CONTRACT NO. C-12-119-07-31
DICKER ROAD
EXHIBIT "E"
Work Authorization Form

WORK AUTHORIZATION NO. 3

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Article 7 of the **Agreement** made by and between the **HIDALGO COUNTY**, acting herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**", and **TEDSI Infrastructure Group**, professional engineers of Mission, Texas, hereinafter called the "**Engineer**".

PART 1.Scope of Work. The purpose of this Work Authorization is to provide services as indicated below:

The scope of services to be provided by the **Owner** is identified in **ATTACHMENT "A" –*Scope of Services to be Provided by the Owner*** attached hereto.

The scope of services to be provided by the **Engineer** is identified in **ATTACHMENT "B" –*Scope of Services to be Provided by the Engineer*** attached hereto.

PART 2. Estimated Cost. The estimated cost for services under this Work Authorization is **$ 1,033,645.00.** This amount is based upon the costs outlined in the ***Fee Proposal*** attached hereto as **ATTACHMENT "D"**.

PART 3. Payment. Compensation and payment to the **Engineer** for the services established under this Work Authorization shall be made in accordance with Articles 5, 6, and 7 of the **Agreement**.

PART 4. Funding. This Supplemental Agreement to Work Authorization No. 3 shall be funded through funding source:
Account No. 3-1315-431-00-122-062-0-731
Requisition No. 246219

PART 5. Period of Service. This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and all work associated with this Work Authorization shall be performed within the time period identified in the ***Work Schedule*** attached hereto as **ATTACHMENT "C"**.

PART 6. Responsibilities and Obligations. This Work Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement**.

PART 7. Acceptance and Acknowledgement. Acknowledgement and confirmation by Hidalgo County Precinct No. 2, Commissioner Hector "Tito" Palacios, as to the content and detail of this Work Authorization No. 3.

Hidalgo County Precinct No. 2

By:_____
Hector "Tito" Palacios, Commissioner Precinct No. 2

PART 8 Acceptance and Approval. Work Authorization is hereby accepted, and approved by Hidalgo Commissioners' Court on _____ as indicated below and effective as of _____ day of _____, 2012.

A purchase order will be issued by the Hidalgo County Purchasing Department after the execution of this document. Issuance of the purchase order will serve as the written Notice to Proceed on Work Authorization No. 3

THE ENGINEER:
TEDSI INFRASTRUCTURE GROUP

BY:_____
Craig F. Stong, (Vice President)

THE OWNER:
HIDALGO COUNTY

_____
Ramon Garcia (County Judge)

ATTEST:

By:_____
Arturo Guajardo Jr., Hidalgo County Clerk

LIST OF ATTACHMENTS

ATTACHMENT "A"	-	Services to be Provided by the Owner
ATTACHMENT "B"	-	Services to be Provided by the Engineer
ATTACHMENT "C"	-	Work Schedule
ATTACHMENT "D"	-	Fee Proposal

CONTRACT NO. C-12-119-07-31
DICKER ROAD
WORK AUTHORIZATION NO. 3
ATTACHMENT "A"

Services to be Provided by the Owner

The following provides an outline of the services to be provided by the **Owner** in the development of the **Work Authorizations**.

The **Owner** will provide to the **Engineer** the following:

1) Prepare and execute a Purchase Order with Hidalgo County Purchasing Department
2) Authorization to the **Engineer** to begin work.
3) Payment for work performed by the **Engineer**.
4) Assistance to the **Engineer**, as necessary, to obtain required data and information from other local, regional, and state agencies that the **Engineer** cannot easily obtain.
5) Secure required Environmental permits from regulatory agencies
6) Acquire additional Right of Way identified by the **Engineer**
7) Provide any available relevant data that may on file concerning the Project.
8) Provide timely review and decisions in response to the **Engineers** request for information and/or submittals and deliverables.
9) Attend and participate in progress meetings as required and as coordinated and conducted by the **Engineer**.
10) Advertise and award, as assisted and recommended by the **Engineer**, construction contracts for the PS&E developed by the Engineer.
11) Attend pre-bid and pre-construction conferences coordinated and conducted by the **Engineer**.
12) Review and approve monthly and final estimates, developed by the **Engineer**, for payment to the Contractor. Compensate and pay the Contractor for work performed as identified in the approved monthly and final estimates.
13) Provide assistance to **Engineer** where necessary and possible with **Owner** information/resources to ensure project is completed within timely/efficient basis.
14) Disseminate mail or deliver mail-out flyer, public meeting agendas and handouts, maps, and other related project information to the public.
15) Providing professional court transcribing and translation service as and when required for the public meeting and/or public hearing.
16) Provide a hard copy and digital copy of court transcript from meetings.
17) Provide hard copy of all public input received from meetings.
18) Publish the notices in the local newspaper, arrange for, pay and provide a location for the public meeting and hearing to be held,
19) Provide a mailing list and copy, collate and mail letters to adjacent property owners, local governmental officials and others as necessary.

CONTRACT NO. C-12-119-07-31
DICKER ROAD
WORK AUTHORIZATION NO. 3
ATTACHMENT "B"

Services to be Provided by the Engineer

The Engineer shall provide the following engineer services required for the preparation of the plans, specification and estimate, and related documents for the above noted project. The Engineer shall maintain a direct line of communication and coordinate very closely with the Owner.

The Engineer shall develop PS&E in conformance with Hidalgo County Specifications/Standards, TXDOT Pharr District requirements and TXDOT Standards, including any appropriate Texas Accessibility Standards (TAS) design considerations.

RIGHT OF WAY SERVICES

Develop right of way documents as follows for the proposed parcel to be taken in the northeast corner of Dicker and Jackson Road. Additional parcel, if required will be added by supplemental agreement. Scope of work is as followings:

1) Preliminary title search and determination of ownership
2) Surveying for identification of platted boundaries.
3) Prepare parcel plats and metes and bound documents
4) Provide title reports
5) Provide right of way acquisition services

UTILITY COORDINATION

6) Utility (All work will be to 10 foot outside of the proposed ROW)
   a) The Engineer shall meet with Utility providers periodically to coordinate the work efforts and resolve any utility related problems. The Engineer shall prepare the minutes for these meetings and forwarded to the County. The Engineer shall address the following issues and any other items deemed necessary during the Utility Coordination meetings:
      i) Activities completed since last meeting
      ii) Problems encountered.
      iii) Late activities.
      iv) Activities required by the next progress meeting.
      v) Solutions for unresolved and/or anticipated problems.
      vi) Information or items required from other agencies/consultants.
   b) If a reimbursable utility relocation exists, the Engineer shall request conveyance documents from the utility provider.
   c) The Engineer shall notify the Utility companies in writing and request the following information in writing:
      i) Project letting date and request they relocate prior to letting.
      ii) Develop their relocation plan according to Utility Accommodation Policy Manual.
      iii) Forward their relocation plan to the Engineer.
      iv) Request in writing when relocation of utilities will be complete.
      v) Upon immediate completion of relocation, request they forward as-built plans to the County.
   d) The Engineer shall develop the typical sections, alignment, and preliminary cross sections addressing the utility location and shall forward these to the respective utility company.

