

EXHIBIT "A"
SCOPE OF SERVICES

TO BE PROVIDED BY HALFF ASSOCIATES, INC.
TO
COLLIN COUNTY, TEXAS
FOR
PARK BOULEVARD EXTENSION
~~PROJECT #????~~

A. PROJECT DESCRIPTION

The COUNTY proposes to construct Park Boulevard from FM2514 (Parker Road) to SH78 which consists of approximately 13,300 linear feet of a 4-lane divided concrete pavement section, including a grade separation at the KCS rail lines, that will accommodate an ultimate 6-lane facility within a 120' wide right of way. Services by the CONSULTANT shall include all aspects of the work set forth in the following scope of services.

The parameters for planning and design of the improvements shall include the following:

1. Coordination with TxDOT for a roadway connection to FM2514 (Parker Road). Consultant will prepare an alternate intersection study to determine an option for prioritizing movements from the north leg of Parker Road to the east leg of Park Boulevard, said option likely being positioned north of the current Park / Parker intersection. Design scope will be modified in the future if an optional intersection location is selected.
2. A roadway intersection at existing Park Boulevard and FM2514 shall be designed to configure lanes in a manner that is consistent with the configuration of Park Boulevard to the west of FM2514 and the existing elevations of FM2514. Designs shall include traffic signal improvements and appropriate traffic control plans for FM2514. Designs for any improvements to add ultimate lanes and/or shoulders to FM2514 are not included.
3. Design of Park Boulevard as a new location facility from FM2514 to Skyview Road at a point approximately 2,000 feet east of Paul Wilson Road. Designs shall include work extending 200' north and south along and within the existing Paul Wilson Road right of way for intersection improvements that will not include traffic signal design. Design shall include the termination and abandonment of a portion of Skyview by use of a new cul-de-sac. CONSULTANT shall coordinate with North Texas Municipal Water District (NTMWD) and Oncor Transmission (ONCOR) and shall prepare customary documents to obtain permission to construct Park Boulevard across existing NTMWD and ONCOR facilities. Designs for the relocation or adjustment of any existing utilities impacted by Park Boulevard construction are not included. Designs of the Park Boulevard east of Paul Wilson will use the previous preliminary design drawings submitted to USACE as the basis for final design.

4. Design of Park Boulevard as an expansion of existing Skyview Drive and Forrest Ross Road from a point approximately 2,000' east of Paul Wilson Road to an intersection with Forrest Ross Road. CONSULTANT shall coordinate with NTMWD regarding the reconstruction of the existing treatment plant access driveways and design intersection improvements to match the existing alignment and elevation within 50' of the proposed Park Boulevard right of way. Designs of the Park Boulevard east of Paul Wilson will use the previous preliminary design drawings submitted to USACE as the basis for final design. Designs shall include necessary structural and grading improvements to be accomplished within the proposed right of way and temporary construction easements. Designs shall include grading only improvements at one off-site location on adjacent USACE property. CONSULTANT shall prepare a separate set of construction and maintenance plans/bid documents for the restoration of prairie grasses on USACE property in accordance with the proposed non-statutory mitigation plan previously submitted to USACE. CONSULTANT shall prepare documentation for the USACE required construction license and address all documentation comments from USACE. CONSULTANT shall assemble a Pre-Construction Notification (PCN) document for the entire corridor relying on the prior documentation provide USACE in the Detailed Information Report (DIR). A new PCN based on updated jurisdictional waters determinations and/or Individual Permit application is not included. Designs shall include the reconstruction of the existing intersections with Lynda Lane, Skyview Drive and the USACE East Fork Park entrance drive to match existing pavement alignments and elevations within 50' of the proposed Park Boulevard right of way. Designs shall include the reconstruction of Skyview Drive between proposed Park Blvd Extension and the USCAE entrance to East Fork Park as a 3-lane collector. CONSULTANT shall coordinate with North Texas Municipal Water District (NTMWD) and shall prepare customary documents to obtain permission to construct Park Boulevard across existing NTMWD properties.
5. Design of Park Boulevard as a new location facility from the intersection with Forrest Ross Road to a point approximately 300 southeast of Spencer Lane. Intersection at Spencer Lane shall be non-signalized and no improvements to Spencer Lane are included.
6. Design of Park Boulevard across the KCS intermodal yard tracks and reconstruction of existing Spring Creek Parkway to a point approximately 500' northwest of the existing intersection of SH78 and Kreymer Lane. CONSULTANT shall coordinate with the Kansas City Southern Railroad (KCS) regarding structural and geometric design requirements for the construction of bridge facilities that cross KCS rail tracks north of Centennial Drive. CONSULTANT shall prepare customary documentation for KCS review and approval. Designs shall also include the construction of retaining walls along existing Spring Creek Parkway and termination of Centennial Drive with a new cul-de-sac and driveway that maintains access to the existing Armory property. Designs for any temporary or permanent improvements to SH78 are not included.

