THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

SUPPLEMENTAL AGREEMENT NO. 1
TO WORK AUTHORIZATION NO. 3
AGREEMENT FOR PROFESSIONAL SERVICES
C-13-336-12-10

This **SUPPLEMENTAL AGREEMENT** is made pursuant to the terms and conditions of Article 8 of the Agreement made by and between **HIDALGO COUNTY**, hereinafter called the "**Owner**", and **L&G ENGINEERING**, professional engineers of Mercedes, Texas, hereinafter called the "**Engineer**".

WITNESSETH

WHEREAS, the **Owner** and the **Engineer** executed the **Main Agreement** on the 10th day of December, 2013 concerning engineering for the FM 1925 Segment II (FM 907 (Alamo Road) to Sharp Road) project to provide PS&E, Field Surveys, ROW Mapping, Permitted Utilities Coordination, Traffic Signal Warrants and Design Engineering Consultant Construction Management, for Hidalgo County Precinct No. 4 (hereinafter referred to as the "**Project**"); and,

WHEREAS, it has become necessary to amend Work Authorization No. 3 to include the additional scope of work and costs associated with ROW Mapping and Signal Design.

WHEREAS, it has become necessary to amend "*Exhibit B, Scope of Services to be provided by the Engineer*" of Work Authorization No. 3.

WHEREAS, it has become necessary to amend *"Exhibit D-1 – Estimated Man-Hour Breakdown"* of Work Authorization No. 3.

WHEREAS, the Estimated Cost from the original Work Authorization No. 3 will increase from $1,582,600.00 to $1,621,317.07; therefore the amount of Supplemental No. 1 is an increase of $38,717.07.

A. AGREEMENT

NOW THEREFORE, premises considered, the **Owner** and the **Engineer** agree that said **Agreement** is amended as follows:

I. Exhibit B – Scope of Services in Work Authorization No. 3 is amended to include the Signal Design, and ROW Map.

II. Exhibit D-1 – Estimated Man-Hour Breakdown in Work Authorization No. 1 is amended to include the additional costs associated with the ROW Map and Signal Design.

All other provisions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the Engineer and the Owner have caused this Supplemental Agreement to the Agreement for Professional Services to be executed as of the _____ day of _____, 2021.

THE ENGINEER:
L&G ENGINEERING

BY: _____
Jacinto Garza, P.E., President

THE OWNER:
HIDALGO COUNTY

BY: _____
Richard Cortez, County Judge

LIST OF EXHIBITS
EXHIBIT "A" - "Service to be provided by the County"
EXHIBIT "B" - "Services to be provided by Engineer"
EXHIBIT "C" – "Work Schedule"
EXHIBIT "D-1" – "Estimated Man-Hour Breakdown"

EXHIBIT "A"
SERVICES TO BE PROVIDED BY THE OWNER

1. The COUNTY will issue work authorization to initiate all required services and designate the authorized representative of the coordination of each work authorization.

2. The COUNTY will provide the ENGINEER with on-going guidance, timely reviews, and decisions necessary to complete services required by the work authorization in order to permit the ENGINEER to maintain an agreed upon project schedule.

3. The COUNTY will process all acceptable requests for payment in a timely manner.

REVISED
EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

SECTION 1 - PROJECT DESCRIPTION

The services designated herein as "Services provided by the ENGINEER" shall include the performance of all engineering services for the following described facility:

COUNTY/CITY: HIDALGO COUNTY

CONTROL: _____

PROJECT/DESCRIPTION: ROW Map and Signal Design

LENGTH: 1.8 miles

HIGHWAY: FM 1925

LIMITS: FM 907 (Alamo Rd) to Sharp Rd

EXISTING FACILITY

PROJECT CLASSIFICATION
(Place an "X" in only one Project Classification)

___ Surface Treatment
___ Overlay
___ Rehabilitation Existing Road (Scarify & Reshape)
___ Convert Non-Freeway to Freeway
___ Widen Freeway
_X_ Widen Non-Freeway
___ New Location Toll Freeway
_X_ New Location Non-Freeway
___ Interchange (New or Reconstruct)
___ Bridge Widening or Rehabilitation
___ Bridge Replacement
___ Upgrade to Standards - Freeway
___ Upgrade to Standards - Non-Freeway
___ Miscellaneous Studies (Use Function Code 110 for All Tasks)

ENGINEER shall mean L&G Engineering.

STATE shall mean Texas Department of Transportation.

COUNTY shall mean the Hidalgo County.

REVISED
EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

SECTION 4 - RIGHT-OF-WAY DATA
Additional 3 Parcels as per final Right-of-Way Map
(Function Code 130)

Services Provided By:
SURVEYOR COUNTY

NOTE: No work involving right-of-way (ROW) data is to be performed until the COUNTY has given the ENGINEER written approval of the final location of the proposed ROW lines as approved by TxDOT.

A. RIGHT-OF-WAY MAPPING:

1. **PURPOSE:**
The purpose of right-of-way mapping is to prepare documents suitable for the acquisition of real property interests and the probable issuance of a title policy.
2. **DEFINITIONS:**
For purposes of this Contract, the following definitions shall apply:
2.1. Abstract Map – A drawing to scale prepared from record documents depicting proposed right-of-way lines, existing right-of-way lines, easement lines, and private property lines with relevant grantee names, recording data, and recording dates.
2.2. Closure/Area Calculation Sheet – A computer generated print-out of the area and the perimeter bearings, distances, curve data, and coordinates of an individual parcel of land to be acquired.
2.3. Access Denial Line – A line which indicates specific location where access to the roadway is denied.
2.4. Property Descriptions – A written metes and bounds description delineating the area and the boundary and describing the location of an individual parcel of land unique to all other parcels of land.
2.5. Owner – The most current title holder of record as determined by a study of the Real Property Records.
2.6. Parcel Plat – An 8 ½ inch by 11 inch drawing to scale depicting all the information shown on the right-of-way map regarding an individual parcel of land to be acquired.
2.7. Parent Tract – A unit or contiguous units of land under one ownership, comprising a single marketable tract of land consistent with the principle of highest and best use. A parent tract may be described by a single instrument or several instruments. A single parent tract cannot be severed by a public right-of-way, easement, or separate ownership which destroys unity of use.
2.8. Parent Tract Inset – A small line drawing, to an appropriate scale, of the parent tract perimeter placed upon the right-of-way map in the proximity of the respective parcel. Parent tract insets are used in cases where the parent tract cannot be shown to the same scale as the right-of-way map. Since parent tract insets are used to identify the limits and location of parent tracts, they should include public right-of-ways, utility easements and fee strips, and identifiable water courses which bound the parent tract.
2.9. Point of Beginning (P.O.B.) – A corner of the parcel of land to be acquired, located on the proposed right-of-way line and being the beginning terminus of the first course of the property description.
2.10. Point of Commencing (P.O.C.) – A monumented property corner which can be identified in the Real Property Records and is located outside the proposed right-of-way corridor. For title purposes, the point of commencing should be a monumented back corner of the parent tract. In the event a monumented back corner of the parent tract cannot be recovered, the nearest identifiable

monumented property corner located outside the proposed right-of-way corridor may be used.

Services Provided By:
SURVEYOR COUNTY

2.11. Preliminary Right-of-Way Layout/Abstract Map – A drawing to scale depicting proposed right-of-way lines, existing right-of-way lines, proposed pavement, access denial lines, the proposed centerline alignment, private property lines, easement lines, visible improvements, visible utilities, the station and offset from the centerline alignment to each Point of Curvature (PC), Point of Tangency (PT), and angle point in the proposed right-of-way lines and to each PC, PT, and angle point in the existing right-of-way lines in areas of no proposed acquisition. *(Reference Sample on CD Attached)*

2.12. Right-of-Way Maps/Property Description/Parcel Plats – A series of 22 inch by 34 inch and 11 inch by 17 inch drawings to scale depicting the results of relevant elements of records research, field work, analysis, computation, and map making required to determine title, delineate areas and boundaries, locate and describe utilities and improvements to the extent necessary to appraise the value and negotiate the acquisition of individual parcels of private land for a proposed right-of-way project. *(Reference Sample on CD Attached)*

3. WORK TO BE PERFORMED:

YES N/A

3.1. Preliminary Right-of-Way Layout/Abstract Map:

An abstract map shall be prepared sufficient to determine the following:

3.1.1. Any and all interests of public record held in the land to be acquired.

3.1.2 The total record holdings of an owner contiguous to land to be acquired from that owner.

3.1.3. Any and all interests in land to be acquired held in common (shopping mall parking lots, subdivision reserves, etc.)

