

# EXHIBIT A

## Addendum Scope of Professional Services

### New Freeway from the intersection of the Collin County Outer Loop with SH 121 to the future US 380 Freeway on the north side of the City of Princeton

#### Purpose

The addendum to the scope of work to be performed by the ENGINEER under this contract will consist of Schematic Design and Environmental services including local environmental document preparation; and project management for the ultimate build-out of a new freeway facility. The “project” is defined as a new-location freeway that extends from near the intersection of the Collin County Outer Loop (CCOL) with SH 121 to the future US 380 freeway Princeton Bypass, approximately 10 miles long. Interchange revisions are anticipated along SH 121, CCOL, and US 380 Princeton Bypass.

Note: Subsequent use of terms “SURVEYOR” and “ABTRACTOR” refer to members of the ENGINEER’s team.

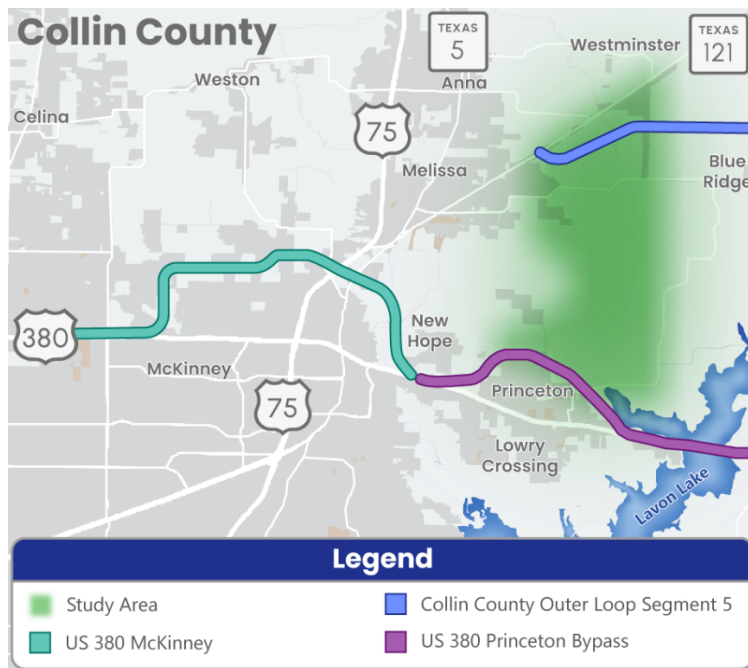


Figure 1 - Project Study Area

#### Objective 5: Environmental Studies

The Engineer shall prepare a Local Draft and Final Environmental Document to disclose the potential impacts of the proposed action. The level of documentation will support the COUNTY’s ability to acquire ROW for the proposed action. If federal funds are obtained to assist with the purchase of ROW or for construction of the proposed improvements, additional coordination with outside agencies, field studies, and analyses under some resource categories will be required. The ENGINEER shall coordinate with NCTCOG for review and support services of the project purpose and need and development of reports and exhibits to be included within the Local Environmental Document.

# Overview

Task 1	Purpose & Need
Task 2	Environmental Analyses
Task 3	Draft Environmental Document
Task 4	Final Environmental Document

## TASK 1: PURPOSE & NEED

The ENGINEER shall prepare a Purpose and Need Memorandum. The ENGINEER shall identify the needs/problems to be addressed by the proposed action and provide relevant supporting data for the need statements.

## TASK 2: ENVIRONMENTAL ANALYSES

### ► Task 2A – Desktop Data Collection – No Additional Work

The ENGINEER shall review data and prepare an Environmental Constraints Map.

- The ENGINEER shall provide Draft and Final Environmental Constraints Map based on desktop-level mapping data (shapefiles and other geospatial data) from NCTCOG, TCEQ, and other local, state, and federal existing environmental databases. This includes NDD, SURGO, NWI, historic aerials, city/county planning documents, and PALM data. The ENGINEER shall review the collected data from this information and integrate additional data into the study file to evaluate tasks for supporting documentation.
- The ENGINEER shall collect existing data, reports, and mapping for review and consideration in the development of the corridor and preferred alignments, the ongoing environmental analyses, and use in public meeting materials.

### ► Task 2B – Field Surveys and Rights of Entry

The ENGINEER shall obtain rights of entry (ROE) and conduct field surveys for the preferred alternative.

