

AGENDA ITEM # 24

Consider approving agreement with Carter Burgess for work on County Road 214.

Commissioner Boatright informed the court the \$750,000.00 will be paid from prior bond package funds dedicated to County Road 214. The approximately 12% fee includes design, surveying, complete bid process and construction.

Moved: Commissioner Boatright

Seconded: Commissioner Heiligenstein

Motion: To approve \$750,000.00 agreement with Carter Burgess for work on County Road 214.

Vote: Motion carried 3 - 0

< Clerk copy here >

C&B Carter - Burgess

FAX TRANSMITTAL

PROJECT: Williamson County Road 214 PROJECT NO.: 98-5043-010
TO: Greg Boatright FAX: 512/280-4284
Williamson County Engineer FAX: _____
FAX: _____
FROM: Bill Caffey, P.E. DATE: 1/27/00

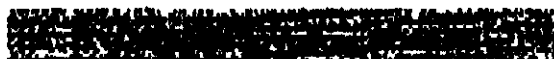
C&B Telephone Number: (512) 314-3100 C&B FAX Number: (512) 314-3135

REMARKS: Total number of pages transmitted, including this page: 23

Attached for your review and approval are copies of the following for the CR214 project:

1. Contract for Professional Services
2. Preliminary Construction Cost Estimate
3. Exhibit "A" Services Provided by County
4. Exhibit "B" Services Provided by Engineer
5. Engineering Fee Estimate - C&B
6. Work Outline - C&B
7. Project Schedule

147



Carter & Burgess, Inc.

Barton Oaks Plaza V, 901 South MoPac Expressway, Suite 200
Austin, Texas 78746

C&B Carter - Burgess

Consultants in Planning, Engineering, Architecture,
Construction Management, and Related Services
January 27, 2000

Highway: Williamson County Road 214 (CR 214)
From: SH 29 in Liberty Hill
To: 1.1 miles North (Rolling Hills Road)
County: Williamson
Project: 985043010

Mr. Greg Boatright
Commissioner, Precinct 2
350 Discovery Blvd., Ste. 201
Cedar Park, Texas 78613

Mr. Joe M. England, P.E.
Williamson County Engineer
1900 Georgetown Inner Loop, Ste. B
Georgetown, Texas 78626

Dear Commissioner Boatright and Mr. England:

Enclosed for your review and approval is one revised copy each of the following for the County Road 214 project:

- Contract for Professional Services
- Preliminary Construction Cost Estimate
- Exhibit "A" - Services Provided by County
- Exhibit "B" - Services Provided by Engineer
- Engineering Fee Estimate - C&B
- Work Outline - C&B
- Project Schedule

This submittal is for the Surveying, Right-of-Way Plans, Field Notes, Schematics, Plans, Specifications & Estimates and Bidding Documents for the preparation of construction plans for County Road 214 in Williamson County from SH 29 in Liberty Hill to 1.1 miles North. Our total fee for Carter & Burgess, Inc. is a maximum not to exceed \$118,000. This estimate is using SAM, Inc. as our surveying sub-consultant. We understand that this is a time and materials contract and the County will only be charged for services rendered.

We understand your desire to cap the expenses for this project at \$750,000. The project could be constructed faster (20-30 days) and safer, if we go with the 100 feet of right-of-way (ROW) instead of the proposed 80 feet. The 100 feet will provide to build one-half (14 feet) of the proposed while using the existing roadway for traffic. If we don't obtain

148

Carter & Burgess, Inc. Suite 200 Barton Oaks Plaza V 901 South MoPac Expressway Austin, Texas 78746
(512) 314-3100 Fax (512) 314-3135

January 27, 2000

100 feet of ROW, the roadway will have to be one-lane, one-way with pilot car during daylight hours. This will be a big inconvenience to the traveling public. The extra 20 feet of ROW (100 feet) would require approximately 2.7 acres. At \$12,000 per acre, this would be an additional \$32,286. We are certain that double this amount could be saved in construction costs. The 100 feet of ROW will also permit future widening without more ROW or utility adjustments. Our fee and construction costs (estimated) for the project is as follows:

\$ 69,000	Plans, Specifications & Estimates
49,000	Field Surveying and ROW Field Notes
<u>345,000</u>	Estimate Preliminary Construction Costs
\$ 663,000	
\$ 87,000	Remaining for ROW and utility adjustments

We have enclosed two original signed contracts. Should you find these terms acceptable, please sign both copies and return one to our office and keep one copy for your records.

Thank you for the opportunity to provide this service to Williamson County. We look forward to building a long term relationship with Williamson County and providing ongoing engineering services to meet your many transportation needs on a continuing basis.

Please call if you have any questions or require additional information. I can be reached at 512/314-3100 or by fax at 512/314-3135.

Sincerely,
Carter & Burgess, Inc.



Bill Caffey, P.E.
Associate
Senior Project Manager

Attachments



Carter & Burgess

Consultants in Planning, Engineering, Architecture,
Construction Management, and Related Services

AUTHORIZATION FOR PROFESSIONAL SERVICES

PROJECT NAME Williamson County Road 214

PROJECT NUMBER 985043010

CLIENT Williamson County

ADDRESS 1900 Georgetown Inner Loop, Ste. B
Georgetown, Texas 78626

Attention Joe M. England, P.E.

hereby requests and authorizes Carter & Burgess, Inc. to perform the following services:

SCOPE See Attachments

COMPENSATION to be on a basis of Maximum Not to Exceed \$118,000 based on time and materials.

If technical or professional services are furnished by an outside source, an additional 10% shall be added to the cost of the services for Carter & Burgess, Inc.'s administrative costs.

List of Attachments:

Preliminary Construction Cost
Exhibit "A" - Services Provided by County
Exhibit "B" - Services Provided by Engineer
Engineering Fee Estimate
Work Outline
Project Schedule

Approved for **CLIENT** *Williamson County*

By:

John C. Daehler

Title:

County Judge

Date:

2-8-00

Accepted for **CARTER & BURGESS, INC.**

By:

Clifton F. Davis

Clifton F. Davis, P.E.

Title:

VICE-PRESIDENT

Date:

January 27, 2000

150

PROVISIONS

1. AUTHORIZATION TO PROCEED

Signing this form shall be construed as authorization by CLIENT for C&B, Inc. to proceed with the work, unless otherwise provided for in the authorization.

2. LABOR COSTS

C&B, Inc.'s Labor Costs shall be the amount of salaries paid C&B, Inc.'s employees for work performed on CLIENT's Project plus a stipulated percentage of such salaries to cover all payroll-related taxes, payments, premiums, and benefits.

