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PROPOSAL FOR PROFESSIONAL SERVICES
AMENDMENT No. 1

PROJECT NAME: **Denton Municipal Electric**
Transmission Capital Improvement Program

TNP PROJECT NUMBER: DME 13222

CLIENT: Denton Municipal Electric (City of Denton)

ADDRESS: 1659 Spencer Road
Denton, Texas 76205

Teague Nall and Perkins, Inc., (the Consultant or TNP) hereby proposes to continue to provide engineering, surveying, and other related services in support of the Denton Municipal Electric (DME) Substation and Transmission Capital Improvement Program (CIP), in the City of Denton, Texas, in accordance with the terms and conditions contained in the original contract.

The original Professional Services Agreement with the Consultant was intended to provide a means for DME to obtain all civil engineering, permitting, surveying, development support, and other related services necessary to accomplish the DME CIP. The agreement was structured with flexibility to allow DME to obtain a range of engineering, surveying, development, and related services including those that could not be specifically identified at the time the contact began. In the course of providing services under the provisions of this contract, TNP has been involved more fully than could have been anticipated in site selection and feasibility evaluations, prepared field surveys of existing transmission lines, provided more project development surveying and construction staking than anticipated, prepared ALTA surveys for the acquisition of numerous properties, provided asbestos testing and Phase I Environmental Site Assessments (both using subconsultants), and generally had a greater role in the execution of the CIP than originally anticipated. Several substations have required the design of retaining walls and/or storm drain systems or other public improvements that could not have been known about prior to the sites being selected.

In accordance with the original agreement, the scope of work under this amendment will include, but not be limited to the following:

Land Surveying

Deed sketches, boundary surveys, plats, design surveys, topographic surveys, preparation of easement exhibits, alignment staking, as-built surveys, Level A and B Subsurface Utility Engineering (S.U.E.), construction verification surveys of concrete placement and other improvements, placement of monuments, and other surveying services as necessary.

Engineering

Feasibility studies for site selections, alignment evaluations and route planning, coordination with other governmental agencies (including TxDOT, City of Denton, Denton County, etc.), site plans, grading plans, drainage studies, design of support infrastructure (such as streets, drainage, water and sanitary sewer facilities), substation retirement support, underground transmission line design and support, landscaping and irrigation design, structural design,

coordination and consultation with geotechnical engineers, preparation of specifications and Requests for Proposals, construction oversight and/or inspection, and other design services as necessary.

Permitting

Permit processing, including coordination with the City of Denton Planning Department, and preparation of submittal packages for permits such as Specific Use Permits, variances, plats, Environmentally Sensitive Areas, TxDOT permits, rail crossing permits, floodplain studies, Site Plans, Clearing & Grading permits, building permits, fence permits, and other permits as may be required. The DESIGN PROFESSIONAL will represent DME at public meetings and official meetings with City staff as requested. Project management, planning, scheduling and tracking necessary to direct the work will also be a part of this effort.

Completion of the CIP will require support for the following substations and transmission lines, some of which are in process and others have yet to begin:

Substations

Jim Christal, Brinker, Long Road, Underwood, Mayhill, Eagle, Hickory, Masch Branch, Fort Worth Expansion, Denton West Interchange, Brazos, Spencer Interchange, Hartlee Field

Transmission Lines

Hickory to Locust, RD Wells to Hickory, Spencer to Locust, Pockrus to Mayhill, Mayhill to Brinker, Denton North to Arco, Cooper Creek to Arco, Pockrus to Arco, Jim Christal to RD Wells, Denton West Interchange to RD Wells, Woodrow to Brinker, Spencer to Brinker

Assumptions and Clarifications

The following assumptions were used by the DESIGN PROFESSIONAL for the preparation of this scope of Basic Services:

1. The estimated fees indicated for the services identified above are based on information provided by DME with regard to the substations and transmission lines that are part of the CIP, as indicated above.
2. Services to be provided will be as requested by DME staff.
3. Services will be provided by TNP staff or may be provided by subconsultants where additional capacity or specialized expertise is required.
4. Engineering design will be in accordance with City of Denton (or other applicable agencies) design standards, and generally accepted engineering practices.
5. All services will be performed at TNP standard hourly rates effective at the time the work is performed.
6. Easement documents prepared will consist of an Exhibit A (property description) and Exhibit B (parcel map), and will be sealed by a Registered Professional Land Surveyor.
7. Horizontal and vertical control shall be established by TNP survey crews at strategic locations along the project route and will consist of 5/8-inch rebar with caps stamped "TNP" set flush with existing ground. Temporary benchmarks will be established at appropriate intervals along the project route for utilization during design and construction phases. All bearings of lines provided by TNP will be referenced to Grid North of the Texas Coordinate System of 1983 {North Central Zone No. 4202; NAD83 (CORS96) Epoch 2002.00} as derived locally from Western Data Systems Continuously Operating

