

AGENDA ITEM 15

Consider amending Cedar Breaks Rd contract with PBS&J (No.3) for additional geotechnical services.

Moved: **Commissioner Hays**

Seconded: **Commissioner Limmer**

Motion: To approve amendment of Cedar Breaks Rd contract with PBS&J (No.3) for additional geotechnical services

Vote: **5 – 0**

< Attachment >

Attachment F

**SUPPLEMENTAL
WORK AUTHORIZATION NO. 3
TO ORIGINAL CEDAR BREAKS ROAD CONTRACT**

CEDAR BREAKS ROAD

THIS SUPPLEMENTAL WORK AUTHORIZATION is made pursuant to the terms and conditions of the original Cedar Breaks Road contract, hereinafter identified as the "Contract", entered into by and between Williamson County Engineering Department, acting by and through Williamson County ("County"), and PBS&J ("Engineer").

PART 1. The Engineer will perform the following engineering services:


Additional geotechnical and engineering services to develop construction plans for Cedar Breaks Road from the intersection of FM 2338 and Cedar Breaks Road to D.B. Wood Road. Services to be provided by the County and Engineer are further detailed in Exhibits A & B. Deliverables **will be delivered to Prime Strategies, Road Bond Manager, attention Mike Weaver, on or before February 15, 2002.**

PART 2. The Engineer will be responsible for providing engineering services necessary to prepare a complete PS&E package. The responsibilities of the Engineer are further detailed in Exhibit B. This additional work justifies compensation in the amount of **\$66,297**, as detailed by the budget attached hereto and Exhibit D.

THIS SUPPLEMENTAL WORK AUTHORIZATION SHALL BECOME EFFECTIVE ON THE DATE OF FINAL EXECUTION OF THE PARTIES HERETO. ALL OTHER TERMS AND CONDITIONS OF THE ORIGINAL CONTRACT NOT HEREBY AMENDED ARE TO REMAIN IN FULL FORCE AND EFFECT.

THE ENGINEER

By:



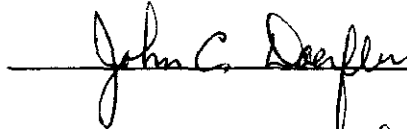
John B. Morrison
Typed or Printed Name

Division Manager
Title

10/4/01
Date

THE STATE OF TEXAS

By:



John C. Doerflinger
Typed or Printed Name

County Judge
Title

10-2-01
Date

LIST OF EXHIBITS

- | | | |
|-----------|---|---|
| Exhibit A | - | Services to Be Provided by the County |
| Exhibit B | - | Services to Be Provided by the Engineer |
| Exhibit C | - | Project Schedule |
| Exhibit D | - | Fee Estimate |

OK
mky 10-4-2001

Cedar Breaks Road
Limits: FM 2338 to D.B. Wood Road
Project Number: WC 1055
Williamson County

Addendum #3
to Original Cedar Breaks
Contract

PROJECT DESCRIPTION: Grading, Structures, Base & Surfacing
Project Classification: New Location

EXHIBIT B
Services to be provided by the Engineer

This addendum covers engineering and geotechnical services required for development of the bridge plans. After further development of the survey around the bridge abutments, it was determined that the bridge needed to be longer than originally anticipated. This in turn required additional geotechnical borings, geotechnical site clearance, and additional design work.

The following is a summary of the tasks required to complete the project. These tasks are replicated in the fee estimate. The original fee estimate with all tasks was used with only the additional hours shown.

FC110 (Task 1) ROUTE AND DESIGN STUDIES (Preliminary Engineering)

- 1) Develop geometric design criteria for new span layout
- 2) Develop bridge alternatives for new span layout

FC110 (Task 3) Geotechnical Investigations

- 1) Two additional 50' borings and all related items
- 2) Site clearance to access #2 and #4 bridge borings
- 3) Mobilization and use of All Terrain Vehicle for #2 and #4 bridge borings
- 4) Standby hours for water truck

FC170 (Task 7) Bridge Design

- 1) Revised bridge layouts for new bent layout
- 2) Revised bridge layouts for twin structure after moving toward single structure layouts

