EXHBIT "A" SCOPE OF SERVICES

DENTON DRIVE ROADWAY IMPROVEMENTS FROM VALLEY VIEW LANE TO SOUTH CITY LIMITS

BACKGROUND

Project Description:

The Professional understands that the City of Farmers Branch (City) intends to construct a new typical section for Denton Drive between Valley View Lane and Pike Street, and between the Star Center and the south City limits for a total length of approximately 2,380 linear feet. Additional improvements include street lighting, sidewalks, landscape and irrigation improvements, traffic signals and bridge traffic rail additions.

ASSUMPTIONS

In developing the scope of work and associated task budgets discussed in this proposal, Teague, Nall, and Perkins, Inc. (Professional) has made the assumptions outlined below:

- 1. Local Government Project Procedures and TXDOT involvement in the project review process will not be required.
- 2. City of Farmers Branch will provide Right-of-Way services (if required), including appraisals, coordination with property owners, negotiation, condemnation, etc.
- 3. City of Farmers Branch will provide copies of record drawings for existing utilities, roadway and/or structures if available.
- 4. For the purposes of the basic services scope of work, it is assumed that no improvements to the existing bridges will be required beyond adding a traffic divider between the travel lanes and the proposed bicycle lane and/or sidewalks (no replacement of outer rails).
- 5. City of Farmers Branch will provide all available City construction details.
- 6. City of Farmers Branch will provide daily inspection services during construction.
- 7. No environmental/archeological permitting services (including cultural resources survey and coordination for Texas Historical Commission permitting, Waters of the US delineation, protected species assessment, Section 404 permitting, and Corps Environmental Assessment and Environmental Constraints Analysis/NEPA permitting) are included in this Scope of Services.

SCOPE OF WORK

The Professional proposes to provide planning, engineering, and surveying services for the above-referenced project. The following paragraphs provide a detailed description of the project scope.

BASIC SERVICES

TASK 100: BOUNDARY ANALYSIS VERIFICATION

- 101. The City has requested a complete boundary survey verification for the entire project corridor. A portion of the boundary analysis verification is being performed under a separate contract. The fees presented herein are to accommodate additional effort to complete the boundary survey verification if needed. The following scope of work is included:
- 102. Title research and deeds will be obtained for the subject property and the adjoining property owners.
- 103. A thorough investigation of boundary markers/corners will be made on the subject property and the adjoining properties.
- 104. A boundary analysis of the property will be made by a Registered Professional Land Surveyor.
- 105. A final Property base will be prepared to incorporate into the Topographic Survey.
- 106. Data will be delivered in Texas Coordinate System of 1983 North Central Zone (4202) scaled to Surface with a combined scale factor supplied.

TASK 200: CIVIL ENGINEERING DESIGN

- 201. Provide project management activities as necessary to properly manage the project, including work planning, internal kickoff/QC meeting, periodic internal project progress meetings as required, and providing periodic Project Status Reports (including schedule updates) to City.
- 202. Develop Design Criteria Matrix.
- 203. Review and research previously prepared construction plans, record documents, and other pertinent information related to the project.
- 204. Review City master plans, design standards, specifications, construction details, and other pertinent information that may impact the design. Review of documents will include but is not limited to:

- a. Thoroughfare Design Criteria
- b. Storm Drainage Design Manual
- c. Water and Wastewater Design Criteria
- d. Control Monument Locations
- e. GPS Control Network
- f. City of Farmers Branch Access Management Policy
- g. NCTCOG Standard Specifications and Standard Drawings for Public Works Construction, Fifth Edition
- h. City Amendments to NCTCOG Standard Specifications and Standard Drawings for Public Works Construction, Fifth Edition
- i. City of Farmers Branch Thoroughfare Plan
- j. City of Farmers Branch Trail Master Plan
- k. Federal design standards
- 1. AASHTO Guide for the Development of Bicycle Facilities
- 205. Develop a complete and accurate base map in AutoCAD Civil 3D 2023 showing all existing Right-of-Way (ROW), easements, and utilities.
- 206. Confirm typical section for Denton Drive within the project limits.
- 207. Develop horizontal alignment for the proposed roadway, including layout of new typical section with parallel parking, sidewalks, etc.
- 208. Develop alignment for the proposed water line replacement of the existing 6" and 8" water lines along Denton Drive from the south City limits to the Star Center. It is assumed that the existing 12" and 16" water lines will remain in place. The scope of services does not include water line replacements on the side streets other than connecting to existing lines.
- 209. Prepare 30% schematic paving plan roll plots. The horizonal alignment of the proposed water line will be included on the roll plots. This drawing will show the layout of the proposed parallel parking, sidewalks, curb ramps, etc.
- 210. Prepare an estimate of construction quantities and develop the conceptual opinion of probable construction cost (OPCC).
- 211. Professional will assess the need for any additional right-of-way and/or easements, based on the proposed improvements and boundary survey, and if needed will prepare a preliminary list of right-of-way parcels and easements necessary to construct the project.
- 212. Conduct a 30% Internal QC review workshop to review key design concepts (proposed roadway layout, constructability, utility issues, etc.), and revise design as necessary.
- 213. Submit 30% schematic paving plan roll plot, OPCC, and design criteria matrix to the City.

