# PROFESSIONAL ENGINEERING SERVICES AGREEMENT BETWEEN THE TOWN OF PROSPER, TEXAS, AND KIMLEY-HORN AND ASSOCIATES, INC. FOR THE GEE ROAD (US 380 - FM 1385) PROJECT (2310-ST)

This Agreement for Professional Engineering Services, hereinafter called "Agreement," is entered into by the Town of Prosper, Texas, a municipal corporation, duly authorized to act by the Town Council of said Town, hereinafter called "Town," and Kimley-Horn and Associates, Inc., a company authorized to do business in Texas, acting through a duly authorized officer, hereinafter called "Consultant," relative to Consultant providing professional engineering services to Town. Town and Consultant when mentioned collectively shall be referred to as the "Parties."

#### WITNESSETH:

WHEREAS, Town desires to obtain professional engineering services in connection with the Gee Road (US 380 – FM 1385) (2310-ST), hereinafter called "Project";

For the mutual promises and benefits herein described, Town and Consultant agree as follows:

- 1. Term of Agreement. This Agreement shall become effective on the date of its execution by both Parties, and shall continue in effect thereafter until terminated as provided herein.
- 2. Services to be Performed by Consultant. The Parties agree that Consultant shall perform such services as are set forth and described in <a href="Exhibit A Scope of Services">Exhibit A Scope of Services</a> and incorporated herein as if written word for word. All services provided by Consultant hereunder shall be performed in accordance with the degree of care and skill ordinarily exercised under similar circumstances by competent members of their profession. In case of conflict in the language of Exhibit A and this Agreement, this Agreement shall govern and control. Deviations from the Scope of Services or other provisions of this Agreement may only be made by written agreement signed by all Parties to this Agreement.
- 3. Prompt Performance by Consultant. Consultant shall perform all duties and services and make all decisions called for hereunder promptly and without unreasonable delay as is necessary to cause Consultant's services hereunder to be timely and properly performed. Notwithstanding the foregoing, Consultant agrees to use diligent efforts to perform the services described herein and further defined in any specific task orders, in a manner consistent with these task orders; however, the Town understands and agrees that Consultant is retained to perform a professional service and such services must be bound, first and foremost, by the principles of sound professional judgment and reasonable diligence.
- 4. Compensation of Consultant. Town agrees to pay to Consultant for satisfactory completion of all services included in this Agreement a total fee of <u>One Million Six Hundred Fifty-Five Thousand and 00/100 Dollars (\$1,655,000.00)</u> for the Project as set forth and described in <u>Exhibit B Compensation Schedule</u> and incorporated herein as if written word for word. Lump sum fees shall be billed monthly based on the percentage of completion. Hourly not to exceed fees shall be billed monthly based on hours of work that have been completed. Direct Costs for expenses such as mileage, copies, scans, sub-consultants, and similar costs are included in fees and shall be billed as completed.

Consultant agrees to submit statements to Town for professional services no more than once per month. These statements will be based upon Consultant's actual services performed and reimbursable expenses incurred, if any, and Town shall endeavor to make prompt payments. Each statement submitted by Consultant to Town shall be reasonably itemized to show the amount of work performed during that period. If Town fails to pay Consultant

within sixty (60) calendar days of the receipt of Consultant's invoice, Consultant may, after giving ten (10) days written notice to Town, suspend professional services until paid.

Nothing contained in this Agreement shall require Town to pay for any work that is unsatisfactory as reasonably determined by Town or which is not submitted in compliance with the terms of this Agreement.

The Scope of Services shall be strictly limited. Town shall not be required to pay any amount in excess of the original proposed amount unless Town shall have approved in writing in advance (prior to the performance of additional work) the payment of additional amounts.

- 5. Town's Obligations. Town agrees that it will (i) designate a specific person as Town's representative, (ii) provide Consultant with any previous studies, reports, data, budget constraints, special Town requirements, or other pertinent information known to Town, when necessitated by a project, (iii) when needed, assist Consultant in obtaining access to properties necessary for performance of Consultant's work for Town, (iv) make prompt payments in response to Consultant's statements and (v) respond in a timely fashion to requests from Consultant. Consultant is entitled to rely upon and use, without independent verification and without liability, all information and services provided by Town or Town's representatives.
- 6. Ownership and Reuse of Documents. Upon completion of Consultant's services and receipt of payment in full therefore, Consultant agrees to provide Town with copies of all materials and documents prepared or assembled by Consultant under this Agreement and that Town may use them without Consultant's permission for any purpose relating to the Project. Any reuse of the documents not relating to the Project shall be at Town's risk. Consultant may retain in its files copies of all reports, drawings, specifications and all other pertinent information for the work it performs for Town.
- 7. Town Objection to Personnel. If at any time after entering into this Agreement, Town has any reasonable objection to any of Engineer's personnel, or any personnel, professionals and/or consultants retained by Engineer, Engineer shall promptly propose substitutes to whom Town has no reasonable objection, and Engineer's compensation shall be equitably adjusted to reflect any difference in Engineer's costs occasioned by such substitution.
- 8. Insurance. Consultant shall, at its own expense, purchase, maintain and keep in force throughout the duration of this Agreement applicable insurance policies as described in <a href="Exhibit C Insurance Requirements">Exhibit C Insurance Requirements</a> and incorporated herein as if written word for word. Consultant shall submit to Town proof of such insurance prior to commencing any work for Town.
- 9. Indemnification. CONSULTANT DOES HEREBY COVENANT AND AGREE TO RELEASE, INDEMNIFY AND HOLD HARMLESS TOWN AND ITS OFFICIALS, OFFICERS, AGENTS, REPRESENTATIVES, EMPLOYEES AND INVITEES FROM AND AGAINST LIABILITY, CLAIMS, SUITS, DEMANDS AND/OR CAUSES OF ACTION, (INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEY'S FEES AND COSTS OF LITIGATION), WHICH MAY ARISE BY REASON OF DEATH OR INJURY TO PROPERTY OR PERSONS BUT ONLY TO THE EXTENT OCCASIONED BY THE NEGLIGENT ACT, ERROR OR OMISSION OF CONSULTANT, ITS OFFICIALS, OFFICERS, AGENTS, EMPLOYEES, INVITEES OR OTHER PERSONS FOR WHOM CONSULTANT IS LEGALLY LIABLE WITH REGARD TO THE PERFORMANCE OF THIS AGREEMENT.

IN THE EVENT THAT TOWN AND CONSULTANT ARE CONCURRENTLY NEGLIGENT, THE PARTIES AGREE THAT ALL LIABILITY SHALL BE CALCULATED ON A COMPARATIVE BASIS OF FAULT AND RESPONSIBILITY AND THAT NEITHER PARTY SHALL BE REQUIRED TO DEFEND OR INDEMNIFY THE OTHER PARTY FOR THAT PARTY'S NEGLIGENT OR INTENTIONAL ACTS, ERRORS OR OMISSIONS.

10. Notices. Any notices to be given hereunder by either Party to the other may be affected either by personal delivery, in writing, or by registered or certified mail to the following addresses:

Kimley-Horn and Associates, Inc. L. Nathan Ante, P.E., Sr. Vice Pres. 2201 W. Royal Lane, Suite 275 Irving, TX 75063 Nathan.Ante@kimley-horn.com Town of Prosper Mario Canizares, Town Manager PO Box 307 Prosper, TX 75078 MCanizares@prospertx.gov

- 11. Termination. The obligation to provide further services under this Agreement may be terminated by either Party in writing upon thirty (30) calendar days notice. In the event of termination by Town, Consultant shall be entitled to payment for services rendered through receipt of the termination notice.
- 12. Sole Parties and Entire Agreement. This Agreement shall not create any rights or benefits to anyone except Town and Consultant, and contains the entire agreement between the Parties. Oral modifications to this Agreement shall have no force or effect.
- 13. Assignment and Delegation. Neither Town nor Consultant may assign its rights or delegate its duties without the written consent of the other Party. This Agreement is binding on Town and Consultant to the extent permitted by law. Nothing herein is to be construed as creating any personal liability on the part of any Town officer, employee or agent.
- 14. Texas Law to Apply; Successors; Construction. This Agreement shall be construed under and in accordance with the laws of the State of Texas. It shall be binding upon, and inure to the benefit of, the Parties hereto and their representatives, successors and assigns. Should any provisions in this Agreement later be held invalid, illegal or unenforceable, they shall be deemed void, and this Agreement shall be construed as if such provision had never been contained herein.
- 15. Conflict of Interest. Consultant agrees that it is aware of the prohibited interest requirement of the Town Charter, which is repeated in <a href="Exhibit D Conflict of Interest Affidavit">Exhibit D Conflict of Interest Affidavit</a> and incorporated herein as if written word for word, and will abide by the same. Further, a lawful representative of Consultant shall execute the Affidavit included in the exhibit. Consultant understands and agrees that the existence of a prohibited interest during the term of this Agreement will render the Agreement voidable.