e) The Engineer shall update all files and plans based on the utility company responses.
f) The Engineer shall identify all utility conflicts on the plans and prepare layouts and profiles of existing utility crossings showing conflicts of utilities with proposed improvements. The Engineer shall forward these layouts to the County and the utility companies. During design process, the Engineer shall field verify all visible utility conflicts.
g) The Engineer shall verify the proposed relocation plan submitted by the Utility companies to assure their design is according to Utility Accommodation Policy Manual. Upon the Engineer's review and concurrence with the proposed relocation plan, they shall forward their recommendation for approval to the State.
h) Contact "One Call" to request marking of underground utilities
i) Request existing utility information from local utility companies
j) The Engineer will perform any surveying necessary to for horizontal location of located, "Flagged", underground utilities and visible overhead utilities.
k) The Engineer will obtain measure downs on utilities as follows
    i) Top of key on gas line values
    ii) Top of key on water line values
    iii) Flowline, size of tie-ins and direction of flow for sanitary sewer manholes
    iv) Flowline, size pipe for irrigation systems
    v) Flowline and size of system for inverted siphons.
l) Subsurface Utility Engineering Level A will be provided as follows:
    i) Six test holes on three existing gas lines located between STA 26+00 and STA 28+00.
    ii) Two test holes on existing gas line located at approximate STA 51+75.
    iii) Two test holes on existing gas line located within the intersection of Dicker Road and 10th Street.
    iv) Two test holes on existing irrigation line located at approximate STA 102+00.
    v) Two test holes on existing gas line located at approximate STA 111+00.
    vi) Two test holes on existing irrigation line located at approximate STA 116+00.
    vii) Two test holes on existing irrigation line located at approximate STA 132+50.
    viii) Addition test holes over the above will be added by supplemental agreement.
m) Design of utilities adjustments and/or upgrades of facilities is not included but will be added by supplemental agreement if and when needed.

ENVIRONMENTAL

Categorical Exclusion (CE) Document The work will be performed to provide environmental documentation according to TxDOT procedures. The documentation will be prepared in accordance with 23 CFR 771.117, the Federal Highway Administration's (FHWA) Technical Advisory T6640.8A, TAC - Title 43, Part 1, Chapter 2, TxDOT Environmental Affairs Division's Standards of Uniformity (SOU) for Determination of Categorical Exclusions, TxDOT's Environmental Manual, and other TxDOT guidance as needed. The CE will follow a format specified in the SOUs. The deliverable under this work scope shall be a CE.
The work for this task includes the following:

1) DATA COLLECTION PROCESS AND FIELD VISIT

The Environmental Consultant will research readily available environmental information from appropriate local, state, and federal agencies relative to the project area. A field visit will be conducted in support of the CE document.

2) ENVIRONMENTAL INVESTIGATIONS AND ASSESSMENTS

The CE report will document the economic, social, and environmental conditions and potential impacts of the proposed project. The environmental studies and investigations will include an assessment of one build alternative and the no build alternative. Impacts to be addressed will be in accordance with

applicable TxDOT guidelines and SOUs. The CE will be organized according to a TxDOT format and will include the following sections as applicable to the project:

Description of the existing and proposed facility
Need for and Purpose of Project
Description of Alternatives
Existing/Proposed Right-of-Way/Easements
Project Setting and Land Use
Socioeconomic Issues
Displacements
Environmental Justice/LEP
Airway-Highway Clearance
Soils and Prime Farmlands
Vegetation including beneficial landscaping practices and invasive species
Wildlife
Threatened and Endangered Species
Section 4(f) Properties
Water Quality
Floodplains
Permitting/Waters of the United States, including wetlands
Noise
Air Quality
Cultural Resources – Archeological and Historical
Hazardous Materials/Waste
Construction Impacts
Indirect and Cumulative Analysis
Public Involvement (public comments summarized from the public meeting and public hearing)
Conclusion
Appendices including exhibits, figures, photos, coordination letters, etc.

Description of the Existing and Proposed Facility

The Environmental Consultant will describe the existing roadway facility and the proposed action, which would include right-of-way requirements, project funding and any utility adjustments.

Need and Purpose of the Project

The Environmental Consultant will describe the proposed project and the transportation problem(s) or other needs that the proposed project is intended to address. The Environmental Consultant will prepare this section based on descriptions of the project's need and purpose.

DESCRIPTION OF THE ALTERNATIVES

The Environmental Consultant will describe the build and no-build alternative for project.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

The Environmental Consultant will describe the existing social, economic, and environmental setting for the area affected by the project. The following provides methods of analyses for resources discussed in the CE:

Socioeconomic Issues/Environmental Justice/Project Setting/Land Use – U.S. Department of Commerce, Bureau of the Census 2010 information on the census block groups for the project area will be obtained and summarized. This information will include race/ethnicity, limited English proficiency, income, and other relevant data. Changes in the neighborhoods or community cohesion will be assessed for various social groups in terms of generating new development, changing property values, and accessibility. Impacts on school districts, recreation areas, churches, businesses, and police and fire

protection will be assessed, where information is available. Impacts to minority and/or low income groups due to the implementation of the proposed project will be reviewed. The impact of changes in travel patterns, highway and traffic safety, and public safety from the proposed project will be assessed. Traffic analysis is not included in this scope of service.

The extent of residential and business displacements (if any) will be discussed for the project. The estimated number of single-family residential and multi-family residential homes to be displaced (if any) and a summary of the social characteristics of these households will be determined, based on available public information. Impacts on commercial/retail facilities that may be displaced will also be determined. Impacts on existing farms and commercial/retail facilities that will be displaced will also be determined. Any special relocation considerations will also be identified.

In addition, available population and land use study data will be reviewed to assess potential impacts of the proposed project on land use. This assessment of land use will include residential, commercial, industrial, education, open space, roadway ROW, and undeveloped land use categories.

Economic impacts on the regional and local economies, such as the effects of the proposed project on development, tax revenues and public expenditures, employment opportunities, accessibility, and retail sales will be discussed. The impacts, both beneficial and adverse, on the economic vitality of existing businesses, business districts, and the resultant impact on the local economy will be described. The impacts will be assessed qualitatively.