- 214. Conduct a 30% review workshop with City staff to review key design concepts (proposed roadway layout, constructability, utility issues, etc.), and revise design as necessary.
- 215. Incorporate comments and feedback from City staff during 30% conceptual design presentation and review meeting.
- 216. Develop paving/roadway design, including horizontal alignment and vertical profile of the proposed roadway and cut cross sections at centerline of driveways, cross streets, and at 50' intervals along the road centerline to evaluate grading. Establish the existing ground profile (C/L, right and left ROW), create proposed ground profile (Top of Curb), create assembly and corridor. Evaluate sidewalks and curb ramps for ADA accessibility issues. Evaluate visibility at intersections.
- 217. Develop a water line relocation design for the existing 6" and 8" water lines. The design includes the following:
 - a. Review and confirm City standard specifications and details
 - b. Revise horizontal alignment as necessary
 - c. Create alignment in Civil3D
 - d. Evaluate potential conflicts
 - e. Locate, verify, and address all water services and water meter locations
 - f. Check valve spacing and address as necessary
 - g. Check hydrant spacing and address as necessary
 - h. No vertical profile will be prepared for the 6" and 8" water lines
- 218. Prepare concept construction phasing plan.
- 219. Adjust existing sanitary sewer manhole rims/frames as necessary, including the following:
 - a. Adjustments will be made to manhole rim/frame as necessary based on adjustments to roadway grades.
 - b. Determine depth of existing sanitary sewer lines and evaluate any conflicts.
 - c. Sanitary sewer line replacement is not included in this project
- 220. Develop storm sewer design for the proposed inlet relocations and additions to accommodate the new roadway typical section. The storm sewer and inlet design shall include the following:
 - a. Review and confirm City standard specifications and details
 - b. Delineate drainage basins/sub-basins
 - c. Analyze street and inlet capacities
 - d. Determine location for new storm sewer inlets as needed
 - e. Size storm sewer inlets and storm sewer system to comply with the City drainage criteria
 - f. If the existing storm sewer system is adequate, extend the existing storm sewer main within the roadway as needed to accommodate connections to new inlets. If the existing storm sewer system is undersized, provide the recommended size to meet City criteria.

- g. Prepare HGL calculations in spreadsheet format.
- h. Prepare calculation sheets
- i. Prepare drainage area map plan sheet
- j. Prepare plan and profile sheets for the storm sewer lines
- 221. Prepare 60% construction plans. Prepare the following sheets at the engineering scale indicated:
 - a. Cover sheet
 - b. General notes sheets
 - c. Project layout control sheet(s). Scale 1"= 50"
 - d. Typical pavement section(s) sheets
 - e. Concept Construction Phasing Plan. Scale 1"=50"
 - f. Demolition plan sheets. Scale 1"=20'
 - g. Water line plan sheets. Scale 1"=20'
 - h. Water line detail sheets.
 - i. Drainage area map. Scale 1"= 100'
 - j. Drainage calculation sheet(s)
 - k. Storm sewer plan & profile sheets. Scale 1"= 20'
 - 1. Drainage detail sheets
 - m. Paving plan & profile sheets. Horizontal scale 1"= 20', Vertical scale 1"=4'
 - n. Paving cross sections sheets
 - o. Paving detail sheets
 - p. Street/pedestrian lighting plans (location, conduit, and pull boxes) and details
 - q. Traffic signal plans and details (see Task 400)
 - r. Landscape and Irrigation plans and details (see Task 300)
 - s. Bridge plan, elevations and typical section sheets (see Task 600)
 - t. Structural details (bridge barrier separation) (see Task 600)
- 222. Meetings and coordination with DART regarding project.
- 223. Revise the estimate of construction quantities and opinion of probable construction cost (OPCC).
- 224. Professional to perform internal 60% QA/QC review of plans and OPCC and revise, as necessary.
- 225. Submit electronic copy and one half-size (11"x17") hard-copy set of the 60% plans and preliminary OPCC to the City for review.
- 226. Meet with City staff to discuss City comments on 60% plans and OPCC.
- 227. Distribute the 60% plans and proposed construction schedule to local utility companies.
- 228. Incorporate City 60% comments into the plans.

