

**SUPPLEMENTAL WORK AUTHORIZATION NO. 1
TO WORK AUTHORIZATION NO. 2
PROJECT: CR258 Extension**

This Supplemental Work Authorization No. 1 is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated July 16, 2019 and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and American Structurepoint, Inc. (the "Engineer").

WHEREAS, the County and the Engineer executed Work Authorization No. 2 dated effective October 31, 2022 (the "Work Authorization");

WHEREAS, pursuant to Article 14 of the Contract, amendments, changes and modifications to a fully executed Work Authorization shall be made in the form of a Supplemental Work Authorization; and

WHEREAS, it has become necessary to amend, change and modify the Work Authorization.

AGREEMENT

NOW, THEREFORE, premises considered, the County and the Engineer agree that the Work Authorization shall be amended, changed and modified as follows;

- I. The Services to be provided by the Engineer that were set out in the original Attachment "B" of the Work Authorization are hereby amended, changed and modified as shown in the attachment revised Attachment "B-1".
- II. The maximum amount payable for services under the Work Authorization is hereby increased by \$67,400.00 from \$29,888.00 to \$97,288.00. The revised Fee Schedule is attached hereto as Attachment "D-1".

Except as otherwise amended by prior Supplemental Work Authorizations, all other terms of the Work Authorization are unchanged and will remain in full force and effect:

EXECUTED this _____

ENGINEER:

American Structurepoint, Inc.

By: J P. McIlree
Signature

Paul McIlree, PE
Printed Name

Principal
Title

APPROVED
By Christen Eschberger at 7:52 pm, Jun 21, 2023

COUNTY:

Williamson County, Texas

By: Bill Gravell Jr.
Signature

Bill Gravell Jr.
Printed Name

Williamson County Judge
Title

LIST OF ATTACHMENTS

Attachment B-1 - Services to be provided by Engineer

Attachment C-1 - Work Schedule

Attachment D-1 - Fee Schedule

**ATTACHMENT B-1
SERVICES TO BE PROVIDED BY THE ENGINEER FOR
CR 258 Extension SWA#1 to WA#2**

Additional work to revise plan sheets to incorporate turn lanes and driveway to the proposed Liberty Hill Independent School District (LHISD) school into the current roadway and drainage design during construction phase of the project. Incidental engineering services will be submitting a Contributing Zone Plan Exception with TCEQ, preparing roadway design, hydraulic and hydrologic engineering services for a Draft and Final Design submittal.

1. PROJECT MANAGEMENT AND ADMINISTRATION

Engineer will designate one Licensed Professional Engineer (Texas) to be responsible for the project management, and all communications with the County and its representatives.

- a. Coordination with LHISD or property owners
- b. Monthly progress reports (assume 1 month)
 - Submit monthly progress status reports to the GEC on ProjectWise that will include: tasks completed, tasks anticipated in subsequent month, items needed from the County or its representatives.
- c. Coordinate with project team

Quality assurance and quality control (QA/QC)

- a. Perform QAQC on all deliverables and submittal documents. Submit QAQC documents

Deliverables

- a. Monthly Invoices and Progress Reports
- b. QA/QC documents

2. PLAN PREPARATION (PS&E) SERVICES

Prepare plans per the current Williamson County Design Criteria Manual including applicable submittal requirements including cost estimate, checklists, hardcopies, CAD files, comment responses, design waivers/exceptions, general notes, quantities and construction time determination. The Engineer will develop and submit these Plans, Specifications & Estimates (PS&E) at Draft and Final Design.

Roadway Design

A. Updated Quantity Sheets

Revise quantities sheets.

B. Revised Roadway Typical Section and Plan

- Pavement edges for turn lanes and driveways
- Lane and pavement widths
- Direction of travel flow
- Drawing scale will be 1"=100'
- ROW lines and easements
- Begin and end superelevation transitions and cross slope changes
- Limits of rip-rap

- Utilities and structures

C. LHSID Side Street

The Engineer will provide side street layout and profile sheet detailing pavement design and drainage design for one driveway.

D. Cross Sections and Earthwork

The Engineer will revise the cross sections every 50' to include the turn lane for the limits of the turn lane. Earthwork will be recalculated with the addition of the turn lane and modified cross sections. Earthwork table and quantities will be modified and provided.

E. Water Quality

Complete and submit a Contributing Zone Plan Exception to TCEQ

- Update forms and attachments impacted by project improvements (project description, total disturbed area, etc.)
- Submit and pay fee (\$500) (Note: included in Engineer's Other Direct Expenses)

F. Estimate and Summary of Quantities

Revise estimate and bid form documents to include the added turn lane.

Drainage Design

The hydrology and hydraulics calculations will have the following for one modified culvert:

A. Culvert Hydraulics

The hydraulic calculations will have the following:

- Determine flows for cross culvert drainage systems.
- Analyze the sizing of the drainage crossing. The extending cross culvert.
- Analyze the design that minimize the interference with the passage of traffic or cause damage to the highway and local property in accordance with the County's Hydraulic Design Manual, District criteria and any specific guidance provided by the County. Cross drainage design will be performed using HY-8, HEC RAS
- Design discharges, Flow per barrel, barrel slope, and Manning n-value
- Inlet flow line, allowable headwater, roadway (shoulder) elevation, calculated inlet headwater elevation
- Outlet flow line, Tailwater for design frequency/frequencies, type of flow, critical depth, and calculated friction losses, calculated outlet water elevation
- Controlling headwater elevation, outlet velocity, and recommended countermeasures to maintain an acceptable outlet velocity.

B. Hydraulic Data Sheets

The Engineer will revise the Hydraulic Data Sheets.