Consultant agrees that it is further aware of the vendor disclosure requirements set forth in Chapter 176, Local Government Code, as amended, and will abide by the same. In this connection, a lawful representative of Consultant shall execute the Conflict of Interest Questionnaire, Form CIQ, attached hereto as <a href="Exhibit E - Conflict of Interest Questionnaire">Exhibit E - Conflict of Interest Questionnaire</a> and incorporated herein as if written word for word.

- 16. Venue. The Parties herein agree that this Agreement shall be enforceable in Prosper, Texas, and if legal action is necessary to enforce it, exclusive venue shall lie in Collin County, Texas.
- 17. Mediation. In the event of any disagreement or conflict concerning the interpretation of this Agreement, and such disagreement cannot be resolved by the signatories hereto, the signatories agree to submit such disagreement to non-binding mediation.
- 18. Prevailing Party. In the event a Party initiates or defends any legal action or proceeding to enforce or interpret any of the terms of this Agreement, the prevailing party in any such action or proceeding shall be entitled

to recover its reasonable costs and attorney's fees (including its reasonable costs and attorney's fees on any appeal).

- "Anti-Israel Boycott" Provision. In accordance with Chapter 2270, Texas Government Code, a Texas governmental entity may not enter into a contract with a company for the provision of goods or services unless the contract contains a written verification from the company that it: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the contract. Chapter 2270 does not apply to a (1) a company that is a sole proprietorship; (2) a company that has fewer than ten (10) full-time employees; or (3) a contract that has a value of less than One Hundred Thousand Dollars (\$100,000.00). Unless the company is not subject to Chapter 2270 for the reasons stated herein, the signatory executing this Agreement on behalf of the company verifies by its signature to this Agreement that the company does not boycott Israel and will not boycott Israel during the term of this Agreement.
- 20. Signatories. Town warrants and represents that the individual executing this Agreement on behalf of Town has full authority to execute this Agreement and bind Town to the same. Consultant warrants and represents that the individual executing this Agreement on its behalf has full authority to execute this Agreement and bind Consultant to same.

duplica		0	nderstood this Agreement, have executed such in force as an original, on the day of	
		TOWN	OF PROSPER, TEXAS	
Ву:	L. Makhan Anto Signature	Ву:	Signature	
	L. Nathan Ante, P.E. Printed Name		Mario Canizares Printed Name	
	Senior Vice President Title		Town Manager Title	
	<u>June 21, 2023</u>		Date	

# EXHIBIT A SCOPE OF SERVICES

# PROFESSIONAL ENGINEERING SERVICES AGREEMENT BETWEEN THE TOWN OF PROSPER, TEXAS, AND KIMLEY-HORN AND ASSOCIATES, INC. FOR THE GEE ROAD (US 380 - FM 1385) PROJECT (2310-ST)

# I. PROJECT DESCRIPTION

This project includes the design of approximately 3,700 linear feet of the 5th and 6th inside lanes along Gee Road from US 380 to First Street, and the design of approximately 3,100 linear feet of 3 Westbound lanes and 1 Eastbound lane from First Street to Gray Wolf Drive. The design improvements generally include paving, drainage, approximately 300 linear foot bridge (3 lanes) over Doe Branch drainage crossing, approximately 700 linear foot bridge (3 lanes) over Doe Branch Tributary 6 drainage crossing, approximately 1,500 linear foot of existing Artesia (Elm Ridge WCID) 18" water line, and approximately 1,800 linear feet of additional asphalt pavement from Gray Wolf Drive to FM 1385.

The project also includes a 10-foot hike and bike trail, median landscaping and irrigation, survey, geotechnical services, and environmental services.

The project also generally includes hydraulic analysis coordination, TxDOT coordination, franchise utility coordination, level 'A' and 'B' SUE, right-of-way and easement documents, bid phase services, construction phase services, and record drawings.

# II. TASK SUMMARY

# Task 1 – Survey

- 1.1. Data Collection and Property Research
  - 1.1.1 Gather existing plat information
  - 1.1.2 Collect property owner and record information
  - 1.1.3 Gather existing right-of-way and easement information. Identify easements available through typical research methodologies (i.e., plats, courthouse filings, etc.). Undocumented easements may not be identified. Title research may be performed as an additional service and fee only upon written Town authorization.
  - 1.1.4 Coordinate with Town and Texas 811 to locate and mark existing franchise and public utilities prior to performing the field survey. Existing franchise and public utility map to be provided as a part of Task 3.
- 1.2. Design Survey (Subconsultant)
  - 1.2.1 The survey limits include the following:
    - Gee Road alignment from US 380 to First Street, 80 feet wide, 3rd/4th lanes and median only.
    - Gee Road alignment from First Street to Gray Wolf Drive, 320 feet wide, 160 feet each side of the centerline.
    - Doe Branch and Doe Branch Tributary 6 drainage crossings. 500 feet wide, 250 feet each side of tributary centerlines, 500 feet north and south of Doe Branch and Doe Branch Tributary 6 centerline. Including grade breaks, top of bank, inverts of swales and channels.

- Gee Road / First Street intersection. 150 feet wide along First Street, 75 feet each side of centerline. 100 feet east of the Gee Road intersection.
- Gee Road / US 380 intersection. 290 feet wide along US 380, 145 feet each side of centerline, 100 feet east and west of the Gee Road / US 380 intersection. And 170 feet wide along FM 432, 85 feet each side of centerline, 100 feet south of the Gee Road / US 380 intersection.
- Gee Road alignment from Gray Wolf Drive to FM 1385, 80 feet wide, north side of the centerline. Perform field survey ground control.
- 1.2.2 Establish a vertical control benchmark circuit as needed throughout the project. Town to provide established monument information for the area. Vertical control benchmarks will be established for use during construction.
- 1.2.3 Establish horizontal control points, which will be based on NAD-83. Locate pertinent objects and above ground features within the survey limits, typically including:
  - Roadway pavement and driveways (including pavement type)
  - Drainage structures (i.e., culverts, ditches, inlets, manholes, and outfalls)
  - Utilities (signs or markers showing the presence of underground utilities, valves, manholes, flowlines, meters, backflow preventers, vents, poles, and guy wires)
  - Large (6-inch diameter and up), significant trees (identify species and caliper), and smaller trees and other plantings located within maintained landscapes
  - Fences (including material type) and gates
  - Sidewalks
  - Signs (roadway and private)
  - Right-of-Way monumentation
  - Creek Bank Elevations
  - Creek Flowline
- 1.2.4 Process survey data to create plan view base map of existing features. Prepare a final topographic drawing in digital format (including contours and breaklines) showing the features located in the field as well as boundary and property information, an ASCII coordinate file of the points located in the field.
- 1.2.5 Project site visit to verify survey data.

# Task 2 – Geotechnical Services (Subconsultant)

#### 2.1. Subsurface Exploration

- Along the roadway alignment from Gray Wolf Drive to First Street, drill and extrude twelve (12) sample borings to depths of 20 feet below existing grade using truck mounted equipment. At the bridge crossing, drill and extrude six (6) sample borings for the bridge to depths of 75 feet below existing grade using truck mounted equipment. Additional depths or borings, if necessary, will be provide as Additional Services only upon written Town authorization.
  - Check samples for consistency with a hand penetrometer
  - Stake the boring locations using normal taping procedures (location and elevation to be surveyed)
  - Backfill bore holes and plug at the surface
  - Provide continuous sampling (with field strength testing)
  - Rock if encountered, will be evaluated for hardness by TxDOT cone penetrating field testing
- 2.2. Laboratory Services

# 2.2.1 Testing

- Moisture contents to determine profile of moisture variations
- Atterberg limits and sieve analysis for classification of soils
- Unconfined compression tests to evaluate soil strengths
- Swell test to determine swell potential and subgrade treatment requirements
- Lime Stabilization Series to determine percent lime and/or cement required for subgrade stabilization (evaluation and recommendation will be provided for both widening conditions and new pavement conditions).
- Sulfate test
- Standard proctor
- Resilient modulus

# 2.3. Engineering Analysis

- 2.3.1 Prepare an engineering report presenting the following:
  - Sample boring location map
  - General soil and ground-water conditions
  - Examine samples for visible evidence of sulfates and discuss in the reports
  - Recommendations for appropriate subgrade treatment, stabilization type, and concentration
  - Recommend pavement section
  - Earthwork recommendations, including compaction criteria for any given fill placed
  - Slope stability analysis for any given fill placed over 8 ft in height
  - Recommendations for bridge and abutment foundation type, depth, and allowable loading in accordance with TxDOT design standards.
- 2.3.2 The geotechnical engineer's design recommendations shall be relied upon by the Consultant for pavement and bridge design
- 2.3.3 Submit (1) copy of the copy of the report to the Town

# Task 3 – Conceptual Design (30%)

- 3.1. Project Management and Administration
  - 3.1.1 Up to one (1) meeting with Town staff and stakeholders
  - 3.1.2 Up to one (1) project site visit
  - 3.1.3 Develop QC plan
  - 3.1.4 Develop project production plan
  - 3.1.5 Develop project schedule and interim milestones
  - 3.1.6 Project correspondence and invoicing
- 3.2. Data Collection
  - 3.2.1 Consultant will rely on the Town to provide Town Design Criteria (paving, drainage, utilities, streetscape), Standard Details, Ordinances, and Master Plan documents applicable to the project
  - 3.2.2 Town to provide Town record drawings and all proposed Gee Road reconstruction drawings to supplement data collection and survey acquired under Task 1.
- 3.3. Roadway Design
  - 3.3.1 Establish roadway centerline per Town record drawings of proposed Gee Road reconstruction. Anticipate alignment to match record drawings. No design iteration is anticipated for this Task. Any modification requested by Town will be addressed as a part of Task 4.