- 229. Incorporate comments from DART.
- 230. Prepare 90% construction plans for proposed improvements. Prepare and/or revise the following sheets at the engineering scale indicated:
 - a. Cover sheet
 - b. General notes sheets
 - c. Quantity breakdown sheet(s)
 - d. Project layout control sheet(s). Scale 1"= 50"
 - e. Typical pavement section(s) sheets
 - f. Construction Phasing plan. Scale 1"= 50' or appropriate legible scale
 - g. Demolition plan sheets. Scale 1"=20'
 - h. Water line plan sheets. Scale 1"=20'
 - i. Water line detail sheets.
 - j. Drainage area map. Scale 1"= 100'
 - k. Drainage calculation sheet(s)
 - 1. Storm sewer plan & profile sheets. Scale 1"= 20"
 - m. Drainage detail sheets
 - n. Paving plan & profile sheets. Horizontal scale 1"= 20', Vertical scale 1"=4'
 - o. Paving cross sections sheets
 - p. Paving detail sheets
 - q. Permanent striping and signage plan sheets. Scale 1"= 40'
 - r. Permanent striping and signage details
 - s. Street/pedestrian lighting plans (location, conduit, and pull boxes) and details
 - t. Erosion controls sheets meeting EPA and City requirements. Scale 1"= 40"
 - u. Erosion control detail sheet(s)
 - v. Traffic signal plans and details (see Task 400)
 - w. Landscape and Irrigation plans and details (see Task 300)
 - x. Bridge plan, elevations and typical section sheets (see Task 600)
 - y. Structural details (bridge barrier separation) (see Task 600)
- 231. Meetings and coordination with DART regarding project.
- 232. Prepare draft copy of bid items, quantities and pay item descriptions. Prepare any technical specifications not included in NCTCOG standard specifications.
- 233. Prepare project bid book.
- 234. Revise the estimate of construction quantities and opinion of probable construction cost (OPCC).
- 235. Professional to perform internal 90% QA/QC review of plans, specifications, and OPCC and revise as necessary.
- 236. Submit electronic copy and one half-size (11"x17") hard-copy set of the 90% plans, draft project bid book, and OPCC to the City for review.

- 237. Meet with City staff to review City comments.
- 238. Distribute the 90% plans and proposed construction schedule to local utility companies.
- 239. Incorporate City 90% plan comments into the plans and bid documents.
- 240. Prepare 100% construction plans, project bid book, and OPCC for proposed improvements.
- 241. Submit electronic copy and up to three full-size (24"x36") or half-size (11"x17") hard-copy sets of the 100% plans, project bid book, and OPCC to the City.
- 242. Distribute the final 100% plans and proposed construction schedule to local utility companies.

TASK 300: LANDSCAPING AND IRRIGATION DESIGN

- 301. 30% Construction Documents (Roll-Plot)
 - a. The Professional will prepare and deliver a one-page colored and rendered roll-plot of the entire project. This drawing will show landscape areas, trees, light poles, and special paving areas, DART bus stops, on one long pdf sheet. The Professional will conduct up to two virtual meetings with the City during this phase.
- 302. 60%, 90%, and 100% Construction Documents
 Professional will prepare and deliver Construction Documents with 60%, 90%, and 100% submittals. This task includes one round each of Client-requested revisions for the 60% and 90% submittals. The Professional will prepare the following:
 - a. Landscape Plans, Details, and Notes. These plans will show the type, spacing, and size of landscape materials as well as details and on-sheet notes and will conform to the City's standards.
 - b. Irrigation Plans, Details, and Notes (at 90% and 100% only). These plans will show the type, spacing, and size of irrigation materials, such as pipe size and location, heads, controllers, and valves, as well as details and on-sheet notes, and will conform to the City's standards.
 - c. Plans and details for the special-colored concrete paving areas at the intersections of Valley View Lane.
 - d. Specifications for the sections listed above in CSI format.
 - e. OPCC for proposed improvements.
 - f. Bid Tabs for use in bidding.