Airway Highway Clearance – The Environmental Consultant will collect and analyze data concerning airports within two miles of the proposed project.

Soils/Prime Farmlands – Soils in the area of the proposed project will be described according to the Natural Resources Conservation Service (NRCS). To ensure compliance with the Farmland Protection Policy Act (FPPA), the Environmental Consultant will consider proposed project impacts, and if necessary coordinate with the NRCS, complete the Farmland Conversion Impact Rating Form CPA 106 and submit it to the NRCS for review. The NRCS maps for Brazos County will be reviewed, and the NRCS list of prime farmland soil types will be reviewed to determine if the proposed project area is potentially subject to the FPPA. If there is a potential for adverse impacts to FPPA lands, or if the Land Evaluation and Site Assessment score is 160 points or greater, the CE will discuss alternative measures to avoid or minimize the impacts..

Invasive Species and Beneficial Landscaping Practices – The CE will address the Executive Order related to Invasive Species and the Executive Memorandum related to Beneficial Landscaping Practices.
Vegetation – The vegetation of the project area will be categorized and evaluated according to TxDOT's Memorandum of Understanding (MOU) with the Texas Parks and Wildlife Department (TPWD).
Wildlife – Wildlife habitat will be evaluated and potential impacts on wildlife will be assessed. Mitigation of possible impacts including habitat loss and fragmentation, and construction in wetland areas, if applicable, will also be addressed.

Threatened and Endangered Species – Data will be obtained from the U.S. Fish and Wildlife Service (USFWS) and the TPWD to determine the potential presence or absence of federally listed and proposed endangered or threatened species and critical habitat in the proposed project area. The Environmental Consultant will report suitable and non-suitable habitat for the species potentially occurring within the project area. This scope of work does not include the preparation of a Biological Assessment or formal consultation under Section 7 of the Endangered Species Act. The Environmental Consultant will include information from the Natural Diversity Database (NDD) from TPWD.

Section 4(f) Properties – The Environmental Consultant will review available data and perform on site

investigations to ascertain the presence of potential Section 4(f) lands, including public parks, recreation lands, and wildlife and waterfowl refuges that may be impacted by the proposed project.

It is anticipated that a Section 4(f) De Minimis documentation would be required for the Hidalgo County Irrigation District (HCID) No. 2 main canal and/or HCID No. 2 underground pipeline adjacent to Dicker Road. Both properties are contributing resources to the NRHP-listed Louisiana-Rio Grande Canal Company Historic District. The De Minimis Section 4(f) documentation will be prepared for inclusion in the project's added capacity CE document or as a stand-alone document. The documentation will follow TxDOT ENV's Section 4(f) De Minimis Documentation in FHWA Projects – Review Checklist. This task will also include coordination with project design engineers as early as practicable to discuss possible minimization, avoidance, and mitigation strategies. These discussions and implemented strategies will be included in the De Minimis Section 4(f) documentation.

Completion of the De Minimis Section 4(f) documentation will be dependent on TxDOT's prior or concurrent completion of Section 106 coordination with the Texas State Historic Preservation Officer (SHPO) for determination of effects. For purposes of the scope and cost estimation, it is assumed that the project will pose no adverse effects to the Section 4(f) properties and that the Texas SHPO will concur with this determination, to allow for application of the De Minimis Section 4(f) finding. The Historic Consultant will prepare the wording for use in the Section 4(f) sections of the project's environmental document.

Water Quality – The ambient conditions of streams and water bodies that are likely to be impacted by the proposed project, and the identification of the potential for impacts to these water bodies will be assessed. The Environmental Consultant will obtain data from the water quality division of the Texas Commission on Environmental Quality (TCEQ) and the U.S. Environmental Protection Agency (EPA) under the Federal Clean Water Act and the Safe Drinking Water Act regarding principal or sole source aquifers and wellhead protection areas.

Floodplains – National Flood Insurance Program (NFIP) maps will be reviewed to determine what portions of the proposed project area are encumbered by the base (100 year) floodplain. Floodplain encroachment will be described and mitigation measures will be discussed.

Waters of the U.S. including wetlands – The results (impacts) of any waters of the U.S./wetlands delineation for the project will be incorporated into the CE.

Permits/Commitments – The CE will describe any permits that will need to be obtained and any commitments (i.e. mitigation). This scope of services does not include the preparation of a pre-construction notification to the U.S. Army Corps of Engineers for impacts exceeding nationwide permit thresholds.

Traffic Noise – Since this project would increase the number of through-traffic lanes, a traffic noise analysis would be required. Construction noise would also be addressed. The Environmental Consultant will follow the Noise SOUs. The Environmental Consultant will conduct a traffic noise analysis for the build alternative. The objective of the noise analysis will be to 1) model existing and predicted future design year noise levels at various locations along the proposed project; 2) evaluate the possible impact of traffic noise at these locations; and 3) discuss and evaluate possible mitigation measures to reduce or eliminate potential noise impacts. Predictions of traffic noise levels will be performed in accordance with the current and applicable state and federal regulations, standards, and guidelines using the Federal Highway Administration (FHWA) Traffic Noise Model (TNM) software. Traffic data is required and should consist of the existing (estimated time of completion [ETC]) and projected design year (existing plus 20 years) peak hour volumes for cars, medium trucks, and heavy trucks traveling on the mainlanes. Traffic data needed to complete this item will be supplied by TxDOT and should include average annual daily traffic count's (AADT), design hourly volumes predicted for

lanes, traffic mix, directional traffic split for the design hour, and speeds. This information will be provided for existing year (ETC) and 20 year proposed AADT. The potential noise impact on sensitive receptors will be assessed in accordance with the FHWA Federal Aid Highway Program Manual, Volume 7, Chapter 7, Section 3.

The noise analysis will consist of the following tasks.

Subtask 1 – Determine Receptor Locations

Identify noise-sensitive land uses and activities that currently exist in the proposed project area and where development is planned, designed, and programmed. Determine receptor locations based on noise-sensitive land uses and activities identified. Where possible, the preliminary engineering layout will include adjacent land use information, to include existing and planned (platted) subdivisions, residences, commercial facilities, parks, etc. This scope assumes that no more than 10 noise receiver locations will be modeled.

Subtask 2 – Model Existing and Predicted Future Noise Levels

The Environmental Consultant will model existing and future worst case noise levels at selected locations along the Build alternative using TNM 2.5 software. This scope does not include field measurements for existing noise levels. Traffic data information will be provided by the design engineers for this analysis. The Environmental Consultant will assess potential impacts of future noise levels on sensitive land uses including analysis and documentation of the results.