- 3.3.2 Establish typical sections, anticipated:
  - Major Thoroughfare '6LD' approximately 3,700 linear feet of Gee Road from US 380 to First Street
    - Two (2) 12-foot travel lanes (5th and 6th lane buildout)
  - Major Thoroughfare '6LD' approximately 3,100 linear feet of Gee Road from First Street to Gray Wolf Drive.
    - Three (3) 12-foot travel lanes Westbound, one (1) 12-foot travel lane Eastbound
    - 10-foot hike and bike trail Eastbound parkway
    - 6-foot sidewalk Westbound parkway
  - Reconfigure intersections of Gee Road and US 380, and Gee Road and First Street.
  - Establish sidewalk/trail widths and locations.
  - Establish profile of the roadway per Town record drawings of proposed Gee Road reconstruction. Anticipate profile to match record drawings. No design iteration is anticipated for this Task. Any modification requested by Town will be addressed as a part of Task 4.
  - Determine Right-of-Way (ROW) and Easement requirements.
- 3.3.3 Establish general horizontal roadway improvements from Gray Wolf Drive to FM 1385 to provide additional travel lane.
  - Evaluate up to two (2) iterations of proposed improvements
- 3.4. Drainage Design
  - 3.4.1 Compile hydrological and hydraulic data
  - 3.4.2 Develop project drainage area maps.
    - Determine conveyance paths, channel slopes, time of concentration, and runoff coefficients to calculate design-year flows for proposed conditions
    - Subdivide the overall drainage areas into sub-areas and calculate the discharge to
      each existing and future inlet. Analyze future inlet capacities and adjust inlet locations
      and sub-areas as needed to meet Town design criteria. Analyze existing inlets along
      Gee Road to determine if the existing facilities are sized to accommodate the
      proposed widening. Anticipated internal system for the entire length of project.
  - 3.4.3 Analyze drainage improvements to accommodate the proposed roadway. Evaluate the need for any offsite drainage improvements and report to the Town (the need for offsite improvements is not anticipated). The design of any offsite drainage improvements will be considered as *Additional Services* and can be performed for an additional fee.
  - 3.4.4 Conceptual design of storm drain facilities will consist of plan view only
- 3.5. Bridge Design
  - 3.5.1 Establish Westbound bridge locations and typical section, anticipated:
    - Major Thoroughfare '6LD' bridge approximately 300 linear feet
      - Three (3) 12-foot travel lanes, and one (1) 6-foot sidewalk (47-foot total width)
    - Major Thoroughfare '6LD' bridge approximately 700 linear feet
      - Three (3) 12-foot travel lanes, and one (1) 6-foot sidewalk (47-foot total width)
    - Proposed bridge structures are anticipated to be similar in structure type and aesthetic treatment to the existing Eastbound bridges.
    - Evaluate up to one (1) option for each bridge layout to match existing Eastbound Bridges.
- 3.6. Franchise Utilities
  - 3.6.1 Establish the location of existing public utilities based upon information provided by the

- Town, franchise utility owners, and field survey information
- 3.6.2 Provide overall existing utility map representing all known existing franchise and public utility information along project corridor gathered from data collection.
- 3.6.3 Identify potential conflicts with franchise utilities. Consultant will provide plan sets upon request for franchise utility coordination purposes.
- 3.6.4 Additional tasks may be provided as a part of Task 10.
- 3.7. Opinion of Probable Construction Cost (OPCC)
  - 3.7.1 Compile and prepare a conceptual opinion of probable construction cost (OPCC) for the project using recent average unit bid prices which are representative of similar types of construction in the local area
- 3.8. Conceptual Plan and Profile Exhibit
  - 3.8.1 Prepare one (1) conceptual roadway plan and profile exhibit (roll plot format at appropriate scale as determined by the engineer). Items to be included:
    - Plan
      - Control Data
      - Existing right-of-way and easements
      - Existing survey data
      - Existing pavement
      - Existing driveway locations
      - Existing trees
      - Existing storm drain locations
      - Existing water line locations
      - Existing sanitary sewer line locations
      - Existing franchise utility locations (relying upon information provided by franchise utility owners and data collection)
      - Proposed centerline alignment and horizontal curve data
      - Proposed curb and paving limits
      - Proposed bridge
      - Proposed sidewalk and hike and bike trail
      - Proposed driveways
      - Proposed transition pavement tie-ins to existing pavement
      - Proposed cross culverts and headwalls, if applicable
      - Proposed storm drainage system
      - Proposed storm drain inlet locations
      - Proposed limits of construction
      - Proposed pavement marking and signs
      - Proposed ROW and easement requirements
      - Proposed bridge layout
    - Profile
      - Existing ground profile at proposed top of curb and right-of-way lines
      - Proposed vertical alignment (top of curb)
      - Proposed bridge
    - It is anticipated that Conceptual Plan and Profile Exhibit will only be used to support design discussion in design meeting with Town. It is assumed Exhibit will not be provided for official Town review and comment.
- 3.9. Prepare one (1) Conceptual level right-of-way map showing the existing and proposed right-of-way and easements needed for proposed improvements.
- 3.10. Conceptual Design submittal
  - 3.10.1 Refer to III. DELIVERABLES

# Task 4 – Preliminary Design (60%)

- 4.1. Project Management and Administration
  - 4.1.1 Up to two (2) meetings with Town staff and stakeholders
  - 4.1.2 Up to one (1) project site visit
  - 4.1.3 Implement QC plan
  - 4.1.4 Update project schedule and interim milestones
  - 4.1.5 Project correspondence and invoicing
- 4.2. General Plan Sheets
  - 4.2.1 Incorporate conceptual design meeting notes as a part of Task 3.
  - 4.2.2 Upon Town approval of the Conceptual Design, prepare plan sheets (originals may be 22"x34" at a scale of 1"=20' horizontal and 1"=4' vertical)
  - 4.2.3 Prepare miscellaneous plan sheets
    - Cover Sheet
    - Sheet Index
    - General Notes (anticipated to be provided by Town)
    - Project Control
    - Typical Sections
    - Identify and prepare special specifications and/or special provisions applicable to the project.
- 4.3. Roadway Design
  - 4.3.1 Develop roadway plan and profile
  - 4.3.2 Incorporate intersection improvements as determined by the Town
  - 4.3.3 Develop design cross-sections
    - Develop on 50' station intervals and driveway centers
    - Show pavement, subgrade, right-of-way limits, easements, cross slopes, curbs, and sidewalks
    - Cross-sections may be provided in the bid documents
  - 4.3.4 Prepare roadway details to clarify intent of design
  - 4.3.5 Compile applicable Town standard details. Supplement standard details as needed.
- 4.4. Drainage Design
  - 4.4.1 Perform preliminary storm sewer sizing and alignment design. Prepare preliminary inlet design sheets and hydraulic design sheets for inclusion in the plans.
    - Storm drain profiles will be provided in the Final Design Submittal
    - The design of lateral extensions (if needed) and inlet replacements for existing inlet locations are included. The design of any storm drain main line capacity improvements and/or offsite drainage improvements to accommodate the proposed widening, if necessary, will be considered Additional Services.
  - 4.4.2 Determine outfall grading requirements and provide plans and details for channel protection (if applicable).
  - 4.4.3 Prepare drainage details to clarify intent of design
  - 4.4.4 Compile applicable Town standard details. Supplement standard details as needed.
- 4.5. Bridge Design
  - 4.5.1 Prepare two (2) Bridge layouts (plan sheets at appropriate scale as determined by the engineer). Items to be included:
    - Plan
      - Existing right-of-way and easements
      - Existing survey data