- g. The Professional will conduct/attend up to two virtual meetings with the City during this phase.
- 303. Construction Phase Services (related to Landscaping and Irrigation Improvements)
 The Professional will provide the following services:
 - a. Answer RFI's from the Contractor
 - b. Attend up to three Construction Site Visits and Punch Lists
 - c. Submit Record Drawings to City (provided by Contractor). Because Record Drawings are based upon information provided by the Contractor, the Professional cannot guarantee their accuracy or completeness.

TASK 400: TRAFFIC SIGNAL DESIGN

- 401. The following scope of services is included for the following intersections:
 - a. Denton Drive and Farmers Branch Lane
 - i. The project understanding is that the existing traffic signal service and controller will remain in place. Existing traffic signal mast arms will remain in-place with the existing vehicular signal heads adjusted to align with any changes to the lane configuration. Existing optical emergency vehicle preemption (EVP) will remain in place. GPS-based EVP will not be installed. Existing cabling will remain in place. Existing video detection will remain in place for all approaches. Existing mast arm signs will be reused. Any loop detection will be abandoned or will be removed and not be replaced.
 - ii. New traffic signal accommodations for pedestrians will be designed based on new crosswalks and ramp locations. All pushbuttons will be upgraded to APS. Where recommended for ADA compliance, pushbutton poles will be installed and cabled to the existing terminal block on existing mast arms for connectivity to the controller. A PTZ camera will be installed at the intersection. Illuminated Street Name Signs (ILSN) supplied by the City will be installed.
 - iii. The intersection is located 50' from a grade crossing. The Professional will coordinate with DART to provide railroad preemption at the traffic signal.
 - b. Valley View Lane at Denton Road
 - i. Project understanding is that the existing traffic signal service and controller will remain in place. Existing traffic signal mast arms will remain in-place with the existing vehicular signal heads adjusted to align with any changes to the lane configuration. Existing optical emergency vehicle preemption (EVP) will remain in-place. GPS-based EVP will not be installed. Existing cabling will remain in-place. Existing video detection will remain in-place for all approaches. Existing

- mast arm signs will be reused. Any loop detection will be abandoned, or will be removed and not be replaced.
- ii. New traffic signal accommodations for pedestrians will be designed based on new crosswalk and ramp locations. All pushbuttons will be upgraded to APS. Where recommended for ADA compliance, pushbutton poles will be installed and cabled to the existing terminal block on existing mast arms for connectivity to the controller. A PTZ camera will be installed at the intersection. Illuminated Street Name Signs (ILSN) supplied by the City will be installed.

TASK 500: STREET/PEDESTRIAN LIGHTING DESIGN

- 501. Develop street/pedestrian lighting plans to include pole locations, conduit locations and size, and pull box locations. Additionally, the plans will include standard Oncor details for pole foundations and other applicable Oncor details. The light pole spacing requirements will be provided by Oncor and the City.
- 502. No fixture selection, photometrics, wiring diagrams, pole foundation design, or development of pole details are included in this scope of work.
- 503. Professional will prepare and deliver Construction Documents with 60%, 90%, and 100% submittals. This task includes one round each of City-requested revisions for the 60% and 90% submittals.

TASK 600: STRUCTURAL DESIGN FOR BRIDGES

Project Understanding of Bridge Modifications - The two existing bridge's superstructure and substructures are not being structurally modified or altered except they will be adapted to accommodate one trail on the east side and within the existing bridge width by removing the outermost northbound traffic lane. The existing 4 traffic lane bridge with raised sidewalks section will be altered to 2 traffic lanes (one southbound and one northbound) and one northbound trail lane with no physical modifications to existing raised sidewalks. Bridge design services shall include the following:

- 601. Design coordination with Landscape and Civil Engineering for geometric trailway alignments and AASHTO requirements.
- 602. Review of available TxDOT Bridge Inspection Reports, PONTEX Reports and Condition Surveys to evaluate and determine if any deficient structural elements require retrofit improvements to meet current AASHTO traffic loadings design requirements.
- 603. Perform structural analysis to verify new imposed trailway loads plus traffic lane loads meet AASHTO design criteria requirements for existing bridge superstructure and substructure capacity.