- Obtain ROE where field surveys should be conducted. Map parcels and develop right of entry request letter to be distributed under County or ENGINEER letterhead with County logo. Two attempts will be made to obtain permission to access each property, if needed, before classifying the property as “access denied.” Combine environmental, survey, subsurface utility engineering (SUE), geotechnical borings, and drainage ROE requests when practical.
- Prepare a GIS platform to map the parcels, track requests, and property owner’s consent or denial so field teams can access the digital deeds acquired and vital information such as property owner’s instructions, gate codes, or phone numbers.
- The ENGINEER shall collect additional field data, as needed, following review and discussion with the COUNTY. Resource-specific field surveys will be conducted for the purposes of identifying: Possible jurisdictional waters including wetlands, floodplains, and general land cover and habitat characteristics to support historic resources, archeological resources, and biological resource field surveys.

### ► Task 2C - Land Use

- The ENGINEER will use field observations, GIS data and aerial photographs to determine and map land use surrounding the study area and for the preferred alternative to be included within the Local Environmental Document.

### ► Task 2D - Communities and Social Setting – No Additional Work

The ENGINEER shall evaluate community impacts and develop a Community Impacts Assessment.

- Collect and map population data including 2020 US Census data and NCTCOG data to describe the affected population demographics within and along the study corridor (e.g., race, ethnicity, household income, employment, age, languages spoken, limited English proficiency [LEP], etc.). Using desktop data, map and identify community facilities (e.g., schools, libraries, places of worship, post offices, public services, government offices, etc.) and the populations served by each. Review EJSscreen and CEJST tools to obtain additional data for potentially underserved and disadvantaged populations and those possibly exposed to environmental risks.
- Identify neighborhoods and isolated residences for use in determining potential displacements. Identify potential displacements and summarize impacts and mitigation efforts.
- Perform a windshield survey to identify signs in languages other than English, community facilities serving specific minority groups, signs of persons with disabilities or other vulnerable populations, low-income populations or neighborhoods, and signs of other modes of transportation. Discuss community cohesion and how the project may impact the local communities.

- Prepare a Community Impacts Assessment Report.

▶ **Task 2E – Archeological Resources – No Additional Work**

The ENGINEER shall develop an Archeological Background Study and Survey Report.

- Conduct archeological background study to identify previously surveyed areas, recorded sites, and areas of high probability for buried resources surrounding the corridor alignments.
- Once preferred alignment is established, conduct archeological surveys in areas of high probability where ROEs have been obtained and make eligibility determinations for identified sites. Obtain an Antiquities Permit from the Texas Historical Commission (THC) to conduct the field surveys.
- Prepare an Archaeological Background Study and Survey Report.

▶ **Task 2F - Historic Resources – No Additional Work**

The ENGINEER shall develop a Historic Resources Survey Report.

- Conduct a historic resources survey along the preferred alignment and within the visual area of potential effects (APE)
- Prepare a Historic Resources Survey Report and make determinations of eligibility.

▶ **Task 2G - Water Resources**

The ENGINEER shall provide analysis of water resources for compliance with state and federal regulations to be included within the Local Environmental Document.

- Water Quality - Stormwater Permits (Section 402 of the Clean Water Act)
  - Describe the need to use the TPDES General Permit, TX 150000. The text must describe how the project will comply with the terms of the TPDES, including the Stormwater Pollution Prevention Plan; and
  - Describe the need for Municipal Separate Storm Sewer System (MS4) notification. List MS4 participating municipalities.
- Floodplains
  - Identify the presence and nature (e.g., zone A, zone AE, zone AE with floodway) of any FEMA mapped floodplains, including the panel number.
  - Indicate the existence of any significant development associated with the mapped area and identify the jurisdiction responsible for the floodplain.
  - Identify the locations where the preferred alternative might encroach on the base (100-year) floodplain (encroachments), where the preferred alternative might support incompatible floodplain development, and the potential impacts of encroachments and floodplain development. This identification must be included in the text and on a map.
- Waters of the U.S.
  - The Engineer shall prepare a Jurisdictional Waters Delineation Report to be referenced in the Local Environmental Document. Task Includes:
    - Review of NRCS Soil Surveys: review previously published soil data published by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), to determine the types of surface soils expected to be confirmed by on-site soil analysis.
    - Review of Aerial Photographs: review historical aerial color and black/white photographic enlargements for selected years. Infrared color photographs will be analyzed for the presence of wetland signature color distortions. Information for all photographic interpretation will be compared to locate recurring sites where wetland signatures are present.
    - Site Reconnaissance for Wetland Indicators: Inspect properties under the field procedures outlined in the Corps of Engineers Wetland Delineation Manual – Technical Report Y-87-1 by the USACE.
    - Demarcation of Wetland Areas: Flag the jurisdictional wetland areas and/or the ordinary high-water mark for location by Global Positioning System (GPS). Location of the areas by GPS survey using the USACE - Galveston District April 2016 Standard Operating Procedures for

Jurisdictional Delineations using GPS and Geographic Information Systems (GIS) Tool and Technologies.