- Existing trees
- Existing utilities
- Proposed right-of-way and easements
- Proposed centerline alignment and curve data
- Proposed bent locations
- Proposed beam spacing
- Proposed abutment locations
- Proposed bridge deck limits
- Proposed approach slabs
- Proposed sidewalks/pedestrian railing
- Proposed pavement transitions
- Proposed utilities
- Proposed safety end treatments
- Proposed bridge traffic railing
- Profile
  - Existing ground profile
  - Proposed vertical alignment (top of curb)
  - Proposed bridge bents
  - Proposed bridge abutments
  - Proposed header banks
  - Proposed safety end treatments
  - Proposed bridge traffic railing and pedestrian railing
  - Proposed utilities
  - Proposed low chord elevation
  - Proposed approach slabs
  - 100-year water surface elevation for both FEMA and for fully-developed conditions
- 4.5.2 Develop the following additional bridge sheets:
  - Foundation plans
  - Bridge typical sections
  - Traffic rail, pedestrian rails, and fencing, if applicable
  - List of additional sheets to be provided during Final Design
  - List of applicable TxDOT standards
- 4.5.3 Incorporate geotechnical recommendations into the preliminary design submittal
- 4.6. Pavement Marking and Signing Design
  - 4.6.1 Plans will consist of stop-control devices, stop bar locations, lane delineation pavement markings, and pedestrian signing/striping (if applicable)
  - 4.6.2 Prepare pavement markers and marking layouts in accordance with Town design standards and the Texas Manual of Uniform Traffic Control Devices (TMUTCD)
  - 4.6.3 Prepare details to clarify intent of design
  - 4.6.4 Compile applicable Town standard details. Supplement standard details as needed
- 4.7. Traffic Signal Design
  - 4.7.1 Develop basic preliminary traffic signal plans for the intersection of Gee Road at First Street
    - Proposed basic signal improvements will be limited to signal head and sign adjustments (removals/relocations/installs) for proposed additional through lanes at the intersections.
    - No new mast arm poles, pedestrian poles, conduits, power services, cabinets, push

- buttons or pedestrian signals are included.
- No signal timing or phasing changes are included.
- 4.7.2 Develop basic preliminary traffic signal plans for the intersection of Gee Road at US 380
  - Proposed basic signal improvements will be limited to signal head and sign adjustments (removals/relocations/installs) for proposed additional through lanes at the intersections.
  - No new mast arm poles, pedestrian poles, conduits, power services, cabinets, push buttons or pedestrian signals are included.
  - No signal timing or phasing changes are included.
- 4.7.3 Preliminary signal plans will include the following sheets
  - Quantity summary/general notes sheet
  - Existing conditions and removals layout sheet (1 per intersection)
  - Proposed signal layout sheet (1 per intersection)
  - Signal summary charts sheet (1 per intersection)
  - Applicable TxDOT and/or Town traffic signal standards/details
- 4.8. Traffic Control Design
  - 4.8.1 Develop a traffic control narrative.
  - 4.8.2 Traffic control layout and plan sheets not included in this Task. To be provided with Task 5 Final Design submittal.
  - 4.8.3 Compile applicable Town and TxDOT standard details.
- 4.9. Illumination Design
  - 4.9.1 Not included in this Task. To be provided with Task 5 Final Design submittal.
- 4.10. Landscape and Irrigation Design
  - 4.10.1 Not included in this Task. To be provided with Task 5 Final Design submittal.
- 4.11. Erosion Control Design
  - 4.11.1 Not included in this Task. To be provided with Task 5 Final Design submittal.
- 4.12. Franchise Utilities
  - 4.12.1 Continue to identify potential conflicts with existing franchise utilities.
  - 4.12.2 Additional tasks may be provided as a part of Task 10.
- 4.13. Opinion of Probable Construction Cost (OPCC)
  - 4.13.1 Compile and prepare a preliminary opinion of probable construction cost (OPCC) for the project using recent average unit bid prices which are representative of similar types of construction in the local area
- 4.14. Preliminary Design submittal
  - 4.14.1 Refer to III. DELIVERABLES

#### Task 5 – Final Design (90% and Final)

#### 90% Design Submittal

- 5.1. Project Management and Administration
  - 5.1.1 Up to two (2) meetings with Town staff and stakeholders
  - 5.1.2 Up to one (1) project site visit
  - 5.1.3 Implement QC plan
  - 5.1.4 Update project schedule and interim milestones
  - 5.1.5 Project correspondence and invoicing
- 5.2. General Plan Sheets
  - 5.2.1 Incorporate preliminary design submittal review comments
  - 5.2.2 Finalize plan sheets (originals may be 22"x34" at a scale of 1"=20' horizontal and 1"=4"

### vertical)

- 5.2.3 Finalize miscellaneous plan sheets
  - Cover Sheet
  - Sheet Index
  - General Notes
  - Project Control
  - Typical Sections
- 5.2.4 Finalize special specifications and/or special provisions applicable to the project.
- 5.3. Roadway Design
  - 5.3.1 Finalize roadway plan and profile
  - 5.3.2 Finalize ultimate intersection improvements as determined by the Town
  - 5.3.3 Finalize cross-sections and driveway grading
- 5.4. Drainage Design
  - 5.4.1 Perform final storm sewer sizing and alignment design. Finalize inlet design sheets and hydraulic design sheets.
  - 5.4.2 Design outfall grading requirements and provide plans and details for channel protection (if applicable).
  - 5.4.3 Provide hydrologic and hydraulic calculations for the proposed storm drainimprovements
  - 5.4.4 Finalize drainage plan and profile sheets
  - 5.4.5 Prepare drainage details to clarify intent of design. Compile applicable Town standard details. Supplement standard details as needed
- 5.5. Bridge Design
  - 5.5.1 Finalize bridge design in accordance with TxDOT and Town requirements. The following sheets are anticipated:
    - Bridge layouts
    - Foundation plan
    - Bearing seat elevations/bent and beam report
    - Bridge typical sections
    - Traffic rail, pedestrian rails, and fencing
    - Rail aesthetic details
    - Abutment details
    - Bent details
    - Bent aesthetic details
    - Column aesthetic details
    - Span unit details
    - Pre-stressed beam design
    - Approach slab
    - Backwall design
    - Bridge drainage layout
    - Bridge drainage details
    - Lighting conduit details
    - Applicable TxDOT standard details
- 5.6. Pavement Marking and Signing Design
  - 5.6.1 Finalize pavement marking and signing plans
  - 5.6.2 Prepare details to clarify intent of design
  - 5.6.3 Compile applicable Town standard details. Supplement standard details as needed.
- 5.7. Traffic Signal Design

- 5.7.1 Incorporate 60% plan review comments into the traffic signal plans for the for the intersections of Gee Road at SH 380 and Gee Road at First Street.
- 5.7.2 Finalize traffic signal plan sheets
  - Quantity summary/general notes sheet
  - Existing conditions and removals layout sheet
  - Proposed signal layout sheet
  - Signal summary charts sheet
  - Applicable TxDOT and/or Town traffic signal standards/details
- 5.7.3 Prepare list of TxDOT/Town provided traffic signal specifications.
- 5.8. Traffic Control Design
  - 5.8.1 Finalize traffic control narrative.
  - 5.8.2 Develop traffic control plan sheets at 1"=100' scale (22"x34"). Traffic control plan to include signage, channelization devices, detours, temporary pavement, and concrete barriers (where applicable). Up to three (3) phases are anticipated.
  - 5.8.3 Compile applicable Town and TxDOT standard details. Supplement standard details as needed.
- 5.9. Illumination Design (Conduit Only)
  - 5.9.1 Upon Town approval of illumination conduit location, design 2-inch conduit system using Town specifications.
  - 5.9.2 Provide conduit layout, pull box locations, and applicable notes and details. Conduit will be shown on paving plans.
  - 5.9.3 Compile applicable TxDOT and Town standard details.
- 5.10. Landscape and Irrigation Design (Median only)
  - 5.10.1 Coordinate with Town on proposed median landscaping and irrigation to meet Town standards.
  - 5.10.2 Prepare planting plan sheets including trees, planting areas, and turf. Planting plans will show plant species, sizes, and location.
  - 5.10.3 Prepare plan sheets for planting details and specifications, including canopy trees, ornamental trees, shrubs and groundcover, and turf.
  - 5.10.4 Prepare irrigation plans per Town standards for irrigation equipment. Irrigation plans will show head layout, pipe sizing, controller / valve locations.
  - 5.10.5 Compile applicable Town standard planting and irrigation details and specifications.
- 5.11. Erosion Control Design
  - 5.11.1 Develop erosion control plans to comply with Town and any federal, state, or local requirements. Sheets will specify sediment control fence, inlet protection, rock check dams, sod, and seed locations
  - 5.11.2 Compile applicable Town and TxDOT standard details
- 5.12. Opinion of Probable Construction Cost (OPCC)
  - 5.12.1 Update opinion for construction cost using recent average unit bid prices which are representative of similar types of construction in the local area
- 5.13. Project Manual
  - 5.13.1 It is anticipated that the Town will compile the project manual. Consultant to provide the following:
    - Pay item listing
    - Quantities
    - Update the overall OPCC
- 5.14. Final design submittal (90%)
  - 5.14.1 Refer to III. DELIVERABLES

