

WORK AUTHORIZATION NO. 02

WILLIAMSON COUNTY ROAD AND BRIDGE PROJECT: CR 201

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated March 19, 2024, and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and Atlas Technical Consultants, LLC. (the "Engineer").

Part 1. The Engineer will provide the following Engineering Services set forth in Attachment "B" of this Work Authorization.

Part 2. The maximum amount payable for services under this Work Authorization without modification is \$29,315.00.

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

Part 4. This Work Authorization shall become effective **on the date of final acceptance and full execution of the parties hereto** and shall terminate on December 31, 2025. The Engineering Services set forth in Attachment "B" of this Work Authorization shall be fully completed on or before said date, unless extended by a Supplemental Work Authorization.

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

Part 6. County believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Work Authorization. Engineer understands and agrees that County's payment of amounts under this Work Authorization is contingent on the County receiving appropriations or other expenditure authority sufficient to allow the County, in the exercise of reasonable administrative discretion, to continue to make payments under this Contract. It is further understood and agreed by Engineer that County shall have the right to terminate this Contract at the end of any County fiscal year if the governing body of County does not appropriate sufficient funds as determined by County's budget for the fiscal year in question. County may effect such termination by giving written notice of termination to Engineer.

Part 7. This Work Authorization is hereby accepted and acknowledged below.

Continued next page

EXECUTED this _____.

ENGINEER:

Atlas Technical Consultants, LLC

COUNTY:

Williamson County, Texas

By: 
Signature

Jimmy Baldwin
Printed Name

Operations Manager/Project Manager
Title

By: _____
Signature

Printed Name

Title

LIST OF ATTACHMENTS

Attachment A - Services to be Provided by County

Attachment B - Services to be Provided by Engineer

Attachment C - Work Schedule

Attachment D - Fee Schedule

ATTACHMENT A
SERVICES TO BE PROVIDED BY THE COUNTY FOR
CR 201

In general, Williamson County and its representatives to their best efforts will render services as follows:

1. Name, business address and phone number of County's project manager.
2. Assistance to the Engineer, as necessary, with obtaining data and information from other local, regional, State and Federal agencies required for this project.
3. Obtain Rights of Entry from landowners that are unwilling to grant access to the Engineer.
4. Provide available appropriate County data on file, plans and specifications that are deemed pertinent to the completion of the work required by the scope of services (including previous hydraulic studies, models, previous reports and studies, available existing traffic counts, and design year traffic projections).
5. Provide available criteria and full information as to the client's requirements for the project. Provide examples of acceptable format for the required deliverables.
6. Provide timely reviews and decisions necessary for the Engineer to maintain the project work schedule. Review recommendations offered by the Engineer, progress of work, and final acceptance of all documents.
7. Submittal of documentation to regulatory agencies for review and comment, when specified.
8. Support project development efforts with stakeholders, coordinate meetings and interface with stakeholders, as needed.
9. Post and maintain project information for public consumption on the County website.
10. Assist with Coordination between the Engineer and the County's other subconsultants.
11. Negotiate with all utility companies for any agreements and/or relocations required.

12. Provide an agent as necessary to secure proposed ROW.
13. Provide construction observation and review contractor pay applications and progress.
14. Provide Engineer with Contractor submittals, Requests for Information (RFI's), shop drawings, and correspondence.
15. Review Engineer progress, submittals, and plan changes.

ATTACHMENT B
SERVICES TO BE PROVIDED BY THE ENGINEER FOR
CR 201

PROJECT DESCRIPTION

PROJECT LIMITS

The project limits are from CR 200 to 1000 feet north of Umbrella Sky, for approximately 2.0 miles.

EXISTING FACILITY

The existing facility is a 2-lane roadway with asphalt pavement. The existing right of way (ROW) varies from 40 feet to 100 feet.

PROPOSED FACILITY

The proposed facility is an interim 2-lane roadway with 2-foot shoulders of an ultimate median arterial divided 4-lane curbed section with a raised median. The proposed ROW width is 136 feet, within the project limits mentioned above. The scope of this work authorization is to perform borings and provide recommendations for subgrade preparation.