Reference Stations (CORS) via Real Time Kinematic (RTK) survey methods. All distances and coordinate data provide1 by TNP will reflect surface values. An average Combination Factor will be utilized and reported for scaling grid coordinates and distances to surface values. All elevations provided by TNP will be referenced to NAVD88, as derived from RTK observations. Orthometric heights will be calculated by applying the Geoid09 model to ellipsoid heights.

Compensation

The Consultant shall be compensated on an hourly basis at Consultant's standard hourly rates at the time service is provided for personnel working on the phases of the project designated as such. A schedule of Consultant's current hourly rates is provided as Attachment 'A' to this proposal. Services shall be billed monthly based on actual time spent working on the project by Consultant's staff. The fees shown are for hourly services are estimates only. The Consultant makes no guarantee that the fees will not exceed the amounts shown. The consultant will notify the Client prior to exceeding the estimated fees shown.

For services to be performed by the Consultant as described above, the Consultant will be compensated the following estimated fees:

Substations	$ 2,170,000
Transmission Lines	$ 2,190,000
Subtotal	$ 4,360,000

SUMMARY OF AMENDED CONTRACT

	Original	Amend. No. 1	Total
Substation Support	$2,715,000	$2,170,000	$ 4,885,000
Transmission Line Support	$1,405,000	$2,190,000	$ 3,595,000
Direct Expenses	$ 40,000		$ 40,000
Total	$4,160,000	$4,360,000	$ 8,520,000

Respectfully submitted,

Teague Nall and Perkins, Inc.

By: _____

Gary L. Vickery, P.E.

Title: Principal

Date: March 15, 2017

ATTACHMENT 'A'

SUMMARY OF ENGINEERING FEES – Amendment No. 1

Denton Municipal Electric
Capital Improvement Plan

A. BASIC SERVICES:

For work performed by the ENGINEER within the scope identified in ATTACHMENT B, Itemized Scope of Services, the ENGINEER will be reimbursed as described below:

1. Labor

The following estimated fees shall be paid to the ENGINEER for labor involved in the various items of work within the scope of Basic Services identified in ATTACHMENT B:

Substations	$ 2,170,000
Transmission Lines	$ 2,190,000
Subtotal	**$ 2,920,000**

All services will be provided at hourly rates for services actually provided.

2. Total Fee for Basic Services

TOTAL (BASIC SERVICES)	**$ 4,360,000**

SUMMARY OF AMENDED CONTRACT

	Original	Amend. No. 1	Total
Substation Support	$2,715,000	$2,170,000	$ 4,885,000
Transmission Line Support	$1,405,000	$2,190,000	$ 3,595,000
Direct Expenses	$ 40,000		$ 40,000
Total		$4,360,000	$ 8,520,000

ATTACHMENT 'B'

ITEMIZED SCOPE OF SERVICES – Amendment No. 1

Denton Municipal Electric
Capital Improvement Plan

BASIC SERVICES

PROJECT DESCRIPTION

The original agreement was estimated based on some very general assumptions regarding the specific scope of work needed to support the CIP, and was intended to allow some flexibility to provide whatever engineering and surveying services were needed, including those that were not anticipated as the CIP began. In the course of the execution of the CIP, TNP has been involved more fully than expected in site selection and feasibility evaluations, prepared field surveys of existing transmission lines, done more construction staking than anticipated, prepared ALTA surveys for acquisition of numerous properties, and generally had a greater role in the execution of the CIP than originally anticipated. Several substations have required the design of retaining walls and/or storm drain systems or other public improvements that were not anticipated. In addition, several services have been completed under the original contract by subconsultants, including Phase I Environmental Site Assessments and Asbestos testing for structures to be removed.

