

AGENDA ITEM 27

Consider approving Work Authorization #1 from Steger & Bizzell for Parmer Lane, FM 2338 to US 195.

Agenda Item 27 was removed from the Agenda, because it is tied into Agenda Item 24. **Judge Doerfler** clarified that he is authorized to sign Work Authorization #1 because of the specifics of Agenda Item 24.

< Attachment >

Contract No. Parmer Lane - FM 2338 to US 195

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ATTACHMENT A

WORK AUTHORIZATION NO. 1

This Work Authorization is made pursuant to the terms and conditions of the Agreement entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (*the "County"*) and Steger & Bizzell Engineering, Inc. (*the "Engineer"*).

Part 1. The *Engineer* will provide the following engineering services:

Surveying and Engineering services for Parmer Lane, FM 2338 to US 195. Refer to attached "Exhibit B" for details.

Part 2. The maximum amount payable for services under this Work Authorization without modification is \$1,189,000.

Part 3. Payment to the *Engineer* for the services established under this Work Authorization shall be made in accordance with the Agreement.

Part 4. This Work Authorization shall become effective on the date of final acceptance of the parties hereto and shall terminate on 7/31/2005 unless extended by a Supplemental Work Authorization.

Part 5. This Work Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

Contract No. Parmer Lane - FM 2338 to US 195

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ATTACHMENT A (con't.)**Part 6.** This Work Authorization is hereby accepted and acknowledged below.

ENGINEER:

Steger & Brazell Engineering, Inc.

COUNTY:

Williamson County, Texas

By:

Signature

Perry C. Steger

Printed Name

President

Title

3/17/2003

Date

By:

Signature

John C. Doerfler

Printed Name

County Judge

Title

4-13-04

Date

LIST OF EXHIBITS

Exhibit A - Services to be Provided by County

Exhibit B - Services to be Provided by Engineer

Exhibit C - Work Schedule

Exhibit D - Fee Schedule

OK
my 3-19-04

Parmer Lane**Contract No. _____****Limits: FM 2338 to State Highway 195 in Williamson County, Texas****PROJECT DESCRIPTION: Aerial surveying, environmental constraints mapping, preliminary engineering, and construction plans for the extension of Parmer Lane****EXHIBIT A****Services to be provided by Williamson County**

Williamson County will furnish to the Engineer the following items/information:

ROUTE AND DESIGN STUDIES

1. Provide Roadway Design Criteria
2. Host Design Concept Conference (DCC)
3. Coordinate meetings between Commissioners and/or County to discuss site specific alignment options.
4. Provide Geotechnical Report for pavement and bridge design.

SOCIAL, ECONOMIC & ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT

1. Coordinate meetings between individual landowners and Commissioners and/or County to discuss alignment.
2. Schedule, coordinate and conduct Public Meeting.
3. Schedule, coordinate and conduct presentation to Williamson County Commissioners.
4. Provide a full geologic and environmental assessment of the 1000' corridor.
5. Evaluate the need for permits and develop a permitting strategy (COE, FEMA, Fish and Wildlife, TCEQ) with assistance from the Engineer.

RIGHT-OF-WAY & UTILITIES

1. Furnish a list of utility contact persons and copies of utility information gathered to date.
2. Assist Engineer in coordinating with utility companies (as needed).
3. Coordinate and resolve conflicts with landowners who refuse to give right of entry or are otherwise hostile with regards to Steger & Bizzell Engineering, Inc.'s (S&B's) ability to complete the scope of services.
4. Provide a standard letter to be used to send to utilities notifying them of the proposed project.

FIELD SURVEYING AND PHOTOGRAMMETRY

1. Furnish available horizontal control points.
2. Furnish available benchmark elevations and descriptions for vertical control.
3. Furnish listing of horizontal alignment coordinates for baseline control.
4. Provide draft of right of entry request letter.

DRAINAGE

1. Verify criteria for design of drainage improvements.
2. Provide any existing drainage studies on hydraulic data if available.

MISCELLANEOUS (ROADWAY)

1. Provide Landscape Architect for input on potential parks and trails locations.

BASIC SERVICE

1. Provide the Engineer with timely reviews and decisions at the milestone dates in order to meet the anticipated design schedule.

Parmer Lane**Contract No.****Limits: FM 2338 to Hwy. 195 in Williamson County, Texas****PROJECT DESCRIPTION: Aerial surveying, environmental constraints mapping, preliminary engineering, and construction plans for the extension of Parmer Lane****EXHIBIT B****Services to be provided by the Engineer**

The ENGINEER shall provide the following engineering services required for the preparation of the aerial mapping, environmental constraints mapping, preliminary engineering, construction plans and related documents for the above-referenced project.

