAL LABOR EXPENSES	\$	510,530
SUMMARY		
TOTAL LABOR COST	\$ \$	510,530
EXPENSE		11,898
TOTAL CP&Y FEI	\$	522,428.
SUBCONSULTANTS		
Lemke Surveying		
Phase 1 - Task 1A - Surveying	\$	70,000.
Phase 5 - Task 5A & 5B - Right-of-Way Support Services	\$	12,500.
g sapport out most	*	12,500.
Terracon		
Phase 1 - Task 1B - Geotechnical Investigation	\$	13,050.
	*	13,050.
Traffic Engineering Consultants		
Phase 1 - Task 1C - Traffic Projection Analysis	\$	4,000.
Phase 3 - Task 3A - Traffic Signals	\$	40,000.
	Ť	40,000.
ADDITIONAL SERVICES (AS NEEDED BASIS)		
Phase 2 - Task 2A - Utility Locates	\$	6,900.
Phase 2 - Task 2B - Supplemental Survey Needs	\$	20,000.
Phase 5 - Task 5A & 5B - Supplemental Right-of-Way Support Services	\$	5,000.
Phase 7 - Task 7B - Supplemental Construction Services	\$	10,000.
SUPPLEMENTAL SERVICES (TO BE DETERMINED)		
Phase 6 - Task 6B - City Norman Utility Design	\$	-
GRAND TOTAL	\$	703,878.5

Task Description	Project Manager	Senior Engineer	Design Engineer	Design Technician /	Admin / Clerical	Тс	tals
	\$180.00		\$110.00	\$100.00	\$55.00	Hours	Cost
PHASE 1 - PRE-DESIGN SERVICES							
Task 1A Design Survey (Provided by Lemke Surveying)		NAME OF THE OWNER OF THE OWNER,				0	\$ 70,000.0
a. Establish Horizontal and Vertical Control		<del> </del>				U	\$ 70,000.0
b. Roadway Cross Sections at 50' Intervals							
c. Provide Cross Sections at Little River Tributary		-		-			
d. Create Digital Terrain Model				+			
e. Collect Topographic Data				-			
f. Tie Pavement Cores and Soil Borings							
g. Develop Survey Data				·			
h. Provide Survey in Oklahoma State Plane Coordinate System		1					
i. Establish Adequate Monumentation							-
j. Develop Survey Sheets							
k. Survey Utility and Collect Utility Information							
Task 1B Geotechnical Investigation and Pavement Design (Provided by Terracor	0	0	0	+o+	0	0	\$ 13,050.5
Provide Standard Geotechnical Investigation		1		-	<u> </u>		Ψ 10,000.0
b. Provide Pavement Design							
c. Provide Geotechnical Report							
Task 1C Traffic Projection Analysis (Provided by TEC)	0	0	ō	0	0	0	\$ 4,000.0
a. Develop Traffic Projections	×						4,000.0
b. Determine Lane Needs Throughout Corridor							
Sub-Total Hours							
Sub-Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	0	\$ 87,050.5

Task Description	Project Manager	Senior Engineer	Design Engineer	Design Technician /	Admin / Clerical	То	tals
2000 E 2000 F 2000	\$180.00	\$150.00	\$110.00	\$100.00	\$55.00	Hours	Cost
PHASE 2 - DESIGN ADDITIONAL SERVICES							
Task 2A Utility Locates (Provided by XXX)						0	\$ 6,900.00
a. Establish Horizontal and Vertical Control							0,900.00
Task 2B Supplemental Survey Needs (Provided by Lemke Surveying)	0	0	0	0	0	0	\$ 20,000.00
a. Survey Underground Utility Locates							Ψ 20,000.00
b. Survey Previously Unmarked Utilities							
c. Survey Additional Development Changes							
d. Stake Existing Right-of-Way							
e. Stake Proposed Right-of-Way							
f. Additional Legal Descriptions & Exhibits							
g. Miscellaneous Survey as Needed							
Sub-Total Hours	0	0	0	0	0	0	
Sub-Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 26,900.00