3. DIRECT EXPENSES

C&B, Inc.'s Direct Expenses shall be those costs incurred on or directly for the CLIENT'S Project, including but not limited to necessary transportation costs including mileage at C&B, Inc.'s current rate when its automobiles are used, meals and lodging, laboratory tests and analyses, computer services, word processing services, telephone, printing and binding charges. Reimbursement for these EXPENSES shall be on the basis of actual charges when furnished by commercial sources and on the basis of usual commercial charges when furnished by C&B, Inc.

4. OUTSIDE SERVICES

When technical or professional services are furnished by an outside source, when approved by CLIENT, an additional amount shall be added to the cost of these services for C&B, Inc.'s administrative costs, as provided on the reverse side of this agreement.

5. COST ESTIMATES

Any cost estimates provided by C&B, Inc. will be on a basis of experience and judgement, but since it has no control over market conditions or bidding procedures C&B, Inc. cannot warrant that bids or ultimate construction costs will not vary from these cost estimates.

6. PROFESSIONAL STANDARDS

C&B, Inc. shall be responsible, to the level of competency presently maintained by other practicing professional engineers in the same type of work in CLIENT'S community, for the professional and technical soundness, accuracy, and adequacy of all design, drawings, specifications, and other work and materials furnished under this Authorization. C&B, Inc. makes no other warranty, expressed or implied.

7. TERMINATION

Either CLIENT or C&B, Inc. may terminate this authorization by giving 30 days' written notice to the other party. In such event CLIENT shall forthwith pay C&B, Inc. in full for all work previously authorized and performed prior to effective date of termination. If no notice of termination is given, relationships and obligations created by this Authorization shall be terminated upon completion of all applicable requirements of this Authorization.

8. ARBITRATION

All claims, disputes, and other matters in question arising out of, or relating to, this Authorization or the breach thereof may be decided by arbitration in accordance with the rules of the American Arbitration Association then obtaining. Either CLIENT or C&B, Inc. may initiate a request for such arbitration, but consent of the other party to such procedure shall be mandatory. No arbitration arising out of, or relating to this Authorization may include, by consolidation, joinder, or in any other manner, any additional party not a party to this Authorization.

9. LEGAL EXPENSES

In the event legal action is brought by CLIENT or C&B, Inc. against the other to enforce any of the obligations hereunder or arising out of any dispute concerning the terms and conditions hereby created, the losing party shall pay the prevailing party such reasonable amounts for fees, costs and expenses as may be set by the court.

10. PAYMENT TO C&B, INC. / INTEREST ON PAST-DUE AMOUNTS

Monthly invoices will be issued by C&B, Inc. for all work performed under the terms of this agreement. Invoices are due and payable on receipt. Interest at the rate of 11 1/2% per month will be charged on all past-due amounts, unless not permitted by law. Any interest charged or collected in excess of the highest legal rate will be applied to the principal amount owing to C&B, Inc., and if such interest exceeds the principal balance of CLIENT'S indebtedness to C&B, Inc., will be returned to CLIENT. It is the intent of C&B, Inc. and CLIENT to abide by all applicable laws regulating the maximum amount of interest which may be charged. To the greatest extent allowed by applicable law, CLIENT and C&B, Inc. agree that in the event CLIENT and C&B, Inc. enter into any compromise or settlement calling for the payment of past due principal and accrued and unpaid interest on any past-due invoice, C&B, Inc. may charge and CLIENT agrees to pay interest on such combined past due principal and accrued and unpaid interest amount (the "New Principal Balance") at the rate of 11 1/2% per month or at the highest rate allowed by law, subject, as provided herein, to C&B, Inc.'s agreement to credit excess interest or return same to CLIENT after the New Principal Balance is paid.

11. LIMITATION OF LIABILITY

C&B, Inc.'s liability to the CLIENT for any cause or combination of causes is in the aggregate, limited to an amount no greater than the fee earned under this agreement.

12. ADDITIONAL SERVICES

Services in addition to those specified in Scope will be provided by C&B, Inc. if authorized in writing by CLIENT. Additional services will be paid for by CLIENT as indicated in the Letter of Proposal, Task Authorization, or such other document as deemed appropriate by CLIENT and C&B, and which is referenced under Compensation.

13. SALES TAX

In accordance with the State Sales Tax Codes, certain surveying services are taxable. Applicable sales tax is not included in the above proposed fee. Sales tax at an applicable rate will be indicated on invoice statements.

14. SURVEYING SERVICES

In accordance with the Professional Land Surveying Practices Act of 1989, the client is informed that any complaints about surveying services may be forwarded to the Texas Board of Professional Land Surveying, 7701 North Lamar, Suite 400, Austin, Texas 78752, (512) 482-6487.

15. TERMINATION FOR NON-PAYMENT OF FEES

C&B, Inc. may terminate this contract by giving written notice if any C&B, Inc. invoice remains unpaid for more than sixty (60) days. C&B, Inc.'s right to terminate this contract shall not be waived by C&B, Inc.'s continued performance during any period of investigation by C&B, Inc. to determine the reasons for CLIENT'S nonpayment.

In case any one or more of the provisions contained in this Agreement shall be held illegal, the enforceability of the remaining provisions contained herein shall not be impaired thereby.