ROUTE AND DESIGN STUDIES

1. Conduct site visit (accessible areas).
2. Attend Design Concept Conference (DCC) and prepare the DCC forms (electronic format).
2. Prepare constraints map (1"=1000'). Items to be included are:
 - a. Potential and known endangered species habitat
 - b. Known karst features
 - c. Residential/land use constraints
 - d. Previously mapped wetlands and waters of the U.S.
 - e. Recorded cultural resource sites (per a file and literature search)
 - f. Identification of the 100-year floodplain
 - g. Identification of public lands adjacent to the project
 - h. Identification 4(f) (public lands available for recreational use) and 6(f) lands (public lands purchased in whole or in part using federal funds from the Land and Water Conservation Fund)
3. Coordinate with County's environmental consultant to incorporate the environmental findings per an "on the ground" survey of the route into the constraints map. County will provide a full geologic assessment of the 1000' corridor.
4. Develop DTM from digital aerial contour maps.
5. Develop final route location by identifying individual locations along the proposed preliminary route that may have site specific constraints associated with them. For each individual location, present a maximum of two possible conceptual routes. Meet with the County, the Road Program Bond Manager and the Commissioners as appropriate to determine the preferred site specific alternative. Costs for various site specific alternatives are not included in this scope of services
6. Obtain existing traffic data and SH 195 improvement plans and ROW maps from TxDOT
7. Perform preliminary traffic study at proposed SH 195.
8. Perform at-grade interchange layout at SH 195.
9. Perform preliminary grade-separated interchange (overpass) layout at SH 195 to determine ultimate ROW requirements.
10. Prepare preliminary cost estimate for final alignment.
11. Develop schematic horizontal and vertical alignments for a final alignment.
12. Prepare schematic cross-sections and compute preliminary earthwork volumes.

SOCIAL, ECONOMIC, AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT

1. Provide technical assistance and prepare exhibits as required by the County.
2. Attend presentations to Williamson County Commissioners Court.
3. Attend meetings with individual landowners and/or commissioners and/or County. Perform a file and literature search for historic sites and summarize findings in a letter report. Per the client's request, S&B proposes to conduct a records and literature review utilizing the files and maps at the Texas Archeological Research Laboratory (TARL) and the Texas Historical Commission (THC) in order to identify known cultural resource sites within the project area as identified on the maps we receive. The files at the THC will be used to identify any listed or determined eligible for listing National Register of Historic Places (NRHP) or designated State Archeological Landmark (SAL) properties

4. Prepare a letter to SHPO regarding our findings and notifying them of the proposed project and requesting them to comment on the project.
5. Assist the County in evaluating the needs for permits and assist in determination of a permitting strategy (COE, FEMA, Fish and Wildlife, TCEQ).
6. Prepare plans and documents required for project permitting, and assist in securing all required permits and approvals

RIGHT-OF-WAY DATA

1. Secure photogrammetry estimates and GPS control diagram.
2. Secure tax plats, subdivision plats and all deeds to parcels affected.
3. Research and plot franchise utility records.
4. Prepare deed study and plots.
5. Determine right of way requirements and acreage.
6. Prepare survey plats and field notes suitable for right-of-way acquisition along route
7. Send a notification of project letter and project schematic to area utilities. Standard letter to be used will be provided by the County.

FIELD SURVEYING AND PHOTOGRAMMETRY – S&B

1. Coordinate with right of way acquisition/negotiation firm.
2. Secure right of entry through certified mail. The Williamson County Road Bond Program Manager will handle problems regarding landowners that refuse to give right of entry or are otherwise hostile with respect to the completion of this scope of services.
3. Retrieve USGS, NSG, TxDOT and other control information for survey control network.
4. Set panels for photo control and do GPS observations.
5. Stake preliminary alignment for use by County's environmental consultant to walk the line and for S&B's drainage engineer to perform a site visit and for S&B's traffic engineer to locate approximate locations of intersections for traffic study. Alignment will be staked once using the preliminary alignment provided by Williamson County. Any additional survey required to accommodate adjustments to alignment determined after environmental constraints and other constraints have been determined will be additional services.
6. Survey geotechnical bore locations. (50 bores assumed, based on 500' spacing).
7. Coordinate with Aerial Sub-consultant.

Survey Scope is based upon:

1. GPS Primary Control
 - A. S&B will set and collect data on GPS control monuments according to control diagrams supplied by the photogrammetrist. Monuments will be located so as to maximize the chance of the control surviving throughout the life of the project. S&B will utilize existing benchmarks in the project area to establish the vertical datum based on NGVD 88.
 - B. Horizontal coordinates will be established based upon the Texas State Plan Coordinate System (NAD 83 (93) HARN).
2. Aerial Panel – Secondary Control
 - A. S&B will set centerline and wing panels to control the aerial photography for this project. The panels will be set in accordance to flight needs identified by the photogrammetrist.
 - B. S&B will establish horizontal and vertical control on the panels as needed for the aerial triangulation and the topographic surveys associated with this scope of services. This network will be adjusted to the primary GPS project control outlined above.
 - C. S&B will check one (1) time all aerial panels on or prior to the day of flying so as to maximize the chance of obtaining successful photography.