1. PROJECT MANAGEMENT

a. COMMUNICATION:

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

b. MONTHLY PROGRESS REPORTS, INVOICES, AND BILLINGS:

- Submit monthly progress status reports to the GEC. Progress reports will include: deliverable table, tasks completed, tasks/objectives that are planned for the upcoming periods, lists or descriptions of items or decisions needed from the County and its representatives. Subconsultant progress will be incorporated into the monthly progress report.
- Prepare correspondence, invoices, and progress reports on a monthly basis in accordance with current County requirements.

c. QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PLAN:

- Prepare a project specific QA/QC plan and submit to the County within ten (10) days of notice to proceed if requested.
 - For each deliverable submittal, provide evidence of their internal review and mark-up of that deliverable as preparation for submittal and in accordance with submitted project specific QA/QC plan.
 - Provide continuous QA/QC throughout the duration of the scheduled services included herein to appraise both technical and business performance and provide direction for project activities.
- d. PROJECT COORDINATION & ADMINISTRATION:
- Prepare and maintain routine project record keeping including records of meetings and minutes.
 - Correspondence and coordination will be handled through & with the concurrence of the GEC.
 - Manage Project activities (including documenting emails, phone and conference calls, maintain project files for the length of the project, meeting agendas, meeting minutes, and schedule meetings), direct Engineer's team/staff, coordinate and review sub-consultant work, correspond with the County and its representatives, and assist the County and its representatives in preparing responses to Project-related inquiries.
- e. PROGRESS/COORDINATION MEETINGS (3 external meetings assumed):
- Attend a kickoff meeting and coordination/progress meeting with the County and its representatives and stakeholders, as necessary to communicate development of the project and design issues.
 - Prepare agenda and sign-in sheets for external coordination/progress meetings.
 - Prepare meeting minutes for review via email within three (3) business days of the external coordination/progress meeting.
 - Conduct internal coordination meetings as required to advance the development of the project.
- f. PROJECT SCHEDULE:
- Maintain a project schedule indicating tasks, subtasks, critical dates, milestones, and deliverables. Submit to County as requested.

g. PROJECT DOCUMENTS/FILES:

- All contract documents, including native files, shall be turned over to the County at each milestone and at the completion of the project or as requested. Documents shall be posted to the County's project management database.

h. DELIVERABLES:

- Monthly Invoices and Progress Reports including Deliverable Table
- Meeting Minutes, Sign-In Sheets, and Agendas
- Project Schedule and Updates
- Project Files
- QA/QC Documentation with Deliverable

2. GEOTECHNICAL SERVICES

a. BORINGS:

- Prepare a geotechnical boring layout KMZ for approval by the county before commencing the field investigation using the Client Requested Boring Location Plan as a guide (see attached) and update to reflect the current ROW footprint. As provided by the Client, the boring program will include borings within and beyond the existing pavement structure and right-of-way at approximately 1,200-ft intervals.
- The minimum spacing and depth of borings for pavement per the latest TxDOT Geotechnical Manual and the Williamson County Road Bond Program Design Criteria Manual (please provide the most recent version to Geotechnical Engineer). Groundwater elevations shall be taken 15 minutes after initial encounter with groundwater. If feasible, additional groundwater elevations shall be taken where clay soils are encountered to obtain a static water level; however, each borehole should be backfilled no later than end of workday for safety protocols. Field testing shall consist of either the Texas Cone Penetrometer (TCP) or the Standard Penetration Test (SPT) at a minimum of 5 foot intervals, along with NX-size coring within bedrock when feasible. In between the TCP/SPT interval obtain Shelby Tube samples and bag samples appropriate for laboratory testing. Pavement boring spacing shall be performed

at intervals per the TxDOT Pavement Design Manual and should be to a depth of 15 feet.

1. Collect geotechnical borings in support of pavement design. For the purpose of scoping, 10 borings maximum are assumed. Drill test holes at least 15' deep. Dynamic cone penetration (DCP) tests will be conducted in the vicinity of each pavement boring location. Ten bulk samples along the alignment will be collected for laboratory testing.