- Preparation of a Map Representing Wetland Areas: Upon receipt of the GPS wetland areas and the limits of the Jurisdictional Waters, information regarding the field location of the boundaries of all Section 10 and 404 waters/wetland limits within the property boundaries will be plotted on a scaled map. Each Jurisdictional area will be depicted with the following information: (1) size and shape; (2) surface area calculation (acres); and (3) combined total wetland and Jurisdictional Water area calculations for the entire subject tract.
- Report Preparation: Upon completion of the site reconnaissance, data translation, and map preparation, a report will be completed. The report will include a discussion of methodology used to delineate the tract, site findings, copies of all historical information reviewed, such as U.S. Geological Survey topographical maps, NRCS soil survey maps, aerial photographs, site photographs, USACE routine data sheets, jurisdictional impacts table, and a WOTUS Delineation map.
- The Engineer shall provide the following water analysis:
  - Section 404 of the Clean Water Act
  - Section 303(d) of the Clean Water Act
  - General Bridge Act/Section 9 of the Rivers and Harbors Act
  - Section 10 of the Rivers and Harbors Act
  - Section 401 of the Clean Water Act
  - Executive Order 11990, Protection of Wetlands

▶ **Task 2H – Biological Resources**

The Engineer shall provide analysis of biological natural resources for compliance with state and federal regulations, prepare a letter report including the results of the Biological Studies investigations and summarize the findings in the Local Environmental Document.

- Evaluate the Threatened and Endangered Species listings currently maintained by the Texas Parks & Wildlife Department (TPWD) and the U.S. Fish & Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) to determine if any of the listed species may be shown to potentially inhabit the project area.
- Physically review and document the biological aspects of the project area habitat (including areas of woody vegetation, tree canopies, and diameter at breast height (DBH)) to determine if the habitat is desirable or reproductively useful to the specific species.
- Evaluate identified listed species habitat, if present.
- Assess the project ROW for biological indicators of presence. If marginal or suspicious habitats are encountered, a specialist on the specific study species will be consulted and included in the site impact assessment.
- Evaluate the presence of state or national parks, forest, wildlife refuges, wildlife management areas, natural areas, or similar preserves in the planning area.
- Prepare a Biological Studies Letter Report.

▶ **Task 2I - Hazardous Materials – No Additional Work**

The ENGINEER shall develop a Hazardous Material Site Inventory Memorandum.

- Obtain an Environmental Data Request (EDR) database search to identify sites with a possible environmental risk such as active and former gas stations, industrial sites, landfills, auto repair shops, etc. Summarize potentially hazardous sites and denote the level of concern/risk for the proposed project. Conduct a windshield survey to verify site types, locations, and ownership. Assess the potential risk properties of environmental concern posed to the project - low, moderate, or high - and include the basis of those classifications.
- Prepare a Hazardous Material Site Inventory Memorandum.

▶ **Task 2J – Traffic Noise**

The Engineer will prepare a Traffic Noise Analysis Report and incorporate the study within the Local Environmental Document.

- Computer modeling using design year traffic data (k-factor, annual average daily traffic (AADT), and fleet mix) to develop predicted (future) noise impact contours.
- Prepare a Traffic Noise Analysis Report.

▶ **Task 2K – Indirect and Cumulative Impacts**

The Engineer will provide a high-level analysis of Indirect and Cumulative Impacts and summarize the findings within the Local Environmental Document.

- Review study area for anticipated induced development. Create area of influence maps.
- Analyze / prepare indirect impact steps / documentation.
- Review study area for reasonably foreseeable projects. Create resource study area maps.
- Analyze / prepare cumulative impacts steps / documentation.

### TASK 3: DRAFT ENVIRONMENTAL DOCUMENT

The Engineer shall develop a draft Environmental Document to disclose the affected environment and anticipated impacts of the ultimate development of the freeway. The ENGINEER shall coordinate with NCTCOG for review and support services of the project purpose and need and development of reports and exhibits to be included within the draft Environmental Document. Development of the Draft Environmental Document will include the following analyses and document sections:

- 1.0 Introduction
- 2.0 Project Description
- 3.0 Purpose and Need
  - 3.1 Need
  - 3.2 Supporting Facts and/or Data
  - 3.3 Purpose
- 4.0 Alternatives
  - 4.1 Build Alternative
  - 4.2 No Build Alternative
  - 4.3 Preliminary Alternatives Considered but Eliminated from Further Consideration
- 5.0 Affected Environment and Environmental Consequences
  - 5.1 Right-of-Way Property Acquisition
  - 5.2 Land Use
  - 5.3 Utility relocation
  - 5.4 Community Impacts
    - 5.4.1 Community Study Area
    - 5.4.2 Displacements
    - 5.4.3 Access and Travel Patterns
    - 5.4.4 Community Cohesion
    - 5.4.5 Limited English Proficiency
  - 5.5 Visual/Aesthetic Impacts
  - 5.6 Cultural Resources
    - 5.6.1 Archeology
    - 5.6.2 Historic Resources