- 604. Preparation of two bridge Plan & Elevation & Typical Bridge Section Drawings showing proposed trailway modifications and geometry.
- 605. Preparation of structural details for addition of one new interior TxDOT C221 (or similar) bridge barrier separation between traffic lanes and trail lanes on the northbound side of each bridge.

606. Exclusions:

- a. Existing Bridge superstructure or substructure foundation repair or retrofit designs for deficient existing conditions to meet AASHTO design criteria for proposed design loads.
- b. Geotechnical services associated with bridge improvements.
- c. Channel or abutment embankment improvements or modifications associated with existing scour or erosion or slope failures.
- d. For the purposes of the basic services scope of work, it is assumed that no improvements to the existing bridges will be required beyond adding a rail between the northbound travel lane and the proposed bicycle lane and sidewalks (no replacement of outer rails).

TASK 700: BID PHASE SERVICES

- 701. Assist City staff in advertising for bids and posting plans and bid documents to Civcastusa.com.
- 702. Attend pre-bid conference (conducted by the City).
- 703. Assist City by responding to questions and interpreting bid documents.
- 704. Prepare and provide the City with addenda to bid documents as necessary.
- 705. Prepare bid tabulation, in MS Excel format, within four (4) working days following bid opening. Include average bid costs amongst all bidders, as well as the final opinion of probable construction costs (OPCC) prior to bidding for comparison analysis.
- 706. Evaluate the lowest bidder. Review and evaluate such factors including: previously completed work, available equipment, publicly available financial resources, technical experience, and responses from references.
- 707. Prepare a letter of recommendation for awarding the contract to the lowest responsible bidder within four (4) working days following the bid opening.
- 708. Coordinate with the lowest bidder and assist city in preparing construction contract document for the contractor and city to execute.

SPECIAL SERVICES

TASK 800: CONSTRUCTION ADMINISTRATION

- 801. Prepare and provide up to five full-size sets and five half-size sets of final conformed construction sets.
- 802. Attend and assist City in holding a pre-construction conference.
- 803. Review all shop drawings and any special design items not covered by a standard detail.
- 804. Review proposed construction schedules, if requested by City Staff.
- 805. Review and provide written responses to Requests for Information (RFIs).
- 806. Prepare plan and quantity revisions to process change orders in accordance with City format. The City will prepare and execute the Change Orders (COs).
- 807. Provide site visits on a requested basis during active construction activity. For the purposes of this proposal, seven site visits are estimated.
- 808. Assist City Staff in conducting final inspection and make recommendation of final acceptance of completed work.
- 809. Prepare construction "Record Drawings" updating the project plans to reflect any field changes or plan revisions. Record drawings shall be delivered in a digital format. The drawings shall be 22" x 34" in size and shall bear "Record Drawing" stamp and the seal and signature of the Engineer along with the date.

TASK 900: EASEMENT DOCUMENTATION PREPARATION

- 901. Prepare a preliminary list of right-of-way parcels and easements necessary to construct the project (if any). Submit to the City as soon as possible before or at the preliminary plan submittal.
- 902. Prepare metes and bounds description (field notes) and 8 ½" x 11" exhibit for right-of-way/easement acquisitions on a per tract basis. Four (4) right-of-way/easement documents are assumed for budgeting purposes.
- 903. Set new iron pins at all new property corners, P.C.'s and P.T.'s of new rights-of-way and easements.
- 904. Deliverables: Digital copy of rights-of-way and/or easements.