Task Description	No.	Project Manager	Senior Engineer	Design Engineer	Design Technician	Admin / Clerical	Totals	
	Shts	\$180.00	\$150.00	\$110.00	\$100.00	\$55.00	Hours	Cost
PHASE 3 - DESIGN SERVICES (TASK 3A - TRAFFIC ENGINEERING)								
Signalization of 36th Avenue and Franklin Road (Provided by TEC)		0	0	0	0	0	0	\$ 15,000.00
Traffic Signal Plans	-							
b. Signalization of 36th Avenue and Indian Hills Road (Provided by TEC)		0	Ō	0	0	0	0	\$ 15,000.00
Traffic Signal Plans								
c. Traffic Signal Interconnect (Provided by TEC)		0	0	0	0	0	0	\$ 10,000.00
36th Ave NW, Tecumseh Rd, to Indian Hills Rd								
Sub-Total Hours		0	0	0	0	0	0	
Sub-Total Cost		\$ -	\$ -	\$ -	4	\$ -		\$ 40,000.00

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Task Description	No. Shts	Project Manager	Senior Engineer	Design Engineer	Design Technician /	Admin / Clerical	То	tals
	Silts	\$180.00	\$150.00	\$110.00	\$100.00	\$55.00	Hours	Cost
PHASE 3 - DESIGN SERVICES (TASK 3B - PRELIMINARY DESIGN &	REPORT)							
The state of the s	I I							
Preliminary Analysis		28	178	344	306	14	970	\$ 100,950.0
Prepare Survey Files for Design			1,0	4	8	14	670	\$ 100,950.0
Develop Typical Sections	2	2	4	8	10			
Prepare Plan & Profile Sheets	10	8	24	48	40			
Analyze Existing Drainage System	- "		16	40	40			
Prepare Exterior Drainage Map	3		4	8	8			
Develop Preliminary Drainage System			12	30	24			
Analyze Cross Drainage Structures			16	40	40			
Develop Horizontal and Vertical Alignments		2	16	28	8			
Develop Preliminary Cross-Sections	-		40	60	120			
Develop Preliminary Grading Quantities			40	12	120			
Determine Preliminary Utility Conflicts			2	8	8			
Develop Preliminary Right-of-Way Limits		2	4	4	8			
Prepare Construction Cost Estimate		4	8	16	0			
Prepare Preliminary Engineering Report	_	4	20	30	40	- 40		
Present Recommendations to City of Norman		4	4	30	12	10		
Revise and Submit Preliminary Engineering Report		2	4	8	8	4	23 07	
"Little River Tributary G" Hydraulic Analysis								
Data Collection / Survey Coordination		0	50	78	78	10	216	\$ 24,430.00
Site Visit			2	6		2		
Hydrologic Analyses			6		6			
Hydraulic Analysis - Existing Conditions			4	8	8			
Hydraulic Analysis - Existing Conditions Hydraulic Analysis - Proposed Conditions			6	16	24			
Preliminary Hydraulic Report			12	24	12			7
			16	16	24	4		
Final Hydraulic Report	-		4	8	4	4		
Sub-Total Hours		00	000	460				
Sub-Total Cost	$\rightarrow$	28 \$ 5.040.00	228	422	384 \$ 38,400.00	24 \$ 1.320.00	1,086	\$ 125,380.0