The scope set forth herein defines the work that is expected to be performed by the DESIGN PROFESSIONAL in completing the project. In general, the work will consist of providing surveying, platting, permitting and civil engineering support as needed for implementation of the transmission lines and substations that are part of the DME CIP, as well as technical support for other DME operations and maintenance needs, both transmission and distribution. It is understood by both the City of Denton (Denton Municipal Electric or DME) and the DESIGN PROFESSIONAL that the specific details of the effort required by DME cannot be fully determined at this time. The description below sets forth the specific substations and transmission lines that are contemplated, and illustrates the assumptions made in establishing the budget figures indicated herein. This list of substations and transmission lines is primarily for the purpose of describing how the estimated fees were determined, but does not preclude the possibility of other facilities being added to the list. The intent of this agreement is to summarize the anticipated support services needed without excluding services that are not foreseen at this time.

Work to be Performed

More specifically, the work will include, but not be limited to, the following:

Land Surveying
Deed sketches, boundary surveys, plats, design surveys, topographic surveys, preparation of easement exhibits, alignment staking, as-built surveys, Level A and B Subsurface Utility Engineering (S.U.E.), construction verification surveys of concrete placement and other improvements, placement of monuments, and other surveying services as necessary.

Engineering
Feasibility studies for site selections, alignment evaluations and route planning, coordination with other governmental agencies (including TxDOT, City of Denton, Denton County, etc.), site plans, grading plans, drainage studies, design of support infrastructure (such as streets, drainage, water and sanitary sewer facilities), substation retirement support, underground transmission line design and support, landscaping and irrigation design, structural design, coordination and consultation with geotechnical engineers, preparation of specifications and Requests for Proposals, construction oversight and/or inspection, and other design services as necessary.

Permitting
Permit processing, including coordination with the City of Denton Planning Department, and preparation of submittal packages for permits such as Specific Use Permits, variances, plats, Environmentally Sensitive Areas, TxDOT permits, floodplain studies, Site Plans, Clearing & Grading permits, building permits and other permits as may be required. The DESIGN PROFESSIONAL will represent DME at public meetings and official meetings with City staff as requested. Project management, planning, scheduling and tracking necessary to direct the work will also be a part of this effort.

Anticipated Assignments – Basic Services
Completion of the CIP will require support for the following substations and transmission lines, some of which are in process and others have yet to begin:

Substations
Jim Christal, Brinker, Long Road, Underwood, Mayhill, Eagle, Hickory, Masch Branch, Fort Worth Expansion, Denton West Interchange, New Northwest, New West Switch

Transmission Lines
Hickory to Locust, RD Wells to Hickory, Spencer to Locust, Pockrus to Mayhill, Mayhill to Brinker, Denton North to Arco, Cooper Creek to Arco, Pockrus to Arco, Jim Christal to RD Wells, Denton West Interchange to RD Wells, Woodrow to Brinker, Spencer to Brinker

Assumptions and Clarifications

The following assumptions were used by the DESIGN PROFESSIONAL for the preparation of this scope of Basic Services:

1. The estimated fees indicated for the services identified above are based on information provided by DME with regard to the substations and transmission lines that are part of the CIP, as indicated above.
2. Services to be provided will be as requested by DME staff.
3. Services will be provided by TNP staff or may be provided by subconsultants where additional capacity or specialized expertise is required.
4. Engineering design will be in accordance with City of Denton (or other applicable agencies) design standards, and generally accepted engineering practices.
5. All services will be performed at TNP standard hourly rates effective at the time the work is performed.
6. Easement documents prepared will consist of an Exhibit A (property description) and Exhibit B (parcel map), and will be sealed by a Registered Professional Land Surveyor.

7. Horizontal and vertical control shall be established by TNP survey crews at strategic locations along the project route and will consist of 5/8 inch rebar with caps stamped “TNP” set flush with existing ground. Temporary benchmarks will be established at appropriate intervals along the project route for utilization during design and construction phases. All bearings of lines provided by TNP will be referenced to Grid North of the Texas Coordinate System of 1983 {North Central Zone No. 4202; NAD83 (CORS96) Epoch 2002.00} as derived locally from Western Data Systems Continuously Operating Reference Stations (CORS) via Real Time Kinematic (RTK) survey methods. All distances and coordinate data provided by TNP will reflect surface values. An average Combination Factor will be utilized and reported for scaling grid coordinates and distances to surface values. All elevations provided by TNP will be referenced to NAVD88, as derived from RTK observations. Orthometric heights will be calculated by applying the Geoid09 model to ellipsoid heights.