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November 1, 2021

Mr. Clarence T. Daugherty, P.E.  
County Engineer  
Collin County  
4690 Community Ave., Suite 200  
McKinney, TX 75071

RE: Frontier Parkway Engineering Services Agreement  
Collin County Contract No. 2016-229  
Collin County Purchase Order No. 199212  
Amendment No. 12 (Revised)

Dear Mr. Daugherty:

As you requested, we are pleased to submit Revised Amendment No. 12(v.11.01.2021) to our Engineering Services Agreement with Collin County dated Sept. 27, 2016 (Collin County Purchase Order No. 199212) for the design of Frontier Parkway, from the Dallas North Tollway (DNT) to S.H. 289 (Collin County Contract No. 2016-229).

As requested by the project Stakeholders, this Amendment No. 12 is revised to provide for a “stand alone” engineering services amendment for the design and construction administration of the:

1. Temporary Wire Span Traffic Signal at the Worthington (Celina)/Victory Way (Prosper) / Frontier Intersection; and
2. Permanent Mast Arm Traffic Signal at the Worthington (Celina)/Victory Way (Prosper) / Frontier Intersection

Following approval of the Traffic Signal design plans, it is expected the traffic signal plans will be incorporated into the County’s Frontier Parkway Construction Contract with Mario Sinacola and Sons Excavation, Inc. through a negotiated construction contract change order.

This Amendment No. 12 makes the following changes to the scope and fee in the original agreement, as amended through Amendment No. 11.

**EXISTING SCOPE ITEM CHANGES:**

**Item A.I.G (new Task Item): Worthington Way /Victory Way Traffic Signals (\$40,000 Lump Sum)**

Preparation of construction plans and specifications for Temporary and Permanent Traffic Signal at Worthington Way / Victory Way / Frontier.

- a. The traffic signal design plans will be prepared by our sub-consultant, Lee Engineering in accordance with the scope outline in their proposal to BHC dated October 19, 2021, as attached hereto and made a part of this Amendment No. 12 as **Exhibit A**. BHC will provide technical and engineering support by providing updated existing conditions base drawing files, right-of-way files and proposed improvements.
- b. Re-design and position barrier free ramps to accommodate the permanent traffic signals
- c. Pavement Marking layout for the temporary traffic signal and re-design pavement markings for permanent traffic signals

**Item A.III: Construction Administration (\$7,000 - Lump Sum):**

Additional service for construction administration services including

- a. Preparation of construction contract change order
- b. Review of Traffic Signal Shop Drawing submittals

**Item B.1: Field Surveys (Design): (\$2,200 - Hourly Basis):**

Additional Field Surveys to define changed existing conditions at the intersection since original design surveys conducted in 2016 and 2017.

**PROJECT SCHEDULE**

Based on Collin County's Full Notice to Proceed with Construction, this project is now scheduled to be complete on or before May 4, 2023.

**CHANGE IN FEE**

The fee schedule is hereby modified by the amounts shown under the column heading "Amendment No. 12" on the **Exhibit "C"– Engineering Services Fee Schedule -Amendment No. 12.**