Task Description	No. Shts	Project Manager	Senior Engineer	Design Engineer	Design Technician /	Admin / Clerical	То	tals
	Snts	\$180.00	\$150.00	\$110.00	\$100.00	\$55.00	Hours	Cost
PHASE 3 - DESIGN SERVICES (Task 3C - 60% Design)								
Roadway	A 200 P. S. C.	19	124	206	220	0	F00	
Finalize Horizontal and Vertical Alignments		2	8	16		U	569	\$ 66,680.0
Finalize Typical Sections	2	1	2	4	8 4			
Revise Plan and Profile Sheets	12		8	30	40			
Revise Preliminary Right-of-Way Needs	12		4					
Revise Preliminary Utility Conflicts			4	8	8			
Prepare Cross Section Sheets	100	4	30	8	8			
Prepare Driveway Schedules	100	4	8	80	80			
Prepare Pay Items & Notes	1		6	16	32			
Prepare Summary Tables	1	_	2	12	16 16			
Prepare Detail Sheets	1		8	8				
Revise Engineer's Estimate of Probable Cost		4	4	16	8			
Roadway QA/QC		8	40	10				
Drainage		20	70	128	200	0	410	¢ 40 100 0
Develop Interior Drainage Area Maps	2	4	12	16	32	0	418	\$ 48,180.0
Develop Preliminary Drainage System	12	4	16	40	40			
Develop Drainage Design Data Sheets	1	2	8	16	12			
Revise Drainage Structures Tables	2	2	6	10	12			
Prepare Drainage Summary Tables	3	2	8	8	24			
Prepare Detail Sheets	2	2	8	16	24			
Prepare Pay Items & Notes	1	4	4	8	8			
Prepare SWPPP and Erosion Control Plans	2		8	24	48			
Traffic		16	56	92	164	0	328	\$ 37,800.0
Develop Construction Traffic Control Plans	36	4	40	60	100	0	328	φ 37,800.0
Develop Signing and Striping Plans	12	2	4	12	36			-
Prepare Traffic Summary Tables	1	4	4	4	12			
Prepare Detail Sheets	1	2	4	8	8			
Prepare Pay Items & Notes	1	4	4	8	8			
Plan-in-Hand Review Meeting		6	. 6	6			18	\$ 2,640.0
Sub-Total Hours		61	256	432	584	0	1,333	
Sub-Total Cost			\$ 38,400.00	\$ 47,520,00	\$ 58,400.00	\$ -		\$ 155,300.00

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Task Description	No.	Project Manager	Senior Engineer	Design Engineer	Design Technician	Admin / Clerical	То	otals
**************************************	Shts	\$180.00	\$150.00	\$110.00	\$100.00	\$55.00	Hours	Cost
PHASE 3 - DESIGN SERVICES (Task 3D - Final Plans)						<b>\$00.00</b>		
The second of th								
Roadway		26	106	209	221	18	580	\$ 66,660.00
Finalize Plan and Profile Sheets	12	2	8	60	80	10	560	\$ 66,660.0
Finalize Right-of-Way Needs			2	4	4			-
Finalize Cross Section Sheets	100	4	24	80	80			
Finalize Driveway Schedules	1		4	8	16			
Finalize Pay Items & Notes	1		-	4	8			
Finalize Summary Tables	1			5	9			
Finalize Detail Sheets	1		8	8	8			
Finalize Engineer's Estimate of Probable Cost		4	4	16	0			
Roadway QA/QC		8	40	10	-			
Prepare Specifications and General Notes		4	8	16	16	12		
Prepare Special Provisions		4	8	8	10	6		
Drainage		12	46	78	140	0	276	\$ 31,640.0
Finalize Interior Drainage Area Maps	2		2	4	12		210	Ψ 31,040.00
Finalize Drainage System	12	2	8	24	24			
Finalize Drainage Design Data Sheets	1		4	8	8		_	
Finalize Drainage Structures Tables	2	2	4		12			
Finalize Drainage Summary Tables	3	2	6	6	16			
Finalize Detail Sheets	2	4	12	12	24			
Finalize Pay Items & Notes	1	2	4	8	8			
Finalize SWPPP and Erosion Control Plans	12		6	16	36			
Traffic		12	38	60	102	0		\$ 24,660.00
Finalize Construction Traffic Control Plans	36	4	24	36	60	- 0	212	\$ 24,000.00
Finalize Signing and Striping Plans	12	2	2	8	24			
Finalize Traffic Summary Tables	1	2	4	4	6			
Finalize Detail Sheets	1	2	4	4	4			
Finalize Pay Items & Notes	1	2	4	8	8			
Attend Final Plan Review		8	8				16	\$ 2,640.00
Revise Plans Per Comments			16	40	80		136	\$ 14,800.0
Sub-Total Hours								
Sub-Total Cost		58	214	387	543	18	1,220	
		\$ TU,44U.00	\$ 32,100.00	\$ 42,570.00	\$ 54,300.00	\$ 990.00		\$ 140,400.00