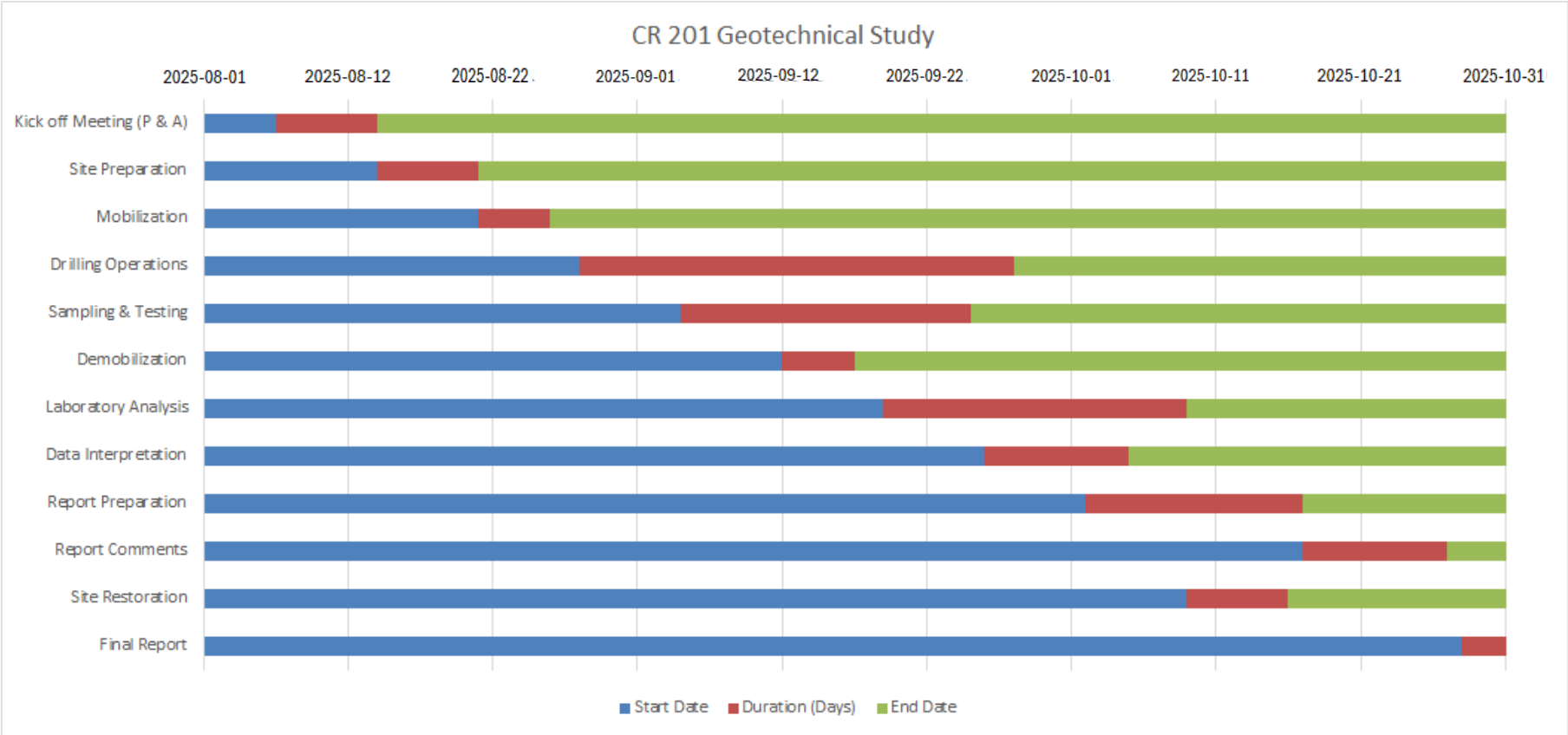
- The Engineer shall be responsible for Soil Core Hole Drilling required for pavement and culvert borings. The Engineer shall follow the procedures in the TxDOT Geotechnical Manual and will contact the appropriate utility location services to have underground utilities located prior to drilling in an area.
- The soil borings will be properly backfilled with bentonite chips and a single lift of cold patch asphalt where applicable. The soil samples will be obtained using Shelby tubes and/or split-spoon samplers. Field-testing of soil samples will include pocket penetrometer in the cohesive soils and Standard Penetration Test (SPT) in the cohesionless soils. Standard Penetration Test will be performed in all borings at five-foot intervals.
- Provide traffic control as needed to support field geotechnical exploration.
- Provide clearance of all utilities prior to drilling.
- Provide limited clearing to access boring locations for a truck-mounted drill rig.
- Provide the proposed field (SPTs, Tubes, etc.) and proposed laboratory testing for the 10 borings.

b. GEOTECHNICAL REPORTS:

- Provide copy of field and/or draft boring logs within 48hrs of boring completion for preliminary review.
- Perform appropriate laboratory tests on soil samples recovered from the borings. Laboratory testing will include but not limited to: moisture content, liquid limit, plastic limit, unconfined compression, free swell, sulfate testing, particle size analysis tests, visual classification, dry density, moisture-density relationships (aka, Proctor), California Bearing Ratio (CBR) tests, sulfate content tests, pH and lime series analyses.