Subtask 3 – Noise Abatement Measures

If the predicted noise levels at the sensitive receptors approaches or exceeds FHWA's Noise Abatement Criteria, or substantially exceeds existing noise levels, the Environmental Consultant will provide a preliminary evaluation of alternative noise abatement measures for reducing or eliminating future traffic noise impacts. Should the noise analysis determine that noise abatement measures are warranted, a noise barrier analysis and a noise workshop would be an additional service.

Subtask 4 – Prepare Traffic Noise Section of CE

The Environmental Consultant will review and analyze the results of the noise analysis, then prepare the traffic noise section of the CE.

Air Quality – The Environmental Consultant will prepare the air quality section of the CE to document the status of regional air quality and the project impacts. A mobile source air toxics (MSAT) analysis will be required and since the Average Annual Daily Traffic is expected to be below 140,000, a qualitative analysis will be performed. The qualitative analysis will include:

1. Brief MSAT description and discussion of national trend data projecting substantial overall reductions in emissions due to stricter engine and fuel regulations issued by EPA;
2. Comparison of the expected effect of the project on traffic volumes, vehicle mix, or routing of traffic, and the associated assumed changes in MSATs;
3. An assessment of schools, licensed day cares, elder care facilities, and hospitals located within 100 and 500 meters of the ROW;
4. Discussion of information that is incomplete or unavailable for a project-specific assessment of MSAT impacts, in compliance with CEQ regulations (40 CFR 1502.22(b)); and
5. Summary of current studies regarding the health impacts of MSATs, in compliance with 40

CFR 150.22(b);

The qualitative analysis will be included in the CE document. This scope does not include a quantitative analysis.

Archeological Resources – An RKEI Archeologist will complete the Project Coordination Request (PCR) form for submittal to the Pharr District and TxDOT ENV. It is not anticipated that an archeological survey would be required because minimal ROW is required at one corner and improvements are occurring in a previously-disturbed ROW. However, if it is determined that an archeological survey is required by TxDOT ENV, then this service will be added by a supplemental agreement.

Historic Resources

Subtask 1 – Project Coordination Request (PCR) Form Preparation

The Historic Consultant will prepare a Project Coordination Request (PCR) form, for submittal to TxDOT Pharr District/TxDOT ENV. The PCR form will be completed as outlined in TxDOT ENV's Standards of Uniformity – Historical Studies Project Coordination Request (PCR).

Subtask 2 – Research Design

Prior to undertaking the fieldwork, the Historic Consultant will conduct a literature review of the project area and present a research design to be submitted to TxDOT Pharr District/TxDOT ENV as outlined in TxDOT ENV's Standards of Uniformity for Non-archeological Historic-age Resource Research Designs. The research design will include:

- Project description and discussion of possible project impacts.
- List of consulting partners including prime contractor, subconsultants, Certified Local Governments, and local preservation contacts, including County Historical Commissions.
- Survey methodology describing the Area of Potential Effects (APE), the study limits of the survey area, the historic-age cutoff date, and the historic period of significance.
- Discussion of previously designated historic properties in the study area, with reference to Texas Historical Commission (THC) survey files and Texas Historic Sites Atlas for identification of properties that have been previously listed in the National Register of Historic Places (NRHP), designated as Recorded Texas Historical Landmarks, and/or are included in the Texas Historic Sites Inventory or other available local historical surveys.
- Literature review results appropriate to the study area, its historic-age resources, and historic period of significance.
- Maps based on aerial photographs or USGS quadrangle showing the APE, proposed project locations, major street names and other directional landmarks, and location of Official State Historical Markers in the study area.
- Bibliography of sources consulted in the literature review and research design.

Subtask 3 – Reconnaissance-Level Field Survey

Following TxDOT ENV's acceptance of the research design, the Historic Consultant will complete a reconnaissance-level field survey of the proposed project to identify and record historic-age

resources within the project's APE. The location of each identified resource will be plotted on an aerial photograph, USGS map, or similarly detailed map. Photographs will be taken, addresses obtained, and physical data gathered on the resource, such as property type and subtype classifications, stylistic influences, construction dates, integrity issues, and eligibility recommendations. Representative contextual photographs will be taken of the surrounding the proposed project improvement locations for use in understanding the overall setting of the study area around the project's APE.

Subtask 4 – Draft Reconnaissance-Level Survey Report

The Historic Consultant will prepare two paper copies and one electronic copy (in PDF format) of the draft reconnaissance-level historic resources survey report for submittal to TxDOT Pharr district/TxDOT ENV as outlined in TxDOT ENV's Standards of Uniformity for Non-archeological Historic-age Resource Reconnaissance Survey Reports. The report will include the following:

- Brief overview of the results of the reconnaissance survey, including an outline of the survey methodology, a background history of the study area presenting historic contexts relevant to the time period associated with the historic-age resources, brief description of property types, and NRHP registration requirements with integrity analysis.

- Discussion of previously designated historic resources within 1,300 feet of the project, even if they are outside of the APE.

- Photographic documentation for each identified historic-age resource in the project's APE. Photographs will be attached to separately labeled pages that clearly identify project name, address (or location) of resource, direction of the photograph, style and/or form of the resource, NRHP eligibility, resource integrity issues, and any limitations encountered when photographing the resource.

- Evaluation of NRHP eligibility for each identified historic-age resource in the project's APE.

- Preliminary assessments of potential direct, indirect, and cumulative effects on historic properties, noting presence or absence of character-defining features within the proposed right-of-way. Such assessments may be limited if information regarding exact project improvement location and improvement type is not available.

- Recommendations for additional intensive survey efforts to finalize NRHP determinations of eligibility.

- Proposed changes to the research design arising from the results of the reconnaissance survey, including contextual issues, comparative property information needs, data gaps, and discussion of additional work necessary to finalize the evaluation and documentation phases of the project, based on the results of the reconnaissance survey.

- An inventory of identified resources that lists their resource ID numbers, addresses/locations, property type and subtype classifications, stylistic influences, construction dates, integrity issues, and NRHP eligibility recommendations or need for intensive-level investigations to finalize NRHP eligibility.

- A map or maps based on aerial photographs or USGS quadrangle showing the APE, major street names and major directional landmarks, and the location of each identified historic-age resource labeled with its appropriate resource ID number.

Subtask 5 – Final Reconnaissance-Level Survey Report

The Historic Consultant will incorporate TxDOT ENV comments to the draft historic resources survey report as needed and will provide two paper copies and one electronic copy (in PDF format) of the final historic resources survey report.

Subtask 6 – Environmental Document – Historic Resources Wording

The Historic Consultant will prepare the wording for use in the historic resources sections of the project's environmental document. An electronic copy of the wording in Word format will be provided.