**SEE NEXT PAGE**

**Exhibit “C”**  
**Engineering Service Fee Schedule – Amendment No. 12**

Engineering Service Agreement Phase			Contract Amounts (\$)		
			Contract Amount Through Amendment No. 11	Amendment No. 12	Revised Contract Amount, this Amendment No. 12
<b>A. Basic Services Parts I-III (Lump Sum)</b>	Part I. A.	Schematic Design	\$165,000		\$165,000
	Part I.B.	Final Design	\$1,279,340		\$1,279,340
	Part I.C.	Full Bridge Width Design with Alternate Bid for 4-lane Bridge	\$120,700		\$120,700
	Part I.D.	PISD Detention Pond Design	\$25,992		\$25,992
	Part I.E.	Prairie Crossing Road Design Phase	\$97,360		\$97,360
	Part I.E.a.	Prairie Crossing Road Bid Phase	\$0		\$0
	Part I.E.b.	Prairie Crossing Road Construction Phase	\$0		\$0
	Part I.F.	Traffic Signal Design at DNT and Preston Road	\$30,000		\$30,000
	Part I.G.	Temporary and Permanent Traffic Signal Design at Worthington and Victory Way (Celina/Prosper)	\$0	\$40,000	\$40,000
	Part II	Bidding Phase	\$31,750		\$31,750
	Part III.	Construction Administration (Celina/Prosper)	\$214,750	\$7,000	\$221,750
	<b>Subtotal - Basic Services (Part A)</b>		<b>\$1,964,892</b>	<b>\$47,000</b>	<b>\$2,011,892</b>
<b>B. Additional Services (Hourly)</b>	1	Field Surveys (Design, Property and Construction Support): (Celina/Prosper)	\$60,840	\$2,200	\$63,040
	2	R-O-W Map, Plats and Field Notes Descriptions (16 each):	\$78,519		\$78,519
	3	Geotechnical Investigation and Report:	\$75,326		\$75,326
	4	Flood Study:	\$28,120		\$28,120
	5	NCTCOG Environmental Form:	\$27,700		\$27,700
	6	404 Permit Application (Nationwide Permit 14):	\$38,751		\$38,751
	7	Permits (TxDOT, BNSF) and Utility Relocation Coordination:	\$84,500		\$84,500
	8	Asbestos Evaluation (4 Buildings):	\$2,215		\$2,215
	9	Project Stakeholder Design Meetings	\$50,176		\$50,176
	10	Attend Twenty(20) Additional Progress Meetings:	\$21,000		\$21,000
	11	Additional Printing of Construction Plans and Specifications:	\$5,000		\$5,000
	12	Revised Schematic Layouts, Drainage Evaluations, Cost Estimates and Coordination Meetings	\$20,870		\$20,870
	13a.	Doe Branch Tributary C Hydraulic Evaluations and Report	\$30,859		\$30,859
	13b.	Revised Flood Study for Detention Pond Design	\$8,636		\$8,636
	14	PISD Detention Pond Replat	\$15,000		\$15,000
	15	Level A Sub-Surface Utility Locates	\$4,100		\$4,100
	<b>Subtotal Additional Services (Part B)</b>		<b>\$551,612</b>	<b>\$2,200</b>	<b>\$553,812</b>

(Continued on next page)

**Exhibit “C”**  
**Engineering Service Fee Schedule – Amendment No. 12 (Continued)**

Engineering Service Agreement Phase			Contract Amounts (\$)		
			Contract Amount Through Amendment No. 11	Amendment No. 12	Revised Contract Amount, this Amendment No. 12
C. Optional Services (Hourly)	1	Traffic Signal Warrant Study	\$0		\$0
	2	Street Lighting Design	\$16,000		\$16,000
	3	Full Irrigation Design Plans and Specifications	\$0		\$0
	3a	Irrigation and Lighting Conduit Sleeves Only	\$5,000		\$5,000
	4	Sidewalks and Barrier Free Ramps (TDLR \$2,085 fee Included)	\$23,500		\$23,500
	5	On-site Observation of Construction Activity	\$0		\$0
	6a	Project Visualization - Final Design Only	\$28,750		\$28,750
	6b	Project Visualization - Construction Phases	\$14,100		\$14,100
	<b>Subtotal Optional Services (Part C)</b>		<b>\$87,350</b>	<b>\$0</b>	<b>\$87,350</b>

D. New Developer Initiated Driveway s and Median Openings (LUMP SUM)	1	(Resrved for Mosey Tract - Celina)	\$0		\$0
	2	Light Farms Laurel and Bartlett Phase I (Celina)	\$0		\$0
	3	Frontier Crossing (Celina)	\$0		\$0
	4	Prose Frontier 51 -Bg-Gbt Celina 15LP (Celina)	\$0		\$0
	5	The Grove (Celina)	\$0		\$0
	6	(Reserved for Metten Tract - Proseper)	\$0		\$0
	7	(Reserved for Frisco Tollway Partners - Prosper)	\$0		\$0
	8	Victory at Frontier (Prosper)	\$0		\$0
	9	Seven-Eleven (Prosper)	\$0		\$0
	Subtotal - New Driveways and Median Openings (Part D)		\$0	\$0	\$0
Engineering Services Agreement Grand Total:		\$2,603,854	\$49,200	\$2,653,054	

Mr. Clarence Daugherty, P.E.  
Frontier Parkway Engineering Services Agreement – Amendment No. 12(Revised 11.01.2021)  
November 1, 2021  
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Total additional compensation for this Engineering Services Amendment No. 12 shall not exceed \$49,200 without written authorization from the County.

