

WORK ORDER NO. PW1

This Work Order, dated the _____ day of _____, _____ (the "Effective Date"), between the City of Norman ("City") and Cowan Group Engineering, LLC ("Consultant") (City and Consultant, together, the "Parties"), adopts and incorporates by reference the terms and conditions of the Agreement for On-Call Professional Services entered into on Jun 27, 2026, ("Agreement") by the Parties. Capitalized terms used by not defined in this Work Order shall have the meanings set out in the Agreement.

WHEREAS, pursuant to Section 3.1 of the Agreement, the Parties wish to enter into this Work Order for purposes of setting forth the rights and obligations regarding the provision of Services by Consultant for the Main Street Two-Way Preliminary Study hereinafter described as "Project" for purposes of this specific Work Order).

NOW THEREFORE, for good and valuable consideration contained herein, the exchange, receipt, and sufficiency of which are acknowledged, the parties agree as follows:

1. Scope of Services. Contractor shall perform those services set forth in Exhibit A attached hereto ("Services").
2. Compensation and Payment. In consideration for the performance of Services under this Work Order, City shall pay to Consultant in an amount and manner as set forth in Exhibit B attached hereto.
3. Schedule. Consultant shall perform the Services in accordance with the schedule set forth in Exhibit C attached hereto.
4. Termination. The term of this Work Order shall commence on the "Effective Date" and end upon the completion of the Services unless otherwise terminated in accordance with the Agreement.
5. [Other Work Order-Specific Terms and Conditions]

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, Contractor has caused this Work Order No. PW1 to be duly executed.

**Cowan Group Engineering, LLC
(CONSULTANT)**

By:

Title:

Attest:

Corporate Secretary

ACKNOWLEDGEMENT

STATE OF OKLAHOMA)
) ss.
COUNTY OF OKla)

Before me, the undersigned, a Notary Public in and for said County and State, on this 6th day of Aug., 2026, personally appeared Jeffrey A. Gowan, to me known to be the identical person who executed the foregoing instrument as an authorized representative of the Contractor, and acknowledged to me that they executed the same as their free and voluntary act for the uses and purposes therein set forth.

Witness my hand and official seal the day and year above written.

Notary Public

My Commission Expires:
My Commission Number:

5/29/30
02.008759



IN WITNESS WHEREOF, the City has caused this Work Order No. _____ to be duly executed this _____ day of _____, 202__.

**CITY OF NORMAN, OKLAHOMA
(CITY)**

By: _____
Mayor

Attest: _____
City Clerk – City of Norman

Reviewed as to form and legality this 20 day of August, 2026.

Elizabeth Eichel
City Attorney

EXHIBIT A SCOPE OF WORK

DESCRIPTION OF PROJECT

The scope of work is to Evaluate and Prepare a Preliminary Engineering report to convert the existing one-way three-lane West Main Street from University Boulevard to Porter Avenue to a two-way facility. The project will include a Preliminary Engineering Report with Survey, Traffic model, conceptual layouts and preliminary estimates. The preferred typical section is 2-lane curb and gutter section with left turn lanes at intersections and on-street parking. It is preferred that these modifications occur with minimal changes or impact to the existing curb line. The project will begin at the intersection of University Boulevard extending east to Porter Avenue. The report will include traffic modeling and preliminary signal pole layouts and modifications required at the existing signal pole locations due to the two-way conversion and added A.D.A. pedestrian modifications. The scope of work will include topographic survey, preliminary conceptual layouts, preliminary engineering report, and ADA Compliance for all features.

DESIGN SERVICES

The following design services shall align with the tasks set forth in **Attachment C – Compensation**.

1. Roadway / Street

Prepare a preliminary engineering report for converting West Main Street from University Blvd to Porter Ave. from existing one-way facility to a two-way facility. The existing facility is a 3-lane one-way section with on-street parking, curb and gutter, and sidewalks. It is anticipated report will analyze modifying the existing driving lanes, parking areas and minimal changes to the curb, gutter and sidewalk areas. The proposed roadway will consist of on-street parking, one (1) 12' driving lane in each direction and left turn lanes at the intersections. The analysis will evaluate two options regarding the paving section. Option 1 will evaluate utilizing the existing pavement section; while Option 2 will evaluate the need for full depth pavement replacement.