3.1.4. Any and all improvements proposed by other agencies which may have a bearing on project development.

3.1.5. All called monuments, bearings, and distances as per recorded information.

YES N/A

3.2. Right-of-Way Map:

The SURVEYOR shall field locate property corners, existing right-of-way markers, improvements, visible utilities, verify and update the planimetric file, if provided, and as directed by the ENGINEER.

A right-of-way map shall be prepared for each proposed right-of-way project. A right-of-way map shall include a title sheet, an index sheet, a survey control index sheet, a horizontal and vertical control data sheet, and sufficient plan sheets to cover the proposed project, or as directed by the ENGINEER. The STATE has developed standard title sheets, index sheets, and plan sheets, copies of which the SURVEYOR shall request and secure for all purposes of this Contract. Plan sheets shall include, but need not be limited to, the following items of information. By mutual agreement between the Texas Board of Professional Land Surveying and the TxDOT, right-of-way maps need not be signed and sealed by a Registered Professional Land Surveyor.

3.2.1. Proposed right-of-way lines shall be delineated with appropriate bearings, distances, and curve data. Curve data shall include the radius, delta angle, arc length, and long chord bearing and distance.

3.2.2. Existing right-of-way lines shall be delineated with appropriate bearings, distances, and curve data to the extent necessary to describe the

individual parcels of land to be acquired. Curve data shall include the radius, delta angle, arc length, and long chord bearing and distance.

Services Provided By:
SURVEYOR COUNTY

3.2.3. The proposed project baseline alignment shall be delineated with appropriate bearings, distances, and curve data. Curve data shall include the station of the curve Point of Intersection (PI), radius, delta angle, arc length, tangent length, long chord bearing and distance, and the N and E coordinates of the curve PI. All alignment PCs, PTs, and even 500 foot stations shall be labeled as to station.

3.2.4. Proposed paving lines combined with relevant existing paving lines shall be shown to the extent necessary to compile a complete picture of proposed traffic movements. Proposed paving on the final mylars submitted to the ENGINEER shall be shaded with a dot pattern or highlighted by some other means acceptable to the ENGINEER.

3.2.5. Access denial lines shall be shown sufficiently to indicate areas where access is to be denied and where access is to be permitted if required by the ENGINEER.

3.2.6. Private property lines shall be delineated with appropriate bearings, distances, and curve data to the extent necessary to describe the individual parcels of land to be acquired. Curve data shall include the radius, delta angle, arc length, and long chord bearing and distance.

3.2.7. Porción lines, subdivision lines and survey lines shall be shown and identified by name and Porción number.

3.2.8. County lines and city limit lines shall be located and identified by name.

3.2.9. A north arrow shall be shown on each sheet, and, if possible, located in the upper right corner of the sheet.

3.2.10. Monumentation set or found shall be shown and described as to material and size.

3.2.11. A station and offset shall be shown for each PC, PT, and angle point in the proposed right-of-way lines. Stations and offsets shall be with respect to the proposed centerline alignment.

3.2.12. Intersecting and adjoining public right-of-ways shall be shown and identified by name, right-of-way width, and recording data.

3.2.13. Railroads shall be shown and identified by name, right-of-way width, and recording data.

3.2.14. Utility corridors shall be identified as to easement or fee and recording information shall be identified.

3.2.15. Easements and fee strips shall be shown and identified by width, owner, distance of easement to a property corner of the parent track, and recording data.

3.2.16. Building lines or set-back lines shall be shown and identified.

3.2.17. Visible improvements located within the proposed right-of-way corridor or within 50 feet of a proposed right-of-way line shall be shown and identified.

3.2.18. Structures shall be identified as commercial or residential, by number of stories, and as to type (brick, wood frame, etc.).

3.2.19. Structures which are severed by a proposed right-of-way line shall be dimensioned to the extent necessary to completely delineate the severed parts.

3.2.20. Parking areas, billboards, and other on-premise signs which are severed by a proposed right-of-way line shall be dimensioned to the extent necessary to delineate that portion of the parking area, billboard, or sign which is located within the proposed right-of-way corridor.

Services Provided By:
SURVEYOR COUNTY

3.2.21. In cases where structures are located outside the proposed right-of-way corridor and within 25 feet of a proposed right-of-way line, the shortest distance between the structure and the proposed right-of-way line shall be shown and field verified.

3.2.22. Visible utilities located within the proposed right-of-way corridor or within 50 feet of a proposed right-of-way line shall be shown and identified.

3.2.23. The location of underground utilities and fuel storage tanks situated within the proposed right-of-way corridor or within 50 feet of a proposed right-of-way line shall be determined and shown as required by the ENGINEER. The visible location of stand pipes, vents and filler caps in conjunction with available design and as-built drawings may be used to determine a most probable location and size in the event an actual location is indeterminable.

3.2.24. Points of commencing and points of beginning shall be shown and labeled. Points of beginning shall be shown with their respective N and E surface coordinates. As an exception, a point of commencing will not be required in the case of a total taking without a remainder.

3.2.25. Each parcel of land to be acquired shall be identified by a parcel number which shall appear in the ownership tabulation and on the right-of-way map in the proximity of the respective parcel. If the SURVEYOR is unfamiliar with the criteria used by the STATE to assign parcel numbers, he shall seek the assistance of the ENGINEER at the time the abstract map is complete. THE SURVEYOR SHALL SEEK ASSISTANCE FROM THE ENGINEER IN DEVELOPING AN OWNERSHIP TABULATION TABLE.

3.2.26. An ownership tabulation shall be shown which shall include the parcel number, existing area of the parent tract, lot(s) and block(s) constituting the parent tract when applicable, owner's name, type of conveyance, film code, county clerk's file number, taking area, and remaining area of the parent tract located left and/or right of the centerline alignment. Types of conveyance, film code and file numbers refer to conveyances into the STATE and will be added to the right-of-way map by the STATE at a later date. Several blank lines shall be provided in the tabulation block to facilitate future map additions.

3.2.27. A parent tract inset shall be shown for each parent tract which cannot be shown to scale on the right-of-way map. The use of broken scale lines should be avoided. When parent tract insets are used, the point of commencing with the appropriate bearing and distance to the point of beginning may be shown on the parent tract inset.

3.2.28. A note shall be included on the title sheet and each map sheet stating the source of bearings, coordinates, and datum used.

3.2.29. Appropriate notes shall be included on the title sheet and each map sheet stating the following:
   a. Month(s) and year abstracting upon which the map is based.
   b. Month(s) and year field surveys were conducted upon which the map is based.
   c. Month and year the map was completed by the SURVEYOR.

3.2.30. The right-of-way CSJ number, if available, shall be shown on each right-of-way map sheet.

REVISED
EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Services Provided By: SURVEYOR	COUNTY	

3.3. Exhibits:
An Exhibit shall be prepared for each parcel or tract consisting of a property description and a parcel plat.

YES NO 3.3.1. Property Description:

A property description shall be prepared for each parcel of land to be acquired. Standard formats for property descriptions, copies of which the SURVEYOR shall request to the ENGINEER and secure for all purposes of this Contract. Property descriptions shall include, but need not be limited to, the following items of information.

All property descriptions shall be signed and sealed by a Registered Professional Land Surveyor. The property description shall begin with a general description which shall include as a minimum:

a. State, County, and Survey within which the proposed parcel of land to be acquired is located.
b. A reference to unrecorded and recorded subdivisions by name, lot, block, and recording data to the extent applicable.
c. A reference by name to the grantor and grantee, date and recording data of the most current instrument(s) of conveyance describing the parent tract. Use execution dates in deed references as opposed to recording or filing dates. In any case, the property description shall make clear which date is being used.
   The property description shall continue with a metes and bounds description which shall include as a minimum:
d. A point of commencing.
e. A point of beginning with the appropriate N and E surface coordinates.
f. A series of courses, identified by number and proceeding in a clockwise direction, describing the perimeter of the parcel of land to be acquired, and delineated with appropriate bearings, distances, and curve data.
   Curve data shall include the radius, delta angle, arc length, and long chord bearing and distance. Each course shall be identified either as a proposed right-of-way line, and existing right-of-way line, or a property line of the parent tract. Each property line of the parent tract shall be described with an appropriate adjoiner call.
g. A description of all monumentation set or found shall include, as a minimum, size and material.
h. A reference to the source of bearings, coordinates, and datum used.

YES NO 3.3.2. Parcel Plat:
A parcel plat shall be prepared for each parcel of land to be acquired. The STATE has developed standard formats for parcel plats, copies of which the SURVEYOR shall request from the ENGINEER and secure for all purposes in this Contract. Parcel plats shall include each and every item of information shown on the right-of-way map which concerns the individual parcel. All parcel plats shall be signed and sealed by a Registered Professional Land Surveyor.

