The City of Norman (City) describes the basic scope of work to provide all engineering services necessary to prepare preliminary and final construction plans, specifications, and bid documents in accordance with their design and construction requirements and generally follow the Oklahoma Department of Transportation (ODOT) design processes and procedures, and provide technical assistance throughout the design and construction of the Porter Avenue Streetscape – Phase 1 from the southside of Robinson Street to the northside of Hughbert Street located in the central part of Norman (See Figure 1).

This project will provide new sidewalks, ADA compliant sidewalk ramps, roadway curb and gutter, new driveways and driveway consolidation, decorative street and pedestrian lighting, landscaping, and streetscape amenities.

The general civil engineering scope of work to be provided by the Cabbiness Engineering design team will include the following design aspects:

- Design the new Porter Avenue Streetscape Phase 1 with new sidewalks, ADA compliant sidewalk ramps, new curb and gutters for Porter Avenue, an upgraded traffic signal, new street and pedestrian lighting, landscaping and streetscape amenities. The overall design will generally follow the conceptual design document, <u>Porter Avenue Corridor Study Phase II, June</u> 4, 2010 prepared by Ochsner Hare & Hare.
- Identify and consolidate driveways and on-street parking to provide a safer multi-modal (vehicular, bicycle and pedestrian) transportation corridor along Porter Avenue.
- Identify public and private utilities in the project area and develop a preferred corridor for each utility affected.
- Determine the right-of-way that will be required to construct the proposed improvements.
- Prepare all necessary construction documents for the city to advertise, bid and award this project.

Tasks and sub-tasks to be performed to accomplish the scope of work will include the following:

Task 1 ~ Overall Project Management

- 1. Meet with the city, program managers and stakeholders to discuss the project expectations and overall design concepts.
- 2. Provide the city and program manager with monthly project updates of the work being performed by the design team. This includes project management of all sub-consultants, communication with stakeholders and coordination with all public entities related to this project.
- 3. Provide detailed project schedules, invoicing and monthly updates of the project progress.

4. When requested, attend the city council meetings or study sessions to provide updates on the project, attend all public meetings with stakeholders to discuss the project's design, and meeting with city staff and program manager.

Task 2 ~ Project Design

A. Topographic Survey

1. Provide a complete topographic survey of the project limits including property boundaries, plat information, roadway and sidewalks, existing surface features, building footprints and finish floor elevations, above ground utilities, and underground utilities as per field locate and/or utility atlas maps.

B. Preliminary Design Plans

- Attend kick-off meeting with the city staff and program manager to discuss the scope of work and project requirements. The city will handle all environmental clearance process including all documentation necessary for the various studies if required. The design team will assist, as needed, by answering questions and providing design information throughout the project.
- 2. The design team will develop preliminary design, construction plans (30% complete) loosely based upon the conceptual design document, <u>Porter Avenue Corridor Study Phase II, June 4, 2010</u> prepared by Ochsner Hare & Hare. The preliminary design will include:
 - a. Roadway horizontal alignment and vertical profiles depicted on plan and profile sheets
 - b. Driveway consolidation and limited access control
 - c. Sidewalk and sidewalk ramp design compliant with current ADA guidelines
 - d. Streetscape design elements
 - e. Landscaping and irrigation designs
 - f. Existing storm sewer design review and minor inlet improvements as required.
 - g. Roadway cross section sheets
 - h. Traffic signals and street lighting design
- 3. The design team will prepare a written analysis (technical design memo) that includes design requirements (i.e., sidewalk and streetscape design, drainage, traffic signals and street lighting, etc.), all necessary calculations, and a detailed cost estimate. The design analysis will be submitted for

written approval to the city before proceeding with the next milestone submittal of plans and specifications.

C. Plans Right-of-Way and Utility Design Submittal (65% Complete Plans)

- 1. The design team will refine the city approved preliminary construction plans to a level of completeness that accurately depicts the necessary right-of-way requirements for the project. This level of completeness is approximately 65% complete construction plans. The Right-of-Way and Utility Design plans will include:
 - a. Finalized roadway horizontal alignment and vertical profile depicted on plan and profile sheets
 - b. Refined driveway consolidation and limited access control
 - c. Refined sidewalk and sidewalk ramp design compliant with current ADA guidelines
 - d. Refined streetscape design elements
 - e. Refined landscaping and irrigation designs
 - f. Refined storm sewer design and minor inlet improvements as required.
 - g. Refined roadway cross section sheets
 - h. Refined traffic signals and street lighting design
 - i. Preliminary signage and pavement striping design
 - i. Identify limits of new right-of-way required to construct the project
- The design team will strive to avoid all existing utilities. However, it is anticipated some existing utilities will need to be relocated. If new utility corridors are to be established, these will require new right-of-way and easements necessary for construction. The design team will furnish required plans to each utility company affected as determined to be necessary to coordinate the project construction and utility relocations. The design team will request written approvals from all utility companies as to the accuracy of all facilities to remain in place shown on the plans.
- 3. The design team will prepare a detailed cost estimate based upon the level of completeness of the construction plans. The cost estimate will be submitted for written approval to the city before proceeding with the next milestone submittal of plans and specifications.