7. Survey scope shall include parcel descriptions for modified right of way and/or abandonments. Survey for and preparation of subdivision plats is not included.
8. Designs shall include replacement of existing sidewalks and barrier free ramps. New sidewalks and ramps shall be installed to meet CITY requirements along with ADA and TDLR requirements.
9. CONSULTANT shall design a continuous roadway illumination system throughout the project limits comprised of a single row of centerline median poles on approximately 180' centers.
10. CONSULTANT shall prepare Construction Erosion Control Plans for the project designs. Preparation of formal Stormwater Pollution Prevention Plans and associated permit documents including NOI and NOT are not included.
11. Typical scale of full-size plans is to be: 1"=20' Horizontal; 1"=5' Vertical.
12. Submittals to the COUNTY of work-in-progress shall be at 30%, 65%, 90%, and 100% stages of completion. For each stage of review, two (2) full size (22" X 34") and four (4) half size (11" X 17") sets of drawings will be furnished to the COUNTY along with a CD containing PDFs of the plan sheets.
13. Standards and typical construction details of the City of Wylie and TxDOT may be referred to in the specifications and on the drawings. Special details that are not included as a standard shall be included in plans and/or specifications.
14. Assist the COUNTY in preparing applications/letters/plan sets to be distributed to any entity for review purposes.

The CONSULTANT shall perform the necessary engineering and related technical services for the Design and Construction Phase Services, including necessary Additional Services for development of this Project according to the following sections of this Contract.

B. TASK DESCRIPTIONS – SCOPE OF SERVICES

I. Preliminary Engineering

- A. Data Collection - Obtain pertinent utility plans, street plans, plats, right-of-way maps, existing easement information, contour maps, and other features within and pertaining to the Project area from the COUNTY and City of Wylie. The CONSULTANT will also coordinate with franchise utilities in the area and obtain record information where available. Existing Project conditions shall also be documented using digital photography and/or video. Perform site visit to obtain necessary information/confirm information obtained from other sources.

1. Subsurface Utility Engineering
 - a. Halff will perform SUE in accordance with ASCE CI/ASCE 38-02 "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."
 - b. Locating (Vacuum Excavation) – Level A: Up to twenty (20) test holes will be performed on the various utilities as identified by the appropriate utility owner. Halff will dig an approximately 12" x 12" test hole, record the depth, take a digital picture of the identified utility take a measurement between the utility and the top of the ground, backfill and compact the hole, and restore the surface to its original condition. An iron rod with cap or "x-cut" will be set to mark the location of the test hole.
 - c. Designating – Level B: Halff will designate, mark and field survey up to 35,000 linear feet of utilities, if tonable and/or accessible, in support of the proposed project designs using geophysical prospecting equipment and reference to established survey control. Designating (Quality Level B) Services are inclusive of Quality levels C and D.
 - d. Traffic Control: Halff will provide routine/ordinary traffic control consisting of cones and free-standing signage for this project. The scope does not include lane closure(s), flag person(s), arrow board(s) and changeable message board(s). Halff will use standard Texas Manual on Uniform Traffic Control Devices (TMUTCD) traffic control details when appropriate.
- B. Pre-Design Conference - Meet with COUNTY engineering staff to review Project requirements, design criteria, communication procedures, Project scheduling, personnel, and other pertinent matters that may impact the Project. Additional meetings will be scheduled throughout the length of the Project.
- C. Signal Warrant Study – CONSULTANT will prepare a signal warrant study related to the intersection of Park Blvd and Parker Rd (FM 2514). Warrant Study will include review of applicable warrants per the TMUTCD and preparation of warrant study report
- D. Preliminary Engineering Design – Prepare preliminary engineering plans with submittals at thirty percent (30%) and sixty-five percent (65%) completion. The preliminary engineering design phase will include the following:
 1. Utilizing information obtained from the data collection (Section I.A) and the field survey (Section V.A), the CONSULTANT will prepare preliminary plans including the following:
 - a. Locations of existing utilities, infrastructure, buildings, property lines, landscaping, and other pertinent information.