TASK 1000: SUBSURFACE UTILITY ENGINEERING (SUE)

1001. General Understanding:

The following represents the general understanding between the City and Professional regarding the basis and/or limitations under which these subsurface utility designating and/or locating services are provided:

- a. These services will be conducted and provided in general compliance with CI/ASCE 38-22 (Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data). This standard establishes and defines four quality levels for data collection that are briefly described as:
 - i. Quality Level D (QL-"D") Generally QL-"D" indicates information collected or derived from research of existing records and/or oral discussions.
 - ii. Quality Level C (QL-"C") Generally QL-"C" indicates information obtained by surveying and plotting visible above-ground utility features and by using professional judgment in correlating this information to QL-"D" information. Incorporates QL-"D" information. (Limited in this scope, this scope is to cover underground utility crossings)
 - iii. Quality Level B (QL-"B") Generally QL-"B", also known as "designating" indicates information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. Quality level B data should be reproducible by surface geophysics at any point of their depiction. This information is surveyed to applicable tolerances defined by the project and reduced onto plan documents. Incorporates QL-"D" & QL-"C" information.
 - iv. Quality Level A (QL-"A") Generally QL-"A", also known as "locating", indicates the precise horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, at a specific point. Incorporates QL-"D" QL-"C" & QL-"B" information.
- b. These services are for the purpose of aiding the design of the subject project by providing information related to subsurface utilities in order to allow potential utility conflicts to be minimized or eliminated.
- c. The Professional will provide services that meet the standard of care for existing subsurface utility location and mapping as established in CI/ASCE 38-22 by exercising due diligence with regard to records research and acquisition of utility information, including visually inspecting the work area for evidence of utilities and reviewing the available utility record information from the various utility owners. However, the Professional makes no guarantee that all utilities can or will be

identified and shown as there still may be utilities within the project area that are undetectable or unknown.

- d. Facilities that are discovered through field investigative efforts by the Professional but no plan records or ownership data can be identified will be hereafter referred to as unknown. As part of these services, the Professional will provide QL-C information in the project deliverables for all unknown utilities that may be identified in the field investigation of the project. Designating and/or locating unknown utilities will typically not be part of the initial scope of work but depending on the client's needs can be added as additional work to address concerns of the project impacts of "unknown" facilities.
- e. Ground penetrating radar will not be used as a part of the field investigation of the project site unless that use has been specifically addressed with the scope of services described herein.
- f. Test holes are very limited in size or diameter (typically 12 inches by 12 inches, or approximately 144 square inches). Given this limited size, some subsurface conditions may prevent the completion of test holes, including rock(s), groundwater, large roots, other utilities & structures, etc. Test hole attempts which cannot be completed due to site conditions will be documented and noted on the plans.
- g. When test holes are used to locate utilities, the nominal pipe sizes of the targeted utility will be documented and reported by using field measurements of the outside diameter (OD) of the pipe (to the nearest inch). Based upon this field measured OD, the nominal pipe size will be determined using typical pipe wall thickness data and other available data including record information. Pipe diameters that are too large for measurement, encased or non-encased conduit duct banks and other concrete encased systems which cannot be adequately measured will be reported based upon the best available information.
- h. The documented results produced by these services represent a professional opinion and interpretation based upon record information and/or field evidence. These results may be affected by a variety of existing site conditions, including soil content, depth of the utility, density of utility clusters, and electro-magnetic characteristics of the targeted utilities. Also, the lack of and/or poor condition of a trace wire for non-conductive materials such as PVC, HDPE, etc. in most cases will make the successful detection and location of the utility unlikely.
- i. The Professional will apply professional judgment to determine which utilities require additional field effort and/or methods to properly designate and/or locate, most commonly when record drawings are not available. In such cases, the Professional will provide a recommendation or request for additional services to the Client. Among other methods, a detectable duct rodder or other conductor may be introduced into the line to enable the designation of the utility. This method is dependent upon

approval by the utility owner, as well as access to, size and condition of the utility.

j. None of these services are intended to and should not be understood to relieve the Client or others from the responsibility to comply with the statutory requirements related to notifying the proper one-call system(s) in advance of any and all excavation, grading and/or construction within the project site.

1002. Scope of Basic Services:

- a. Quality Level 'A' Utility Test Hole
 - i. Excavate by air-vacuum or other minimally invasive methods up to Four (4) test holes along Denton Drive. This work includes:
 - ii. Providing all necessary personnel, equipment, supplies, management, and supervision for the test hole excavation, backfill, and restoration.
 - iii. Contacting the appropriate one-call system to request utilities to be marked onthe-ground prior to beginning excavation of test hole.
 - iv. Providing and utilizing appropriate traffic control devices, as necessary, in conformance with the MUTCD, including any state or locally adopted supplements. (if closures or additional traffic control equipment is needed other than cones, additional direct expenses will be charged)
 - v. Preparing documentation for each test hole attempted. This documentation will include the horizontal and vertical position of the targeted utility or structure, a general description of the target utility, with condition, material and general orientation noted, a generalized description of the material encountered in the test hole, and any other field observations noted during the excavation.