D. Final Design (95% Complete Plans) Submittal

1. The design team will complete the project's final design of the Porter Avenue Streetscape – Phase 1 and submit to the city, 95% complete construction plans for final review and approval. The final design plans will show all right-of-way information including existing and proposed right-of-way limits and platted property lines. The design team will prepare detailed plans including, but not limited to:

- a. Title Sheet
- b. Typical Sections Sheet
- c. Pay Item Summaries and General Notes
- d. Survey Data Sheets
- e. Roadway Plan and Profile Sheets
- f. Sidewalks and Sidewalk Ramp Detail Sheets
- g. Streetscape Elements Detail Sheets
- h. Signal and Street Light Plan Sheets
- i. Signing and Striping Sheets
- j. Landscaping and Irrigation Plan and Detail Sheets
- k. Miscellaneous Detail Sheets
- I. Temporary and Permanent Erosion Control Plan Sheets
- m. Existing and Proposed Right-of-Way
- n. Construction Sequencing Plan and Detail Sheets
- 2. The design team will prepare final construction plans, special provision and a construction cost estimate in accordance with the requirements of the city's policies and procedures.

E. Final Plans, Specifications and Estimate (P,S & E) Submittal

- 1. The design team will make final changes to the project's design as requested by the city from their 95% complete plans review.
- 2. The design team will prepare the final plans, specifications, list of special provisions and a detail construction estimate for submittal to the city. All final plans and specifications will be signed and sealed by a licensed Professional Engineer registered in the State of Oklahoma.

Task 3 ~ Bidding Services

- 1. The design team will provide the city support services during the bidding for this project. Those support services include:
 - a. Attendance at the pre-bid meeting
 - b. Review all questions and comments presented at the pre-bid meeting and formulate written responses
 - c. Review bid tabulations and make recommendations as required
 - d. Prepare a written award recommendation letter as required

Task 4 ~ Construction Support Services

- 1. The design team will provide the city support services during the construction of this project. Those support services include:
 - a. Attendance at the pre-work meeting
 - b. Review all questions and comments presented at the pre-work meeting and formulate written responses
 - c. Review all Requests for Information (RFI's) and formulate written responses for the city
 - d. Review all Shop Drawings and Submittals and formulate written responses for the city
 - e. Review all Change Orders (CO's) and formulate written responses for the city
 - f. Attend monthly construction progress meeting as needed or requested by the city

Task 5 ~ As-Built Plan Services

1. The design team will provide the city as-built construction drawing in electronic format (PDF's and CADD Files) at the completion of construction.

Scope of Work Assumptions

- 1. The city will provide all updated traffic counts and data needed for the traffic signal design and upgrades.
- 2. City will prepare all environmental clearance documents and perform studies necessary per the NEPA process if required.
- 3. The City will provide notices for all public meetings in accordance with normal city public meeting requirements.

<u>Additional Services To Be Added by Contract Amendment</u>

- 1. Public (City of Norman) Utility Relocations: If required by the city, public utility relocation designs will be handled by the design team by a separate contract amendment.
- 2. Permitting: Any required local, state or federal permitting for public utilities will be handled by the design team. The owner (the city) will be responsible for payment of all fees for these permits.
- 3. Right-of-Way: If required by the city, any new right-of-way services to include research and preparation of documents (ownership research, legal descriptions and exhibit mapping) and field staking of new right-of-way will be handled by the design team by a separate contract amendment.

Proposed Fees

The fees associated for all tasks and sub-tasks to be performed to accomplish the scope of work are:

Task 1 ~ Overall Project Management	\$ 16,000.00
Task 2 ~ Project Design	
Topographical Survey	\$ 6,500.00
Preliminary Design	\$ 43,500.00
Right-of-Way & Utility Submittal	\$ 53,200.00
Final Design Submittal	\$ 22,300.00
Plans, Specifications & Estimate (PS&E) Submittal	\$ 15,500.00
Task 3 ~ Quality Control/Quality Assurance	\$ 8,000.00
Task 4 ~ Bidding Services	\$ 3,500.00
Task 5 ~ Construction Support Services	\$ 12,000.00
Task 6 ~ As-Built Plan Services	\$ 5,000.00
Total Contract Amendment #1 Fee	\$185,500.00

executed this Agreement.	ABBINESS ENGINEERING, LLC nave
DATED thisth day of, 2019	Э.
The City of Norman (OWNER)	Cabbiness Engineering, LLC (CONSULTANT)
Signature	Signature Aufanium
Name	Name <u>J. Bret Cabbiness, P.E.</u>
Title	Title President
Date	Date
Attest:	Attest:
City Clerk	Secretary Cathiness
Approved as to form and legality this	day of 2019.
City Attorney	

PROFESSIONAL SERVICES AGREEMENT K-1213-165 CONTRACT AMENDMENT #1 FINAL DESIGN OF INTERSECTION IMPROVEMENTS TO PORTER AVENUE AND ACRES STREET

Figure 1:

