

P. O. Box 324 Cedar Park, Texas 78630-0324 TBPLS Firm Number 10103800

February 27, 2023

Mr. Randy Ehresman, PE Williamson County Road Bond Program, HNTB Corporation 101 East Old Settlers Boulevard, Suite 100, Round Rock, TX 78664

PSA: HNTB Surveying Services For Road & Bridge WA #5

HIGHWAY: CR 201 Drone Photogrammetry Topo

**LIMITS:** Proposed ROW Topo per attached map (Exhibit E) along CR 201 (approximately 12000 Centerline Linier Feet) from CR 200 to approximately 600 LF Northwest of Umbrella Sky roadway including 300' each direction at tie in CR 200 (approx. 12000 Centerline LF).

Mr. Ehresman,

Walker Texas Surveyors, Inc. (WTS) is pleased to submit this proposal to your office for Professional Land Surveying Services to produce 1' Design Topographic Survey of the referenced project in Williamson County, Texas.

We propose to complete this project on a time and materials basis in accordance with our existing contract with Williamson County. We will begin work immediately upon notice to proceed from your office per the details herein.

This proposal was developed using information provided (right-of-way maps, digital files, etc.) that we have on file, information that was provided from HNTB/Wilco, other sources, including our visit to the project site.

WTS will deliver the digital files, survey data files and hard copies of the survey, as described in this proposal, within budgeted time frame agreed upon in attached Exhibit C.

Thank you for the opportunity to provide this proposal and fee estimate. Please contact me with any questions or comments you may have.

Sincerely,

Charles G. Walker

Registered Professional Land Surveyor

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#### **WORK AUTHORIZATION #5**

#### PROJECT CR 201 TOPO

- This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Surveying Services, being dated May19, 2020 and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and Walker Texas Surveyor's, Inc. (the "Surveyor").
- Part1. The Surveyor will provide the following Surveying 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 \$65,880.00
- Part 3. Payment to the Surveyor 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, 2023</u>. The Surveying 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. Surveyor 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 Surveyor 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 terminations to Surveyor.
- Part 7. This Work Authorization is hereby accepted and acknowledged below.

EXECUTED this day of	, 2023
SURVEYOR: Walker Texas Surveyors, Inc.	COUNTY: Williamson County, Texas
By: Signature	By:Signature
Charles G. Walker Printed Name	Bill Gravell, Jr. Printed Name
Vice President  Title  2/27/23	County Judge Title
Date  LIST OF ATTACHMENTS	Date
Attachment A - Services to be Provided by Cour	nty
Attachment B - Services to be Provided by Surv	eyor
Attachment C - Work Schedule	
Attachment D - Fee Schedule (approved rate sch  APPROVED  By Christen Eschberger at 6:17 pm, Feb 28, 2023	nedule)

#### ATTACHMENT A

# SERVICES PROVIDED BY THE COUNTY

- 1. Provide the specification requirements for all surveys and provide CAD file with proposed limits of proposed Topo area anticipated.
- 2. Provide timely reviews and decisions necessary to enable the Surveyor to maintain an agreed upon project schedule as developed in attached Exhibit C.
- 3. Designate a project manager to serve as the Counties point of contact with the Surveyor.
- 4. Provide Aluminum caps for Iron Rods, if applicable.
- 5. Provide Brass Disc's for flush mount ROW markers, if applicable.

#### ATTACHMENT B

#### SERVICES PROVIDED BY THE SURVEYOR

# SCOPE OF SERVICES AND FEE ESTIMATE CR 201, WILLIAMSON COUNTY, TEXAS – DESIGN TOPOGRAPHIC SURVEY

**DETAILED LIMITS OF PROJECT:** Walker Texas Surveyors, Inc. (WTS) proposes to provide the following surveying services to Williamson County, Texas

 Proposed ROW Topo along CR 201 from CR200 to approximately 600 LF passed Umbrella Sky including 100' min each direction at roadway tie in's.

# **RIGHT-OF-ENTRY (ROE)**

• No ROE tasks are included in this scope of services. WTS will coordinate with project manager for access details is needed however, all tasks are expected to be performed within current ROW..

#### HORIZONTAL and VERTICAL CONTROL

- Walker Texas Surveyors (WTS) will establish and/or rectify to existing survey control performed by others. WTS will expand and increase as needed to acquire necessary data. (6 TO 8 Horizontal & Vertical Primary Control Points expected)
- Walker Texas Surveyors (WTS) will report in State Plane Coordinate System, Central Zone NAD 83 for Horizontal and NAVD 88 (Geoid 2018) for Vertical.
- One pair of Project Control Points will be set on each end of the project and placed in a position that will best insure long term survival. If ground conditions will not allow for standard utilized monumentation WTS will opt for another suitable monument that will be permanent in nature and acceptable to project manager. Additional points may be set along project corridor (as needed).
- Establish Aerial Ground Control Targets for Photogrammetry Drone operations. Expect 20 to 32 along project corridor.