If this Amendment No. 12 to our original agreement dated September 27, 2016, meets with your approval, please have one set executed for Collin County and returned to our office. We look forward to our continued work on this project with you and your staff.

Sincerely,

Gary C. Hendricks, P.E., R.P.L.S.

**APPROVED BY COLLIN COUNTY, TEXAS**

\_\_\_\_\_  
**By:**

\_\_\_\_\_  
**Date:**

## EXHIBIT A – Lee Engineering Proposal



ARIZONA  
TEXAS  
NEW MEXICO  
OKLAHOMA

October 19, 2021

Mr. Joe Carter, P.E., CFM  
Partner  
Birkhoff, Hendricks & Carter, L.L.P.  
11910 Greenville Ave, Suite 600  
Dallas, Texas 75243

*Re: Proposal – PS&E for Temporary and Permanent Traffic Signal Designs at Frontier Pkwy at Worthington Way in Prosper, Texas*

Dear Mr. Carter:

Lee Engineering is pleased to submit this agreement to perform traffic engineering services for Birkhoff, Hendricks & Carter, L.L.P. The services outlined below include the preparation of design plans, specifications, and cost estimate data for the installation of temporary and permanent traffic signals at the intersection of Frontier Pkwy and Worthington Way in Prosper, Texas. The plans will be prepared according to City of Prosper and TxDOT requirements. This letter will be an agreement between Birkhoff, Hendricks & Carter, L.L.P. and Lee Engineering, LLC to provide the services outlined in the Scope of Services below.

### SCOPE OF SERVICES

#### Task 1: Design Plans for Temporary Traffic Signal Installation

Lee Engineering will follow the work items below in preparing design plans, specifications, and cost estimate data for the temporary traffic signal installation at the intersection of Frontier Pkwy and Worthington Way:

- Lee Engineering will gather all available data from Birkhoff, Hendricks & Carter, L.L.P. on the configuration of the intersection, construction phasing, and utilities in the area (electronic format). This data will include a topographical survey file with all existing utilities for the entire intersection (right of way to right of way), proposed roadway (paving) file (if roadway work is to be done as a part of the project), existing and proposed right-of-way, and utility files.
- We will then prepare preliminary temporary signal plan sheets for review by the City. We anticipate this submittal to include a layout sheet of the intersection for each phase of construction, signal design tables, and a wiring chart sheet. The first temporary signal layout sheet will show the temporary signal layout as it will be laid out at the beginning of the project. It will include the location of the timber poles, span wire, signal heads, detection, conduit/aerial runs, and a controller cabinet location. The layout sheet for each subsequent phase of construction will show the temporary signal layout with updated signal head locations.
- Upon approval of the preliminary plan sheets by the City, we will prepare all necessary temporary plan sheets for inclusion in the roadway design plan set. The plans will conform with and will utilize City of Prosper and TxDOT design standards. This submittal will include revisions of the preliminary

temporary signal plans and completion of the wiring tables, as well as the addition of standard detail sheets. A draft set of all plan sheets will be provided for review to the City.

- Based upon comments, we will incorporate necessary changes and produce, sign, and seal final plans on 11" x 17" sheets.
- We will also prepare any required technical specifications and cost estimate data for the temporary signal installations.