Hazardous Materials – The Environmental Consultant will purchase a regulatory database search report including electronic GIS shapefiles. A review of the provided records will be performed according to TxDOT standards to identify listed hazardous waste generators; treatment, storage, and disposal facilities; solid waste landfills; unauthorized sites; documented spills; and underground storage tank sites within the proposed project area. Where practicable, during the field investigations, the hazardous materials sites identified in the database search that are adjacent to the project corridor will be visually inspected from public access points for the potential presence of hazardous substances and petroleum products on the subject properties. Identified sites will be located on maps. The current regulatory status of the site will be determined and presented along with the additional investigations that may be recommended based on these findings. A Hazardous Materials Initial Site Assessment (ISA) would be provided to TxDOT for their files.

This task does not include interviews with any local or adjacent landowners regarding the potential for hazardous materials use or sites. Should the hazardous materials sites review indicate that a Phase I Environmental Site Assessment, sampling, and/or subsurface investigations are warranted, these items would be additional services.

Construction Impacts – Potential adverse impacts associated with construction of the proposed project will be assessed.

Indirect and Cumulative Impacts – Since this project adds capacity, an indirect and cumulative impact analysis would be required. The Environmental Consultant will identify indirect and cumulative impacts in accordance with the requirements of FHWA Technical Advisory T 6640.8A (1987), Report 466: Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects (National Cooperative Highway Research Program 2002), TxDOT Guidance on Preparing Indirect and Cumulative Impact Analyses (2010), and related guidance from FHWA and TxDOT.

Public Involvement – A summary of the public meeting that will be held will be summarized for the CE. If a public hearing is held, the public's comments will also be summarized in the CE.

Summary – The Environmental Consultant will prepare the summary section of the CE.

Appendices – Photos and figures to include location map, existing and proposed typical sections, project layouts, USGS map including any floodplains, natural diversity database, noise receiver maps, soils map, record of resource agency coordination, etc. will be included.

3) DELIVERABLES AND CE REVIEW/REVISIONS

The information above will be compiled into a preliminary draft CE document. The CE text will be prepared on an IBM compatible computer with Microsoft Word software and a CD will be provided, if

requested. Exhibits will be limited to 8.5"x 11" format, if possible. The necessary Client copies will be provided as necessary. The Environmental Consultant will provide the following:

- Two (2) copies of the draft CE document (V1) to the TxDOT- Pharr District for review and comment. Upon receipt of comments, revisions will be made and the additional information needed to complete the items will be incorporated into the draft CE (V2).
- Six (6) copies of the draft CE document (V2) will be prepared and provided to the TxDOT- Pharr District for TxDOT Environmental Affairs Division (ENV) review.
- After receiving comments from TxDOT ENV, the Environmental Consultant will revise the draft CE document and submit the revised drafts back to TxDOT ENV for resource agency review (V3) (3 copies).
- Six (6) copies of the draft CE document (V4) will be prepared and provided to TxDOT- Pharr District for FHWA review (V4).
- After receiving comments from FHWA, the Environmental Consultant will revise the draft CE document and submit the revised draft to the TxDOT- Pharr District for (V5) (6 copies).
- After advertising an opportunity for a public hearing, the Environmental Consultant will provide final CE documents (V6) (6 copies).

4) Public Meeting

The Environmental Consultant will plan, coordinate, and conduct one Public Meeting for the project to solicit input from the community. The Public Meeting will be held in either an open house format, followed by a formal presentation and oral comment period or without the open house. The Engineer's or City's staff will be present at the Public Meeting to receive comments from the public and other attendees. The tasks to be performed will include the following:

- The Environmental Consultant will update and maintain the project mailing list and prepare a Public Meeting notice to inform adjacent property owners and other interested persons of the Public Meeting.
- Prepare materials to facilitate the Public Meeting.
- Identify and secure the venue for the Public Meeting and coordinate the logistics in support of the hearing.
- Update and maintain a mailing list that includes, but is not limited to adjacent property owners, special interest groups, and others identified by TxDOT to be used for the hearing notice.
- Prepare, publish, and distribute meeting notices and obtain affidavits of publication, in accordance with TxDOT and FHWA requirements. Notices will be published in English and in Spanish newspapers at 30 days and 10 days prior to the Public Meeting to notify the public in advance of the meeting.
- Prepare sign-in sheets, comment forms, handouts, and pre-printed nametags for staff.
- Identify and make arrangements for equipment needs (e.g., easels, chairs, tables, and audio-visual) including transportation, set-up, and break down.
- Provide for an English to Spanish translator at the Public Meeting.
- Provide for an English to Spanish translated materials such as legal notice, comment forms and handouts.
- Provide and coordinate Public Meeting informational and directional signs (registration/sign-in, written comment station, and directional arrows for traffic flow).
- Provide two personnel (Sr. Planner and Env. Planner) to conduct the Public Meeting.
- Prepare graphics related to the environmental study.
- Provide a Summary and Analysis Report that will include copies of notices, photographs, handouts, sign-in sheets, comment forms, letters, and a transcript of comments made during the Public Meeting. The Public Meeting comments and responses will be compiled to properly record the meeting and hearing. There will be one Public Meeting summary report. Four bound copies and one electronic copy in PDF format of the summary report will be prepared.

5) Afford for an Opportunity for Public Hearing

The Environmental Consultant will prepare and advertise an Opportunity for a Public Hearing.

- Prepare and publish a public hearing notice and obtain affidavits of publication, in accordance with TxDOT and FHWA requirements. Notices will be published in English and in Spanish newspapers at 30 days and 10 days.

This scope of work does not include holding a public hearing. If a public hearing is requested to be held, an additional scope and fee will be added by supplemental agreement.

PLAN, SPECIFICATIONS AND ESTIMATE SERVICES

1) The Engineer shall prepare and submit work under this task in accordance to the PS&E Preparation Manual. The location of project should depict the entire project with beginning and ending (Station Numbers/Reference Markers) for each noted CSJ. Mapping landmarks (side streets, creeks, etc.) along with North Arrow and a scale should be shown to help relate the physical location of the project.
2) The Engineer shall use the Design Speed, the Funding Category, Average Daily Traffic, ADT, Roadway Classification, Location Type, and the appropriate Design Criteria to develop the typical sections as set forth in the Roadway Design Manual, PS&E Preparation Manual and other deemed necessary State approved manuals to prepare and submit the work under this task. The existing typical section should be shown with current roadway (pavement, right of way, etc.) characteristics. The proposed typical sections should be shown below the existing typical section with all related pertinent (pavement, right of way, etc.) information for the proposed roadway construction.
3) For Roadway, Bridge and Traffic quantities, the Engineer shall prepare and submit work under this task in accordance to the PS&E Preparation Manual and other deemed necessary State approved manuals. All summaries shall be consolidated per CSJ, City or County participation, etc. Any quantities shown "For Contractor Information Only" should be shown as such.