TASK 1100: RAS PLAN REVIEW AND INSPECTION (via SUBCONSULTANT)

- 1100. Register the project with the Texas Department of Licensing and Regulation (TDLR) Texas Architectural Barriers System.
- 1101. Provide an accessibility compliance review of the construction plans. The compliance review shall be performed by a licensed RAS.
- 1102. Provide a post-construction inspection and final report. A licensed RAS will perform the inspection and prepare a report.
- 1103. Provide follow-up inspections following corrective action by the Contractor to confirm compliance.
- 1104. Complete all necessary documentation and submit it to the TDLR for project closeout.

ADDITIONAL SERVICES

The City of Farmers Branch and Professional agree that the following services are beyond the Scope of Services described in the tasks above; however, Professional can provide these services, if needed, upon written authorization by the City of Farmers Branch. Compensation for Additional Services shall be for an agreed-upon hourly fee based upon Professional's rate schedule. Additional services may include the following:

- i. Rights-of-entry (ROE): The City will assist in securing rights-of-entry (ROE) if needed for survey, SUE, and Geotechnical fieldwork.
- ii. Right-of-way and easement acquisition services;
- iii. Construction staking services;
- iv. Geotechnical investigation;
- v. Environmental/archeological permitting services (including cultural resources survey and coordination for Texas Historical Commission permitting, Waters of the US delineation, protected species assessment, Section 404 permitting, and Corps Environmental Assessment and Environmental Constraints Analysis/NEPA permitting);
- vi. Services related to disputes over Contractor prequalification, bid protests, bid rejection, and/or rebidding of the Project;
- vii. Construction management and inspection services;
- viii. Performance of materials testing or specialty testing services;
- ix. Services necessary due to default of the Contractor;
- x. Services related to warranty claims, enforcement, and inspection after final completion;
- xi. Services to support, prepare, document, bring, defend, or assist in litigation undertaken by or defended by the City of Farmers Branch (unless said litigation is as a result of Professional's negligence);
- xii. Flood studies or hydraulic analysis of existing storm drain beyond scope provided in this agreement;
- xiii. Sanitary sewer design;

- xiv. Design, selection, and placement of street furniture (benches, seating, litter receptacles, tree grates, signage, banners, planter pots, etc.);
- xv. Modifications to the DART railroad crossing and crossing arms;
- xvi. This project will be designed and constructed as a single phase. Phasing of the construction plans can be provided as an additional service if required;
- xvii. Electrical, gas, and franchise utility design and relocation coordination
- xviii. Storm Water Pollution Prevention Plan, unless approved as an additional service;
- xix. Tree mitigation plan;
- xx. Structural design of screening walls, retaining walls, etc.;

PROJECT COMPENSATION SUMMARY:

Task	Fee Basis	Total
BASIC SERVICES		
TASK 100: BOUNDARY ANALYSIS VERIFICATION	Hourly	\$10,000
TASK 200: CIVIL ENGINEERING DESIGN	Hourly	\$275,000
TASK 300: LANDSCAPING AND IRRIGATION DESIGN	Hourly	\$72,000
TASK 400: TRAFFIC SIGNAL DESIGN	Hourly	\$50,000
TASK 500: STREET/PEDESTRIAN LIGHTING DESIGN	Hourly	\$20,000
TASK 600: STRUCTURAL DESIGN FOR BRIDGES	Hourly	\$40,000
TASK 700: BID PHASE SERVICES	Hourly	\$15,000
Total Basic Services Fees		\$482,000
SPECIAL SERVICES		
TASK 800: CONSTRUCTION ADMINISTRATION	Hourly	\$40,000
TASK 900: EASEMENT DOCUMENTATION PREPARATION (4 @ \$2,500 each)	Unit Price	\$10,000
TASK 1000: SUBSURFACE UTILITY ENGINEERING (SUE)		
a. Quality Level 'A' Utility Test Holes (4 holes @ \$2,600 each)	Unit Price	\$10,400
b. Pavement Coring (Est 2 days at \$750 per day)	Hourly	\$1,500
c. Traffic Control (Est 2 days at \$1,500 per day)	Hourly	\$3,000
d. ROW Permits	Hourly	\$2,100
TASK 1100: RAS PLAN REVIEW AND INSPECTION (via sub-consultant)	Hourly	\$3,200
Total Special Services Fees		\$70,200
Total Project Fee		\$552,200

<u>Hourly Consulting Services:</u> When the Fee Basis is defined as hourly, those services shall be provided on an hourly, not-to-exceed, reimbursable basis at the Professional's standard hourly rates. Please refer to the attached standard hourly rates. Services shall be billed monthly based on actual time spent working on the project by the Professional's staff.