Task Description	No. Shts	NO. Managor E	Senior Engineer	Senior Planner	Design Engineer	Design Technician /	Admin / Clerical	Totals	
	Silts	\$180.00	\$150.00	\$125.00	\$110.00	\$100.00	\$55.00	Hours	Cost
PHASE 4 - ENVIRONMENTAL CLEARANCE SUPPORT									
Environmental Clearance Support		21	32	34	8	12	2	400	A 45 000 00
a. Conduct Public Meeting		6	6	6	8	12	Z	109	\$ 15,020.00
b. Prepare Power Point Presentation		4	8	6	- 4	4			
<ul> <li>Attend and Present at the Public Meeting</li> </ul>		4	4	1	4	4			
d. Prepare Responses to Public Meeting Questions		4	8	0	4				
e. Prepare Meeting Minutes		2	4	0		-			
f. Prepare Meeting Exhibits		1	2	2		8			
Sub-Total Hours		21	32	34	8	12	2	109	
Sub-Total Cost		\$ 3,780.00		\$ 4,250.00		\$ 1,200.00	\$ 110.00	103	\$ 15,020,0

Task Description	No. Shts	Project Manager	Senior Engineer	Design Engineer	Design Technician	Admin / Clerical	То	tals
	Sitts	\$180.00	\$150.00	\$110.00	\$100.00	\$55.00	Hours	Cost
PHASE 5 - RIGHT-OF-WAY ACQUISITION SUPPORT SERVICES								
(Provided by Lemke Surveying)								
Task 5A - Right-of-Way Acquisition Support Services	NAME OF STREET	0	0	0	0	0		A 7 500 0
a. Prepare Legal Descriptions						- 0	0	\$ 7,500.00
b. Prepare Exhibits								
c. Prepare Misery Sheets								
d. Revise Legal Descriptions and Exhibits								
Task 5B - Recoupment District Legal Decriptions and Exhibits		0	0	0	0	0		<b>*</b> F 200 0
a. Prepare Legal Descriptions	1000	7 Y.		U	_ 0	0	0	\$ 5,000.0
b. Prepare Exhibits								
Sub-Total Hours		0	0	0	0.1	0		
Sub-Total Cost		\$ -	\$ -	\$ -	9	\$ -	0	\$ 12,500.0

Task Description	No. Shts	Project Manager \$180.00	Senior Engineer \$150.00	Design Engineer \$110.00	Design Technician /	Admin / Clerical \$55.00	Totals	
					\$100.00		Hours	Cost
PHASE 6 - UTILITY RELOCATION								
Task 6A - Utility Relocation Coordination and Relocation Plan Review		14	30	0	92	0	136	\$ 16,220.00
Coordination with City Utility Coordinator		6	16		16		130	φ 10,220.00
b. Coordination with Utility Companies			4		16			
c. Attend Meetings with Utility Companies		4	4		4			
d. Review Utility Relocation Plans		2	4		16			
e. Maintain "Utility Relocation Map"		2	2		40			
Task 6B - Design for City Utility Relocations (TBD)	S-1-1-1	0	0		0	0	ō	\$ -
a. Waterline Plan and Profile							<u> </u>	Ψ -
b. Waterline Details								
<ul> <li>Sanitary Sewer Line Plan and Profile</li> </ul>								
d. Sanitary Sewer Line Details								
e. Utility Quantities, Bid Item Notes and Estimate								
f. Utility General Notes and Specifications								
Sub-Total Hours		14	30	0	92	0	136	
Sub-Total Cost			\$ 4,500.00	\$ -	\$ 9,200.00		130	\$ 16,220.00

Task Description	No. Shts	Project Manager \$180.00	Senior Engineer \$150.00	Design Engineer \$110.00	Design Technician / EIT \$100.00	Admin / Clerical \$55.00	Totals		
							Hours	Cost	
PHASE 7 - CONSTRUCTION SERVICES									
Task 7A - Bid Administration		7	23	10	8	0	48	\$ 6,610.00	
Prepare a Signed/Sealed Engineer's Estimate		2	4	4		u	70	Ψ 0,010.00	
<ul> <li>Submit "Construction Plans" to ODOT for Reproduction</li> </ul>			4	-	8				
c. Attend Pre-Bid Meeting		3	3						
d. Answer RFI's		2	12	6					
Task 7B - Construction Administration		4	4	0	0	0	g .	\$ 1,320.00	
c. Attend Pre-Construction Meeting Conducted by ODOT		4	4		V .	<b>V</b>	8	Ψ 1,320.00	
Task 7C - Record Drawings		2	8	60	60	0	130	\$ 14.160.00	
Prepare and Submit Record Drawings to the City		2	8	60	60	, , , , , , , , , , , , , , , , , , ,	130	Ψ 17,100.00	
Sub-Total Hours	+	13	35	70	68	0	186		
Sub-Total Cost			\$ 5,250.00		\$ 6,800.00	\$ -	100	\$ 22,090.00	