REV 03/88

PRELIMINARY CONSTRUCTION COST

DATE: 01/27/2000
PROJECT NO.: 97-5043-010
CONTROL NO.:
HIGHWAY: County Road 214
COUNTY: WILLIAMSON

ITEM NO.	DESCRIPTION	UNIT	EST. QUAN	PRICE PER UNIT	AMOUNT
ROADWAY AND BRIDGES - RURAL NET LENGTH = 5,800 FT = 1.11 MI 2 - 12' LANES W/2 SHOULDERS					
	LENGTH = FEET	5,800 FT			
	PAV WIDTH	28 FT			
	BASE WIDTH	32 FT			
	ROW WIDTH	60 FT			
	ASPH-1 GAL/SY	0.25 GAL			
	ASPH-2 GAL/SY	0.25 GAL			
	AGGR-1 CY/100SY	1 CY			
	AGGR-2 CY/180SY	1 CY			
100	PREP ROW	STA	59	\$900.00	\$29,800
110	EXCAVATION(ROW)(ROCK)	CY	20,000	\$4.00	\$80,000
132	EMBANK(DENS CONT)(TY C)(CL3)	CY	25,000	\$4.00	\$100,000
160	FURN AND PLAC TOPSOIL (CL 2)(4")	SY	31,283	\$1.30	\$40,669
164	DRILL SEED (PERM)(RURAL)(CLAY)	SY	31,283	\$0.10	\$3,128
247	FLEX BASE(COPL IN PLAC)(1")	SY	20,886	\$5.00	\$104,180
310	ASPH MATL (MC-30)	GAL	10,836	\$1.30	\$14,221
316	AGGR GR. 4 (2 CRSE SURF TRMT)	CY	203	\$35.00	\$7,105
316	AGGR GR. 6 (2 CRSE SURF TRMT)	CY	101	\$40.00	\$4,040
400	BRIDGES (INCLUDES RIPRAP)	SF		\$35.00	
432	RIPRAP (CONC) (CL B)	CY	20	\$200.00	\$4,000
460	CGMP (24 IN)	LF		\$25.00	
460	CGMP (36 IN)	LF	200	\$30.00	\$6,000
462	CONC BOX CULV (4 - 8 FT X 7 FT)	LF		\$440.00	
466	WINGWALL (7 FT)(W/RIPRAP APRON)	EA		\$3,000.00	
466	SET (24")	EA		\$2,500.00	
466	SET (36")	EA	6	\$2,500.00	\$15,000
500	MOBILIZATION	LS	1	\$45,000.00	\$45,000
502	BARRIC. SIGNS & TRAF HANDL	LS	1	\$30,000.00	\$30,000
506	CONSTRUCTING DETOURS	EA	2	\$5,000.00	\$10,000
540	MTL BM GD FEN (12 GA)(TM POST)	LF		\$12.00	
540	TERM ANCH SEC	EA		\$300.00	
642	SMALL ROADSIDE SIGN (COMPLETE IN PL)	EA	10	\$300.00	\$3,000
666	DEL AND OBJ MKK ASM	EA	8	\$30.00	\$240
666	REFL PAV MKK TY I (W)(4")(SLD)	LF	11,720	\$0.20	\$2,344
666	REFL PAV MKK TY I (W)(4")(BLK)	LF	5,500	\$0.25	\$1,406
666	REFL PAV MKK TY I (W)(8")(SLD)	LF		\$1.00	
666	REFL PAV MKK TY I (W)(12")(SLD)	LF	36	\$2.80	\$104
666	REFL PAV MKK TY I (Y)(4")(SLD)	LF	2,000	\$0.20	\$400
666	REFL PAV MKK TY I (Y)(4")(BLK)	LF		\$0.25	
666	REFL PAV MKK TY I (Y)(8")(SLD)	LF		\$1.00	
666	REFL PAV MKK TY I (Y)(12")(SLD)	LF		\$2.80	
672	RAISED PAV MARK (REFL) T H-A-A	EA	360	\$2.10	\$756
672	RAISED PAV MARK (HIGGLE) TY H-A-A	EA		\$12.00	
5006	ROCK FILTER DAMS (TY 1)	LF	60	\$20.00	\$1,000
5010	CONSTRUCT EXT (TY 1)	SY	500	\$8.50	\$4,250
5010	CONSTRUCT EXT (REMOV)(TY 1)	SY	500	\$3.50	\$1,750
5240	TEMP SEDMT CONT FENCE & (REMOV)	LF	2,000	\$1.50	\$3,000
5257	SINGLE GORAIL TERMINALS	EA		\$2,000.00	
5274	TRENCH EXCAV PROTECTION	LF			
	SUBTOTAL (ROADWAY AND BRIDGES)				\$515,000
	ESTIMATE FOR ITEMS THAT HAVE NOT BEEN DETERMINED				\$30,000
	TOTAL (ROADWAY AND BRIDGES)				\$545,000
	COST PER MILE			\$941,000	
	COST PER LINEAR FOOT			\$0.8	

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01/27/2000
10:04 AM

EXHIBIT "A"

Services to be Provided by the County

Highway: CR 214
Limits: From SH 29 in Liberty Hill to 1.1 Miles North (Rolling Hills Road)
Length: 1.1 Miles
County: Williamson

In conjunction with the services to be provided by the Engineer, as described in Exhibit "B", Williamson County (County) will furnish to the Engineer the following items:

1. Furnish available horizontal control points.
2. Furnish available benchmark elevations and descriptions for vertical control.
3. Furnish data that County has on file concerning this project.
4. Furnish available existing Right-of-Way data.
5. Furnish available and applicable special specifications, special provisions, and updated list of bid items applicable to the project.
6. Furnish available traffic counts.
7. Furnish a tabulation of applicable unit prices.
8. Furnish a sample set of construction plans.
9. Provide the Engineer with timely review (10 working days) and decisions necessary in order to permit the Engineer to maintain an agreed upon project schedule.

EXHIBIT "B"**Services to be Provided by the Engineer**

Highway: CR 214
Limits: From SH 29 in Liberty Hill to 1.1 Miles North (Rolling Hills Road)
Length: 1.1 Miles
County: Williamson

The work performed by the Engineer under this work authorization shall consist of providing engineering services required for, preliminary schematic design, surveying, right-of-way plans, construction plans, specifications and estimates, and bidding documents. All work to be performed under this contract shall be subject to review and approval of Williamson County (County). The Engineer will provide the overall project supervision, management, administration and coordination and will be the single point of contact between the County and all subcontractors.

The Engineering work required under this work authorization is outlined according to each task to be performed in the Work Outline. The Engineer shall furnish all equipment, materials, supplies, and incidentals as required to perform the above mentioned engineering work except as otherwise specified in Exhibit "A" which precedes this section.

The Engineer will meet with County representatives on an as needed basis to report progress. Map drawings, bar graphs and reports will be used to present the project progress. Upon completion of the meeting, a meeting summary will be prepared to document project progress. A brief progress report will be furnished each month with the submission of the project invoice.

The Engineer will prepare right-of-way plans in accordance with the County procedures.

The Engineer will prepare the construction plans for this project which will contain all of the required plans and details pertaining to grading, roadway, drainage, signing, pavement markings, delineation, sequence of construction, and all details necessary for construction. Whenever possible, the TxDOT standard drawings, standard specifications, or previously approved special provisions and/or special specifications will be used. If a special provision and/or special specification must be developed for this project, it shall be in TxDOT format and, to the extent possible, incorporate references to approved TxDOT test procedures.

The Traffic Control Plan will be submitted to the County for review and approval early in the design stage.

The Engineer will perform all necessary hydrologic studies and hydraulic design necessary for channel analysis for all drainage structures and submit a report with this information along with the outputs from computer programs used, to the County for review and approval.

PS&E for the above work shall generally be prepared in accordance with the applicable requirements of TxDOT Specifications, Standards, and manuals (updated for revisions).

The Engineer will perform contract working days calculations and submit them with the final PS&E.

The Engineer will develop the project using the English System of Measure with the American Customary System of Measure notations on right-of-way plans, typical sections, and possible other locations where linear measurements are required. The schematic and geometric designs, as well as all field measurements, will be entirely in the English System of Measure.