REVISED
EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Services Provided By: SURVEYOR	COUNTY		
		4.	**DELIVERABLES:** In preparing right-of-way maps, the following is an outline of the work to be submitted (records should be delivered in a binder):
YES	NO	4.1.	An Abstract Map of the current record title holders included in the Preliminary Map showing the proposed schematic and existing right-of-way as per General Specifications.
YES	NO	4.2.	A Right-of-Way map for the project limits under cover of Title Sheet, Index Sheet, Control Data Sheet, and Exhibits of the property descriptions and parcel plats as per General Specifications.
YES	NO	4.3.	Appropriate monuments on the proposed right-of-way lines at intersecting property lines, and at all PCs, PTs, angle points, intersecting right-of-way lines of side streets, and at 1,000 foot stations.
YES	NO	4.4.	Appropriate monuments on the existing right-of-way lines in areas of no acquisition at all PCs, PTs, angle points, and 1,000 foot stations, and as directed by the ENGINEER.
YES	NO	4.5.	A SURVEYOR's report, outlining the approach, reasons or basis for the existing right-of-way determination, and conclusions made.
YES	NO	4.6.	Records used to establish ownership.
YES	NO	4.7.	ROW and parcel filed notes signed and sealed by a RPLS.
YES	NO	4.8.	Computation sheets of survey closures, ground surveys, etc. used to develop plats and meets and bound information.
YES	NO	4.9.	Items indicated under the Automation Requirements Section 6.
YES	NO	4.10	Completed (Attached) Checklist with submittal of ROW Map etc.

5. GENERAL REQUIREMENTS:

For purposes of this Contract, the following general requirements shall apply:

5.1. Copies of instruments of record submitted to the ENGINEER shall be indexed by parcel number.

5.2. Coordinates appearing on right-of-way maps, on parcel plats, and in property descriptions shall be surface coordinates based on the Texas State Plane Coordinate System. The combined adjustment factors (sea level factor x scale factor) which have been developed by the STATE for its use are as follows:

5.2.1. In (List Applicable Counties): Counties (---------- Zone), grid coordinates are multiplied by a combined adjustment factor of 1.xxxxxx to obtain surface coordinates. For work in Counties other than those listed, the ENGINEER will provide the combine adjustment factor.

5.3. Line and curve tables may be used when necessary.

5.4. The number of centerline alignment stations to be shown on a single plan sheet shall be restricted to the extent necessary to allow approximately 4 inches between match lines and sheet borders for future details and notes.

5.5. A minimum 4 inch by 4 inch space shall be reserved at the bottom right corner of each map sheet for future revision notes.

REVISED
EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Services
Provided By:
SURVEYOR COUNTY

6. AUTOMATION REQUIREMENTS:

In addition to standard hard copy plots and mylar copies, the following will be required electronically:

0.1. Right-of-way maps and parcel plats shall be prepared using a *Micro Station* software graphics system capable of producing graphics files that can be plotted and viewed without further modification or conversion using the State's *Micro Station V8* graphics system.

0.2. It is the intent of the ENGINEER to secure graphics files which have elements of equal integrity, singularity, and attributes as elements prepared using the State's *Micro Station V8* graphics system.

0.3. For purposes of clarity, consistency, and ease of utilization, the SURVEYOR shall request and secure standards relevant to right-of-way mapping to the extent necessary to ensure that the needs of the ENGINEER are met. This includes, but may not be limited to, TxDOT seed file and corresponding units.def file, TxDOT font resource file, TxDOT GEOPAK SMD file, TxDOT DGNLIB, associated cell libraries and custom line styles, and other files as deemed appropriate for the project.

0.4. Graphics files furnished to the ENGINEER by the SURVEYOR shall be submitted on a Compact Disk CD, DVD or USB, in a format compatible with the STATE's computer system. The SURVEYOR shall confer with the ENGINEER regarding acceptable media and formats before making submissions. The SURVEYOR shall request and secure a Consultant File Index form provided by the ENGINEER, to be completed by the SURVEYOR, and to be submitted to the ENGINEER along with the graphics files.

0.5. Property descriptions shall be prepared using a computer word processing system capable of producing data files readable using *Microsoft Office Word Version 2007* word processing software.

0.6. Data files furnished to the ENGINEER by the SURVEYOR shall be submitted in ACSII format on a CD, DVD or USB.

0.7. Provide to the ENGINEER electronic copies of all instruments of record acquired pursuant to a work authorization.

7. GENERAL SPECIFICATIONS:

For purposes of this Contract, the following general specifications for right-of-way mapping shall apply:

7.1. Completed right-of-way maps shall be submitted to the ENGINEER on single or double matte mylar, 22 inches by 34 inches in size with a 21 inch by 32 inch printed border positioned ½ inch from the top, bottom, and right edge of the sheet. Two copies on 11 inch by 17 inch paper will also be supplied to the ENGINEER.

7.2. Parcel plats shall be submitted to the ENGINEER on 8 ½ inch by 11 inch bond paper with respective borders of 7 ½ inches by 10 inches, positioned ½ inch from the top, bottom, and right edge of the sheet. Match lines shall be used where more than one sheet is required.

7.3. Right-of-way maps shall be drawn to a scale of 1 inch = 50 feet. An appropriate scale other than 1 inch = 50 feet may be used on some proposed right-of-way projects upon prior approval by the ENGINEER.

Services Provided By:
SURVEYOR COUNTY

7.4. Since right-of-way maps are reduced in size by one-half for archiving purposes, the smallest size lettering acceptable on a right-of-way map shall be 1/10 of one inch (Leroy #100). A right-of-way map which contains any lettering smaller than 1/10 of one inch will not be accepted by the ENGINEER.

7.5. Parcel plats shall be drawn to a preferred scale of 1 inch = 50 feet. An appropriate scale other than 1 inch = 50 feet may be used on some proposed right-of-way projects upon prior approval by the ENGINEER. In the case of a very large parcel which would be difficult to show with clarity on a single 8 ½ inch by 11 inch sheet, the SURVEYOR shall use multiple 8 ½ inch by 11 inch sheets with matching lines.

7.6. The smallest size lettering acceptable on a parcel plat shall be 0.06 of an inch (Leroy #60).

7.7. Property descriptions shall be submitted on 8 ½ inch by 11 inch bond paper.

7.8. The ENGINEER has encountered a number of mylar products which are considered unacceptable. The SURVEYOR shall confer with the ENGINEER regarding mylar products he intends to use which have not been previously used on State projects.

7.9. Zip-A-Tone or other similar stick-on products shall not be used on right-of-way maps or parcel plats.

8. ADHERENCE TO STANDARDS:

For purposes of clarity, consistency, and ease of understanding, the COUNTY, as an acquiring agency of private property for public use, has adopted the STATE standards and formats for right-of-way mapping which have proven to facilitate the processes of negotiation, appraisal, relocation assistance, and condemnation. It shall be the responsibility of the SURVEYOR to adhere to these standards and formats to every extent possible to ensure that the needs of the acquiring agency are met.

SAMPLES ATTACHED FC 130:

- PRELIMINARY Right-of-Way Layout / Abstract Map
- Right-of-Way Map, Field Notes, Parcel Sketches and Area Computation Sheets

REVISED
EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

ROW MAP CHECKLIST

Consultant: _____
Contract/WA# _____
Responsible Office: _____
Project Manager: _____
County: _____
Highway: _____
RCSJ: _____
CCSJ: _____

As the responsible consultant project manager, I hereby certify that the attached ROW Map has undergone a QA/QC review, with the following applicable items specifically checked for accuracy, completeness and constructability (as noted by Checkmarks)

_____
Signature Date

_____
Printed Name

(This Checklist must be signed by the RPLS and turned in with all proposed ROW Projects.

MAP:

General

___ All documents have been proofread and are accurate.
___ Title Commitments for each individual parcel.
___ Graphics files compatible with Micro station and Word software are provided.
___ Photos of proposed ROW staking included.
___ Field notes and Parcel Plats are numbered continuous.
___ Scale shall be 1"=50' or 1"=100".