# Final Design Submittal

- 5.15. Incorporate the final design submittal review comments
- 5.16. Prepare the final OPCC
- 5.17. Final design submittal (Final) (to be used by the Town for bidding)
  - 5.17.1 Incorporate the final design submittal review comments
  - 5.17.2 It is anticipated the following sheets will be included in the construction plans:
    - Cover Sheet
    - Sheet Index
    - General Notes
    - Project Control
    - Typical Sections
    - Paving Plan and Profile
    - Bridge Plan and Profile
    - Pavement Marking and Signing Plan
    - Traffic Signal Plan
    - Drainage Area Map (Existing and Proposed)
    - Drainage Calculations
    - Storm Drain Plan and Profile
    - Traffic Control Narrative and Plan
    - Landscape Plan
    - Irrigation Plan
    - Erosion Control Plan
    - Cross Sections
    - Standard Details
    - TxDOT Details (where applicable)
- 5.18. Agency Permitting and Coordination (TDLR and TxDOT)
  - 5.18.1 Prepare and submit Final Design plans to a Texas Department of Licensing and Regulation (TDLR) reviewer in accordance with the Elimination of Architectural Barriers Act. Consultant will review accessibility comments and make appropriate revisions to the plans. All coordination and fees with the TDLR application will be performed by Kimley-Horn.
  - 5.18.2 Prepare and submit Final applicable permit set to Town for submission to TxDOT.
    - Town will submit permit sets to agencies and pay applicable fees
    - Engineer will respond to up to two (2) rounds of agency comments
- 5.19. Refer to III. DELIVERABLES

# Task 6 – Water Line Design (Artesia)

This project may include additional design services to relocate approximately 1,500 linear foot of existing Artesia (Elm Ridge WCID) 18" water line within an easement along Gee Road from Grey Wolf Drive to Doe Branch. The budgeted fee for this Task is based upon approximately 225 hours, water line design will not be performed without written authorization by the Town.

- 6.1 Establish horizontal location for the following proposed water line:
  - 6.1.1 Relocate approximately 1,500 linear feet of 18" water line.
  - 6.1.2 Tying into existing 18" water line along Gee Road.
- 6.2 Establish vertical location for the proposed water line
- 6.3 Develop water line plan and profile plan sheets
- 6.4 Show connections to existing lines and abandonments where applicable

- 6.5 Compile applicable Town standard details and specifications. Supplement standard details as needed.
- 6.6 Opinion of Probable Construction Cost (OPCC)
  - 6.6.1 Update opinion for construction cost using recent average unit bid prices which are representative of similar types of construction in the local area
- 6.7 Prepare pay item listing for inclusion in Project Manual
- 6.8 Incorporate up to three (3) rounds of Town review comments for 60%, 90%, and Final design submittals.
  - 6.8.1 Town to submit applicable set to Elm Ridge WCID
    - Prepare up to three (3) exhibits to assist with WCID application.
  - 6.8.2 Incorporate additional agency review comments as part of 60%, 90%, and Final design submittals.

# Task 7 – Hydraulic Analysis Coordination

The budgeted fee for this Task is based upon approximately 40 hours for coordination with Hydrologic and Hydraulic Design Engineer (Cardinal Engineering, LLC) of Doe Branch and Doe Branch Tributary 6. This main creek is named "Doe Branch" and the tributary is named "Doe Branch Tributary 6" in Denton County. For clarity in this scope of services, the creek will be referred to as Doe Branch. Task may include the following additional items in additional to coordination with Hydrologic and Hydraulic Design Engineer:

#### 7.1 Data Collection

- 7.1.1 Request effective hydrologic and hydraulic models from the Town and/or FEMA. The project reach of Doe Branch is Zone AE with base flood elevations determined and no regulatory floodway. The project reach of Doe Branch is included in Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panels 48121C0410G dated April 18, 2011 in Denton County.
- 7.1.2 Request relevant data pertaining to the crossing from the Town and the Hydrologic and Hydraulic Design Engineer. This information may include creek information/studies, record drawings, GIS files, and aerials.
- 7.1.3 Coordinate with the Hydrologic and Hydraulic Design Engineer on assumptions.

# 7.2 Hydraulic Analysis

- 7.2.1 Coordinate with the Hydrologic and Hydraulic Design Engineer to confirm the hydraulic models are consistent with the current survey data and conditions in the project area.
- 7.2.2 Conceptual Proposed Condition Hydraulic Analysis
  - Send the Hydrologic and Hydraulic Design Engineer the proposed design information including the proposed bridge span length, piers, abutments, and any erosion control to confirm whether the design meets Town criteria for water surface elevations, velocities, and valley storage requirements.
  - Provide information to the Hydrologic and Hydraulic Design Engineer for alternative for the proposed bridge crossing as needed to mitigate any adverse impacts.

#### 7.2.3 Proposed Condition Hydraulic Analysis

- Send the Hydrologic and Hydraulic Design Engineer the final proposed design information including the proposed bridge span length, piers, abutments, and any erosion control to finalize the hydraulic modeling.
- Information provided by the Hydrologic and Hydraulic Design Engineer will be included in the plans prepared under a separate task.

# 7.3 Erosion Analysis

7.3.1 Coordinate with the Hydrologic and Hydraulic Design Engineer to confirm need for erosion

- control options to stabilize the bank as needed.
- 7.3.2 Erosion control options may be evaluated for the selected design. The erosion control design will be an iterative process with the goal of stabilizing the bank as needed, protecting the bridges, minimizing environmental impacts, evaluating water surface elevation rises to the existing 100- year and fully developed 100-year storms, and evaluating applicable velocity and valley storage requirements. Additional alternatives can be performed as Additional Services.
- 7.3.3 Perform a scour analysis as needed based on variables provided by the Geotechnical Engineering under a separate task.
- 7.3.4 If applicable based on the selected erosion control alternative, this task may include sizing rock riprap based on fully developed 100-year velocities. No hydraulic modeling is included with this task. Information will be requested as needed from the Hydrologic and Hydraulic Design Engineer.

### Task 8 – Environmental Services

The budgeted fee for this Task assumes Aquatic Resources Delineation, USACE Nationwide Permitting, and Archaeological Survey have been completed for proposed project improvements by Windsong Ranch Environmental Engineer (Integrated Environmental Solutions, LLC). The budgeted fee for this Task is based upon providing the below services as needed to support these original assumptions. The budgeted fee for this Task is based upon approximately 40 hours. Budgeted hours do not assume all task listed below will be required. We will not proceed with performance of services beyond the hours budgeted, without written authorization by the Town. This Task shall be used on an as-needed basis, at the discretion of the Town. Task may include:

- 8.1 Develop Project Memo to show project does not exceed original USACE approved Individual Permit
  - 8.1.1 This task assumes proposed project impacts were included as a part of original Individual Permit for Windsong Ranch Residential development (USACE project number SWF-2016-00136). It is assumed formal USACE notification and authorization will not be required; however, it will be based upon review of project plans, construction details, and/or specifications and potential impacts to jurisdictional waters previously identified. Consultant will document this information specific to the project.
- 8.2 Perform Additional Aquatic Resources Delineation (may be provided as Additional Service)
  - 8.2.1 Consultant will perform an Aquatic Resources Delineation for the areas not previously studied for the issued Approved Jurisdictional Determination in general accordance with the U.S. Army Corps of Engineers (USACE) 1987 Wetlands Delineation Manual and appropriate USACE Regional Supplement as detailed below.
  - 8.2.2 Consultant will locate readily available resource documents which may include aerial photographs, historic topographic maps, soil surveys, U.S. Fish and Wildlife Service, National Wetlands Inventory maps, National Hydrography Dataset, Federal Emergency Management Agency (FEMA), Flood Insurance Rate Maps (FIRM), historic aerial photographs, and other related data for a desktop review of site conditions.
  - 8.2.3 Consultant will perform a site visit to evaluate the existence and approximate locations of aquatic resources on the site generally following the USACE 1987 Wetlands Delineation Manual and the applicable USACE Regional Supplement. Completion of USACE wetland determination data forms will be completed if necessary. The ordinary high-water mark for waterbodies will be identified in the field. Following the site visit, Consultant will prepare exhibits showing the boundaries (polygons) and acreage and/or linear footage (if applicable) of aquatic resources identified onsite during the site visit as collected utilizing a GPS with