The County will be responsible for the geotechnical design required for the project. The County will drill core test holes to determine soil properties. Adequate soil test data will be developed for determining the pavement design (by County geotechnical firm) for the project.

A copy of the Project tape will be furnished to the County. Electronic documents will be supplied in County preferred format.

ENGINEERING FEE ESTIMATE

COUNTY ROAD 214
WILLIAMSON COUNTY
FROM SH 20
TO: 1.11 MILES NORTH (Rolling Hills Road)
LENGTH = 1.11 MILES (2000')

CARTER & BURQUINS, INC.

27-Jan-2009
(CR214EP-4 WK4)
SHEET 1 OF 5

ESTIMATED MANHOURS OF EACH WORK TASK

TASK AND DESCRIPTION	PROJECT MANAGER	DESIGN ENGINEER	ASST. DES. ENGINEER	PR. ENGR. / SCIENTIST	CADD DRAFTER	CLERICAL	TOTAL MAN-HOURS
I. PROJECT MANAGEMENT (F.C. 114)							
A. Coordination and Review	12	28	0	0	0	4	44
B. Contract Administration	2	4	18	0	0	8	32
C. Quality Assurance/Quality Control	0	24	0	0	0	0	24
SUBTOTAL:	14	56	18	0	0	12	90
II. ROUTE AND DESIGN STUDIES (F.C. 115)							
A. Schematic Design	0	2	4	4	0	2	12
1. Data Collection	0	2	4	0	0	0	6
2. Initial Field Reconnaissance	0	0	0	1	0	0	1
3. Modify Property Ownership	0	0	1	2	0	0	3
4. Develop Alternate Designs	0	1	2	0	0	0	3
5. Typical Sections	0	0	0	0	0	0	0
6. Right of Way Requirements	1	2	0	0	0	0	3
B. Design Concept Conference	2	2	2	0	0	0	6
C. Preliminary Cost Estimate	0	1	2	2	0	0	5
SUBTOTAL:	5	16	9	0	20	4	54
III. SOCIAL ECONOMIC AND ENVIRONMENTAL STUDIES (F.C. 120)							
A. Environmental Assessment							
1. Agency Consultation							0
2. Purpose and Need for Action							0
3. Alternatives							0
4. Socioeconomic Data							0
5. Field Investigation							0
6. Land Use							0
7. Geology and Geomorphology							0
8. Noise and Vibration							0
9. Surface Water Hydrology							0
10. Air Quality							0
11. Cultural Resources							0
12. Ecological Resources							0
13. Wetlands							0
14. Endangered Species							0
15. Relocation							0
16. Private Farm Land							0
B. Review and Process							0
SUBTOTAL:	0	0	0	0	0	0	0

ENGINEERING FEE ESTIMATE

COUNTY ROAD 214

WILLIAMSON COUNTY

FROM: SH 28

TO: 1.11 MILES NORTH (Paving Hills Road)

LENGTH = 1.11 MILES (880')

CARTER & BURGESS, INC.

27-Jan-2008
(CR14EFLM/A)
SHEET 2 OF 6

ESTIMATED MANHOURS OF EACH WORK TASK

TASK AND DESCRIPTION	PROJECT MANAGER	DESIGN ENGINEER	ASST. DES. ENGINEER	INSTRUMENT SCIENTIST	QUALITY CONTROL	CLERICAL	TOTAL MANHOURS
IV. PUBLIC INVOLVEMENT (F.C. 120)							
A. Public Meeting							0
1. Prepare Meeting Exhibit							0
2. Assist with Meeting							0
3. Prepare Summary and Analysis							0
A. Public Hearing							0
1. Prepare Notice for Opportunity for Hearing							0
2. Prepare Summary							0
SUBTOTALS:	0	0	0	0	0	0	0
V. RIGHT OF WAY PLANS (F.C. 120)							
A. Corridor Data	0	1	0				2
B. Utility Locations	1	2	4			1	14
C. Right of Way Plans							
1. Prepare Right of Way Plans	0	1	2		4		7
2. Calculate Right of Way Plan		1	1		2		4
3. Calculate Parcel Areas							0
D. Prepare Field Notes							0
E. Research and Trust Analysis	0	1	1		2	2	6
F. Notify Utility Owners of Utility Adjustments							0
SUBTOTALS:	1	6	8		14	4	33
VI. FIELD SURVEYS (F.C. 120)							
A. Establish Horizontal and Vertical Control	0	1	1		2		4
B. Establish Benchmarks at (100') Intervals		1	1				2
C. Stake Corridor		0	1				1
D. Existing Cross Sections and Ties		0	0				0
1. Proposed Roadway Centerline		0	1				1
2. Connecting Roads		0	1				1
3. Driveway Crossings		0	1				1
4. Existing Bridges and Culverts		0	0				0
5. Corrections to SH 28		0	0				0
E. Survey and Stake Right-Of-Way		1	1				2
F. Stake Core Test Holes		0	1				1
SUBTOTALS:	0	3	5		2		10

ENGINEERING FEE ESTIMATE

COUNTY ROAD 214
WILLIAMSON COUNTY

FROM: SH25
TO: 1.11 MILES NORTH (Rising Hills Road)
LENGTH = 1.11 MILES (approx)

CARTER & BURGESS, INC.