REFERENCES

1. Standard Specifications for Construction of Highways, Streets, and Bridges - TxDOT.
2. Special Provisions and Special Specifications - TxDOT.
3. PS&E Preparation Manual - TxDOT.
4. Division of Bridges and Structures Operation and Planning Manual - TxDOT.
5. Division of Bridges and Structures Hydraulic Manual - TxDOT.
6. Division of Bridges and Structures Design Examples - TxDOT.
7. Division of Bridges and Structures Bridge Design Guide - TxDOT.
8. Division of Bridges and Structures Detail Manual - TxDOT.
9. Division of Bridges and Structures Foundation Exploration and Design Manual TxDOT.
10. Standard Specifications for Highway Bridges - AASHTO.
11. Division of Highway Design Operations and Procedures Manual - TxDOT.
12. Division of Highway Design Operations and Procedures Manual Part IIB - Environmental and Public Involvement Procedures during Project - Specific Planning and Development - TxDOT.
13. A Policy on Geometric Design of Highways and Streets ("The Green Book") AASHTO.
14. Highway Capacity Manual Special Report 209 - Texas Research Board (TRB).
15. Technical Advisory T6640.8A - FHWA.
16. Noise Guidelines - TxDOT.
17. Air Quality Guidelines - TxDOT.
18. Flexible Pavement Design Manual - TxDOT.
19. Guide for the Design of Pavement Structures, 1996 - AASHTO.
20. Texas Manual on Uniform Traffic Control Devices - TxDOT.
21. Standard Highway Sign Designs for Texas - TxDOT.
22. Standard Specifications for Structural Supports for Highway Signs, Luminaries, and Traffic Signals - AASHTO.
23. Utility Accommodation Policy - TxDOT.
24. Utility Manual - TxDOT.
25. Division of Right of Way, ROW Manual - Book I - TxDOT.
26. Division of Right of Way, ROW Manual - Book II - TxDOT.
27. Code of Federal Regulations, Title 23 - "Highway" - Federal Register.
28. Administrative Order No. 5-89 - Signing, Sealing and Dating of Engineering Documents - TxDOT.
29. Administrative Circular No. 26-91 - Minimum Signing, Sealing, and Dating Procedures for Department Engineering Documents - TxDOT.
30. Administrative Circular No. 25-84 - Soils Information for High Mast Lighting, Overhead Sign Bridges, and Retaining Walls - TxDOT.
31. Administrative Circular No. 33-87 - Preliminary Retaining Wall Layouts to be submitted to Division of Bridges and Structures - TxDOT.
32. Administrative Circular No. 25-92 - Division of Bridges and Structures to be responsible for all geotechnical engineering support for foundations, retaining walls, and embankment stability and settlement - TxDOT.

NOTES:

1. All design shall be in accordance with the above references, except where variances are permitted in writing by the **Williamson County**.
2. The **Engineer** is responsible for purchasing all references, which are required for the project.
3. Proposed design will be designed in English units.

EXHIBIT D
COMPENSATION SUMMARY
Cedar Breaks Road
From FM 2338 to D.B. Wood Road

LABOR

Classification	Hours	Rate	Labor
Principal	0	\$44.32	\$0.00
Project Manager	16	\$37.56	\$601.02
Senior Engineer	34	\$37.56	\$1,277.17
Design Engineer	0	\$25.80	\$0.00
Design EIT	0	\$20.99	\$0.00
CADD Technician	50	\$27.32	\$1,365.77
Clerical	0	\$15.39	\$0.00
Total Labor	100		\$3,243.96