TRAFFIC CONTROL PLANS (TCP)

1) The Engineer will develop a conceptual traffic control plan (TCP), roll plot, and narrative. These information will be submitted to the County and TxDOT for review. The Engineer shall make a presentation to the District Traffic Control Safety Review Committee to obtain approval of the TCP prior to development of plan sheets. Modifications requested by TxDOT or County after approval will be consider additional work and be added by supplemental agreement.
2) The Engineer shall notify the State if they plan on requesting a speed reduction at the work zones. The Engineer shall prepare the request form using the latest approved Strip Map within the project limits in conjunction with the Traffic Standards for this request. If the project limits is within the city limits, the request shall be coordinated with the State and the local municipality at the early design process.
3) The Engineer shall provide the State with a hardcopy and accompanying electronic file of a schedule and Critical Path Method for project duration for each phase of construction using SureTrack software
4) The Engineer shall describe the type of work to be performed for each phase of sequence of construction and any special instructions (ex: storm sewer, culverts, bridges, railing, illumination, signals, retaining walls, signing, paving surface sequencing or concrete placement, ROW restrictions, utilities, etc.) that the contractor should be made aware to include limits of construction, obliteration, and shifting or detouring of traffic prior to the proceeding phase.
5) The Engineer shall include the work limits, the location of channelizing devices, positive barrier, location & direction of traffic, work area, stations, pavement markings, and other information deemed necessary for each phase of sequence of construction.
6) If Engineer determines that a standard is not applicable to address the entire project, then the Engineer shall prepare layouts for each respective phase of sequence of construction to illustrate any necessary additional construction details not covered by the Standards to address work limits for each sequence in stations,

channelizing devices, barricades, positive barrier, tapers, buffer zones, TCP signage, signs, work zone pavement markings, work area, location & direction of traffic, locations for pedestrian crossings, and other information deemed necessary for each phase of sequence of construction. The Engineer shall develop the layouts by referring to the TxDOT standards, latest version of the TxMUTCD for non-TCP signage that may be needed as part of the TCP signage for intersections. The layouts shall address construction of detours, access to business, homes, side streets, and driveways, and reroute of traffic to other roads.

7) The Engineer will address drainage issues that are a result of changes in horizontal and vertical profiles by specifying the location and size of the temporary drainage structures.
8) The Engineer shall prepare the plan and profile sheets and cross sections for all detours.
9) The Engineer will develop TCP plans as double stacked, 1" = 100'. TCP plans will be developed for a two phase approach to traffic control.

ROADWAY DETAILS

1) The alignment sheet(s) include the following for complex projects and/or where it is not desirable to show the following information on the plan and profiles sheet(s): include the project limits for the entire project, label curve date bearings/coordinates for each alignment, computer generated data may be graphically place on the sheet(s) and if applicable the State Plane Coordinates System should be noted on this sheet(s).
2) The Benchmark Data sheet shall be developed in tabulated form and accompanied by surveyor's sketch showing the Station Number from respective alignment, Offset, and Elevation and Physical Description.
3) The Engineer shall design the plan (horizontal) and profile (vertical) including roadway transitions based on the controlling criteria previously defined and as set forth in the previously listed. The Engineer shall develop the alignment for the project in GEOPAK format. Plan and Profile sheets will be developed at 1" =100'.
4) The Engineer shall identify and notify the State all locations not meeting the set criteria. In addition, the Engineer shall provide alternatives and a recommendation to address these design issues.
5) The Engineer shall develop and verify all cross sections in preparation of the proposed traffic control plan, drainage, utilities, right-of-way, and access onto adjacent properties. In addition, the cross sections shall be drained to maintain the natural watershed unless otherwise directed by the State.
6) The Engineer shall determine all cut and fill quantities.
7) The Engineer shall design all intersections to accommodate the design vehicles turning radius. The ADA-wheelchair ramps shall be designed in accordance to the TDLR compliance and the latest TxDOT's Pedestrian Ramp Standards in conjunction with the requirement of the latest version of the TxMUTCD as it relates location of the traffic signals pedestrian heads, signage, and pavement markings.
8) The Engineer shall design all longitudinal barriers (railing and guardrail), raised median, fencing, bus bays, parking areas, mailboxes, and shoulder texturing in accordance to the criteria set forth in the roadway design manual and standards. Miscellaneous Details Sheet(s) may be developed to illustrate any necessary additional construction details not covered by the Standards.

DRAINAGE DETAILS

1) The Engineer shall use the Roadway Design Manual, Hydraulic Manual, PS&E Preparation Manual, and other deemed necessary State approved manuals to prepare and submit the work under this section
2) The Engineer shall use the above-listed manuals to prepare and submit the work under this task. The hydraulic calculations shall have the following based on previously County approved drainage study:
   a) Description-Material, Size, & Entrance (headwall)
   b) Design discharges, Flow per barrel, barrel slope, and Manning n-value
   c) Inlet flow line, allowable headwater, roadway (shoulder) elevation, calculated inlet headwater elevation
   d) Outlet flow line, Tailwater for design frequency/frequencies, type of flow, critical depth, and calculated friction losses, calculated outlet water elevation
   e) Controlling headwater elevation, outlet velocity, and recommended countermeasures to maintain an acceptable outlet velocity.
3) The Engineer shall show the location of culverts and ditches on the roadway plan view.
4) The Engineer shall use TxDOT standards preferably at all times. Modification to inlets, pipe connection, bedding details, and other elements pertaining to drainage details shall be included under this work task. The BCS sheet

must be submitted for all box culverts within the project limits. This sheet must be signed and sealed by the Engineer.

TRAFFIC ITEMS

The Engineer shall coordinate with the TXDOT Pharr District for traffic items under TXDOT maintenance (Signs, Pavement Markings and Traffic Signals). The Engineer will incorporate TXDOT comments into the PS&E.

1) SIGNS

The Engineer shall inventory all signage through the project limits including those limits that are considered incidental to the project limits. All intersections and roadway signage shall be designed and spaced according to the requirements set forth in TXDOT's Sign Crew Field Book and standards for work under this task. Any signs no longer used by the State shall be taken out and replace by an accepted TXMUTCD signs. The Engineer shall design all signage according to the latest version of the TXMUTCD, Supplemental to TXMUTCD, and TXDOT's Signs and Markings Manual.