The on-street parking and ADA facilities will be evaluated and designed to meet the most current version of the ADA, AASHTO, and PROWAG guidelines.

2. Traffic

The general scope of the complete design project is to change the operations of Main Street (S University Boulevard to S Porter Avenue, Norman, OK) from one-way to two-way operations. A traffic study will be completed to evaluate the impacts to W Main Street and adjacent roadways and provide design recommendations for the project design. Traffic signal pole placement locations will be provided for the project design team to incorporate into design submittals.

2.1 Traffic Data Collection

Collect turning movement counts data for up to 14 study intersections along Main Street between University Boulevard and Porter Avenue, and adjacent locations along Gray Street and the Gray Street/Main Street Roundabout during representative weekday peak periods (AM and PM).

- E Main Street/Acres Street/N Carter Avenue Roundabout
- E Main Street & S Porter Avenue
- E Main Street & N Crawford Avenue
- E Main Street & N Peters Avenue
- E Main Street & N Jones Avenue
- W Main Street & James Garner Avenue
- W Main Street & N Santa Fe Avenue
- W Main Street & N Webster Avenue
- W Main Street & N University Boulevard
- W Main Street & N Flood Avenue
- W Gray Street & N Flood Avenue
- W Gray Street & N University Boulevard

- W Gray Street & James Garner Avenue
- W Gray Street & S Porter Avenue

Counts will be supplemented with existing traffic volume data available from the City of Norman and the Association of Central Oklahoma Governments (ACOG). Field data collection will also document existing lane configurations, signal timing, pedestrian activity, and on-street parking conditions at each study intersection to establish an accurate baseline for analysis.

2.2 Existing Conditions Traffic Analysis

Using the data collected in Task 1, to develop existing conditions traffic operations models for all intersections collected. This analysis will establish baseline Level of Service (LOS), intersection delay, and volume-to-capacity ratios using Synchro 12. The existing conditions analysis will serve as the "before" benchmark against which the proposed one-way conversion will be measured.

2.3 Two-Way Conversion Operational Analysis

Building on the existing conditions baseline, to develop a future conditions traffic model reflecting Main Street's proposed conversion from one-way to two-way operation. This task will evaluate revised lane configurations, planning level signal phasing and timing adjustments, and turning movement updates to model potential two-way operational traffic conditions. LOS, delay, and volume-to-capacity ratios will be calculated for up to 14 study intersections under the proposed configuration, along with a qualitative assessment of anticipated impacts to circulation, access, and adjacent parallel routes.

2.4 Before/After Comparison and Tech Memo

Prepare a before/after comparison summarizing changes in LOS, delay, and capacity across all 14 study intersections between the existing one-way configuration and the proposed two-way conversion along Main Street. Findings will be documented in a technical memorandum suitable for presentation to City staff and elected officials, including intersection-by-intersection tables, summary graphics, and a narrative discussion of operational trade-offs and any locations warranting further mitigation.

2.5 Preliminary Design Traffic Signal Pole Placement

For the seven (7) existing and proposed signalized intersection along the one-way section of Main Street (N University Boulevard to S Porter Avenue), Prepare traffic signal pole placement locations reflecting the revised lane configuration associated with the one-way to two-way conversion. This task will include field verification of existing pole locations and foundations; development of proposed pole and mast arm placements in AutoCAD Civil 3D. Coordination with the City and any applicable utility owners to confirm clearances and constructability ahead of final signal design. Traffic signal pole placement locations will be submitted to the Client in the form of a CAD file (.dwg or equivalent) to be incorporated into the project preliminary design plans.

3. Survey

Topographic survey will be provided along the centerline of Main Street from Park Drive to approximately 250' east of Porter Ave. The corridor shall be from building face to building face. The survey will also include a minimum of 100 feet in all directions at all side street and cross street intersections or through the first driveway, whichever distance is greater.