OVERHEAD (157%) \$5,093.02

EXPENSES \$432.63

FEE (15%) \$1,250.55

PBS&J Survey Fee \$0.00

PBS&J Total Design Fee \$10,020.15

SUBCONSULTANTS

HVJ Associates, Inc. \$56,276.75

Subtotal Subconsultants \$56,276.75

Project Total Design Fee*

\$66,297

EXHIBIT D
PBS&J MAN-HOURS
Cedar Breaks Road
From FM 2338 to D.B. Wood Road

Task	Sid Sheets	New Sheets	MANAGEMENT		ENGINEERING			SUPPORT		Total Hours	Hours/ Sheet
			Principal	Project Manager	Senior Engineer	Design Engineer	Design EIT	CADD Technician	Clerical		
5 Drainage	1.) Existing Cedar Breaks									0	
	2.) D.B. Woods Rd. (north of proposed Cedar Breaks Rd.)									0	
	L. Miscellaneous Roadway Details									0	
	M. Signing Layouts (1"=100')									0	
	1.) Temporary signing layouts									0	
	2.) Final signing layouts									0	
	N. Pavement Marking Layouts (1"=100')									0	
	1.) Temporary pavement marking layouts									0	
	2.) Final pavement marking layouts									0	
	O. Traffic Control Plan									0	
	1.) Layouts (1"=100')									0	
	2.) Detours (1"=1000')									0	
	3.) Temporary Drainage									0	
	P. Cross-sections									0	
	Q. Earthwork calculations									0	
	R. Assemble TxDOT Standards									0	
	S. Perform QA/QC									0	
	Subtotal	0	0	0	0	0	0	0	0	0	
6 Right of Way (ROW) Mapping	A. Data gathering									0	
	1.) USGS digital maps									0	
	2.) USGS Gaging Station data									0	
	B. Drainage area maps									0	
	C. Outfall determination/analysis									0	
	D. Scour analysis									0	
	E. Preliminary hydraulic design									0	
	1.) Culvert sizing									0	
	2.) Channel/outfall sizing									0	
	F. Culvert Layouts									0	
	G. Culvert Computations									0	
	H. Storm Water Pollution Prevention Plan (1"=100')									0	
	I. Drainage Details									0	
	1.) Culverts									0	
	2.) Outfall channels									0	
	3.) Bridge deck drains									0	
	J. Assemble TxDOT Standards									0	
	K. Perform QA/QC									0	
	Subtotal	0	0	0	0	0	0	0	0	0	
7 Bridge Design	A. Prepare final bridge layouts (see item 7)									41	
	B. Prepare final bridge details (see item 7)									0	
	C. Prepare beam seat elevations. (see item 7)									0	
	D. Prepare bar lists for bent and abutments. (see item 7)									0	
	E. Prepare bridge quantities and cost estimate.									0	
	F. Prepare bridge special provisions and special specifications									0	
	G. Sheets:									0	
	1.) Layout sheets									0	
	2.) Estimated Bridge Quantities									0	

EXHIBIT D
PBS&J MAN-HOURS
Cedar Breaks Road
From FM 2338 to D.B. Wood Road

Task	Std Sheets	New Sheets	MANAGEMENT		ENGINEERING			SUPPORT		Total Hours	Hours/ Sheet
			Principal	Project Manager	Senior Engineer	Design Engineer	Design EIT	CADD Technician	Clerical		
3.) Boring Logs 4.) Foundation Layouts 5.) Foundation Details 6.) Abutment No. 1 7.) Abutment No. 10 8.) Abutment Details 9.) Bent Plan (2-9) 10.) Bent Details 11.) Bent Quantities 12.) Framing plans 13.) Typical Sections 14.) Slab Span 15.) Slab Span Details 16.) Bridge Drain Details 17.) Beam Seat Elevations 18.) Prestressed Beam Design Table 19.) Miscellaneous structural details 20.) Assemble TxDOT Standards H. Perform QA/QC										0	0
										0	0
										0	0
										0	0
										0	0
										0	0
										0	0
										0	0
										0	0
										0	0
Subtotal	10	0	0	1	8	0	0	32	0	41	
8 Miscellaneous		5								0	0
A. Quantity take-offs and summaries										0	0
B. Specifications										0	0
1.) Prepare General Notes										0	0
2.) Prepare Special Specifications										0	0
3.) Prepare Special Provisions										0	0
C. Prepare Invoices (26)										0	0
D. Prepare and Maintain Design Schedule										0	0
E. Prepare Project Control Plan (PCP)										0	0
F. Manage Subconsultants										0	0
Subtotal	0	5	0	0	0	0	0	0	0	0	
9 Additional Services		5								0	0
A. Engineering services to provide 40 MPH design speed facility on D.B. Woods from intersect with proposed Cedar Breaks to SH 29										0	0
Subtotal	0	5	0	0	0	0	0	0	0	0	
TOTAL PROJECT	10	13	0	16	34	0	0	50	0	100	4