27-July-2000
(CPR145F.A11WKA)
SHEET 3 OF 6

ESTIMATED MAN-HOURS OF EACH WORK TASK									
TASK AND DESCRIPTION	PROJECT MANAGER	DESIGN ENGINEER	ASST. DES. ENGINEER	SR. ENGR. / SCIENTIST	CADD / DRAFTER	CLERICAL	TOTAL MAN-HOURS		
VII. ROADWAY DESIGN (F.C. 165)									
A. Geometric Design	1	5	4	0	0	0	10		
1. Horizontal Alignment	1	4	0	0	0	0	5		
2. Vertical Alignment	0	0	0	0	0	0	0		
3. Right-Of-Way Requirements	0	0	0	0	0	0	0		
4. Typical Sections	0	0	0	0	0	0	0		
SUBTOTAL:	2	7	12	0	0	0	19	37	
VIII. PREPARATION OF CONSTRUCTION PLANS									
FULL SIZE SHEETS (22" x 34")									
SHEET TOTALS									
NO. OF SHEETS	1	2	4	1	0	0	8	TOTAL SHEETS	18
DESIGN ENGINEER HOURS	1	2	4	1	0	0	8	DESIGN ENGINEER HOURS	16
ASST. DES. ENGINEER HOURS	1	1	2	0	0	0	4	ASST. DES. ENGINEER HOURS	4
SR. ENGR. / SCIENTIST HOURS	1	1	2	0	0	0	4	SR. ENGR. / SCIENTIST HOURS	4
CADD / DRAFTER HOURS	1	1	2	0	0	0	4	CADD / DRAFTER HOURS	4
CLERICAL HOURS	1	1	2	0	0	0	4	CLERICAL HOURS	4
SUBTOTAL:	7	32	60	0	0	0	99	TOTAL HOURS	177
A. ROADWAY DESIGN (F.C. 165)									
1. Title Sheet	1	1	4	4	0	0	10	15	
2. Project Layout	1	1	1	1	0	0	4	8	
3. Typical Sections	1	1	2	2	0	0	6	13	
4. Plan and Profile Sheets (1"=200')	3	4	8	24	0	0	36	63	
5. Horiz. Alig. & Cross Slopes	1	1	1	1	0	0	4	8	
6. Roadway Summaries	1	1	4	4	0	0	10	14	
7. General Notes and Specs. Data	2	4	8	16	0	0	30	46	
8. Estimate and Quantities	1	4	8	8	12	0	38	54	
SUBTOTAL:	13	32	60	60	12	0	177	17	
B. DRAINAGE (F.C. 161)									
1. Drainage Area Maps	1	4	4	8	0	0	16	18	
2. Hydraulic Data	1	8	8	16	0	0	48	22	
3. Drainage Sheet	2	12	12	24	0	0	72	48	
4. Outlet Cross Sec. & Details	2	6	6	12	0	0	36	18	
5. Drainage Details	2	6	6	12	0	0	36	22	
6. Storm Water Pol. Prev Plan	2	2	4	8	0	0	16	11	
7. Drainage Summary	1	2	2	4	0	0	8	12	
SUBTOTAL:	11	38	62	62	0	0	168	17	

WEDNESDAY - 11 JULY 2007

27-JUN-2008
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PAGE 4 OF 8

SHEET TOTALS		NO. OF SHEETS		DESIGN HRS./SHEET		AEST. HRS./SHEET		BR. ENG. HRS./SHEET		CADD. OR. HRS./SHEET		CHECK. HRS./SHEET		TOTAL HOURS	
SHEET TOTALS		NO. OF SHEETS		DESIGN HRS./SHEET		AEST. HRS./SHEET		BR. ENG. HRS./SHEET		CADD. OR. HRS./SHEET		CHECK. HRS./SHEET		TOTAL HOURS	
C. SIGNING AND MARKINGS (F.C. 168)															
1. Sign, Strip, and Dist. Plan	2	1	2	4	8	12	0	0	0	0	0	0	0	0	12
2. Summary of Small Signs	1	0	0	4	4	8	0	0	0	0	0	0	0	0	12
3. Sign Details	1	1	1	4	4	8	0	0	0	0	0	0	0	0	12
SUBTOTAL:		4	3	16	24	24	0	0	0	0	0	0	0	0	36
D. MISCELLANEOUS ROADWAY (F.C. 169)															
1. Traffic Control Plan, Below Sequence of Construction	3	1	3	4	12	24	0	0	0	0	0	0	0	0	36
SUBTOTAL:		4	3	16	24	24	0	0	0	0	0	0	0	0	36
E. BRIDGE DESIGN (F.C. 170)															
1. Structures Layout	0	2	0	16	0	12	0	0	0	0	0	0	0	0	12
2. Alignment Details	0	2	0	16	0	12	0	0	0	0	0	0	0	0	12
3. Bent Details	0	2	0	16	0	12	0	0	0	0	0	0	0	0	12
4. Span Details	0	2	0	16	0	12	0	0	0	0	0	0	0	0	12
5. Abut. Details	0	2	0	16	0	12	0	0	0	0	0	0	0	0	12
6. Summary of Structures	0	2	0	12	0	8	0	0	0	0	0	0	0	0	12
SUBTOTAL:		6	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS (Prep. of Const. Plans)		30	19	98	173	230	0	0	0	0	0	0	0	0	393
DESIGN TOTALS:															
PERCENT OF TOTAL HOURS:															

ENGINEERING F&E ESTIMATE

COUNTY ROAD 214
WILLIAMSON COUNTY

CANTIER & BURGESS, INC.
SUMMARY

27-Jan-2000
(C3814EF-AMK4)
SHEET 5 OF 8

FROM SH-29
TO: 1.71 MILES NORTH (Folding Hills Road)
LENGTH = 1.11 MILES (0.0007)

ESTIMATED COST OF EACH WORK TASK TASK AND DESCRIPTION	PROJECT MANAGER	DESIGN ENGINEER	ASST. DES. ENGINEER	SCIENTIST	CAUD. DRAFTER	3D SPECIAL	TOTAL MANHOURS
I. PROJECT MANAGEMENT (F.C. 110) TOTAL HOURS SALARY RATE: DIRECT SALARY COST: OVERHEAD MULTIPLIER: PROFIT:	14 \$80.25 \$704 \$1,148 \$252 \$2,978	58 \$80.25 \$4,653 \$4,653 \$2,941 \$5,578	18 \$32.00 \$576 \$576 \$354 \$1,506	0 \$29.00 \$0 \$0 \$0 \$0	0 \$22.00 \$0 \$0 \$0 \$0	12 \$15.00 \$180 \$180 \$117 \$557	80
II. ROUTE AND DESIGN STUDIES (F.C. 110) TOTAL HOURS SALARY RATE: DIRECT SALARY COST: OVERHEAD MULTIPLIER: PROFIT:	8 \$80.25 \$642 \$642 \$409 \$1,051	12 \$80.25 \$963 \$963 \$611 \$1,574	8 \$32.00 \$256 \$256 \$160 \$672	0 \$29.00 \$0 \$0 \$0 \$0	20 \$22.00 \$440 \$440 \$275 \$1,155	4 \$15.00 \$60 \$60 \$38 \$158	80
III. SOCIAL ECONOMIC AND ENVIRONMENTAL STUDIES (F.C. 120) TOTAL HOURS SALARY RATE: DIRECT SALARY COST: OVERHEAD MULTIPLIER: PROFIT:	0 \$80.25 \$0 \$0 \$0 \$0	0 \$80.25 \$0 \$0 \$0 \$0	0 \$32.00 \$0 \$0 \$0 \$0	0 \$29.00 \$0 \$0 \$0 \$0	0 \$22.00 \$0 \$0 \$0 \$0	0 \$15.00 \$0 \$0 \$0 \$0	0
IV. PUBLIC INVOLVEMENT (F.C. 120) TOTAL HOURS SALARY RATE: DIRECT SALARY COST: OVERHEAD MULTIPLIER: PROFIT:	0 \$80.25 \$0 \$0 \$0 \$0	0 \$80.25 \$0 \$0 \$0 \$0	0 \$32.00 \$0 \$0 \$0 \$0	0 \$29.00 \$0 \$0 \$0 \$0	0 \$22.00 \$0 \$0 \$0 \$0	0 \$15.00 \$0 \$0 \$0 \$0	0
V. RIGHT OF WAY PLANS (F.C. 130) TOTAL HOURS SALARY RATE: DIRECT SALARY COST: OVERHEAD MULTIPLIER: PROFIT:	1 \$80.25 \$80 \$80 \$50 \$130	8 \$80.25 \$642 \$642 \$409 \$1,051	8 \$32.00 \$256 \$256 \$160 \$672	0 \$29.00 \$0 \$0 \$0 \$0	14 \$22.00 \$308 \$308 \$193 \$809	4 \$15.00 \$60 \$60 \$38 \$158	28
VI. FIELD SURVEYS (F.C. 130) TOTAL HOURS SALARY RATE: DIRECT SALARY COST: OVERHEAD MULTIPLIER: PROFIT:	8 \$80.25 \$642 \$642 \$409 \$1,051	8 \$80.25 \$642 \$642 \$409 \$1,051	8 \$32.00 \$256 \$256 \$160 \$672	0 \$29.00 \$0 \$0 \$0 \$0	2 \$22.00 \$44 \$44 \$27 \$115	0 \$15.00 \$0 \$0 \$0 \$0	10
							\$2,927