- sub-meter accuracy. Consultant will provide the Town with PDF and AutoCAD versions of the aquatic resources files in the correct coordinate system.
- 8.2.4 Consultant will perform a preliminary jurisdictional analysis of identified aquatic features onsite (if any) to evaluate the potential for the USACE to regulate identified aquatic features. Consultant will provide a summary email with an aquatic features map for review.
- 8.2.5 It is important for the Town to understand the Environmental Protection Agency (EPA) and the USACE occasionally issue guidance concerning what they intend to assert jurisdiction over. Changes that impact our strategy or scope will cause additional work and will be addressed as an additional service amendment to this agreement. Observations will be made under the applicable regulatory guidance at the time of the observations. Official authority to make a determination defining applicable jurisdictional limits rests with the EPA; however, authority has been delegated to the USACE. Jurisdictional determinations are made by the USACE, upon specific written request, on a case-by-case basis and may make use of certain information at its disposal (such as other permits in the local area) that may not be readily available to the public. The Aquatic Resources Delineation should not be considered authoritative, and it may not wholly eliminate uncertainty regarding the USACE's jurisdictional limits.
- 8.3 Develop USACE Nationwide Permit Non-Notifying Memo (may be provided as Additional Service)
  - 8.3.1 This task assumes formal USACE notification and authorization will not be required; however, it will be based upon review of project plans, construction details, and/or specifications and potential impacts to jurisdictional waters. Consultant will document this information specific to the project and how to use the perceived applicable Nationwide Permit (NWP). This letter report will include regulatory language for the applicable NWP with discussion of selected noteworthy General Conditions.
  - 8.3.2 Though no coordination with the USACE is proposed as part of this Task, the use of the applicable NWP constitutes compliance with appropriate Federal regulations. All NWP General and Regional Conditions and NWP terms must be met by the Town.
  - 8.3.3 Based on project details provided to Consultant by the Town, it appears an NWP 14 for Linear Transportation Projects and NWP 58 for Utility Line Activities for Water and Other Substances would authorize the proposed project activities. Further, it is assumed that triggers for notification to the USACE under NWP 14 and NWP 58 are met; Therefore, the preparation of a Pre- Construction Notification (PCN) to be submitted to the USACE Fort Worth District is not included as part of this agreement. For reference, the submittal of a PCN may be required if:
    - The NWP General or Regional Conditions can't be met;
    - Specific triggers for notification to the USACE are met within the NWP;
    - Impacts thresholds for the Nationwide Permit program are exceeded (greater than 0.10- acres and less than 0.50-acres at each separate, single and complete crossing);
    - Town requests verification from the USACE.
  - 8.3.4 This task does not include consultation with the USACE; however, this can be performed if warranted under a separate Agreement.
- 8.4 Perform Desktop Cultural Resources Review (may be provided as Additional Service)
  - 8.4.1 Consultant will engage a professional cultural resources management consultant to perform a desktop cultural resources review. The purpose of the desktop review is to identify and describe existing documented cultural resources in the project area, discuss the potential for discovering previously unknown cultural resources, and make recommendations about the need for further archaeological work so that the project can proceed.
  - 8.4.2 The archeologist will compile information from records/databases, including (as necessary):

- Texas Archeological Sites Atlas;
- National Register of Historic Places (NRHP);
- Additional records at the Texas Archeological Research Laboratory;
- Natural Resources Conservation Service soil maps;
- Town, state, or county planning documents (when available);
- USGS topographic maps;
- Records available at Town and county historical societies; and
- Published local histories.
- 8.4.3 A letter report that details the results of the records search and presents a review of the natural environment and cultural history of the project area, along with conclusions and recommendations of findings will be prepared. This letter will include a discussion of the potential for the proposed project to affect known archaeological sites, State Antiquities Landmarks (SALs), or sites listed or potentially eligible for listing on the NRHP. In addition to this discussion, the letter will also address the likelihood the proposed project will encounter areas with a high potential for containing cultural resources. The report will be submitted to the Town for review.
- 8.4.4 It should be known that if a federal nexus is not identified for the project, consultation with the Texas Historical Commission (THC) under Section 106 of the National Historic Preservation Act is not required. Additionally, if the project is located entirely on private land, consultation with the THC under the Antiquities Code of Texas is not required.
- 8.4.5 Consultant will submit the letter report to the THC for review.
- 8.5 Perform Archaeological Survey (may be provided as Additional Service)
  - Prepare and submit an Antiquities Permit application to the THC for review and approval. Field survey work cannot occur until a permit is issued by the THC.
  - 8.5.2 Conduct a Phase I pedestrian survey. Survey standards will meet the minimum requirements accepted by the THC, as set forth in Chapter 26 of the Texas Administrative Code (TAC). The purpose of a Phase I investigation is to identify cultural resources in the project area and make recommendations about their significance. This scope of work does not include Phase II testing or Phase III mitigation tasks or costs, but these may be necessary to satisfy the THC if sites are found and cannot be avoided.
    - If present, standing structures which are at least 45 years old within the area of
      potential effect will be photographed and recorded. Based on the age and condition of
      the structure, an architectural historian may be consulted (at an additional cost, unless
      otherwise specified in the Cost section below) to determine the structure's eligibility for
      listing on the NRHP or as a SAL.
    - The boundaries of archaeological sites found during the survey will be defined in the horizontal and vertical plane based on surface artifacts, shovel testing, and possibly trenching. These methods comply with standards referenced in 13 TAC 26.20. This scope of work includes the cost of recording one (1) archaeological site. To fulfill the permit requirements laid out in the TAC, we must record archaeological sites found in the proposed survey area. Due to the nature of archaeological work, we can only estimate the number of subsurface site deposits or standing structures that will be found during the survey. Sites and standing structures that are found more than the number listed above may incur additional costs.
    - If a recommendation for NRHP eligibility cannot be made at a site during Phase I
      pedestrian survey, Phase II testing may be recommended and subsequently required
      by the THC.
  - 8.5.3 If artifacts are found during the survey, they will be analyzed, either in the field or in the lab. The results of this analysis will be used to support the overall and site-specific

- recommendations in the technical report.
- 8.5.4 Prepare a draft technical report. This report will meet the standards for cultural resource reports adopted by the THC (Council of Texas Archeologists). The report will describe the natural and cultural history of the project area, present a research design and methodology, then the results of the survey. It will conclude with recommendations about site eligibility (if applicable) and whether further archaeological work should be conducted in the project area. These recommendations will include appropriate justifications based on the requirements of 13 TAC 26.5 and 13 TAC 26.20.
- 8.5.5 The draft report will be submitted to Town and subsequently to the THC for review and comments.
- 8.5.6 Once approved, the final report will be printed, and the necessary copies will be submitted to Town and the THC.
- 8.5.7 Records will be prepared for curation at an approved facility. The cost of records curation is included in the proposed cost. If artifacts are collected, their preparation and the cost of perpetual curation (as required) will be negotiated with the curation facility and will be an additional cost. If the project is on private land, artifacts will be returned to the landowners.
- 8.5.8 The THC may determine deep testing is required for the project. Deep testing is excluded from this scope of services. If deep testing is required by the THC, this would be considered an Additional Service.
- 8.6 Environmental Service submittal
  - 8.6.1 Refer to III. DELIVERABLES

# Task 9 – TxDOT Coordination

- 9.1 The budgeted fee for this Task is based upon approximately 80 hours for TxDOT coordination. We will not proceed with performance of services beyond the hours budgeted, without written authorization by the Town. This Task shall be used on an as-needed basis, at the discretion of the Town. Task may include:
  - 9.1.1 Prepare for and attend meetings with TxDOT and the Town.
  - 9.1.2 Additional Site visits not outlined in the task above.
  - 9.1.3 Coordinate project specific items for traffic signal and intersection design modifications at U.S. 380 intersection.
  - 9.1.4 Review and respond to additional construction plan reviews not outlined in the task above.
  - 9.1.5 Development of enhanced traffic signal plans for the intersection of Gee Road at US 380
    - Proposed enhanced signal improvements may include relocating (or installing new)
      mast arm signal poles and associated equipment and/ or pedestrian signal poles and
      equipment as well as conduit, ground boxes and wiring for relocated/new signal poles.

#### Task 10 – Franchise Utility Coordination

- The budgeted fee for this Task is based upon approximately 80 hours for franchise utility coordination. We will not proceed with performance of services beyond the hours budgeted, without written authorization by the Town. This Task shall be used on an as-needed basis, at the discretion of the Town. Task may include:
  - 10.1.1 Coordinate with franchise utility companies.
  - 10.1.2 Attend group and/or individual franchise utility meetings.
  - 10.1.3 Provide design data to franchise utility companies.
  - 10.1.4 Identify potential franchise utility conflicts and possible relocation requirements.
  - 10.1.5 Notify the Town if any relocations may be required.

10.1.6 Provide utility relocation exhibits to assist with franchise utility coordination.

# <u>Task 11 – Subsurface Utility Engineering (SUE) Quality Level "A" and Level "B" (through a subconsultant)</u>

- 11.1 Upon Town Authorization, perform SUE (Subsurface Utility Engineering) Quality Level "A" and Level "B" to identify existing franchise utility locations along Gee Road by exposing specific utilities.