Title Sheet Requirements

___ Title and description of project including county, limits, etc....
___ Vicinity map with beginning and ending station
___ Equations and Exceptions
___ Index
___ Legend
___ Title block completely filled out with Construction and R.O.W. CSJs'
___ List all Major Utilities from Station to Station

Individual Map Sheet Requirements

___ Sheet size 34" X 22"
___ Text legible when reduced to half-scale.
___ Title block completely filled out with R.O.W. CSJ
___ Matchlines

REVISED
EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

___ Project layout sheet
___ Existing utility lines and easements, deed reference, as shown on Schedule "B" of the Title Commitment, and defined on parcel plats

Existing information:
___ R.O.W. lines
___ Whole property or whole property inset
___ Roadways
___ Survey, county, and city limit lines shown and labeled
___ Improvements shown and labeled *(see below)*
___ Monumentation i.e. P.C., P.T., Break Points
___ North arrow
___ Scale
___ Property lines
___ Property descriptions i.e., lot, block, tract, subdivision, etc…
___ Identify existing and proposed access denial locations *(if applicable)*

Proposed information:
___ #5- 2-ft iron road set monumentation i.e. P.C., P.T., Break Points and 1000' stations at proposed ROW lines and where existing ROW line is the proposed ROW.
___ Survey and R.O.W. lines
___ Basis of bearings
___ Parcel bearings and distances correspond with traverse sheet
___ Outside ties (P.O.C.) corresponds with field notes
___ Point of beginning (P.O.B.) established on proposed R.O.W. line
___ Parcel tied to baseline
___ Baseline information shown i.e. Stationing, bearings, curve data, etc…
___ Conveyance information shown in tables i.e. parcel number, grantors name, amount of take, remainder etc.
___ Math checked on remainder

Improvements:
___ Improvements bisected or within 25' of proposed R.O.W. line are shown on map with stationing and distance from proposed R.O.W. line. Buildings are labeled and dimensioned.
___ Off-premise outdoor advertising signs within proposed R.O.W. are shown and labeled.

Utilities:
___ All utilities within or crossing existing and proposed right of way are shown and labeled as to size, easement or fee width, and recording data of instrument.
___ Location of underground storage tanks and/or filler caps are shown and labeled

FIELD NOTES - Heading
___ County
___ Highway
___ Parcel number
___ R.O.W. CSJ
___ Construction CSJ

General Description or "preamble"
___ Area of parcel to be acquired is shown in acreage (0.000) for rural land and/or square feet (to nearest whole sq. ft.) for urban land or smaller parcels

Parent tract data is shown:
___ Size of parent tract
___ Survey data or lot, block, and subdivision
___ Name of last recorded seller and buyer
___ Date, volume and page or document number of last recorded conveyance
___ Records and county of last recorded conveyance

REVISED
EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Beginning Description
___ Point of commencement is on outside tie and is described accurately by bearings and distances as it leads to the point of beginning.
___ Point of beginning is on proposed R.O.W. line

Particular Description
___ Traverse calls are clockwise sequence
___ Bearings and distances correspond exactly with map, parcel sketch, and traverse sheet
___ Bearings are to nearest whole second and distances are to the nearest one-hundredth of a foot
___ Calls are numbered
___ Denial of access shall be described from beginning to end *(if applicable)*

Closing Description
___ Last call leads back to P.O.B.
___ Restates area of parcel
___ Establishes taking in existing road R.O.W. if applicable
___ Legal description is referenced to Plat
___ Sealed and signed
___ Include an access clause whether access is permitted or denied *(if applicable)*

PARCEL SKETCH:
Shows P.O.B. and P.O.C.
___ All data corresponds exactly with Map and Field Notes
___ Sheet size is no larger than 81/2" x 11"
___ Plat closely matches example provided
___ Plat referenced to legal description
___ Sealed and signed
___ Include an access clause whether access is permitted or denied *(if applicable)*
___ Existing utility lines and easements (deed reference, if available);

TRAVERSE SHEET
___ Computations show area to be acquired in sq. ft. or acres, whichever is applicable
___ Computations show area that is existing road R.O.W. if applicable
___ Traverse calls are in clockwise sequence
___ Error of closure meets the following:

Secondary rural	.0003
Primary rural - secondary urban	.0002
Urban or industrial	.00013

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

SECTION 8 - SIGNING, MARKINGS AND SIGNALIZATION
Permanent and Temporary Signals at FM 1925 at Brushline Road

(Function Code 162)

Services Provided By: ENGINEER	COUNTY	
YES	N/A	1. Signing and Markings Layout
		a. Requirements (Separate Layout)
		(1) Roadway layout
		(2) Center line with station numbering
		(3) ROW lines
		(4) Culverts and other structures that present a hazard to traffic
		(5) Location of utilities, if not shown on plan and profile
		(6) Existing signs to remain, to be removed, to be relocated
		(7) Proposed signs (illustrated and numbered)
		(8) Existing overhead sign bridges to remain, to be revised, removed or relocated
		(9) Proposed overhead sign bridges indicating location by plan layout (electrical details need not be shown on this layout)
		(10) Proposed markings (illustrated and quantified) which include pavement markings, object markings and delineation
		(2) Quantities of existing pavement markings to be removed
		(3) Proposed delineators and object markers
		b. For projects involving freeway to freeway or other types of directional interchanges, projects including left-hand ramps or connections, the following information must be provided:
		(1) The location of interchanges, main lanes, grade separations, frontage roads and ramps
		(2) complete explanation of the sequence and methods of stage construction, where applicable, which would include the initial and ultimate proposed treatment of crossovers and ramps
		(3) The number of lanes in each section of proposed highway and the location of changes in numbers of lanes
		(4) The projected traffic volumes as provided by the STATE (20 year traffic projection, unless otherwise determined by the District Engineer)
		(5) Tentative ROW limits
		(6) Direction of traffic flow on all roadways
		(7) Main lane, ramp, frontage road, and necessary cross road profiles at proposed interchanges or grade separations
YES	N/A	2. Summary of Small Signs Tabulation
YES	N/A	3. Summary of Large Signs Tabulation including all Guide Signs
YES	N/A	4. Sign Detail Sheets
		a. All signs except route markers
		b. Design details for large guide signs
		c. Dimensions of letters, shields, borders, corner radii etc.
		d. Designation of shields attached to guide signs
		e. Designation of arrow used on exit direction signs

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Services Provided By: ENGINEER	COUNTY	
		5. Traffic Signals
		a. Development of Justification (Warrant) Data
NO	N/A	(1) Location Map Relationship of proposed installation to other traffic signals, highways, business areas and traffic generators
NO	N/A	(2) Photographs as appropriate
NO	N/A	(3) Accident data as appropriate
		(4) Vehicle volumes (provided by TxDOT)
N/A	N/A	(a) Existing
N/A	N/A	(b) Estimated
N/A	N/A	(c) Projected
N/A	N/A	(d) Pedestrian
N/A	N/A	(5) Traffic Survey - Count Analysis
N/A	N/A	(6) Recommendation based on above data
NO	N/A	b. Layout
		(1) Title Sheet (when applicable)
		(a) Describe the location
		(b) Type of installation
		(c) Area map with project limits for each location
		(d) Index of sheets
		(e) Space for official signatures
		(2) Estimate and quantity sheet (when applicable)
		(a) List of all bid items
		(b) Bid item quantities
		(c) Specification item number
		(d) Paid item description and unit of measure
		(3) Basis of estimate sheet (list of materials)
		(4) General notes and specification data sheet
		(5) Condition diagram
		(a) Highway and intersection design features
		(b) Roadside development
		(c) Traffic control including illumination
		(6) Plan sheet(s)
		(a) Existing traffic control that will remain (signs and markings)
		(b) Existing utilities
		(c) Proposed highway improvements
		(d) Proposed installation
		(e) Proposed additional traffic controls
		(f) When applicable, proposed conduit for Railroad interconnect with standard details for runs under tracks.
		(g) Proposed illumination attached to signal poles.
		(7) Notes for plan layout
		(8) Elevation sheet(s) (span wire design)
		(9) Phase sequence diagram(s)
		(a) Signal locations
		(b) Signal indications
		(c) Phase diagram
		(d) Signal sequence table
		(e) Flashing operation (normal and emergency)
		(f) Preemption operation (when applicable)
		(g) Interval timing, cycle length and offset

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Services Provided By: ENGINEER	COUNTY	
		5. Traffic Signals *(continued)*
NO	N/A	b. Layout *(continued)*
		(10) Construction detail sheets(s)
		(a) Poles (TxDOT standard sheets)
		(b) Detectors
		(c) Pull Box and conduit layout
		(d) Controller Foundation standard sheet
		(11) Marking details (when applicable)
		(12) Barricade and warning sign standard sheet and any special details for work zone traffic control for special conditions
		(13) Aerial or underground interconnect details (when applicable)
		c. General Requirements
		(1) Contact local utility company
NO	N/A	(a) Confirm power source
NO	N/A	(b) Discuss route of aerial or underground interconnect cable (when applicable)
N/A	N/A	(c) Adjustment of overhead utility lines
NO	N/A	(2) Prepare governing specifications and special provisions list
NO	N/A	(3) Prepare project estimate
NO	N/A	d. Summary of Quantities

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

SECTION 13
ADDITIONAL RESONSIBILITIES

Easements, Letters of Permission, Etc.

The ENGINEER shall be responsible for delineating easements. The ENGINEER will be responsible for securing the necessary legal instruments.