Survey control will be based on the City of Norman Control network and will include 1-foot contour intervals with spot elevations at all key locations such as drainage features, sanitary sewer manholes, etc. Survey will denote the location of all visible utilities, those identified through OKIE 811 requests and any obtained from the City of Norman utility atlas maps. Additional items to be shown include all improvements within the areas of scope such as drives, parking lots, landscaping, etc.

The survey will include property lines and alignment ties to monuments or corners. Landowner notifications will be limited to the owners of property that will be accessed during survey field work.

MEETINGS

The CONSULTANT shall schedule milestone meetings or conference calls with the OWNER to discuss current project status, upcoming milestones, and any issues arising on the project. Brief weekly conference calls between the OWNER Project Manager and CONSULTANT Project Manager shall be conducted.

DESIGN CRITERIA

The design and plans shall conform to current (at the time of bidding) Federal, State of Oklahoma, City of Norman, and American Association of State Highway and Transportation Officials (AASHTO) policies and standards unless modified in writing at the direction of the OWNER. It is expected that this project will be bid and awarded by the City of Norman; however, the project design and plans will be per the current ODOT requirements in the event that funding is available for the project to be bid and awarded by ODOT.

DELIVERABLES

The CONSULTANT shall provide monthly project status updates that include (but are not limited to) schedule updates, action items, and the anticipated submittal date for upcoming milestones. CONSULTANT shall make available all design calculations upon request. CONSULTANT shall complete thorough quality control reviews prior to the submittal of all deliverables.

1. Preliminary Engineering Report

Report submissions will include both hard-copy and electronic deliverables. The hard-copy submittal shall consist of five (5) printed copies of the Preliminary Engineering Report and delivered to the City of Norman Engineering Department. For the electronic submittal, the CONSULTANT will upload the plan set (and all other requested documents) to Smartsheet.

a. Preliminary Engineering Report

A Preliminary Engineering Report will be submitted and shall include the following information:

- Develop 15% Conceptual typical and layouts and alternates
- Review 15% Conceptual typical and layouts with City Staff
- Existing Conditions (Typical Sections, ADA Compliance, Signal Poles)
- Proposed Conditions (Typical Sections, ADA Compliance, Signal Poles)
- Traffic Modeling (Traffic Counts to be provided by the City)
- A.D.A. evaluation for compliance with number of parking stalls and accessibility of the existing parking stalls.
- Engineering Report
 - Conceptual Plan Sheets with Aerial background
 - Conceptual Typical Sections
 - Preliminary Construction Sequence
 - Conceptual Estimated Construction Costs
- Draft Engineering Report
- Present Report to Council (As Required)
- Prepare and Deliver Final Engineering Report
 - Five (5) Hard Copies and one (1) PDF

EXHIBIT B COMPENSATION

The OWNER will compensate the ENGINEER on a lump sum basis for the SERVICES rendered. The lump sum fee is broken down below by task as defined in the Scope of Services:

Task	Task Description	Total Fee Amount
1	Preliminary Engineering Report	\$63,500
2	Traffic Modeling and Study	
2.1	Traffic Data Collection	\$9,000
2.2	Existing Conditions Traffic Analysis	\$12,000
2.3	Two-Way Conversion Operational Analysis	\$14,000
2.4	Before/After Comparison And Tech Memo	\$12,000
2.5	Preliminary Design Traffic Signal Pole Placement	\$26,000
3	Topo Survey	\$58,000
Total		\$194,500

ENGINEER may submit interim statements, not to exceed one per month, for partial payment for SERVICES rendered. The statements to OWNER will be by task for the percentage of work actually completed. The OWNER shall make interim payments within 30 calendar days in response to ENGINEER's interim statements.

EXHIBIT C SCHEDULE

ENGINEER shall begin work under this Agreement within ten (10) days of a Notice to Proceed and shall complete the work in accordance with the schedule below:

Task	Description	Sept 2026	Oct. 2026	Nov. 2026	Dec. 2026	Jan. 2027
1.	Topo Survey					
2.	Preliminary Report					