- b. Establish preliminary horizontal and vertical alignments for paving improvements.
 - c. Delineate drainage areas and make evaluations as to the extent of drainage facilities required for the project.
 - d. Establish preliminary locations for drainage, water, and sewer lines.
 - e. Establish right-of-way and easement needs. Final documents for right-of-way and/or easement acquisition shall be provided along with the sixty-five percent (65%) plan submittal.
 - f. Determine any conflicts with private property including fences, mailboxes, driveways, sidewalks, landscaping, etc., and provide preliminary replacement or alternate design options if required.
 - g. Preliminary engineering plan sheets shall meet COUNTY and City of Wylie standard criteria.
2. Work with affected franchise utilities to obtain accurate information for horizontal and vertical data of existing facilities and identify those to be protected or relocated.
 3. Prepare updated estimated construction quantities and opinion of probable construction costs for thirty percent (30%) and sixty-five percent (65%) submittals, as shown on Exhibit "E" which is attached hereto and incorporated herein by reference and made a part hereof as if repeated verbatim. Present any potential alternatives, which may provide cost savings to the COUNTY.
 4. Submit electronic plans sets to franchise utility companies at sixty-five percent (65%) completion stage and meet with franchise utilities, if required, to communicate project details and identify known conflict points.
 5. Meet with the COUNTY and City of Wylie to discuss preliminary plans and estimates at scheduled intervals. Discuss preliminary construction sequencing, utility adjustments, traffic control, property access, and construction storm water runoff issues.
 6. Attend public meetings, if required, to communicate project details to citizens, commissioners court, or other interested parties. COUNTY shall provide for meeting location and notices.

II. Final Engineering

- A. Final Engineering Design – Incorporating comments from the COUNTY, City of Wylie, franchise utilities and other interested parties; prepare final engineering plans and specifications with submittals at ninety percent (90%) and one-hundred percent (100%) completion. The final engineering design phase will include the following:
 1. Revise and complete preliminary drawings.

2. Prepare final construction sequencing, traffic control and access plans.
 3. Prepare storm water runoff control plans to comply with any federal, state, or local requirements.
 4. Incorporate standard details into the plans and prepare additional details as required. Provide cross-section drawings for roadways.
 5. Final engineering plan sheets shall meet COUNTY and City of Wylie standard criteria.
- B. Project Manual – prepare project manual including bidding requirements, proposal, bid schedule, special conditions, and technical specifications using COUNTY standard contract forms and standard specifications.
- C. Final Submittal – Prepare updated estimated construction quantities and opinion of probable construction costs and submit two (12) sets of full size (22" X 34"), ten (10) half size (11" X 17") sets of the engineering plans and five (5) sets of the project manual, along with revised estimates and a CD containing PDFs of the plan sheets to the COUNTY for review.
1. Submittals will occur at ninety percent (90%) and one hundred percent (100%) completion stages.
 2. Supply one (1) set of plans (hardcopy) and bid documents (both hard copy and electronic copy) to COUNTY purchasing department prior to advertisement.

III. Bid Phase Services

- A. Bidding Process – Assist the COUNTY with the bidding process as follows:
1. Draft Advertisement language for bids.
 2. Attend pre-bid conference if required by the COUNTY.
 3. Address questions from the proposed bidders during the bidding process and issue addenda as necessary.
 4. Prepare tabulation sheet for the bid opening and assist the COUNTY in securing, opening, tabulating, and analyzing bids received.
 5. Prepare final bid tabulations based upon the bids received and furnish electronic bid tabulation sheet along with recommendations on the award of the contract to the lowest qualified bidder. Recommendations will be based upon the following criteria:
 - a. Past work history.
 - b. Financial resources.
 - c. Physical resources to complete the Project.