#### **Task 2: Design Plans for Permanent Traffic Signal Installation**

Lee Engineering will follow the work items below in preparing design plans, specifications, and cost estimate data for the traffic signal installation at the intersections of Frontier Pkwy and Worthington Way:

- Using the information previously provided by Birkhoff, Hendricks & Carter, L.L.P., we will develop a traffic signal base map for the intersection.
- We will discuss with the City of Prosper and Birkhoff, Hendricks & Carter, L.L.P. any guidelines, design issues, design standards, and intersection specific concerns.
- We will review the proposed intersection geometrics and identify any features that may impact the signal installation at the intersection. Potential modifications to the intersection geometrics, if required, will be discussed with the City and Birkhoff, Hendricks & Carter, L.L.P., if needed.
- We will visit the project intersection to photograph key intersection features and confirm the dimensions of the base map. We will also identify the potential pole foundation locations, electrical service location, and controller cabinet location, as needed. Prior to the field visit, we will contact DIG TESS and the City of Prosper to locate existing underground utilities, if necessary.
- We will prepare a conduit layout sheet that will allow conduit that is to be placed under the roadway to be installed prior to the placement of new pavement. This layout sheet will be provided to allow a change order to be executed as soon as possible.
- We will then prepare a preliminary plan set (60%), utilizing TxDOT and/or City design standards, for review. These sheets are expected to include new pole locations, conduit and wiring run data, signal heads, vehicle detection, power source, and controller cabinet location. Plans for barrier-free ramps, sidewalk, pavement markings, and signing modifications related to the intersection will be prepared by others. The plan set will also include general notes and applicable TxDOT and/or City details and standard sheets.
- Upon review of the preliminary plan set, we will incorporate any comments and prepare the plan sheets for the construction of the proposed traffic signal installation. A draft set of all plan sheets (90%) will be provided for review.
- Upon review and approval, we will incorporate any necessary changes and produce a final signed and sealed plan set for submittal on 11" x 17" sheets.
- We will also prepare any required technical specifications and cost estimate data for the signal installation. We will identify and gather all applicable City and/or TxDOT standards and special specifications required for the signal installation. Quantity estimates for all applicable bid items will be tabulated along with up-to-date unit costs. A draft set of specifications and cost estimate data will be submitted to Birkhoff, Hendricks & Carter, L.L.P.. Upon completion of the review, we will incorporate necessary changes and produce final specifications and estimate data.
- It is our understanding that the signal installation work will be bid along with a roadway improvement project. Lee Engineering will only provide signal design plans, quantities, specifications, and standard details related to the signal construction. Lee Engineering will not be responsible for preparing a bid book for the letting of the project.



### Task 3: Construction Engineering / Additional Services

This task will include, but is not limited to, the following items and assumes up to two (2) meetings or site visits:

- Attending meetings as requested.
- Answer signal construction-related questions from the City or contractor during construction.
- Review shop drawings as needed.
- Prepare record drawings based on red lines provided by the contractor.
- Any other additional services necessary for the construction of the traffic signal.

### FEE AND SCHEDULE

**Task 1 & Task 2: Temporary and Permanent Traffic Signal Design Plans** - We will perform the work identified in these Tasks within fifty-five (55) working days (excluding review time) after receiving a notice to proceed and all electronic files. We will complete the conduit layout within fifteen days (15) and preliminary layouts of the temporary and permanent traffic signal design plans for City review within thirty-five (35) working days after receiving electronic files. Final (DRAFT) plans and specification data will be submitted within ten (10) working days after receiving review comments on the preliminary layout sheets. Final signed and sealed plans will be submitted within ten (10) working days after receiving comments on the final (DRAFT) plans. The work performed for **Tasks 1 & 2** for a **lump sum fee of \$36,000.**

We will perform **Task 3 on an hourly basis, and our fee will not exceed \$6,000** without prior approval. Any additional services beyond the Scope of Services identified above will be performed on an hourly basis per the attached terms and conditions dated August 12, 2020.

If you have any questions, please contact me at (972) 248-3006. We appreciate the opportunity to submit this proposal and look forward to working with you on this project. Please sign below and return a copy of this letter as notice to proceed if this agreement meets with your approval.

Sincerely,



Joseph T. Short, P.E., PTOE  
President

Digitally signed by  
Joseph T Short  
Date: 2021.10.19  
15:24:00 -07'00'

Accepted:

\_\_\_\_\_  
Birkhoff, Hendricks & Carter, L.L.P.

\_\_\_\_\_  
Date