Coordination of Utilities

The ENGINEER shall furnish the COUNTY prints of a project layout which will be distributed by ENGINEER to various utility companies to determine which utilities are in the limits of the project. These shall be preliminary layouts. Upon completion of the preliminary drainage plans and U&D sheets, the ENGINEER shall distribute to the various utility companies and request return. Upon return of these prints, the ENGINEER will schedule a meeting with the various utility companies to discuss potential conflicts and conformance with the State's Utility Accommodation Policy. The ENGINEER is responsible for coordination with the various utility companies for exposing potential conflicts and field ties to uncover utilities in potential conflict areas.

Meetings

Meetings will be held with the FHWA, State Officials, local governments, property owners, utility owners, railroad companies, other consulting firms, etc., as needed or required by the COUNTY. The ENGINEER shall coordinate through the COUNTY for the development of this project with any local entity having jurisdiction or interest in the project (i.e., city, county, etc).

Specifications, Special Provisions, Special Specifications

Use the State's standard specifications or previously approved special provisions and/or special specifications. If a special provision and/or special specification is developed for this project, it shall be in the State's format and incorporate references to approved State test procedures.

Project Manager/Engineer Communication

The ENGINEER shall designate one Texas Registered Professional Engineer to be responsible throughout the project for project management and all communications, including billing, with the COUNTY's Director. Any replacements to the ENGINEER's designated Project Manager/Engineer must be approved by the COUNTY.

Engineering documents produced for the department's engineering projects shall be signed, sealed and dated or CADD sealed in accordance with Administrative Order No. 5-89 and Administrative Circular No. 26-91.

Design Responsibilities

The ENGINEER is responsible for design errors and/or omissions that become evident before, during or after construction of the project. The ENGINEER's responsibility for all questions arising from design errors and/or omissions will be determined by the COUNTY and all decisions shall be final and binding. This would include, but not necessarily be limited to:

1. All design errors and/or omissions resulting in additional design work to correct the errors and/or omissions.
2. Preparation of design documents and detail drawings necessary for a field change due to design errors and/or omissions.
3. Revision of original tracings to the extent required for a field change due to design errors and/or omissions.

The ENGINEER shall promptly make necessary revisions or corrections resulting from the ENGINEER's errors, omissions or negligent acts without additional compensation. Acceptance of the work by the COUNTY will not relieve the ENGINEER of the responsibility for subsequent correction of any such errors or omissions or for clarification of any ambiguities.

Document and Information Exchange

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

Data, Plan Sheets, General Notes and/or Specifications provided to the COUNTY shall be furnished on 8GB USB flash drives. Each 8 GB flash drive shall have a file titled Table of Contents. The Table of Contents shall indicate the locations of files within the directory structure of the documentation.

General Notes and specifications shall be provided in MS Office 2007 format. Plan sheets shall be provided in Microstation DGN or GEOPAK GPK format. PDF copies of plan sheets shall also be provided.

Two copies of the documentation shall be provided to the COUNTY.

If required, the ENGINEER shall provide to the COUNTY, a CD that contains all the plan sheets for the project. The graphics tape shall be compatible with the COUNTY's computer system.

CD Tape Required (YES or NO): YES

Proposal Time

The time indicated in the proposal and the contract shall include time necessary for reviews, approval, etc.

Office Location

The ENGINEER will perform the services to be provided under this agreement out of their office or offices listed below:

Service	Office Location
PS&E	Mission Office
ROW Acquisition	Mission Office

The work effort will be managed out of the Mercedes (City)

office located at 2100 West Expressway 83 (Address),

Mercedes (City), Texas (State).

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX A - PLAN SHEET SEQUENCE PROCEDURE

1. Title Sheet
   Detailed Index of Sheets

2. Typical Sections

3. General Notes and Specifications Data

4. Estimate and Quantity Sheets

5. Storm Water Pollution Prevention Plan (SW3P) Sheets

6. Traffic Control Plans
   a. Sequence of Construction Layouts
   b. Detour Plan/Profile/Typical Sections/Quantities

7. Roadway Layouts
   a. Roadway Plan/Profile Sheets
   b. Intersection Plan/Profile Sheets
   c. Intersection Layouts
   d. Alignment Layouts/Data
   e. Ramp Layouts/Profiles
   f. Connection Roads/U-turns Layouts/Profile

8. Roadway Details
   a. Concrete Pavement Details/Standards
   b. Concrete Pavement Terminal Anchorage Details/Standards
   c. Bridge Approach Details/Standards
   d. Bridge Terminal Anchorage Details/Standards
   e. Roadway/Median Barrier Details/Standards
   f. Curb Details
   g. Driveway Details/Typical Sections/Standards

9. Signing Layouts and Marking Layouts

10. Traffic Signal Layouts

11. Lighting Layouts

12. Illumination Detail Standards (HMID, HMIF, HMIP, RID)

13. Utility Layouts/Profiles

14. Drainage Area Maps and Hydraulic Data
    a. General Drainage Area Maps
    b. Stage-Discharge Curves
    c. Main Cross-Drainage Culvert/Bridge Hydraulic Data
    d. Drainage Area Maps/Culverts/Storm Sewer
    e. Hydraulic Data/Culverts/Inlets/Storm Sewer/Pumps

15. Detailed Drainage Plans
    a. Drainage Plan/Profile Sheets (Storm Sewer Plan/Profile Sheets)
    b. Channel Plan/Profiles/Typical Sections
    c. Box Culvert Plan/Profile
    d. Pipe Sewer/Culvert Cross Sections

APPENDIX A - PLAN SHEET SEQUENCE PROCEDURE (Continued)

16. Drainage Structural Details/Standards
    a. Inlet Details/Standards
    b. Manhole Details/Standards
    c. Junction Box Details/Standards
    d. Safety End Treatment Details/Standards
    e. Box Culvert Details/Standards
    f. Culvert Wingwall Details/Standards
    g. Excavation-Backfill Diaphrams
    h. Riprap Details/Standards
    i. Temporary Pollution and Erosion Control Details

17. Pumphouse Layouts

18. Pumphouse Details

19. Pumphouse Standard Details

20. Bridge Layouts/Profile/Typical Sections*

21. Bridge Details*
    a. Summary of Bridge Quantities
    b. Abutments
    c. Interior Bents
    d. Spans
    e. Special details for the specific bridge

22. Bridge Standard Details*

23. Bridge Railing Standards

24. Retaining Wall Layouts/Profiles**

25. Retaining Wall Details**

26. Retaining Wall Standard Details**

27. Guard Fence/Standards and Signal Pole Standards

28. Signal/Electrical Details/Standards and Signal Pole Standards

29. Signing/Markers/Striping Details/Standards

30. Barricade/Construction/Beacon Standards

31. Miscellaneous Standards
    a. Chain Link Fence Standards
    b. Bridge End Detail/Standards
    c. Roadway Clearance Details/Standards
    e. Attenuator Standards

NOTE: Variations of these plan sheet sequence guidelines may be permitted if approved in writing by the County.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX B - PLAN PREPARATION PROCEDURES

1. Title Sheet
   The ENGINEER shall be responsible for completing the title sheet as required and formatted by the STATE and as discussed in Part V of the Highway Design, Operations and Procedures Manual. Refer to Section K - Plans, 1 - Title Sheets, page 5-24, for the procedure to be used regarding all plans prepared by the ENGINEER.

2. Project Layout
   The project layout shall clearly depict the entire project as it is proposed and will usually be drawn at a scale of 1 inch=100 feet or 1 inch=200 feet, depending on the size of the project.

3. Typical Sections
   See Part IV of the Highway Design, Operations and Procedures Manual.

4. Sequence of Work Sheets (Traffic Control Plan)
   Clarity and completeness should be the rule to follow in preparing these sheets, with particular attention given to location of construction signs and barricades, lane widths, protection of drop offs, etc. For a reference guide use the Texas Department of Transportation, Texas Manual on Uniform Traffic Control Devices. Usual scale of 1 inch=100 feet and/or 1 inch=50 feet for special locations. A narrative sequence shall be included in the special provisions for the project. Staging of structural elements shall be considered. Provisions for drainage shall be considered, included and indicated during all stages of construction operations.

5. Removal Item Sheets
   These sheets indicate removal of existing facilities necessary to the proposed construction. (1 inch=40 feet) (use same scale as plan/profile sheets).

6. Summary Sheets
   Summary Sheets are required to indicate type, quantity and/or location of work for individual items of the proposed project.

7. Alignment Layout Sheets
   These sheets indicate the horizontal alignment with curve data and coordinates usually tabulated thereon. On some projects, depending on size, this information may be included on the plan profile sheets. Usual scale (1 inch=100 feet) or (1 inch=40 feet).

8. Plan Profile Sheet
   Clarity and completeness should be the rule to follow in preparation of these sheets. Usual scale (1 inch=40 feet or 1 inch=50 feet) or (1 inch=20 feet), depending on project complexity.