#### FIELD SURVEY - TOPOGRAPHIC SURVEY

- WTS will established Primary Control, as needed to complete this scope of services, by utilizing Network GPS, RTK GPS, Robotic and Conventional surveying methods.
- WTS will locate existing ROW along the project roadway per CAD alignment info as provided by Wilco project manager to relate all topographic data. Any unexpected challenges encountered in establishing and/or associating this data will be immediately brought to the attention of Wilco project manager for other viable solutions.

# **ATTACHMENT B (Continued)**

#### SERVICES PROVIDED BY THE SURVEYOR

- Topographic Survey will include surface produced by Aerial Drone based Photogrammetry methods as well as perform spot elevations and ground data sufficient to generate 1' contour intervals within the project limits. The data point cloud will extend minimally 25' outside the proposed ROW in order to insure accuracy of the contours.
- Locate any visible culverts, utilities within the site including inverts (flow lines) of accessible (unbolted) Storm Sewer, Wastewater manholes and all observed utility apparatus located within the current ROW. Digital photos of any unique and/or non-typical apparatus will be available as part of the deliverables. No utility research is included.
- Locate all driveways and/or streets within the limits of the project area.
- No trees are included in this task however, any notable trees observed will be brought to the attention of the project manager.
- WTS will quality check the project using LiDAR/Photogrammetry results, conventional field survey, published LiDAR as well as other reliable sources to insure accuracy and completeness.
- WTS will provide project manager with report weekly with project progress.

#### PRODUCTION OF SURVEY DELIVERABLES

- WTS will use provided proposed ROW map providing the data collected along the Project corridor in the Field Survey to produce a digital AutoCAD dwg or MicroStation dgn and/or LandXML file(s) showing survey results along the current CR 201. Survey, field crew notes and supporting electronic data will be made available upon request or as stated above.
- WTS will publish the Primary Control Point Network on the overall 1' Contour Topo map deliverable that will be signed and sealed by Charles G. Walker, RPLS.
- WTS will deliver the specified files stated above upon completion of this project.

#### COMPENSATION

The above scope of services will be performed on a time and materials basis according to the contract rates and is estimated for a budget of \$65,880.00 (detailed on the attached Exhibit D, Fee Spreadsheet). The stated budget will not be exceeded without prior written authorization.

# ATTACHMENT C

# WORK SCHEDULE

Work schedules will be developed prior to Notice-to-Proceed (NTP) and submitted to the County in the form of a Memorandum of Understanding. Should the schedule be acceptable, a written NTP will be delivered to Surveyor.

Anticipated NTP: March/April, 2023

Anticipated Field Start: within 2 to 3 weeks of NTP

Anticipated Delivery of Topographic Survey: 1.5 to 2.5 months from NTP

EXHIBIT D FEE SCHEDULE

Walker Texas Surveyors, Inc. P. O. Box 324 Cedar Park, TX 78630 512/259-3361

Wilco Work Authorization for Surveying Services for Road & Bridge HNTB WA#5 = WTS Project # 075063 - CR 201 CR 201 CR 204 Design Topo Liberty Hill, Texas COUNTY: Williamson LIMITS: Along CR 201 from - CR 200 Tie-in to +/- 600 LF past Unbrella Sky Approx. 12000 LF

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Service	2 Crew	3 Crew	1 Crew	Add Person	PM	RPLS	Field Cor	Sr Tech	CAD Tech		Admin	AT<	Subtotal	Reimburse	Total
Rate/Hr	175	220	130	130 45	175	150	120	120	120 90		75	150			
Establish/Rectify/Densify H&V State Plane Control as needed for Top			12			8		12			9				
Establish Aerial Drone Target Ground Control Points for Photogramm	ω		16			m		9			7	က			
Subtotal	20	0	28	0	0	9	0	18		0	ω	9		0	
Total	3500	0	3640	0	0	900	0	2160	0	0	009	900	11700	0	11700
Fight ops for Photogrammetry by others and WTS support			20		2	-		16			2	3		4300	
Topo ROW w/point cloud extends 25' outside of Proposed ROW	30		45			9		25			ω	25			
Fight ops for LiDar by others and WTS support if needed (Optional)			80		2			ω						2900	
Subtotal	30	0	73	0	4	7	0	49	0	0	ω	28			
Total	5250	0	9490	0	200	1050	0	5880		0	009	4200	27170	10200	37370
Prepare and deliver project in AutoCAD or MicroStation format						φ		06			m				
QC survey and deliver via email			25					80			m	0			
Subtotal	0	0	25		0	9	0	86	0	0	9	8		0	
Total	0	0	3250	0	0	900	0	11760		0	450	450	16810		16810
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0		0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0		0	0	0	0	0	
Total	0	0	0	0	0	0	0	0		0	0	0			0
Grand Total	8750	0	16380	0	700	2850	0	19800	0	0	1650	5550	25680	10200	65880
Reimburseables:	0														