Task Description	No. Shts	Project Manager \$180.00	Senior Engineer \$150.00	Design Engineer \$110.00	Design Technician \$100.00	Admin / Clerical	Totals		
						\$55.00	Hours	Cost	
Project Management									
Project Management		108	58	36	16	44	262	\$ 36,120.00	
Meet with City, ODOT, and Stakeholders as Required		· 24	24	12	10	77	202	a 30,120.00	
Coordination with Subconsultants		8	8	8					
Create and Submit Monthly Invoices		24				24	- 100		
Prepare Monthly Progress Reports	1	24			7.	24			
Prepare Meeting Agendas		12	6			12			
Internal Design Team Meetings		8	16	16	16	12			
Monitor and Review Subconsultant Invoices		8	4	10	10	8			
Sub-Total Hours	+	108	58	36	16	44	262		
Sub-Total Cost		\$ 19,440.00	\$ 8,700.00	\$ 3,960.00			202	\$ 36,120.00	

CP&Y, Inc. 1000 W. Wilshire Blvd., Suite 224 Oklahoma City, OK 73116

#### Direct Expenses

Expense Item	Unit	Unit Cost		Amount	Total Cost	
CADD Plotting	sf	\$	1.50	5,500	\$	8,250.00
Mylar Plots	sheet	\$	3.00	0,000	\$	0,230.00
Digital Ortho Plotting	If	\$	3.00	200	\$	600.00
11" X 17" Mylar	sheet	\$	1.00	200	\$	000.00
8 1/2" X 11" B/W Paper Copies	sheet	\$	0.10	2,000	\$	200.00
11" X 17" B/W Paper Copies	sheet	\$	0.20	5,500	\$	1,100.00
8 1/2" X 11" Color Paper Copies	sheet	\$	1.00	300	\$	300.00
11" X 17" Color Paper Copies	sheet	\$	1.80	200	\$	360.00
Fax Copies	sheet	\$	0.10		\$	
Film and Development	roll	\$	8.00		\$	
4 X 6 Digital Color Prints	picture	\$	0.50		\$	_
Oversized Digital Color Prints	picture	\$	50.00		\$	
Standard Postage	letter	\$	0.46	300	\$	138.00
Express Mail (Standard)	each	\$	15.00	10	\$	150.00
Express Mail (Oversized)	each	\$	30.00		\$	100.00
Deliveries	each	\$	25.00	10	\$	250.00
Airfare	each	\$	200.00		\$	200.00
Rental Car	day	\$	80.00		\$	
Lodging	day	\$	85.00		\$	
Meals	day	\$	36.00		\$	
Mileage	mile	\$	0.550	1,000	\$	550.00
SUBTOTAL DIRECT EXPENSES					\$	11,898.00

# ATTACHMENT "D" OWNER'S RESPONSIBILITIES

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

#### I. OWNER RESPONSIBILITIES

- 1. OWNER shall furnish to CONSULTANT all available information pertinent to PROJECT including previous reports, and any other data relative to design and construction of PROJECT.
- 2. OWNER shall be responsible for all permit fees.
- 3. 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 SERVICES of CONSULTANT.
- 4. 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 OWNER's policies and decisions with respect to materials, equipment, elements, and systems pertinent to the services covered by this AGREEEMENT.
- 5. OWNER shall furnish legal assistance as required in the preparation, review, and approval of construction documents.
- 6. OWNER shall furnish assistance in locating existing OWNER-owned underground utilities and expediting their relocation in preparation for construction.
- 7. 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.

# II. SPECIAL RESPONSIBILITIES

- 1. OWNER shall furnish to CONSULTANT traffic studies as may be required for by ACOG, ODOT, and/or FHWA for consideration of the PROJECT funding and/or Project letting.
- 2. OWNER shall furnish Certificates of Title, Appraisals, and Right-of-Way Acquisition necessary for utility relocations and/or proposed construction of PROJECT.