9. Drainage Area Maps
   Usual scale (1 inch=100 feet) and/or (1 inch=200 feet) supplemented by large scale area maps as necessary.

10. Drainage Plan Profile Sheets
    These sheets may be required on some projects to clearly depict location of inlets, storm sewer lines, and profile of storm sewer lines and laterals. Usual scale (1 inch=40 feet or 1 inch=50 feet) or (1 inch=20 feet). Storm sewer design does include redesign of storm sewers imposed by utility constraints developing after initial reviews by the STATE and consequential redesign and adjustments.

11. Runoff, Inlet, Storm Sewer and Culvert Sheets
    Use standard sheets.

APPENDIX B - PLAN PREPARATION PROCEDURES (Continued)

12. Culvert Cross Sections and Details
District standard reproducible sheets can be furnished (one each) to the ENGINEER for modification of special designs.

13. Manhole and Inlet Details
District standard reproducible sheets can be furnished (one each) to the ENGINEER.

14. Miscellaneous Detail
Curb, Sidewalk, Driveways, etc.

15. Intersection Details

16. Marking Layouts and/or Details
Layouts of the entire project with markings depicted thereon. Usual scale 1:500 (1 inch=40 feet or 1 inch=50 feet). On some projects typical details might suffice.

17. Structural Details
Bridge layout sheets shall have the same horizontal and vertical scale. Usually (1 inch = 10 feet) (1 inch = 20 feet). Sections of existing and proposed structures usually have a scale of (1 inch = 5 feet). Elements of the bridge (abutments, bents, slabs, etc.) shall be detailed to a (1/2 inch = 1 foot) or (1/4 inch equals 1 foot) architect scale to provide clear legible drawings when reduced. Letters shall be a minimum size of 4 millimeters (5/32 inch) height for hand lettering and 140 for lettering by computer-aided design and drafting (CADD).

18. Overhead Sign Bridge Layouts
A maximum of four structures may be shown on each layout sheet. The reference to the appropriate overhead sign bridge (OSB) standard and the following requirements shall be shown on the layout:
(1) Drilled shaft size and length
(2) Soil strength used for design {indicate basis and boring(s) used}
(3) Design height
(4) Tower height
(5) Leg spacings and
(6) Design wind speed.
The wind speed design map need not be included in the project plans. Designation of tower member size and anchor bolt size shall not be shown. For OSBs which require special design, the design shall be in accordance with the AASHTO sign specifications (see Item 22 of References on page 49) and to the same loading requirements as for normal standard structures. Structures (special or standard) which will have changeable message signs shall be analyzed by the ENGINEER.

EXHIBIT "B"
SCOPE OF SERVICES TO BE PROVIDED BY THE ENGINEER

APPENDIX C - GENERAL PLAN CHECKLIST

Services Provided By: ENGINEER	COUNTY	
___	___	Title Sheet
___	___	Project Layout
___	___	Sequence of Work
___	___	Detour Layouts & Profiles
___	___	Construction Pavement Markings
___	___	Signing & Barricades
___	___	Construction Sign & Beacons
___	___	Typical Sections
___	___	Shaping & Finishing Sections
___	___	Slopes Adjacent to Shoulders
___	___	Estimate & Quantities
___	___	General Notes & Specification Data
___	___	Grading Summary
___	___	Miscellaneous Summaries (See following "SUMMARIES" heading)
___	___	Horizontal Curve Data & Alignment Layouts
___	___	Drainage Summaries
___	___	Structure Summaries
___	___	Erosion Control Summary & Details
___	___	Plan/Profile Sheets
___	___	Erosion Control Summary & Details
___	___	Pavement Contours
___	___	Superelevation Transition (If Required)
___	___	Grading Contours
___	___	Guard Fence Layouts
___	___	Storm Water Pollution Prevention Plans (SW3P)
___	___	Drainage Area Maps
___	___	Hydraulic Data
___	___	Drainage Sheets
___	___	Bridge Hydrology Sheets
___	___	Inlet & Manhole Details
___	___	Utility Support Details
___	___	Culvert Cross Sections & Details
___	___	Special Culvert Designs
___	___	Special Drainage Details
___	___	Chain Link Fence Locations
___	___	Ramp Details Sheet
___	___	Removal Item Sheet - Including detours
		(Shown in detour summary, No payment for removal; subsidiary to construction detours)
___	___	Pavement Details
___	___	Pavement Standard Modification for Concrete Shoulder
___	___	Concrete Pavement Continuously Reinforced (CPCR)
___	___	Concrete Pavement Contraction Design (CPCD)
___	___	Concrete Pavement Details - Jointed Reinforced (Steel Bars) (CPJR)
___	___	Bridge Approach Slab Details
___	___	Vehicle Attenuator Details
___	___	Miscellaneous Details
___	___	Wheelchair Ramps
___	___	Pavement Marking Details
___	___	Modified Standards
___	___	List of Standards
___	___	Permanent Signing Plans & Quantities

APPENDIX C - GENERAL PLAN CHECKLIST *(continued)*

Services Provided By: ENGINEER	COUNTY	
___	___	Permanent Lighting Plans, Quantities & Standards
___	___	Bridge Layout(s)
___	___	Bridge Details
___	___	Retaining Wall Layout(s)
___	___	Retaining Wall Details
___	___	Pumphouse Details
___	___	Underdrain Details (Retaining Walls)
___	___	Culvert Standards
___	___	Soil Profile
___	___	Temporary Traffic Signals
___	___	Design Cross Sections
___	___	Estimate
___	___	List of Standard Specification, Special Provisions & Special Specifications
___	___	Detour Special Provisions (If Required)
___	___	Construction Time Estimate
___	___	Critical Path Method (CPM)
___	___	Unit Price Documentation
Miscellaneous		
___	___	Conduit Requirements
___	___	Traffic signal Requirements
Summaries		**(ALL BELOW YES FOR ENGINEER AND NO FOR COUNTY UNLESS NOTED OTHERWISE)**
___	___	Salvaging and Placing Topsoil
___	___	Prepare ROW
___	___	Remove Old Structures
___	___	Scarify Existing Pavement
___	___	Remove Old Concrete Curb of Curb and Gutter (C&G)
___	___	Remove Old Concrete Pavement
___	___	Remove Old Concrete Riprap
___	___	Remove Metal Beam Guard Fence
___	___	Galvanized steel Beam Guard Fence (12Ga) (GSBGF)
___	___	Temporary Guard Fence (TEMPGF)
___	___	Summary of Concrete Flumes
___	___	Curbs
___	___	Adjust Manholes & Inlets
___	___	Underdrains
___	___	Base and Pavement
___	___	Large Structure
___	___	Concrete Riprap (RR8 & RR9)
___	___	Temporary Portable Concrete Barrier (PCBR)
___	___	Concrete Traffic Barrier
___	___	Vehicle Attenuator
___	___	Guard Rail Energy Absorbing Terminal (Great System)
___	___	Pavement Markings & Blast Cleaning (Thermoplastic)
___	___	Retaining Walls
___	___	Large Structure Summaries
___	___	Small Structure Summaries

APPENDIX C - GENERAL PLAN CHECKLIST *(continued)*

Services Provided By: ENGINEER	COUNTY	Summaries	(ALL BELOW YES FOR ENGINEER AND NO FOR COUNTY UNLESS NOTED OTHERWISE)
___	___		Earthwork (Roadway & Channel) & Channel Details
___	___		Culverts
___	___		Detours
___	___		Seeding or Mulch Sod - Quantity Only
___	___		Inlet & Manholes
___	___		Sidewalks
___	___		Construction Pavement Markings
___	___		Driveways
___	___		Concrete Median
___	___		Storm Sewers
___	___		Head Walls & Safety End Treatments
___	___		Curb Openings
___	___		Manholes
___	___		Chain Link Fence, Remove & Replace Chain Link Fence
___	___		Remove & Relay Reinforced Concrete Pipe (RCP) or Pipe Sewer

Client: Hidalgo County Precinct #4

EXHIBIT "C"

PROJECT DEVELOPMENT SCHEDULE

CSJ: 1803-02-035
FM 1925 (Monte Cristo Rd)
From FM 907 to Sharp Rd
Length = 1.6 miles