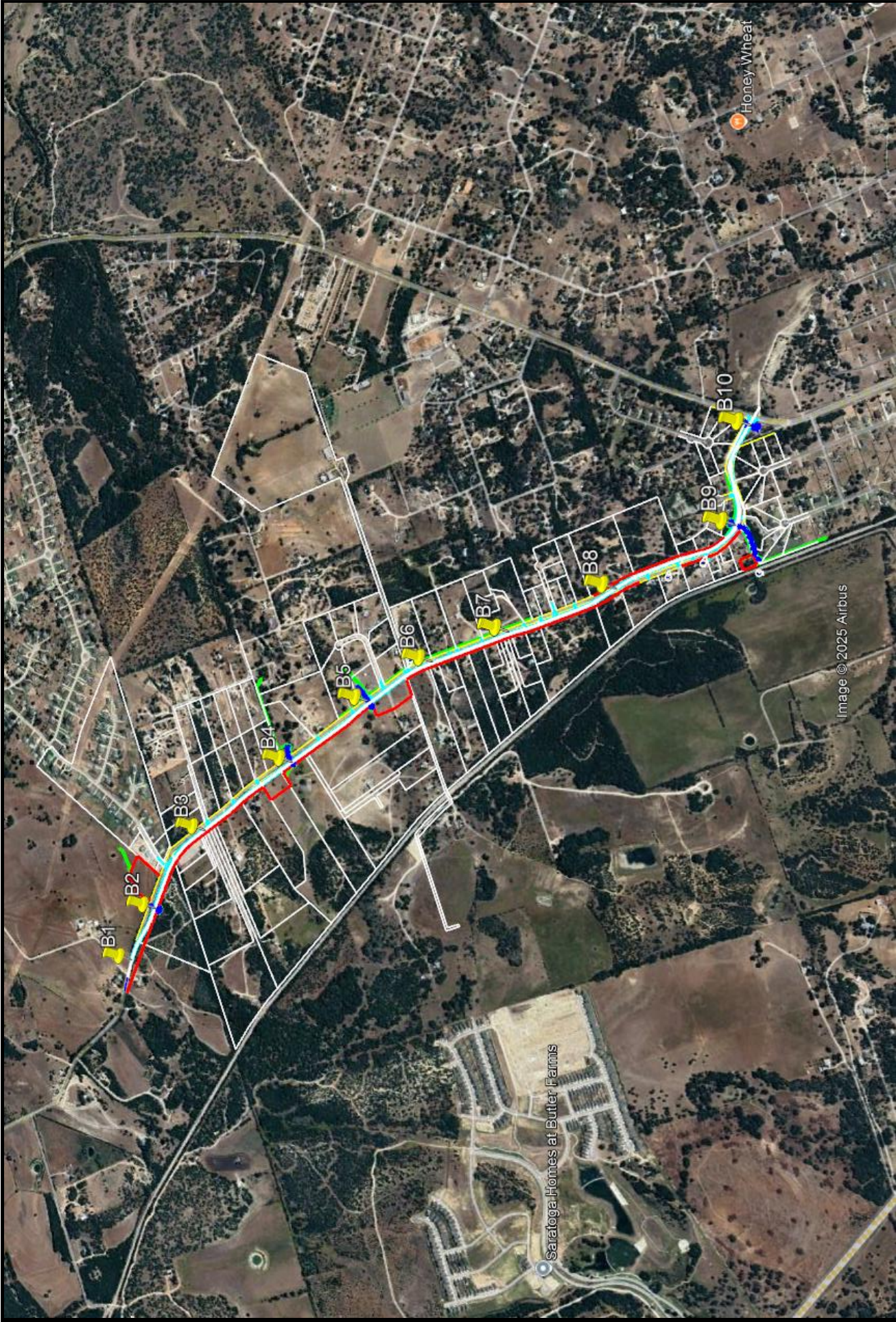
- Provide a Geotechnical Investigation for the project evaluated by a professional geotechnical engineer Licensed in the State of Texas. The following items will be included in the geotechnical report: soil boring locations, boring logs (TxDOT Wincore output graphs/format), and plan of borings, subsurface exploration procedures, encountered subsurface conditions, field and laboratory test results, description of surface and subsurface conditions, groundwater conditions/readings, analysis and recommendations for culvert bedding, general earthwork recommendations, Swell potential evaluations, subgrade stabilization utilizing and flexible base layer (if lime is not recommended, an explanation shall be provided for approval by the County Engineer), PVR calculations.
 - Provide geotechnical analysis needed for pavement design and culvert design, as required. Pavement analysis to be performed per Williamson County Design Manual.
 - Provide subgrade preparation recommendations based on the field testing, laboratory testing, and analysis following the Williamson County Design Criteria Manual.
 - Evaluate and identify areas of sulfate heave and soil swell potential.
 - Subgrade improvement based on TxDOT Potential Vertical Rise (PVR) analysis (Tex- 124-E).
- c. BORING DATA SHEETS:
- Prepare signed and sealed soil boring data sheets using digital boring log images for eventual incorporation in the plan sets.
- d. DELIVERABLES:
- Boring Layout KMZ
 - Draft and signed and sealed Geotechnical Report
 - Signed and sealed boring data sheets


