WORK AUTHORIZATION NO. 4

PROJECT: Engineering Design Services for Phase 1 of Street and Drainage Improvements within the Durham Park Subdivision

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated <u>March 24, 2020</u> and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and <u>M&S</u> <u>Engineering, LLC</u> (the "Engineer").

Part1. 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 <u>\$197,295.00.</u>

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 <u>December 31, 2021</u>. 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.

EXECUTED this _____ day of ______, 20____.

ENGINEER:	COUNTY:
M&S Engineering, LLC	Williamson County, Texas
By: <u>Jewood Mott</u> Signature	By:
O Signature	Signature
Jerod Mott, PE, CFM	
Printed Name	Printed Name
Manager - Municipal Division	
Title	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 County Services to be Provided by County

Williamson County Road & Bridge Division personnel will provide:

- Project direction, review and oversight.
- Topographic and R.O.W Surveys.
- Geotechnical Investigations; data and reports.
- ROW Documents and Drainage Reports.
- Conducting pre-bid meeting, responding to contractor questions during bidding, tabulating and evaluating bids after bid opening, and providing recommendation of award of contract.
- Construction oversight, administration and management.

Attachment B - Services to be Provided by Engineer Services to be Provided by the Engineer

Project Location:

Design for the reconstruction of Phase 1 streets including Cara Cove (923 LF), San Gabriel Drive (5,146 LF), Birdsong Cave (402 LF), Deer Trail (1,533 LF), Jenkins Davis Road (1,317 LF), N. San Gabriel Loop (1,952 LF) and S. San Gabriel Loop (1,927 LF) within the Durham Park Subdivision in western Williamson County, TX.

Task 1: Project Management

Attend Progress Review Meetings with County Road & Bridge department at 50%, 90% and Final. Prepare monthly progress reports and invoices. Maintain project schedule and perform QA/QC.

Task 2: Topographic and R.O.W Surveys To be provided by the County

Task 3: Preliminary Engineering

Conduct site visit and field reconnaissance to document existing conditions. Data collection including available as-builts. Review survey and geotechnical data provided by the County for completeness. Prepare 50% plan set including the sheets listed below. Develop preliminary drainage analysis including delineation of drainage areas, calculation of peak stormwater runoff rates for 10-yr, 25-yr and 100-yr.

Plan Sheets:

- Title Sheet
- Estimate & Quantity Sheet
- Typical Sections
- Traffic Control Plan
- Horizontal Alignment Data Sheet
- Roadway Plan & Profile Sheets
- Cross Sections (50' Interval and Driveways)
- Drainage Area Map
- Culvert Layouts

Specifications Opinion of Probable Construction Cost General Notes

Task 4: Geotechnical Investigations To be provided by the County

- Task 5: Environmental Studies N/A
- Task 6: Utility Coordination To be provided by the County

Task 7: FEMA Coordination N/A

Task 8: Final Engineering

Revise 50% plan set based on review comments provided by County staff. Prepare 90% detailed design and PS&E for proposed improvements. Calculate ditch capacity and size driveway and cross culvert pipes.

Revise Plan Sheets per comments:

- Title Sheet
- Estimate & Quantity Sheet
- Typical Sections
- Traffic Control Plan
- Horizontal Alignment Data Sheet
- Roadway Plan & Profile Sheets
- Cross Sections (50' Interval and Driveways)
- Drainage Area Map
- Culvert Layouts

Additional Plan Sheets:

- Driveway Details
- Driveway Summary
- Miscellaneous Roadway Details
- Erosion Control Plan
- Standards

Specifications Opinion of Probable Construction Cost

General Notes

Revise 90% plan set based on review comments provided by County staff. Submit 100% plan set with seals and signatures.

Task 9: Bidding Phase Services

Respond to Bidder's questions. Prepare Bid-Tabs for processing by Purchasing Department.

Task 10: Construction Phase Services

Review shop drawings and respond to contractor RFls. Prepare electronic as-built final drawings for the County based on construction red-lines provided by the County.

Deliverables:

50% Submittal:

- 1 paper copy of 11" *x* 17" Plan Sheets
- Specifications
- Opinion of Probable Construction Cost
- General Notes
- Engineer's internal QA/QC marked up set

90% Submittal:

- 1 paper copy of 11" x 17" Plan Sheets
- Specifications
- Opinion of Probable Construction Cost
- General Notes
- Engineer's internal QA/QC marked up set

Final Submittal:

- 1 paper copy of 11" x 17" Plan Sheets
- Specifications
- Opinion of Probable Construction Cost
- General Notes
- Engineer's internal QA/QC marked up set
- Electronic copy of submittal documents in PDF format on CD

Attachment C - Work Schedule

xpected notice to proceed from withanison County hear October 1, 2020.		
Notice to Proceed		October 1, 2020
50% Plans Submittal	13 weeks	January 8, 2020
50% Review Comments returned	2 weeks	January 22, 2021
90% Plans Submittal	8 weeks	March 19, 2021
90% Review Comments returned	2 weeks	April 2, 2021
100% Plans Submittal	4 weeks	April 30, 2021

Expected notice to proceed from Williamson County near October 1, 2020.

Attachment D - Fee Schedule

Total	\$197,295.00
Task 10 – Construction Phase Services	\$15,120.00
Task 9 – Bidding Phase Services	\$3,990.00
Task 8 – Final Engineering	\$47,385.00
Task 3 – Preliminary Engineering	\$89,730.00
Task 1 – Project Management	\$41,070.00