TASK AND DESCRIPTION	FIRM	2018	2019						2020												2021												2022			
			Q1	Q2	Q3	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Q1	Q2	Q3	Q4
Advanced Funding Agreement																																				
TxDOT Submit AFA to Hidalgo County	COMPL																																			
Hidalgo County Execute Through Comm. Court	COMPL																																			
TxDOT Executes AFA (Dec 31, 2014)	COMPL																																			
Work Authorization No. 1																																				
Phase I: Schematic & Environmental																																				
Schematic Development & Environmental Clearance																																				
Schematic Approval	L&G																																			
Revised Schematic Approval (Removing Sharp Road)	L&G																																			
Environmental Clearance	L&G																																			
Work Authorization No. 3																																				
Phase II: PS&E & ROW Map																																				
PS&E																																				
Design Survey	L&G																																			
Compensable Utility Oversight	L&G																																			
Outfall Coordination with HCDD #1	L&G																																			
30% PS&E Completion	L&G																																			
60% PS&E Completion	L&G																																			
90% PS&E Completion	L&G																																			
95% PS&E Completion	L&G																																			
100% PS&E Completion	L&G																																			
TxDOT Plan Set Approval	TxDOT																																			
ROW Map																																				
Prepare ROW Map	L&G																																			
TXDOT Review & Revisions	TxDOT																																			
TxDOT ROW Map Approval	TxDOT																																			
Work Authorization No. 5																																				
Phase III: ROW Acquisition																																				
ROW Acquisition (13 Parcels)																																				
ROW Release (Dependent on Availability of Funds)	TxDOT																																			
Project Administration	TxDOT																																			
Title Commitments	TxDOT																																			
Appraisal Reports	TxDOT																																			
Appraisal Review Reports	TxDOT																																			
Appraisal Update Reports	TxDOT																																			
Approved Values by TxDOT	TxDOT																																			
Acquisition Negotiation Offers	TxDOT																																			
Title Curative Process	TxDOT																																			
Title Commitment Updates	TxDOT																																			
Payments for Parcels	TxDOT																																			
Eminent Domain Proceedings	TxDOT																																			
Title Insurance Policies	TxDOT																																			
Consumation of Outstanding Cases	TxDOT																																			
Phase III: Proposed Letting																																				
Let Project (Est. Earliest Date: Jun 2022)	TxDOT																																			
(Dependent on Availability of Funds)																																				Estimated 18 Months Constru

Updated by Jordan Sinclair, P.E. (04/16/2021)

L&G ENGNEERING TASK
TxDOT TASK
COUNTY TASK

9:56 AM4/19/2021

EXHIBIT D-1

REVISED ESTIMATED MAN-HOUR BREAKDOWN

FM 1925 Project
from FM 907 (Alamo Road) East to Sharp Road

		MANHOURS												
		Senior Project Manager	Senior Engineer	Project Engineer	Design Engineer	ROW Administrator	EIT	Senior Engineer Tech	Engineer Tech	CADD Operator / GIS Analyst	Admin / Clerical	TOTAL HOURS	Sub-Contract Amounts / ROW COST	TOTAL LINE ITEM COST
	CONTRACT RATE	215.40	167.89	123.54	114.04	107.70	82.36	79.19	76.02	66.52	57.02			
WORK AUTHORIZATION NO. 3														
PHASE II - PS&E, ROW Mapping & Surveying														
1	Coordination and Management of Subconsultant for ROW Map	4	11	11	5	2.00	1.790					35		$ 5,000.28
1a	*SUB: ROW Mapping (See fee breakdown on Page 2 of 3)*												$ 35,000.00	$ -
2	Outfall Hydraulics (Ditch Capacities, etc...)	20	80	116	136		77.96					429.96		$ 54,000.00
3	Pavement Design for TxDOT	20	60	90	132		141	180			18.94	642		$ 67,500.00
4	Traffic Signal Warrant Design Support ~ Coordination and Management of Subconsultant for Traffic Signal Warrant Design	6	10	20	20		20	10	8	9.93		104		$ 11,430.66
4a	*SUB: Signal Design, Adjustments, & Warrants (See fee breakdown on Page 3 of 3)*												$ 7,569.57	$ -
5	Traffic Signal Design and one Signal Design During Construction	30	60	92	60		50	61	70	72	3.46	498		$ 54,000.16
6	PS&E Development	160	320	480	960		1123	1360	1460	1582	60	7505		$ 676,800.00
7	Engineering Fee to Submit Plans Through Letting (Pharr District and Austin Divisions)	52	92	220	235		280	381			20.05	1280		$ 135,000.00
8	PS&E Development For Outfalls	40	80	130	200		240	320	363	401	29.95	1803.95		$ 162,000.00
9	Coordination and Management of Subconsultant for Field Surveys	28	57	90	60		48	60	68	67.1				$ 51,899.33
9a	*SUB: Field Surveys for Design and Construction (See fee breakdown on Page 2 of 3)*												$ 64,101.00	
10	Permitted Utilities Coordination to adjust	32	88	254	299		241	240.02				1154		$ 126,000.00
11	Engineering Consultant Construction Management (18 Months)	64	120	320	299.98		299					1103		$ 132,300.00
SUB-TOTAL		**456**	**978**	**1823**	**2406.98**	**2**	**2521.75**	**2612.02**	**1969**	**2132.03**	**132.40**	**14555**	**$ 106,670.57**	**$ 1,475,930.44**

Sub-Total Manhours Fee with Subconsultant Fee:	$ 1,582,601.01
*** TOTAL PROJECT FEE:**	**$1,582,600.00**

* Rounded Figure

		MANHOURS												
		Senior Project Manager	Senior Engineer	Project Engineer	Design Engineer	ROW Administrator	EIT	Senior Engineer Tech	Engineer Tech	CADD Operator / GIS Analyst	Admin / Clerical	TOTAL HOURS	Sub-Contract Amounts / ROW COST	TOTAL LINE ITEM COST
	CONTRACT RATE	215.40	167.89	123.54	114.04	107.70	82.36	79.19	76.02	66.52	57.02			
Supplemental #1 to WORK AUTHORIZATION NO. 3 - Reallocate Fundes to afford ROW Mapping and Signal Design														
PHASE II - Signal Design														
1	Coordination and Management of Subconsultant for ROW Map	3	8	8	5	2	1.6614					28		$ 3,900.00
1a	*SUB: ROW Mapping*												$ 10,500.00	$ 10,500.00
2	Traffic Signal Design Support ~ Coordination and Management of Subconsultant for Traffic Signal Design	6	12	18	12		2	2	4		10	66		$ 8,096.59
2a	*SUB: Signal Design*												$ 24,994.42	$ 24,994.42
3	*Project Management*	4	9	9	7						4	33		$ 4,510.83
4	Traffic Signal Warrant Design Support ~ Coordination and Management of Subconsultant for Traffic Signal Warrant Design	-3	-5	-10	-10		-10	-5	-4	-4.963		-52		$ (5,715.21)
4a	*SUB: Signal Design, Adjustments, & Warrants*												$ (7,569.57)	$ (7,569.57)
SUB-TOTAL		**10**	**24**	**25**	**14**	**2**	**-6**	**-3**	**0**	**-5**	**14**	**75**	**$ 27,924.85**	**$ 38,717.07**

Sub-Total Manhours Fee with Subconsultant Fee:	$ 38,717.07
TOTAL PROJECT FEE:	**$1,621,317.07**

R. O. W. Surveying Services, L.L.C.

March 16, 2021

Mr. Jacinto Garza, P.E./President
L & G Engineering
Attn: Jordan Sinclair, P.E.
2100 Expressway 83
Mercedes, Texas 78570

RE: Proposal FNC 130—FM 1925 Road Project—Supplemental #1
ROW Map, Parcel Surveys, Metes & Bounds Descriptions, & Title Reports
Limits: From FM 907 (Alamo Rd.) to Sharp Rd.

Dear Mr. Garza,

The following is a cost estimate for requested right of way revisions for the above mentioned project supplemental #1. New Parcels 11-13 will be added, these are additional parcels as per our final ROW Map.

FNC 130 ROW Mapping	3 parcels	@ $3,500/parcel	=	$10,500
		Total	=	**$10,500**

Let us know at your convenience when you and/or Mr. Jordan Sinclair, P.E. are available to discuss this project supplemental. If you require more information or have any questions, please contact me at your convenience.

Sincerely,

Julio Cerda, P.E.
President

Cc: Juan Galvan, R.P.L.S.

TBPLS Reg. #: 10193886
DBE #: 25254 / HUB #: 1462094388700

900 S. Stewart Road, Suite 13 -- Mission, TX 78572
PH 956.424.3335 -- FX 956.424.3132

ERGONOMIC TRANSPORTATION SOLUTIONS, INC.
5300 Hollister, Suite 220
Houston, Texas 77040
Tel. (713) 956-9601
Fax: (713) 956-9667

December 11, 2020

Mr. Jacinto Garza, P.E.,
President
L & G Engineering
2100 W. Expressway 83
Mercedes, Texas 78570

Reference: Traffic Engineering Services for
FM 1925: From East of FM 907 to East of Sharp Road, Hidalgo County, Texas
Signal Design

Dear Jacinto:

We are pleased to submit the attached fee proposal to conduct the referenced services. Our work will cover traffic signal design at the intersection of:

- FM 1925 at Brushline Road (Permanent and Temporary Signals)

Our proposed fee for the signal design is $24,994.42. Exhibit A shows the proposed services, while Exhibits B shows a breakdown of our proposed fees.