ENGINEERING FEE ESTIMATE

COUNTY ROAD 214

WILLIAMSON COUNTY

FROM SH 28

TO: 1.11 MILES NORTH Grading 1 Mile Road

LENGTH = 1.11 MILES (2005)

CARTER & BURGESS, INC.

SUMMARY

27-Jan-2008

ICRBT4EEF4WK40

SHEET 8 OF 8

ESTIMATED COST OF EACH WORK TASK

TASK AND DESCRIPTION	PROJECT MANAGER	DESIGN ENGINEER	FLIGHT DES. ENGINEER	BL. ENGR. ASSISTANT	CADD PRACITICE	CIVILICAL	TOTAL MAN-HOURS
MIL. ROADWAY DESIGN (P.C. 100)							
TOTAL HOURS	2	7	12	0	10	0	37
SALARY RATES	\$20.00	\$31.25	\$32.00	\$20.00	\$22.00	\$16.00	
DIRECT SALARY COST:	\$101	\$218	\$384	\$0	\$220	\$0	
OVERHEAD MULTIPLIER:	\$164	\$414	\$606	\$0	\$350	\$0	
PROFIT:	\$82	\$200	\$151	\$0	\$118	\$0	
TOTAL	\$247	\$632	\$1,141	\$0	\$688	\$0	\$1,668
PREP. PREPARATION OF CONSTRUCTION PLANS							
TOTAL HOURS	10	0	175	0	0	4	189
SALARY RATES	\$20.00	\$31.25	\$32.00	\$20.00	\$22.00	\$16.00	
DIRECT SALARY COST:	\$200	\$0	\$5,600	\$0	\$0	\$64	
OVERHEAD MULTIPLIER:	\$1,000	\$0	\$18,080	\$0	\$0	\$320	
PROFIT:	\$304	\$0	\$1,747	\$0	\$0	\$100	
TOTAL	\$1,504	\$0	\$14,427	\$0	\$0	\$484	\$16,415
TOTAL CARTER & BURGESS, INC.							
TOTAL HOURS	41	106	225	0	202	24	798
SALARY RATES	\$20.00	\$31.25	\$32.00	\$20.00	\$22.00	\$16.00	
DIRECT SALARY COST:	\$820	\$3,338	\$7,200	\$0	\$4,440	\$384	
OVERHEAD MULTIPLIER:	\$1,230	\$5,012	\$11,520	\$0	\$7,772	\$576	
PROFIT:	\$304	\$1,536	\$2,250	\$0	\$1,100	\$192	
TOTAL	\$1,354	\$9,886	\$20,970	\$0	\$13,312	\$1,152	\$45,674
PERCENT OF CARTER & BURGESS COST:							
	8.00%	23.80%	31.30%	0.00%	29.47%	1.96%	100.00%
DIRECT COST - CARTER & BURGESS, INC.:							
Mylar Print	200 Square Feet at	\$4.00 Square Feet at	\$4.00 Square Feet at				\$1,200
Blanking Reproductions or Plotting	1,000 Square Feet at	\$0.25 Square Feet at	\$0.25 Square Feet at				\$250
Survey Materials and Supplies	3 Deliveries at	\$15.00 Delivery	\$15.00 Delivery				\$45
Express Deliveries	1,000 Miles at	\$0.510 Mile	\$0.510 Mile				\$510
Auto Mileage	0 Flights at	\$200.00 Round Trip	\$200.00 Round Trip				\$0
Air Travel	0 Nights at	\$80.00 Night	\$80.00 Night				\$0
Lodging	0 Days at	\$25.00 Day	\$25.00 Day				\$0
Per Diem	6 Days at	\$60.00 Day	\$60.00 Day				\$360
Auto Rental							\$0
Telephone & Communications							\$0
TOTAL DIRECT COST - CARTER & BURGESS, INC.							\$1,860
SUBSIDIARY - CARTER & BURGESS, INC.							
Labor + Overhead + Profit							\$47,197
Client Cost							\$1,860
TOTAL CONTRACT COST - CARTER & BURGESS, INC.							\$49,057
TOTAL CONTRACT COST - SAU, INC.							\$119,080
GRAND TOTALS							

WORK OUTLINE

Highway: CR 214
Limits: From SH 29 in Liberty Hill to 1.1 Miles North (Rolling Hills Road)
Length: 1.1 Miles
County: Williamson

I. Project Management

- A. The Engineer will coordinate all activities with Williamson County and with other state and federal agencies. The Engineer will meet with the County staff on a scheduled basis to review project progress.
- B. The Engineer will administer all phases of the project not reserved by the County, including preparation of invoices, coordination of all work assigned to and accomplished by team firms, etc.
- C. The Engineer will assign experienced Senior Staff members the responsibility of reviewing the work produced and developing the procedures to be used during project development to assure compliance with County policies and procedures as well as assuring that work is accomplished correctly and on time.

II. Route Location Studies

- A. The Engineer will review alternate routes
 - 1. Collect and review all previously developed data for the project.
 - 2. Identify property ownership.
 - 3. Develop horizontal and vertical alignments for the selected route.
 - 4. Prepare typical sections for the project, using County pavement design.
 - 5. Determine right-of-way requirements for the selected route.
- B. The Engineer will assist the County with a project concept conference.
- C. The Engineer will prepare preliminary cost estimates including any required structure cost.