- 5.7 Protected Lands
- 5.8 Water Resources
  - 5.8.1 Water Quality
  - 5.8.2 Floodplains
  - 5.8.3 Wetlands/Waters of the US
- 5.9 Biological Resources
  - 5.9.1 Vegetation
  - 5.9.2 Wildlife and Migratory Birds
  - 5.9.3 Threatened and Endangered Species
- 5.10 Hazardous Materials
- 5.11 Traffic Noise
- 5.12 Indirect Impacts
- 5.13 Cumulative Impacts
- 6.0 Agency Coordination
- 7.0 Public Involvement
- 8.0 Conclusion
- 9.0 References
- 10.0 Appendices – Project Location Map, Project Photos, Schematics, Typical Sections, Resource-Specific Maps, Resource Agency Coordination and Public Involvement

## TASK 4: FINAL ENVIRONMENTAL DOCUMENT

The Engineer will develop a Final Environmental Document to disclose changes in the Preferred Alignment in consideration of comments/input received during the public hearing from agencies and the public. The ENGINEER shall coordinate with NCTCOG for review and support services and update reports and exhibits to be included within the Final Environmental Document.

Deliverables	
<ul style="list-style-type: none"> <li>▶ Local Draft and Final Environmental Documents</li> <li>▶</li> </ul>	<ul style="list-style-type: none"> <li>▶ Jurisdictional Waters Delineation Report</li> <li>▶ Biological Studies Letter Report</li> <li>▶ Traffic Noise Analysis Report</li> </ul>

## Objective 7: Project Management



### Overview

<b>Task 1</b>	Schedule, Progress Reports, and Invoices
<b>Task 2</b>	COUNTY Update Meetings and Presentations
<b>Task 3</b>	QA/QC

## TASK 1: SCHEDULE, PROGRESS REPORTS, AND INVOICES

- ▶ **Task 1A – Schedule**
  - The ENGINEER shall prepare and maintain a simple graphic milestone schedule indicating completion dates of major work items, deliverables, and reviews.
- ▶ **Task 1B – Monthly Progress Reports and Invoicing**

The ENGINEER shall submit monthly progress reports to the COUNTY. Monthly progress reports will include a description of all activities ongoing or completed during the reporting period, activities planned for the following month, problems encountered, and actions required to remedy them. The progress report will include a tabulation of percent complete by task.

The ENGINEER shall submit monthly invoices for all work completed during the period. Invoices will be submitted in accordance with the rate schedule and function codes authorized in the contract.

▶ **Task 1C – Subconsultant Coordination and Oversight**

The ENGINEER shall prepare subcontracts for sub-consultants, direct and monitor sub-consultant activities, conduct bi-monthly meetings, and review and recommend approval of sub-consultant work and invoices.

**TASK 2: COUNTY UPDATE MEETINGS AND PRESENTATIONS**

▶ **Task 2A – Project Team Meetings**

The ENGINEER shall schedule and conduct monthly virtual project team meetings with the COUNTY. The purpose of these meetings is to discuss project status, plan upcoming events, and discuss and resolve any key project issues. Critical elements of these meetings will be documented by the ENGINEER and distributed as appropriate.

▶ **Task 2B – Technical Presentations**

The ENGINEER shall prepare and present up to two (2) in-person technical PowerPoint presentations during the schematic design providing a briefing on project schedule, design development, and future tasks.

**TASK 3: QA/QC**

▶ **Task 3A – Project Management and Quality Management Plans**

The ENGINEER shall:

- Develop and distribute a high-level Project Management Plan to describe the scope of services, identify the task and sub-task responsibilities of team members, and define the formats for all memos, reports, graphics, mapping, and operational procedures for the project.
- Develop and distribute a high-level Project Quality Management Plan to define a quality control program and specific quality control practices. The ENGINEER shall maintain the QA/QC Plan throughout the duration of the project.
- Provide a Quality Control review of plans, calculations, documents, and other supporting design data based on the Project Quality Management Plan
- Provide a Quality Assurance audit of the QC review to ensure all comments were addressed and/or resolved.

▶ **Task 3B – Comment Response and Resolution Process**

The ENGINEER shall:

- Log any previous County or stakeholder comments in a Comment Response Log spreadsheet and provide a resolution for each comment.
- Coordinate production of the milestone deliverable including printing, compiling electronic files, and preparation of a transmittal letter.

Deliverables	
▶ Monthly progress reports and invoices	▶ QMP
▶ Study schedule	▶ Meeting notes
▶ PMP	▶ Comment response log