Signing Layouts (double banked 1"=50') shall include the following:

- Legend
- Notes
- Callouts/dimensions
- Existing signs to remain
- Existing signs to be removed
- Proposed signs type/location
- Summary - Proposed signs
- Summary - Existing signs to be removed

2) PAVEMENT MARKINGS

The Engineer shall design all pavement markings according to the latest version of the TXMUTCD, Supplemental to TXMUTCD, and TXDOT's Signs and Markings Manual. The Engineer will develop pavement marking details within the work area. All striping to be removed will be so indicated along with complete restriping of the project area.

Pavement Markings Layouts (double banked 1"=50') shall include the following:

- Legend
- Notes
- Callouts/dimensions
- Existing striping to remain
- Existing striping to be removed
- Proposed pavement markings
- Tie in proposed pavement markings to existing striping
- Summary - Pavement Markings

3) TRAFFIC SIGNALS

The Engineer shall inventory all traffic signals through the project limits including those limits that are considered incidental to the project limits. All traffic signals shall be designed and spaced according to the requirements set forth in TXDOT's standards for work under this task. The Engineer will submit to TXDOT traffic signal warrants.

Traffic Signal will be installed at the following intersections:

- Dicker Rd at Spur 115 (23rd St) - Modification

- Dicker Rd at SH 336 (10th St) - Modification
- Dicker Rd at McColl Rd - Modification
- Dicker Rd at FM 2061 (Jackson Rd) - Modification

General Requirements:

- Contact Local Utility Company, conduct joint field investigation, determine service drop locations, determine need for adjustment of overhead utility lines.
- Select TXDOT standard drawings.
- Signal configuration shall be span wire with luminaires on signal poles.

Traffic Signal Layouts to include the following layouts:

- General Notes
- Summary - Traffic Signal
- Existing Conditions Layout (single bank 1"=50')
- Proposed Signal Layouts (single bank 1"=60') shall include the following:
    - Legend
    - Notes
    - Signal configuration type
    - Detection location
    - Controller location/type
    - Ground box location/type
    - Wiring/Conduit location
    - Signal head orientation
    - Luminaires location/orientation
    - Overhead signs location
    - Phasing/Phase sequence diagram
    - Electrical schedule
    - Detector schedule
    - Signal head schedule
    - Foundation schedule
    - Sign details schedule
    - Timing chart (isolated)
    - Electrical service data

STORM WATER POLLUTION PREVENTION PLANS (SW3P)

The Engineer shall submit and prepare separate SW3P sheets when soil is to be disturbed as part of the erosion control measures during each phase of the sequence of construction. The general plan for the SW3P on this project is to enclose the area under construction including existing and proposed inlets with erosion control devices and provide a stabilized construction entrances at points where traffic will be entering or leaving the construction site. The Engineer shall also design structures or features to control erosion and suspended sediments for post-construction. A standardized General Note will serve as the SW3P where there is to be no soil disturbance (seal coats, overlays, etc.) in the project. The Engineer shall refer to the Hydraulic Design Manual, TxDOT standards, TxDOT Storm Water Management Guidelines, the Environmental Manual, and District Environmental Staff for guidance on work under this task. Erosion Control measures shall conform to one or more of the approved TxDOT / Texas Natural Resources Conservation Commission (TNRCC) / US Environmental Protection Agency (EPA) / US Army Corps of Engineers (USACE) Best Management Practices. The appropriate Best Management Practice(s) shall be listed on the Environmental Issues, Permits, and Commitments (EIPC) sheet to be included as a Plan Sheet and shall be followed by the Engineer and Contractor to completion. Plan sheets will be develop separate from TCP as 1"=100', double stacked.

CROSS SECTIONS

For the Final Submission, the Engineer shall furnish the final cross - section plots, on 36" wide x 120" long roll plots, showing both the original terrain and the design cross-sections, showing the roadway template, at a vertical scale of 1"=10' and a horizontal scale of 1"=10'. The design cross - sections shall indicate the slope rate on the side slopes. The Engineer shall use GeoPak software and provide the state with the applicable files. Cross sections are to show proposed pavement thickness, top of subgrade, finish grade of side bar ditches with slopes and location of right of way. Indicating other features within the cross sections is not part of the scope of work, ie. Underground utilities, storm sewer lines, top soil, etc.

BRIDGE DESIGN

Bridge design will be provided for the widening of the San Juan Main Canal and HCDD# 1 South Floodway Bridge. Work is limited to widening of existing structures. Additional work if and when required by TxDOT for bridge replacement, detail evaluation of existing conditions and global stability analysis of fill section will be added by supplemental agreement if and when required.

1) Preparation of Structural Details
2) Preparation of Bridge Layouts (each bridge)
   a) Bridge Layouts (PLAN)
      i) Horizontal curve information or bearing of centerline.
      ii) Including horizontal, vertical, and template information of all roadways or railroads crossed.
      iii) Bearing of center line or reference line.
      iv) Skew angle(s).
      v) Slope for header banks and approach fills.
      vi) Control stations at beginning and ending of bridge (with deck elevation), intersections, etc.
      vii) Approach pavement and crown width.
      viii) Bridge roadway width and curbs, face of rail, shoulders, or sidewalks.
      ix) Bridge end treatments (cement stabilized backfill details, etc.)
      x) Limits and type of riprap.
      xi) Proposed features under structure.
      xii) Location of profile grade line.
      xiii) North arrow.
      xiv) Typical bridge roadway section including preliminary proposed beam types and spacings.
      xv) Cross slope and superelevation data.
      xvi) Minimum horizontal clearances will be calculated and indicated (dimensioned) to controlling features, when applicable.
      xvii) Location of soil core holes (station and offset), shown on layout.
      xviii) Bent stations and bearings.
      xix) Retaining wall locations.
      xx) Traffic flow directional arrows.
      xxi) Railing types shown (use single slope railing unless otherwise directed).
      xxii) Joint types and seal size, if used.
      xxiii) Beam line numbers consistent with span details.
      xxiv) Critical horizontal clearances (location of railroad tracks, nearby structures and utilities).
      xxv) Bearings of utilities.
      xxvi) Overhead sign bridge locations, if applicable
   b) Bridge Layouts (ELEVATION)
      i) Type of foundation.
      ii) Finished grade elevations at beginning and end of bridge,
      iii) Overall length of structure.
      iv) Length, type of spans and units.

v) Type of railing.
vi) Minimum calculated vertical clearance(s).
vii) Existing and proposed ground lines clearly marked.
viii) Grid elevations and stations.
ix) Bent numbers encircled.
x) Stationing of bridge compatible with grid stations.
xi) Standard title.
xii) Profile grade data.
xiii) Type of riprap.
xiv) Soil Core Hole information with penetrometer test data shall be shown on the bridge layout at correct station, elevation and scale.
xv) Dowel locations at all bents.
xvi) Column "H" heights.
xvii) Number, size and length of foundations.
xviii) Overhead sign bridge locations.

c) Additional layout requirements for waterway structures and bridge classification culverts.
i) Design and 100-year peak discharges.
ii) Design and 100-year high water (HW). (Recorded HW and date if available.)
iii) Natural and through-bridge velocities for design and 100-year floods.
iv) Calculated backwater for design and 100-year floods.
v) Direction of flow for waterway crossings.
vi) Contours for water crossing.