As always we thank you for giving us the opportunity to assist you.

Sincerely,

Harry C. Simeonidis, P.E.,
President

Attachments

EXHIBIT "A"
SCOPE OF SERVICES
TRAFFIC ENGINEERING SERVICES
along
FM 1925: From East of FM 907 to East of Sharp Road,
Hidalgo County, Texas

Project Understanding

Currently, FM 1925 is a two lane asphalt road with roadside ditches and no shoulders. Its pavement varies from fair to poor. It runs in an east-west direction and serves a mix of land uses, including residential, agricultural and industrial facilities.

Schematic plans developed by L&G Engineering show the proposed FM 1925 to have a four lane divided cross section with a flush median, 10 foot shoulders and curb and gutters.

The new roadway will affect the signalized intersection at Brushline Road, which will need to be reconstructed and brought to current TxDOT accessibility standards.

A temporary signal would also be required at the same intersection to accommodate traffic during construction.

Ergonomic Transportation Solutions, Inc. (ETSI) will produce a complete set of Plans, Specifications and Cost Estimates (PS&E) that cover signal designs at the following intersection:

- FM 1925 at Brushline Road: This intersection is currently controlled by a traffic signal that will need to be replaced. Existing signal poles conflict with proposed pavement. A temporary signal will also be necessary at this intersection to accommodate traffic during construction.

Shown below in detail, is ETSI's scope of services:

CATEGORY A - TRAFFIC SIGNAL DESIGN:

- **FM 1925 AT BRUSHLINE ROAD - PERMANENT AND TEMPORARY TRAFFIC SIGNAL**

TASK 1 – General Notes for Traffic Signal installation

ETSI will prepare the general notes for the traffic signal design at the above intersection.

TASK 2 – Basis of Estimate Quantities

ETSI will prepare Basis of Estimate sheet with quantities of all equipment to be installed at the intersection.

ETSI will calculate quantities at 90% and 100% levels of completion or as directed by L&G.

TASK 3 – Condition Diagram

ETSI will collect from various agencies the existing signal plans for the above intersection. Information from these plans will be verified in the field and then incorporated into the condition diagram sheet.

ETSI will setup the condition diagram sheet that would show the existing configuration of the intersection, existing utilities and other elements in accordance with TxDOT Signal Design practices and as required by L&G. ETSI will show which items are to be removed and which to are to remain.

TASK 4 – Proposed Signal Plan Layout

ETSI will setup proposed signal layout sheets that would show the proposed geometry of the above intersection along with the basic elements of the signal design, such as location of signal poles, pedestrian poles, wheel chair ramps, cross walks and service pole locations, in accordance with TxDOT Signal Design practices and as required by L&G.

The proposed layouts will also show existing equipment to remain, existing equipment to be removed and proposed new equipment to be installed by the contractor.

ETSI with assistance from L&G Engineering will contact the local power company for electrical service requirements at each of the above intersections.

ETSI will produce submittals for Client's review at the 90% and 100% completion levels or as directed by L&G.

TASK 5 – Signal Phasing and Timing

With assistance from TxDOT, ETSI will develop optimal phasing and timing charts. The charts will be presented to TxDOT for review and approval before their incorporation into the plan sheets.

TASK 6 – Electrical Schedules

ETSI will prepare tables, depicting the electrical schedule for the wiring connections at each intersection.

TASK 7 – Intersection Signing, Pavement Markings and Curb Ramps

While working on the proposed layouts, ETSI will also locate the cross walks and stop bars at the intersection, as they affect the signal design and furnish this information to L&G. Curb ramps and cross walks will conform to current US Access Board's Proposed Accessibility Guidelines as well as ADA standards.

ETSI will produce submittals for Client's review at the 90% and 100% completion levels.

TASK 8 – Standard Sheets List

ETSI will prepare a list of standard sheets for the 90% and 100% submittals. ETSI will also prepare the drill shaft tables on the TSFD standard sheet as well as the shipping parts list on the SP/SMA standard sheet.

TASK 9 –Specifications List and Cost Estimate

ETSI will prepare a list with all pertinent specifications and special provisions as they relate to the above tasks. ETSI will also prepare cost estimates using Pharr District's average bid values at the 90% and 100% submittals.

TASK 10 – Field Investigation and Meetings

ETSI will conduct field investigations at the above intersection locations and record pertinent design information as well as identify potential design issues. ETSI will verify the condition of the existing equipment and if necessary make recommendations for their replacement.

ETSI will participate in one or more project progress meetings as requested by L&G.

TASK 11 – Temporary Signal Design: FM 1925 at Brushline Road

ETSI will setup temporary signal layouts that will show the existing and proposed geometry at the above signalized intersection along with the area under construction and the traffic paths for each construction phase. Signal heads will be properly repositioned over the traveled lanes to accommodate each phase of construction. Two construction phases are anticipated for the construction of FM 1925. Existing and proposed equipment will be used to minimize conflicts between traffic and construction area.

Electrical schedules would be provided for the temporary signal as needed. ETSI will prepare tables, depicting the electrical wiring connections for each phase of construction as needed.

Quantities summaries for temporary equipment for each construction phase will be prepared along with appropriate notes and a construction cost estimate.

SERVICES TO BE PROVIDED BY L&G ENGINEERING

L&G shall furnish ETSI hard copies and electronic versions of the existing topographic data to include all existing utilities, as well as the proposed geometric design with all related reference files.

L&G may also provide previously conducted studies along the project limits.

L&G will be responsible for contacting all utility companies present at the above intersection and furnish such information to ETSI. ETSI will assist L&G in identifying and resolving utility conflicts as required by L&G.

L&G shall also provide coordination and communication for the progress of the signal design

work among all parties involved.

TIME SCHEDULE

Assuming all information is available, ETSI can produce 90% complete drawings within six weeks of the notice to proceed. After receipt of the 90% review comments, ETSI can produce 100% complete drawings within one week of L&G's review comments. ETSI will submit a hard copy and electronic version of all work performed to L&G. The submittal will be in electronic and hard copy format.

EXHIBIT B "FEE SCHEDULE" - TRAFFIC SIGNAL DESIGN
FM 1925 at Brushline Road

Ergonomic Transportation Solutions, Inc.

PERMANENT AND TEMPORARY TRAFFIC SIGNAL DESIGN			MANHOURS						
			No. of sheets (estimated)	Project Manager	Senior Transp. Engineer	Transportation Engineer	CADD Designer	Administrative Assistant	Total
TASK									
	1	General Notes	n/a		1	2		2	5
	2	Basis of Estimate	1	1	2	6	6		15
	3	Condition Diagram	1	1	2	6	6		15
	4	Proposed Signal Plan Layout	3	3	16	24	24		67
	5	Signal Phasing/Timing	n/a	1	2	6	2		11
	6	Electrical Schedule	1	1	4	8	4		17
	7	Int..Signs, Pav.Markings, Curb Ramps	n/a	1	2	4	4		11
	8	Standard Sheets List	12	1	2	2			5
	9	Specifications and Cost Estimate	1	1	2	4	6		13
	10	Coordination and Meetings	n/a	4					4
	11	TEMPORARY TRAFFIC SIGNALS	2	2	14	28	28		72
		Subtotal	**21**	**16**	**47**	**90**	**80**	**2**	**235**

Total Sheets/Labor Hours	**21**	**16**	**47**	**90**	**80**	**2**	**235**
Contract Rates		$ 68.00	$ 46.00	$ 34.00	$ 23.00	$ 19.00	
Direct Salary Cost		$ 1,088.00	$ 2,162.00	$ 3,060.00	$ 1,840.00	$ 38.00	$ 8,188.00
Overhead Multiplier	165.260%	$ 1,798.03	$ 3,572.92	$ 5,056.96	$ 3,040.78	$ 62.80	$ 13,531.49
Fixed Fee	12.50%	$ 360.75	$ 716.87	$ 1,014.62	$ 610.10	$ 12.60	$ 2,714.94
Total Labor Costs		**$ 3,246.78**	**$ 6,451.79**	**$ 9,131.58**	**$ 5,490.88**	**$ 113.40**	**$ 24,434.42**

Ergonomic Transportation Solutions, Inc. Expenses			
EXPENSES			
Printing Reproduction	$ 60.00		
Travel	$ 450.00		
Deliveries	$ 50.00		
Total Expenses		**$ 560.00**	
ETSI Total Cost			**$ 24,994.42**