Attachment C - Schedule
CR 201



Task	Start Date	Duration (Days)	End Date
Kick off Meeting (P & A)	2025-08-05	7	2025-08-12
Site Preparation	2025-08-12	7	2025-08-19
Mobilization	2025-08-19	5	2025-08-24
Drilling Operations	2025-08-26	30	2025-09-25
Sampling and Testing	2025-09-02	20	2025-09-22
Demobilization	2025-09-09	5	2025-09-14
Laboratory Analysis	2025-09-16	21	2025-10-07
Data Interpretation	2025-09-23	10	2025-10-03
Report Preparation	2025-09-30	15	2025-10-15
Report Comments	2025-10-14	10	2025-10-24
Site Restoration	2025-10-06	7	2025-10-13
Final Report	2025-10-27	4	2025-10-31

Project Manager (Logger)	Field Technician (Soils)	Field Technician (1B)	ADMIN	Sub Total	Hr/Unit	Labor
\$113.00	\$76.00	\$76.00	\$53.00	Hours		Cost
				0		\$ -
			1	0		\$ -
	16			4		\$ 558.00
				24		\$ 2,120.00
				9		\$ 1,232.50
				3		\$ 393.00
12				16		\$ 1,916.00
				4		\$ 505.50
				0		\$ -
				0		\$ -
				0		\$ -
				4		\$ 668.00
				0		\$ -
				5		\$ 686.00
				0		\$ -
			2	5		\$ 723.00
				9		\$ 1,315.00
			2	2		\$ 106.00
						\$ -
						\$ -
12	16	0	5	Row Total = 84 Column Total = 84		
\$ 1,356	\$ 1,216	\$ -	\$ 265			\$ 10,223.00
14.3%	19.0%	0.0%	6.0%			\$ 10,223.00
subconsultant)			\$500.00 each		\$1,000.00	
			\$0.00 day		\$0.00	
subconsultant)			\$0.00 ft		\$0.00	
			\$28.00 ft		\$4,200.00	
			\$0.00 ft		\$0.00	
			\$0.00 ft		\$0.00	
			\$0.00 each		\$0.00	
subconsultant)			\$0.00 each		\$0.00	
			\$5.00 ft		\$750.00	
			\$150.00 each		\$450.00	
			\$0.00 each		\$0.00	
subconsultant)			\$0.00 hr		\$0.00	
			\$0.00		\$0.00	
			\$85.00 each		\$425.00	
			\$109.00 each		\$2,289.00	
			\$60.00 each		\$1,800.00	
			\$98.00 each		\$2,156.00	
			\$244.00 each		\$976.00	
			\$450.00 each		\$450.00	
			\$0.00 each		\$0.00	
			\$0.00 each		\$0.00	
			\$0.00 each		\$0.00	
			\$0.00 each		\$0.00	
			\$380.00 each		\$380.00	
			\$403.00 each		\$403.00	
			\$0.00 each		\$0.00	
			\$1,193.00 each		\$1,193.00	
					\$16,472.00	
			Max NTE			
			\$0.00 day		\$0.00	
(subconsultant)			\$1,500.00 day		\$3,000.00	
			\$0.00 day		\$0.00	
					\$3,000.00	
					\$29,695.00	



SCALE: NTS			FIGURE 1
CHECKED BY: BJ			
PLOTTED BY: JB			
DATE: 2025 - 03 -- 25			
County Road 201 from CR 200 to Umbrella Sky Williamson County, Texas			