3) Bridge Total Quantities, Cost Estimates, and Summary Sheets (each bridge)
4) Bearing seat elevations for each beam or girder. Top of cap elevations for non-beam type structures.
5) General Guidelines for Bridge Design - The Engineer shall prepare a bridge layout of each bridge structure for the TxDOT's review and approval. The bridge layout shall be in conformance with the Bridges and Structures, Operation and Planning Manual and the Bridges and Structures, Detailing Manual. Soil core hole data is not required for submission of the preliminary bridge layout. No bridge design work is to be performed until the State has given the Engineer written approval of the preliminary bridge layout. Several months may be required after the preliminary bridge layout is submitted for the District to obtain approval and/or permits from the following: TxDOT Design Division, FHWA, US Army Corps of Engineers, Texas Parks and Wildlife. Consequently, the Engineer's design contract schedule should reflect all bridge layouts being submitted at the earliest possible date, and generous review times should be associated with the submittals.

DELIVERABLES

PS&E

The Engineer shall deliver to the County and TxDOT Project Manager one copies and one CD's containing PDF's of the plan sheets provided, respective of the 1st, 2nd, and 3rd submittal. For the final submittal, the Engineer shall submit one set in Mylar accompanied by a paper copy and two CD's containing PDF's of the final plans.

1st Submittal -

1) Design Summary Report
2) Title Sheet
3) Typical Sections (existing and proposed)
4) Traffic Control Plan
5) Utility Layout (conflicts identified)
6) Plan & Profile
   a) Vertical Alignment (existing and proposed)
   b) Horizontal Alignment (existing and proposed)

7) Miscellaneous Details
8) Bridge Layouts
9) Corresponding Quantity Summary Sheets
10) Corresponding Standard Detail Sheets for all Items of Work in this submittal
11) Preliminary Estimate
12) Design Exceptions/Waivers required
13) Newly created Special Provisions/Specifications to be used (Form 1814)
14) R.O.W. (issues identified)
15) 2 Rolls of Cross Sections

2nd Submittal -
1) Index Sheet
2) Hydrologic Computation Sheets
3) Hydraulic Data Sheets
4) Drainage Area Maps
5) Drainage Plan & Profile
6) Drainage Structure Details
7) Storm Sewer Details
8) Storm Water Pollution Prevention Plan
9) Miscellaneous Details
10) Bridge Details
11) Corresponding Quantity Summary Sheets
12) Corresponding Standard Detail Sheets for all Items of Work in this submittal
13) Updated Estimate
14) Utility Adjustment/Relocation Details
15) R.O.W. Acquisition Detail
16) 2 Rolls of Cross Sections

3rd Submittal -
1) Final Index of Sheets
2) Pavement Marking Layout/Details
3) Bridge Details
4) Miscellaneous Details
5) Corresponding Quantity Summary Sheets
6) Corresponding Standard Detail Sheets for all Items of Work in this submittal
7) Final Estimate
8) General Notes
9) Certifications
10) Form 1002
11) Cross Sections

4th Submittal - PS&E Package 100% complete.

ENVIRONMENTAL ASSESSMENT
The Engineer shall submit the Environmental Assessment to the Texas Department of Transportation for review and approval. Three hard copies and one CD with PDF's of the submittal will be provided for the preliminary draft, final draft and final assessment.

HYDRAULIC DELIVERABLES
The Engineer shall submit the Hydraulic Report signed and sealed by a Registered Professional Engineer in the State of Texas.

SURVEY DELIVERABLES

The Engineer shall submit, after completion of PS&E, all original field books containing all survey information requested for this work authorization. The field book shall contain all information gathered in the field. The survey information provided shall be to the surveyor’s best knowledge, accurate, and complete.

Electronic files (*.txt) containing survey information with proper identification and with the following data format x, y, and z NAD-83 coordinate system. The x-coordinate corresponding to the east bearing, the y-coordinate corresponding to the north bearing, and the z-coordinate corresponding to the vertical elevation.

Electronic 2d and 3d Microstation files (*.dgn) containing survey information with proper identification and with the following data format x, y, and z NAD-83 coordinate system.

CONTRACT NO. C-12-119-07-31
DICKER ROAD
WORK AUTHORIZATION NO. 3
ATTACHMENT "C"
Work Schedule

Description	**Time**
Purchasing Department PO and NTP	NTP
Begine PS&E and Draft CE Report	7 months
TxDOT Review	3 months
Revise CE and Resubmit	1 month
Review by FHWA	2 months
Revise CE and Resubmit	1 month
Approval to afford opportunity to Public Hearing	3 months
Clearance from FHWA	1 month
Purchase of One Parcel and finalize PS&E	4 months
Total	22 months from NTP

CONTRACT NO. C-12-119-07-31
DICKER ROAD
WORK AUTHORIZATION NO. 3
ATTACHMENT "D" FEE PROPOSAL
UPDATED 10/10/13

ESTIMATE OF CONSTRUCTION COST	**$**	**9,800,000.00**

BASIC ENGINEERING SERVICES

ITEM		AMOUNT
General Management	$	33,120.00
Utility Coordination	$	69,080.00
General PS&E	$	83,250.00
Traffic Control Plan	$	81,060.00
Roadway Details	$	168,935.00
Drainage Details	$	54,710.00
Signing, Pavement Markings and Traffic Signals	$	121,805.00
EPIC & SW3P	$	31,785.00
Bridge Design	$	105,920.00
Project DirectCosts	$	30,000.00
SUBTOTAL BASIC ENGINEERING SERVICES	$	779,665.00

SPECIAL ENGINEERING SERVICES

ITEM		AMOUNT
Stakeholder Meeting (TEDSI)	$	36,480.00
Environmental Documentation Allowance	$	172,500.00
Public Involvement Allowance	$	45,000.00
	$	-
SUBTOTAL SPECIAL ENGINEERING SERVICES	$	253,980.00

TOTAL FEE PROPOSAL	**$**	**1,033,645.00**