  Additional SUE will not be performed without written authorization by the Town.
  - 11.1.1 Utilities to be designated include, gas, telecommunications, electric, traffic signals, storm, water, and sanitary sewer.
  - 11.1.2 QL "A" provides three-dimensional (x,y,z) information obtained through the application and interpretation of non-destructive vacuum excavation methods. This quality provides the most accurate horizontal location and vertical position of subsurface utilities.
  - 11.1.3 Up to six (6) test hole locations which will then be field surveyed have been budgeted for this task. We will not proceed with performance of services beyond the days budgeted, without written authorization by the Town.
  - 11.1.4 QL "B" provides two-dimensional (x,y) information obtained through the application and interpretation of non-destructive surface geophysical methods. This quality provides the horizontal position of subsurface utilities within approximately one foot.
    - Approximately four (4) days have been budgeted for this task. This may include area along new Gee Road alignment between Gray Wolf Drive to First Street, and/or at Gee Road and US 380 intersection. We will not proceed with performance of services beyond the days budgeted, without written authorization by the Town.

# <u>Task 12 – ROW and Easement Instruments of Conveyance</u>

- 12.1 Prepare up to five (5) Right-of-Way instrument (narrative and graphic exhibits of ROW required for the Project).
- 12.2 Prepare up to seven (7) easement instruments for acquisition purposes (narrative and graphic exhibits of easements required for drainage, sidewalk, slope, street, and/or temporary construction easement).
- 12.3 Individual parcel exhibits shall be on 8 ½" x 11" paper, shall be sealed, dated, and signed by a Registered Professional Land Surveyor and shall contain the following:
  - Parcel number.
  - Area required.
  - Area remaining.
  - Legal description.
  - Current owner.
  - Any existing platted easement or easements filed by separate instrument including easements provided by utility companies.
  - Metes and bounds description of parcel to be acquired. Description shall be provided on a separate sheet from the exhibit. Each type of easement shall be described separately.
  - Easement instruments for encroachment agreement purposes will be prepared in accordance with franchisee requirements.
- 12.4 Refer to III. DELIVERABLES

# Task 13 – Bid and Construction Phase Services

# 13.1 Bid Phase Services

- 13.1.1 Town will issue bid documents to prospective bidders via electronic site, maintain a list of bidders to whom bidding documents have been issued, and addenda as appropriate to interpret, clarify, or expand the bidding documents. Assist the Town as needed.
- 13.1.2 Attend the pre-bid meeting and bid opening
- 13.1.3 Final construction plan submittal (conformed sets). Refer to III. DELIVERABLES
- 13.1.4 The budgeted fee for this Task is based upon approximately 20 hours for bid phase services We will not proceed with performance of services beyond the hours budgeted, without written authorization by the Town.

#### 13.2 Construction Phase Services

- 13.2.1 The budgeted fee for *Shop Drawings and Samples* is based upon approximately 70 hours (approx. 4 hours/month for anticipated 18 months for construction phase services). We will not proceed with performance of services beyond the hours budgeted, without written authorization by the Town.
  - Shop Drawings and Samples. Review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction or to related safety precautions and programs.
- 13.2.2 The budgeted fee for *Clarifications and Interpretations* is based upon approximately 70 hours (Approx. 4 hours/month for anticipated 18 months for construction phase services). We will not proceed with performance of services beyond the hours budgeted, without written authorization by the Town.
  - Clarifications and Interpretations. When requested, review laboratory testing reports, requests for information (RFI), field change requests, and change orders and provide comments and/or responses to Town. Provide written responses to RFI's or clarification to Town or contractor. Provide and maintain an accurate Change Order Log, Submittal Log and RFI Log throughout the duration of the Project, and make such logs available to the Town upon request. If requested by the Town, render written decision on all claims of Town and contractor relating to the acceptability of contractor's work or the interpretation of the requirements of the contract documents pertaining to the progress of the contractor's work.
- 13.2.3 The total budged fee for Construction Phase Services is approximately 140 hours (approx. 8 hours/month for anticipated 18 months). We will not proceed with performance of services beyond the hours budgeted, without written authorization by the Town. Consultant shall perform its services in accordance with such Project schedule as is specified in the Contract, but in any event as expeditiously as is consistent with such professional skill and care and the orderly progress of the Project in the case of delays caused by the Town's review of documents submitted under this Contract.

# Task 14 – Record Documents

- 14.1 Consultant will prepare construction Record Documents based on the information received from the Contractor.
- 14.2 The budgeted fee for this Task is based upon approximately 40 hours. We will not proceed with performance of services beyond the hours budgeted, without written authorization by the Town.
- 14.3 Record Documents submittal, refer to III. DELIVERABLES

#### **Additional Services**

Services not specifically identified in the Scope of Services above will be considered additional and may be performed with additional fee on an individual basis upon authorization by the Town. Such services may include, but are not limited to, the following:

- Construction Staking
- Environmental Services beyond those identified in the Scope of Services
- Title Research
- Streetscape/Hardscape design
- Illumination design
- Sanitary sewer design
- Franchise utility design
- Traffic counts
- Traffic simulations and/or traffic studies
- Temporary traffic signal design
- Phased signal construction plans
- Full permanent traffic signal design plans
- Traffic signal timing plans
- Design of any offsite drainage improvements beyond the improvements identified in the scope
- Design of retaining walls over 3 feet or outside the limits of right-of-way, or specialized inlets
- Stakeholder Coordination
- Preparation of Additional Bid Packages
- Packaging/inclusion of contract documents prepared by others
- Revising the Traffic Control Narrative or Phasing Plan based on Contractor input after Bidding
- Hydrologic and Hydraulic analysis and/or Flood Study of Doe Branch bridge crossing
- Floodplain reclamation plans or Floodplain analysis beyond establishing parameters for bridgedesign
- Preparation of a CLOMR and Endangered Species Act conformance
- Preparation of a LOMR and associated post construction survey

# **III. DELIVERABLES**

Task 1 - Survey	Digital Topographic Drawing
Task 2 - Geotechnical Services	One (1) Copy of Geotechnical Report
Task 3 - Conceptual Design	<ul> <li>30% Design</li> <li>30% Design Meeting with Town to discuss the following:         <ul> <li>Conceptual Design Exhibit</li> <li>Conceptual Level Right-of-Way Map</li> <li>Overall Existing Utility Map</li> <li>Drainage Area Map</li> <li>30% Opinion of Probable Construction Cost</li> </ul> </li> </ul>
Task 4 - Preliminary Design	<ul> <li>60% Design</li> <li>Half-size 60% roll plot (up to 1 of each upon request)</li> <li>Preliminary Right-of-Way Map</li> <li>Half-size 60% plan sets (up to 1 of each upon request)</li> <li>Draft ROW and Easement documents</li> <li>60% Opinion of Probable Construction Cost</li> <li>PDF versions of 60% Deliverable</li> </ul>
Task 5 - Final Design	<ul> <li>90% Design</li> <li>Half-size 90% roll plot (up to 1 of each upon request)</li> <li>Half-size 90% plan sets (up to 1 of each upon request)</li> <li>Final ROW and Easement documents</li> <li>90% Opinion of Probable Construction Cost</li> <li>PDF versions of 90% Deliverable</li> <li>Half-size and full-size of Final plan sets (up to 1 of each upon request)</li> <li>Final Opinion of Probable Construction Cost</li> <li>PDF versions of Final Deliverable</li> <li>One (1) DWG copy of final files</li> </ul>
Task 6 - Water Line Design (Artesia)	<ul> <li>Half-size 60% and 90% plan sets</li> <li>Half-size and full-size of Final plan sets</li> <li>Up to three (3) exhibits for WCID application</li> </ul>
Task 8 – Environmental Services	Environmental Technical Memo
Task 12 – ROW and Easement Instruments of Conveyance	<ul><li>Up to five (5) ROW instruments</li><li>Up to seven (7) Easement instruments</li></ul>

Task 13 – Bid and Construction Phase Services

- Pay item listing
   Half-size and full
  - Half-size and full-size of final (signed and sealed)
     Conformed plan sets (up to 1 each upon request)

Task 14 - Record Drawings

- One (1) DWG of the record drawings base map in accordance with Town standard
- One (1) PDF copy of each sheet of the record drawings

# EXHIBIT B COMPENSATION SCHEDULE

# PROFESSIONAL ENGINEERING SERVICES AGREEMENT BETWEEN THE TOWN OF PROSPER, TEXAS, AND KIMLEY-HORN AND ASSOCIATES, INC. FOR THE GEE ROAD (US 380 - FM 1385) PROJECT (2310-ST)