IV. Special Services

- A. Surveying for Engineering Design – Perform necessary surveying operations for the complete design of the Project as outlined in this Exhibit A, Scope of Services. Surveying for design shall include the following:
1. Establish horizontal and vertical control using City of Wylie criteria.
 2. Tie right-of-way lines and corners, property lines and corners, trees ~~three-six~~ (36) inches in diameter and larger, fence lines, and other visible surface features within the disturbance limits of the construction work.
 3. Topographic Information including cross sections of the existing ground features as needed for design.
 4. Horizontal and vertical location of all existing facilities within the Project limits including existing paving, driveways, sidewalks, buildings, mailboxes, landscaping, etc.
 5. Tie existing visible franchise utilities and appurtenances, and public utilities such as water valves, fire hydrants, manholes, etc.
 6. Tie underground utilities if exposed.
 7. Provide detailed tree survey (where applicable).
- B. Right-of-Way / Easement Documents – The CONSULTANT's scope of work does not include revision of existing right of way documents to correct accuracy deficiencies. Surveying for ROW shall include the following:
1. Prepare metes and bounds descriptions for the acquisition of all modified right-of-way and additional easements necessary for the construction of the Project. Submit three (3) copies of right-of-way documents to the COUNTY at the sixty-five percent (65%) plan submittal.
 2. Establish proposed easement and right-of-way corners on the ground (one-time) for utility relocation purposes.
 3. Provide individual Right-of-Way Parcel Maps for modified right-of-way and additional easements showing adjacent properties with ownership and existing and proposed right-of-way and easements. Fees are based on the assumption that approximately 30 parent tracts must be tied and solved, and 50 separate ROW and/or easement descriptions with exhibits will be prepared.
 4. Provide Right-of-Way staking at 100 ft stations and property corners for franchise utility relocation purposes (one time per parcel as needed).
 5. Update and confirm previously prepared exhibits and legal descriptions for USACE tracts in conformance with Outgrant agreement requirements.
- C. Geotechnical Investigation – CONSULTANT will rely on the previously prepared geotechnical data for project structures located on USACE lands. Provide additional geotechnical investigation through sub-contract services with a qualified geotechnical engineering firm to perform the following:

1. Determine design recommendations for bridge foundations at the KCS facilities overpass location.
2. Determine design recommendations for retaining walls located along existing Spring Creek Parkway.
3. Determine parameters for proposed cut and fill slopes based on standard stability criteria.
4. Determine pavement subgrade stabilization measures and depths of treatment for various ranges of anticipated shrink-swell related movement at the surface of the pavement.

D. Construction Administration - CONSULTANT is neither scoped nor authorized to perform construction phase services.

E. Environmental Services –

1. Environmental Evaluation

CONSULTANT shall make field observations and collect data as necessary to prepare all documentation and perform all coordination for permitting the Project in accordance with local, state and federal regulations. Observations and data collection of the natural environment shall generally be limited to the areas previously covered by the DIR submitted to USACE. Sampling and testing of soil materials for the purposes of identifying the presence of hazardous materials will not be performed. CONSULTANT shall prepare PCN document using the DIR project report data only and will assist COUNTY in acquiring mitigation credits by fee payment from an appropriate mitigation bank. No updated field survey determinations concerning the Project's permanent impact on Waters of the United States (WOUS) are included. It is anticipated that the approved Project design will not impact jurisdictional WOUS above any threshold that would restrict the use of a Section 404 nationwide permit for compliance. A Section 404 individual permit is not included in the Project scope.

2. NCTCOG Environmental Checklist

CONSULTANT will prepare an "Environmental Review Checklist for Local Projects" in accordance with the North Central Texas Council of Governments (NCTCOG) guidelines and compile relevant documents prepared by Consultant and/or as prepared and provided

V. Exclusions

The scope of services identified herein specifically excludes the following items, however, these items can be provided if necessary with a revision to scope of work and fees as agreed between COUNTY and CONSULTANT in writing:

A. Plats;

- B. Title Searches;
- C. Legal opinions, audits and financial reports;
- D. Preparation and coordination of a Section 404 individual permit application and supporting documentation;
- E. Preparation of compensatory mitigation construction plans and technical specifications including performance of mitigation monitoring and preparation of mitigation monitoring reports;
- F. Public hearings ~~and/or meetings~~;
- G. Fees for permits, document reviews and mitigation credits.
- H. Construction phase administrative and inspection
- I. Designs for Trench Safety;
- J. Designs for structural steel bridge spans and or cantilevered prestressed concrete spans;
- K. Railroad shoo-fly designs;
- L. Masonry screen wall, Sound attenuation wall and/or privacy fence designs;
- M. Landscape Architecture for roadway hardscape, plantings and irrigation design;
- N. Materials quality control and testing services during construction;
- O. Alternate bid schedules and designs;
- P. Improvements outside the Project limits and items not specifically contemplated in the Scope.