ADDENDUM NO. 3
EXHIBIT D
GEOTECHNICAL COST BREAKDOWN - HVJ ASSOCIATES, INC.
Cedar Breaks Road
From FM 2338 to D.B. Wood Road

<u>Item Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
<u>Field Investigation (From January 1 through January 31, 2001)-Additional Cost</u>				
Field Technician - Field Work Coordination & Logging	58.5	hr	\$43.50	\$2,544.75
Field Coordination - Project Engineer	12	hr	\$73.50	\$882.00
Standby hours	28	hr	\$150.00	\$4,200.00
Dozer/Water Truck Rental	2	wk	\$1,400.00	\$2,800.00
Per Diem	8	day	\$200.00	\$1,600.00
			Subtotal	\$12,026.75
<u>Field Investigation (From January 1 through January 31, 2001)-Additional Cost</u>				
Site Clearance (Lump Sum Cost + 10%)	1	ea	\$8,000.00	\$8,000.00
Mobilization, All-Terrain Vehicle Mounted Rig	1	site	\$1,100.00	\$1,100.00
All Terrain Vehicle	1	wk	\$18,900.00	\$18,900.00
Field Technician - Field Work Coordination & Logging	130	hr	\$43.50	\$5,655.00
Field Coordination - Project Engineer	50	hr	\$73.50	\$3,675.00
Tex-132-E, Texas Cone Penetration Test	20	ea	\$15.00	\$300.00
Boring Backfill Material (50-foot borings) - Bentonite Chips	2	ea	\$75.00	\$150.00
Core Boxes	7	ea	\$10.00	\$70.00
Standby hours	20	hr	\$150.00	\$3,000.00
Dozer/Water Truck Rental	1	wk	\$1,400.00	\$1,400.00
Per Diem	5	day	\$200.00	\$1,000.00
			Subtotal	\$43,250.00
Additional Laboratory Testing	100	ft	\$10.00	<u>\$1,000.00</u>
				\$1,000.00
			Total	<u>\$56,276.75</u>

ADDENDUM NO. 3
EXHIBIT D
PBS&J EXPENSES
Cedar Breaks Road
From FM 2338 to D.B. Wood Road

Direct Cost	Unit	Quantity	Unit Price	Total
CD-ROM	Each	1	\$35.00	\$35.00
CADD Machine Time	Hour	25	\$10.00	\$250.00
Photocopy (8.5 x 11 paper)	Each	0	\$0.04	\$0.00
Photocopy (11 x 17 paper)	Each	0	\$0.12	\$0.00
Plot Mylar (11 x 17 Mylar)	Each	0	\$7.00	\$0.00
Plot (11 x 17 paper)	Each	0	\$0.50	\$0.00
Overnight express deliveries	Each	0	\$15.00	\$0.00
Hot shot deliveries (2 hour service)	Each	4	\$17.50	\$70.00
Mileage (3 trips @ 75 miles round trip)	Mile	225	\$0.345	\$77.63
Total				\$432.63

AGENDA ITEM 16

Hold public hearing regarding regulation of signage for school zone revisions 2001.

Judge Doerfler announced the public hearing regarding regulation of signage for school zone revisions for 2001 open at 10:19 a.m. on Tuesday, October 2, 2001.

County Engineer Joe England addressed the court regarding the school zone revisions.

Judge Doerfler announced the public hearing regarding regulation of signage for school zone revisions for 2001 closed at 10:21 a.m. on Tuesday, October 2, 2001.

AGENDA ITEM 17

Discuss and consider adopting regulations of signage for school zone revision 2001.

Moved: **Commissioner Limmer**

Seconded: **Commissioner Hays**

Motion: To adopt the proposed school zones on Williamson County roads for the 2001-2002 school year.

Vote: **5 – 0**

< Attachment >