III. Social Economic and Environmental Studies (Not Included)

IV. Public Involvement (Not Included)

V. The Engineer will prepare right-of-way plans in accordance with the TxDOT "Right-of-Way Division Manual, Books I and II", except for parcel sketches. The right-of-way deliverables will include the following:

- A. Ownership data
- B. Utility locations
- C. Right-of-way plans
 - 1. Right-of-way plans preparation
 - 2. Calculated right-of-way requirements
 - 3. Calculated parcel areas.

- D. Field notes
- E. Research and tract analysis
- F. Notify utility owners of utility adjustments

VI. Field Surveys will include the following:

- A. Establish horizontal and vertical control.
- B. Establish benchmarks at approximately 2000 foot intervals along the project.
- C. Stake the centerline offsets (PC, PT & 2000' tangents) for the selected route.
- D. Existing cross sections and horizontal ties will be taken for the following:
 - 1. Proposed roadway centerline - 150' left & right
 - 2. Connecting roads
 - 3. Drainage channels
 - 4. Existing culverts
 - 5. Connections on existing SH 29
- E. The required new and existing right-of-way will be surveyed and staked.

VII. Roadway Design

- A. The Engineer will prepare geometric design with calculated horizontal and vertical alignments along the selected route. The geometric design will include the following:
 - 1. Horizontal alignment
 - 2. Vertical alignment
 - 3. Right-of-way requirements
 - 4. Typical sections

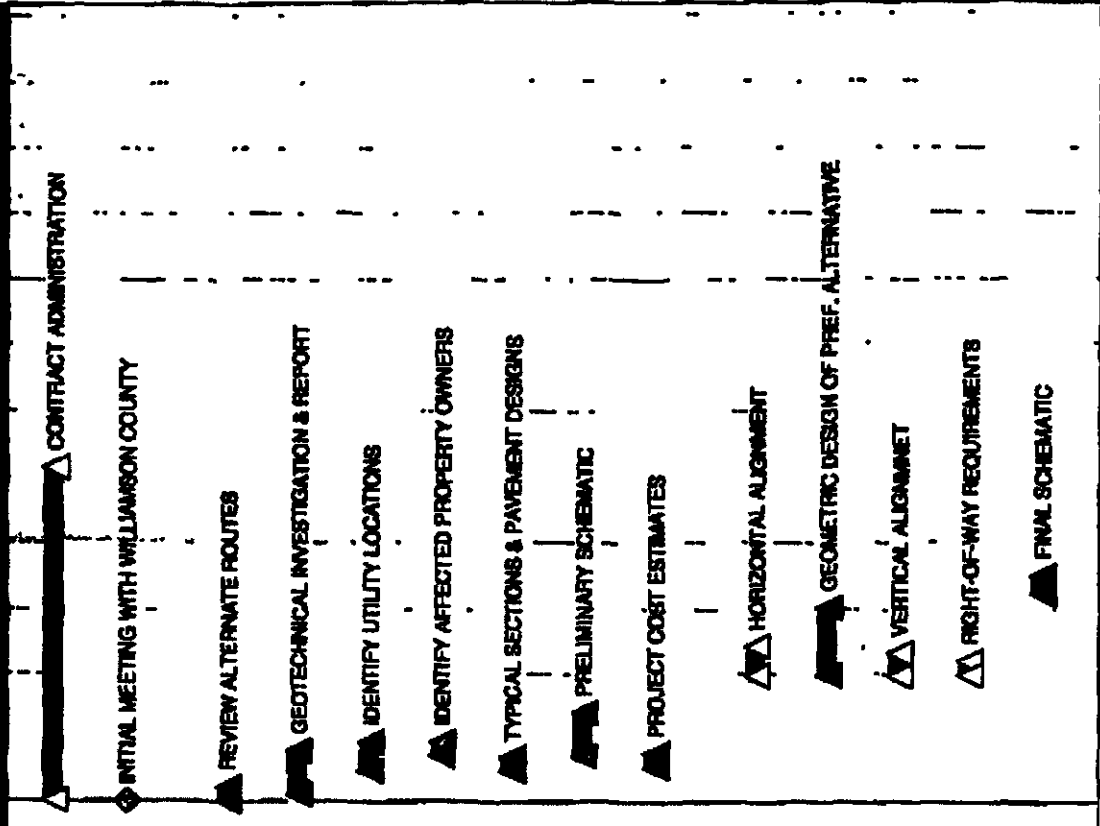
VIII. The Engineer will prepare a complete set of construction plans for the project for review and subsequent letting by County. These plans will be in accordance with the design standards generally used by the County and TxDOT. The construction Plans, Specifications, and Estimates (P&S&E) will include, but will not be limited to the following:

- A. Roadway
 - 1. Title sheet
 - 2. Project layout
 - 3. Typical sections
 - 4. Plan and profile sheets
 - 5. Horizontal alignment and cross slope
 - 6. Roadway summaries
 - 7. General notes and specification data
 - 8. Estimate and quantities
- B. Drainage
 - 1. Drainage area maps
 - 2. Hydraulic data
 - 3. Drainage sheet
 - 4. Culvert cross section and details
 - 5. Drainage details
 - 6. Storm water pollution prevention plan
 - 7. Drainage summary

- C. Signing and Markings
 - 1. Signing, striping, and delineation plans
 - 2. Summary of small signs
 - 3. Sign details
- D. Miscellaneous Roadway
 - 1. Traffic control plan, detour and sequence of construction
 - 2. Construction time estimate

PROJECT SCHEDULE - WILLIAMSON COUNTY ROAD 214

















1000	CONTRACT ADMINISTRATION	112d	01FEB00	06JUL00	CAB
1010	INITIAL MEETING WITH WILLIAMSON COUNTY	0	01FEB00		CAB
1020	REVIEW ALTERNATE ROUTES	5d	01FEB00	07FEB00	CAB
1030	GEOTECHNICAL INVESTIGATION & REPORT	15d	04FEB00	24FEB00	CNTY
1040	IDENTIFY UTILITY LOCATIONS	10d	16FEB00	26FEB00	CAB
1050	IDENTIFY AFFECTED PROPERTY OWNERS	5d	22FEB00	26FEB00	CAB
1060	TYPICAL SECTIONS & PAVEMENT DESIGNS	5d	15FEB00	21FEB00	CAB/CNTY
1070	PRELIMINARY SCHEMATIC	15d	22FEB00	13MAR00	CAB
1080	PROJECT COST ESTIMATES	5d	17FEB00	22FEB00	CAB
1090	HORIZONTAL ALIGNMENT	10d	31MAR00	13APR00	CAB
1100	GEOMETRIC DESIGN OF PREF. ALTERNATIVE	22d	31MAR00	01MAY00	CAB
1110	VERTICAL ALIGNMENT	7d	31MAR00	10APR00	CAB
1120	RIGHT-OF-WAY REQUIREMENTS	5d	31MAR00	06APR00	CAB
1125	FINAL SCHEMATIC	7d	06MAY00	16MAY00	



▲	Early start point	▲	Critical point
▲	Early finish point	◆	Start reflection point
■	Early bar	◆	Finish reflection point
■	Critical bar		

Company name: CARTER - BURFORD
 PROJECT SCHEDULE - CR 214
 FROM SH 26 TO 1 MILE NORTH
 Project name: 214
 Run date: 26-JAN-00
 © Flanders Systems, Inc.