APPROXIMATE PROJECT LIMITS



Teague Nall and Perkins, Inc. 2024 Standard Hourly Rates Effective January 1, 2024 to December 31, 2024

Lyjective Junuary 1, 2024 to December 31, 2024	Hourly
Engineering/Landscape Architecture/ROW	Hourly Billing Rate
Principal or Director	\$310.00
Team Leader	\$285.00
	\$280.00
Senior Project Manager	\$240.00
Project Manager	\$240.00 \$290.00
Senior Engineer	•
Project Engineer	\$190.00
Senior Structural Engineer	\$295.00
Structural Engineer	\$210.00
Engineer III/IV	\$170.00
Engineer I/II	\$145.00
Senior Landscape Architect/Planner	\$290.00
Landscape Architect / Planner	\$210.00
Landscape Designer	\$150.00
Senior Designer	\$195.00
Designer	\$170.00
Senior CAD Technician	\$165.00
CAD Technician	\$130.00
IT Technician	\$190.00
Clerical	\$90.00
ROW Manager	\$265.00
Senior ROW Agent	\$195.00
ROW Agent	\$155.00
Relocation Agent	\$195.00
ROW Tech	\$110.00
Intern	\$90.00
	Hourly
Surveying	Billing Rate
Survey Manager	\$310.00
Registered Professional Land Surveyor (RPLS)	\$265.00
Field Coordinator	\$160.00
S.I.T. or Senior Survey Technician	\$155.00
Survey Technician	\$140.00
1-Person Field Crew w/Equipment**	\$170.00
2-Person Field Crew w/Equipment**	\$200.00
3-Person Field Crew w/Equipment**	\$225.00
4-Person Field Crew w/Equipment**	\$245.00
Flagger	\$65.00
1148861	705.00

Exhibit A – Scope of Services	August 14, 2024
Denton Drive Roadway Improvements	_
City of Farmers Branch	
Abstractor (Property Deed Research)	\$105.00
Small Unmanned Aerial Systems (sUAS) Equipment & Crew	\$475.00
Terrestrial Scanning Equipment & Crew	\$290.00

	Hourly	
Utility Management, Utility Coordination, and SUE	Billing Rate	
Senior Utility Coordinator	\$190.00	•
Utility Coordinator	\$170.00	
SUE Field Manager	\$190.00	
Sr. Utility Location Specialist	\$180.00	
Utility Location Specialist	\$135.00	
1-Person Designator Crew w/Equipment***	\$165.00	
2-Person Designator Crew w/Equipment***	\$220.00	
2-Person Vac Excavator Crew w/Equip (Exposing Utility Only)	\$335.00	(4 hr. min.)
Core Drill (equipment only)	\$830.00	per day
SUE QL-A Test Hole (0 < 8 ft)****	\$2,400.00	each
SUE QL-A Test Hole (> 8 < 15 ft)****	\$2,900.00	each

Hourly

Construction Management, Construction Engineering and Inspection

(CEI)	Billing Rate
Construction Inspector I/II	\$120.00
Construction Inspector III	\$140.00
Senior Construction Inspector	\$160.00
Construction Manager	\$235.00
Senior Construction Manager	\$280.00

Direct Cost Reimbursables

Direct in-house expenses shall be invoiced at actual cost. Direct expenses performed by others shall be invoiced at 1.10 times actual cost.

Any permit fees, filing fees, or other fees related to the project and paid on behalf of the client by TNP to other entities shall be invoiced at 1.10 times actual cost.

Notes:

All subcontracted and outsourced services shall be billed at rates comparable to TNP's billing rates above or cost times a multiplier of 1.10.

- * Rates shown are for 2024 and are subject to change in subsequent years.
- ** Survey equipment may include truck, ATV, Robotic Total Station, GPS Units and Digital Level.
- *** Includes crew labor, vehicle costs, and field supplies.