FIELD SURVEYING AND PHOTOGRAMMETRY – AERIAL SUB-CONSULTANT

(See attached scope for Aerial Sub-consultant)

DRAINAGE

1. Data Collection and Existing Report Evaluation

- A. Perform research to collect available information regarding existing drainage patterns and systems within and adjacent to the project area, including existing drainage area maps, contour maps, and drainage system plans.
 - B. Conduct an on-site investigation of the project.
2. Hydraulic Study
- A. Hydraulic computations will be completed for proposed culverts and drainage outfall channels.
 - B. Computations shall include a check for the required year design frequency.
 - C. Hydraulic computations for this project include the use of hydraulic computer programs such as Texas Hydraulic System (THSYS), HEC-RAS, Winstorm, Federal Highway Administration Hydraulic Engineering Circulars, and other TxDOT Hydraulic Section Publications.

Performance of this study shall be in accordance with the procedures outlined in the TxDOT Hydraulic Manual and the new SW3P guidelines.

3. Drainage Area Maps

- A. Major drainage areas will be identified and hydrologic information will be calculated from existing drainage area and USGS maps of the area.
- B. A 1"=1000' drainage area map will be created from this information, including culvert locations and runoff computations.
- C. This information gathered and calculated will be presented to the County in hydrology and hydraulic report form.
- D. The need and preliminary locations of Storm Water Detention and Water Quality Facilities will be evaluated and identified on the plans. Preliminary locations will be coordinated with TCEQ.

CONSTRUCTION PLANS

1. Prepare detailed construction plans in accordance with Williamson County Road Bond Program standards, including:
 - A. Plan and profile sheets for initial two-lane roadway, including rough cut design for ultimate four-lane divided roadway
 - B. Drainage and bridge structures sufficient for four-lane roadway
 - C. Intersection design at FM 2338 and proposed Parmer Lane (coordinate with existing plans for intersection south of FM 2338)
 - D. Intersection design at County Road 245 and proposed Parmer Lane
 - E. At-grade intersection design at proposed Parmer Lane and proposed new alignment of SH 195 (coordinate with TxDOT and Arcadis Engineering)
 - F. Traffic control plans including pavement marking, signage, and signalization
 - G. Develop Project Manual
2. During construction phase, respond to all RFIs, make periodic inspections of progress of project, and review pay estimates and other documents as requested by County.
3. Review construction cost estimates
4. Coordinate with Road Bond Program Manager.
5. Coordinate with TxDOT, local municipal agencies, utility companies, and sub-consultants.
6. Coordinate with LCRA regarding shared right of way.
7. Coordinate with Geotechnical Engineer regarding soil core locations, survey ties to soil cores and interpretation of geotechnical data.
8. Coordinate with the County's landscape architect regarding parks and trails.
9. Incorporate input from landscape architects regarding parks and trails into schematic drawing.

EXCLUSIONS

1. A FONSI is not part of this Scope of Services.
2. Survey of the geologic features found by the County's environmental consultant is not a part of this Scope of Services.
3. Environmental/geologic assessment is not a part of this Scope of Services.
4. Geotechnical report is not a part of this Scope of Services.

Parmer Lane

Contract No.

Limits: FM 2338 to Hwy. 195 in Williamson County, Texas

PROJECT DESCRIPTION: Aerial surveying, environmental constraints mapping, preliminary engineering, and construction plans for the extension of Parmer Lane

EXHIBIT IV
Production Schedule and Estimated Budget

This production schedule is dependent on timely right-of-entry, weather suitable for on-the-ground surveying, aerial photography, scheduling of environmental assessments, geologic assessments, changes requested by the client and/or required by landowners, and regulatory agencies. This production schedule presumes timely execution of these items that are beyond the control of ENGINEER.

Total Project timeline: 57 weeks (400 calendar days)

Work Schedule

Production Schedule: (400 total calendar days from date of Work Authorization)

Task	Duration (calendar days)	Start (day)	Finish (day)
Obtain right-of-entry	45	1	46
Develop probable right-of-way alignment	14	41	55
Establish survey controls and aerial panels	35	55	90
Topographic mapping and orthophotography	30	60	90
Environmental assessment	60	60	120
Schematic horizontal and vertical alignments	60	120	180
Hydraulic study and TCEQ WPAP	150	175	325
Preliminary intersection layouts	45	185	230
Field notes and survey for r.o.w. acquisition	20	230	250
Detailed Construction Plans	125	275	400
Right-of-way staking	40	359	399
Project Manual, including specs and quantities	60	340	400

Estimated Budget:

*Fee Schedule***Surveying:**

Establish control, place aerial panels, and centerline staking:	\$28,500
Prepare field notes, plats, survey for r.o.w acquisition:	\$18,000
Stake r.o.w at 100' intervals for fence construction:	\$27,500
Topographic mapping, DTM, orthophotos:	\$40,000
(Sanborn proposal is \$32,800 but scope may change)	
Surveying subtotal:	\$114,000

Engineering:

Develop schematic alignments:	\$300,000
Perform hydraulic study and preliminary design:	\$375,000
Develop detailed construction plans:	\$350,000
Develop bid documents, including quantities:	\$50,000
Engineering subtotal:	\$1,075,000

Total: \$1,189,000

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AGENDA ITEM 28

Discuss and take appropriate action on road bond program.

Paul Petrich addressed the Court.

< Attachment >