C. Culvert Layout Sheets

The Engineer will revise the culvert plan/profile sheets for one (1) cross culverts.

D. Drainage Impact Study

The Engineer will provide an addendum memo providing information and analysis that all improvements will not have any adverse impact to the creek existing conditions.

E. Estimate and Summary of Quantities

Revise quantities and bid documents to include the added turn lane.

Signing and Pavement Markings

The Engineer perform the following tasks:

A. Revise the Signing and Pavement Markings Sheet

Design to establish required pavement markings, markers, and signing;

Develop the various plans and details required for plan sheets, including details/labels indicating status/disposition of proposed small signs

B. Revise the Estimate and Summary of Quantities

Revise quantities and bid documents to include the added turn lane.

Stormwater Pollution Prevention Plan

The Engineer will Revise the SW3P sheets.

A. SW3P Sheet

The Engineer will Revise the SW3P. The SW3P must include text describing the plan, quantities, type, phase and locations of erosion control devices and any required permanent erosion control.

B. Temporary Erosion Control Layouts

The Engineer will revise the Temporary Erosion Control Layouts (1"=100').

C. Permanent Erosion Control Layouts

The Engineer will revise the Permanent Erosion Control Layouts (1"=100').

D. Environmental Permits Issues and Commitments (EPIC) Sheets

The Engineer will complete the latest version of the EPIC sheets per information provided by the County. These sheets must be signed, sealed, and dated by the Engineer as indicated in signature block. The final sheets must be submitted for the County's signature.

E. SW3P Quantity Sheet

Revise the quantity sheets

Deliverables:

In conjunction with the performance of the foregoing services, the Engineer will provide the following draft and final documents and associated electronic files:

- CZP Exception Plan
- 100% and Final Change Order Plans on 11" x 17" pdf submitted through ProjectWise
- 100% and Final Engineers Cost Estimate for the Change Order Plans
- Design Waiver – shoulder width
- CADD Files

ASSUMPTIONS and EXCLUSIONS

The proposed scope of services is based on the following assumptions:

1. Utility Coordination: The County and its representatives will identify utilities and utility easements, perform utility coordination, utility relocations, and obtaining SUE information.

**ATTACHMENT C-1
WORK SCHEDULE
PROJECT: CR 258 EXTENSION**

CR 258 Extension – LHSID Turn Lane Submittals

- Change Order Plans Submittal including TCEQ Submittal 6/30/2023
- GEC Review 7/10/2023
- Final Change Order Plans Submittal 7/15/2023
- Submit CZP Exception to TCEQ 7/15/2023
- TCEQ CZP Exception Approval 8/29/2023 – 10/13/2023

ATTACHMENT D-1: ESTIMATED FEE SUMMARY
WILLIAMSON COUNTY
CR258 EXTENSION SWA#4 to WA#1

Task	Sheets	Principal	QA/QC	PM	Sr Proj Eng	Proj Eng	Tech	EIT	Total Hours	Total Labor
		\$265.00	\$260.00	\$200.00	\$180.00	\$140.00	\$95.00	\$110.00		
1. Project Management and Administration		0	15	12	0	12	0	0	39	\$ 7,980.00
a. Project Admin				12		12			24	\$ 4,080.00
b. QA/QC			15						15	\$ 3,900.00
2. PLAN PREPARATION (PS&E) SERVICES		0	0	42	0	54	108	170	492	\$ 58,920.00
Roadway		0	0	16	0	18	16	60	110	\$ 13,840.00
Typical Section	1					2		4	6	\$ 720.00
Roadway Plan	1			2		4	8	8	22	\$ 2,600.00
Side Street Layout and Culvert	1			2		2	8	8	20	\$ 2,320.00
Cross Sections and Earthwork	DGN			8		8		24	40	\$ 5,360.00
Estimate and Summary of Quantities	2			4		2		16	22	\$ 2,840.00
Water Quality		0	0	8	0	30	40	40	118	\$ 14,000.00
Contributing Zone Plan Excpetion and TCEQ coordination				8		30	40	40	118	\$ 14,000.00
Drainage		0	0	10	0	16	40	48	114	\$ 13,320.00
Hyrology and Hydraulics	1			4		4	16	16	40	\$ 4,640.00
Culvert Plan and Profile	1			4		8	24	24	60	\$ 6,840.00
Estimate and Summary of Quantities	1			2		4		8	14	\$ 1,840.00
Signing and Pavement Markings		0	0	6	0	8	16	24	54	\$ 6,480.00
Signing and Pavement Markings Plan Sheet	1			4		4	16	16	40	\$ 4,640.00
Estimate and Summary of Quantities	1			2		4		8	14	\$ 1,840.00
Stromwater Pollution Prevention Plan		0	0	10	0	12	36	38	96	\$ 11,280.00
SW3P Sheet	1						2	2	4	\$ 410.00
EPIC							2	2	4	\$ 410.00
Temporary SW3P Sheet				4		4	16	16	40	\$ 4,640.00
Temporary SW3P Sheet				4		4	16	16	40	\$ 4,640.00
Estimate and Summary of Quantities				2		4		2	8	\$ 1,180.00
SUBCONSULTANTS										
Total ASI Direct Labor Hours		0	15	54	0	66	108	170	531	
Percent of Total Hours		0.0%	2.8%	10.2%	0.0%	12.4%	20.3%	32.0%		
Total ASI Direct Labor (PS&E) Cost										\$ 66,900.00
Total ASI Other Direct Expenses Cost										\$ 500.00
Total Subconsultants Cost										\$ -
TOTAL PROJECT COST										\$ 67,400.00