# I. COMPENSATION SCHEDULE

Task	Completion Schedule (Anticipated)	Compensation Schedule (Anticipated)
Notice-to-Proceed	July 2023	
Task 1 – Survey	August 2023	Up to \$70,000
Task 2 – Geotechnical Services (through Subconsultant)	December 2023	Up to \$59,000
Task 3 – Conceptual Design (30%)	December 2023	\$262,000
Task 4 – Preliminary Design (60%)	June 2024	\$548,000
Task 5 – Final Design (90% and Final)	March 2025	\$502,000
Task 6 – Water Line Design (Artesia)	As needed	Up to \$56,000
Task 7 – Hydraulic Analysis Coordination	As needed	Up to \$10,000
Task 8 – Environmental Services	March 2025	Up to \$10,000
Task 9 – TxDOT Coordination	As needed	Up to \$20,000
Task 10 – Franchise Utility Coordination	As needed	Up to \$20,000
Task 11 – SUE QL "B" and "A" (through subconsultant)	As needed	Up to \$25,000
Task 12 – ROW and Easement Instruments of Conveyance	November 2024	Up to \$23,000
Task 13 – Bid and Construction Phase Services	November 2026	Up to \$40,000
Task 14 – Record Drawings	December 2026	Up to \$10,000
Total Compensation		\$1,655,000

# **II. COMPENSATION SUMMARY**

Basic Services (Lump Sum)	Amount
Task 3 – Conceptual Design (30%)	\$262,000
Task 4 – Preliminary Design (60%)	\$548,000
Task 5 – Final Design (90% and Final)	\$502,000
Total Basic Services:	\$1,312,000

Special Services (Hourly Not-to-Exceed)	Amount
Task 1 – Survey	Up to \$70,000
Task 2 – Geotechnical Services (through Subconsultant)	Up to \$59,000
Task 6 – Water Line Design (Artesia)	Up to \$56,000
Task 7 – Hydraulic Analysis Coordination	Up to \$10,000
Task 8 – Environmental Services	Up to \$10,000
Task 9 – TxDOT Coordination	Up to \$20,000
Task 10 – Franchise Utility Coordination	Up to \$20,000
Task 11 – SUE QL "B" and "A" (through subconsultant)	Up to \$25,000
Task 12 – ROW and Easement Instruments of Conveyance	Up to \$23,000
Task 13 – Bid and Construction Phase Services	Up to \$40,000
Task 14 – Record Drawings	Up to \$10,000
Total Special Services:	\$343,000

# EXHIBIT C INSURANCE REQUIREMENTS

Service provider shall procure and maintain for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the vendor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be borne by the service provider. A certificate of insurance meeting all requirements and provisions outlined herein shall be provided to the Town prior to any services being performed or rendered. Renewal certificates shall also be supplied upon expiration.

#### A. MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

- 1. ISO Form Number GL 00 01 (or similar form) covering Commercial General Liability. "Occurrence" form only, "claims made" forms are unacceptable, except for professional liability.
- Workers Compensation insurance as required by the Labor Code of the State of Texas, including Employers' Liability Insurance.
- 3. Automobile Liability as required by the State of Texas, covering all owned, hired, or non-owned vehicles. Automobile Liability is only required if vehicle(s) will be used under this contract.
- 4. Professional Liability, also known as Errors and Omissions coverage.

### B. MINIMUM LIMITS OF INSURANCE

Service Provider shall maintain throughout contract limits not less than:

- 1. Commercial General Liability: \$500,000 per occurrence /\$1,000,000 in the aggregate for third party bodily injury, personal injury and property damage. Policy will include coverage for:
  - a. Premises / Operations
  - b. Broad Form Contractual Liability
  - c. Products and Completed Operations
  - d. Personal Injury
  - e. Broad Form Property Damage
- 2. Workers Compensation and Employer's Liability: Workers Compensation limits as required by the Labor Code of the State of Texas and Statutory Employer's Liability minimum limits of \$100,000 each accident, \$300,000 Disease- Policy Limit, and \$100,000 Disease- Each Employee.
- 3. Automobile Liability: \$500,000 Combined Single Limit. Limits can only be reduced if approved by the Town. Automobile liability shall apply to all owned, hired, and non-owned autos.
- 4. Professional Liability aka Errors and Omissions: \$500,000 per occurrence and in the aggregate.

#### C. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductible or self-insured retentions in excess of \$10,000 must be declared to and approved by the Town.

#### D. OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain the following provisions:

- 1. General Liability and Automobile Liability Coverages
  - a. The Town, its officers, officials, employees, boards and commissions and volunteers are to be added as "Additional Insured's" relative to liability arising out of activities performed by or on behalf of the provider, products and completed operations of the provider, premises owned, occupied or used by the provider. The coverage shall contain no special limitations on the scope of protection afforded to the Town, its officers, officials, employees or volunteers.
  - b. The provider's insurance coverage shall be primary insurance in respects to the Town, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the Town, its officers, officials, employees or volunteers shall be in excess of the provider's insurance and shall not contribute with it.
  - c. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the Town, its officers, officials, employees, boards and commissions or volunteers.
  - d. The provider's insurance shall apply separately to each insured against whom the claim is made or suit is brought, except to the insured's limits of liability.
- 2. Workers Compensation and Employer's Liability Coverage:

The insurer shall agree to waive all rights of subrogation against the Town, its officers, officials, employees and volunteers for losses arising from work performed by the provider for the Town.

All Coverages:

Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled or non-renewed by either party, reduced in coverage or in limits except after 30 days written notice to the Town for all occurrences, except 10 days written notice to the Town for non-payment.

4. Professional Liability and / or Errors and Omissions:

"Claims made" policy is acceptable coverage, which must be maintained during the course of the project, and up to two (2) years after completion and acceptance of the project by the Town.

# E. ACCEPTABILITY OF INSURERS

The Town prefers that Insurance be placed with insurers with an A.M. Best's rating of no less than A- VI, or better.

# F. VERIFICATION OF COVERAGE

Service Provider shall provide the Town with certificates of insurance indicating the coverages required. The certificates are to be signed by a person authorized by that insurer to bind coverage on its behalf. Certificates of insurance similar to the ACORD Form are acceptable. Town will not accept Memorandums of Insurance or Binders as proof of insurance. The Town reserves the right to require complete, certified copies of all required insurance policies at any time.

Certificate holder to be listed as follows:

Town of Prosper P.O. Box 307 Prosper, TX 75078

# EXHIBIT D CONFLICT OF INTEREST AFFIDAVIT

# PROFESSIONAL ENGINEERING SERVICES AGREEMENT BETWEEN THE TOWN OF PROSPER, TEXAS, AND KIMLEY-HORN AND ASSOCIATES, INC. FOR THE GEE ROAD (US 380 - FM 1385) PROJECT (2310-ST)

THE STATE C	F TEXAS	§	
COUNTY OF	Dallas	§ §	
I,L. Natha	n Ante, a membe	r of the Consu	ltant team, make this affidavit and hereby on oath state the following:
•	son or persons related to me, the Project (Check all that ap		owing interest in a business entity that would be affected by the work
	Ownership of 10% or more of t	he voting shar	res of the business entity.
	Ownership of \$25,000.00 or m	ore of the fair	market value of the business entity.
F	unds received from the busin	ess entity exce	eed 10% of my income for the previous year.
F	Real property is involved, and I	have an equita	able or legal ownership with a fair market value of at least \$25,000.00.
	relative of mine has substant f the public body of which I ar		the business entity or property that would be affected by my decision
	Other:		<del></del>
<u>X</u> N	lone of the Above.		
	or affinity, as defined in Chapt		as, I further affirm that no relative of mine, in the first degree by Texas Government Code, is a member of the public body which took
Signed this	31sTday of_	May	, 20 <b>23</b> .
			2. Nathan And Senior Vice President Signature of Official / Title
			ally appeared <u>L. No than Ante</u> and o the best of his / her knowledge or belief.
Sworn to and s	subscribed before me on this	31 st <sub>day</sub> of _	Notary Public in and for the State of Texas  My Commission expires: 2 2 28 23

# EXHIBIT E CONFLICT OF INTEREST QUESTIONNAIRE

CONFLICT OF INTEREST QUESTIONNAIRE For vendor doing business with local governmental entity	FORM CIQ
This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.	OFFICE USE ONLY
This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).	Date Received
By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.  A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An	
offense under this section is a misdemeanor.  1 Name of vendor who has a business relationship with local governmental entity.	
Kimley-Horn and Associates, Inc.	
Check this box if you are filing an update to a previously filed questionnaire. (The law recompleted questionnaire with the appropriate filing authority not later than the 7th business you became aware that the originally filed questionnaire was incomplete or inaccurate.)	
Name of local government officer about whom the information is being disclosed.	*
N/A	
Name of Officer	
A. Is the local government officer or a family member of the officer receiving or lift other than investment income, from the vendor?	kely to receive taxable income,
Yes No	
B. Is the vendor receiving or likely to receive taxable income, other than investment of the local government officer or a family member of the officer AND the taxable is local governmental entity?	
Yes No	
Describe each employment or business relationship that the vendor named in Section 1 mother business entity with respect to which the local government officer serves as an of ownership interest of one percent or more.	
Check this box if the vendor has given the local government officer or a family member of as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.0	
<sup>1</sup> // / ///	

www.ethics.state.tx.us

Form provided by Texas Ethics Commission

Revised 11/30/2015