PROJECT SCHEDULE - WILLIAMSON COUNTY ROAD 214

1130	OWNERSHIP DATA	10d	07APR00	20APR00	CBS		OWNERSHIP DATA
1140	UTILITY OWNER NOTIFICATION	10d	24MAY00	03JUN00	CBS		UTILITY OWNER NOTIFICATION
1150	RIGHT-OF-WAY SURVEYS	30d	08MAY00	08JUN00	SAM		RIGHT-OF-WAY SURVEYS
1160	RIGHT-OF-WAY PLANS	22d	08MAY00	09JUN00	SAM		RIGHT-OF-WAY PLANS
1170	RESEARCH & TRACT ANALYSIS	3d	01FEB00	03FEB00	SAM		RESEARCH & TRACT ANALYSIS
1180	PREPARE FIELD NOTES	14d	08MAY00	28MAY00	SAM		PREPARE FIELD NOTES
1190	RIGHT-OF-WAY PLAN APPROVAL	10d	12JUN00	28JUN00	SAM		RIGHT-OF-WAY PLAN APPROVAL
1200	SURVEY & STAKE RIGHT-OF-WAY	12d	28JUN00	11JUL00	SAM		SURVEY & STAKE RIGHT-OF-WAY
1230	STAKE CENTERLINE	5d	28JUN00	30JUN00	SAM		STAKE CENTERLINE
1210	ESTABLISH CONTROL BASELINE	12d	01FEB00	16FEB00	SAM		ESTABLISH CONTROL BASELINE
1220	ESTABLISH BENCHMARKS	5d	17FEB00	23FEB00	SAM		ESTABLISH BENCHMARKS
1240	FIELD TIE TO UTILITIES	4d	24FEB00	02MAR00	SAM		FIELD TIE TO UTILITIES
1250	CROSS SECTIONS & TOPOS	20d	17FEB00	12MAR00	SAM		CROSS SECTIONS & TOPOS
1260	DRIVEWAY & CONNECTING STREETS	3d	18MAR00	20MAR00	SAM		DRIVEWAY & CONNECTING STREETS
1270	DRAINAGE CHANNELS	3d	21MAR00	23MAR00	SAM		DRAINAGE CHANNELS
1280	EXISTING DRAINAGE STRUCTURES	2d	24MAR00	27MAR00	SAM		EXISTING DRAINAGE STRUCTURES

 Early start point  Early finish point  Early bar  Critical bar	 Critical point  Start milestone point  Finish milestone point	PROJECT SCHEDULE - CR 214 FROM SH 28 TO 1 MILE NORTH	Company name: CARTER - BORDERS Project name: 214 Run date: 28JUN00 © Williams Systems, Inc.
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PROJECT SCHEDULE - WILLIAMSON COUNTY ROAD 214

1300	TYPICAL SECTIONS	10d	28MAY00	10APR00	CMB	TYPICAL SECTIONS
1310	PLAN & PROFILE SHEETS	24d	11APR00	12MAY00	CMB	PLAN & PROFILE SHEETS
1320	ROADWAY DESIGN	24d	28MAY00	29APR00	CMB	ROADWAY DESIGN
1330	ROADWAY SUMMARIES	10d	18MAY00	28MAY00	CMB	ROADWAY SUMMARIES
1340	GENERAL NOTES & SPEC. DATA	14d	11MAY00	30MAY00	CMB	GENERAL NOTES & SPEC. DATA
1350	ESTIMATE & QUANTITIES	8d	05JUN00	14JUN00	CMB	ESTIMATE & QUANTITIES
1355	TITLE SHEET	8d	16JUN00	21JUN00	CMB	TITLE SHEET
1360	DRAINAGE AREA MAPS	10d	07APR00	20APR00	CMB	DRAINAGE AREA MAPS
1370	HYDRAULIC DESIGN & DATA SHEETS	18d	21APR00	19MAY00	CMB	HYDRAULIC DESIGN & DATA SHEETS
1380	CULVERT CROSS SECTIONS & DETAILS	10d	16MAY00	26MAY00	CMB	CULVERT CROSS SECTIONS & DETAILS
1390	STORM WATER POLLUTION PREVENTION PLAN	14d	16MAY00	01JUN00	CMB	STORM WATER POLLUTION PREVENTION PLAN
1400	DRAINAGE SUMMARY	6d	20JUN00	27JUN00	CMB	DRAINAGE SUMMARY
1410	REVIEW OF CONSTR. PLANS, SPEC., & EST.	16d	16JUN00	05JUL00	CMB	REVIEW OF CONSTR. PLANS, SPEC., & EST.

167

RECORDERS MEMORANDUM

All or parts of the text on this page was not clearly legible for satisfactory recordation.

▲	Early start point	▲	Critical point	Company name	CARTER - BURGESS
▲	Early finish point	◆	Start milestone point	Project name	214
■	Early bar	◆	Finish milestone point	Run date	24JAN00
■	Critical bar				© Primavera Systems, Inc.

AGENDA ITEM # 25

Discuss and take appropriate action on space needs assessment committee.

Judge Doerfler suggested approving phases 1,2 and 4 of the Croslin and Associates proposal using existing information for phases 3 and 5.

Moved: Commissioner Boatright

Seconded: Commissioner Heiligenstein

Motion: To approve Phases 1,2,3,4 and 5 of Croslin and Associates proposal in the amount of \$151,118.00.

Vote: Motion carried 2 - 1 with Judge Doerfler voting against the motion.
< Clerk copy here >

**Williamson County
Needs Assessment & Master Plan
Fee Proposal
Croslin and Associates, Inc.
C/A Project #20001**

RECAP

February 7, 2000

Phase I Statistical & Demographic Study	\$6,800
Phase II Needs Assessment	\$94,986
Phase III Site Analysis	\$16,152
Phase IV Master Planning & Implementation Plan	\$18,980
Phase V Cost Estimating	\$14,400
Sub Total	\$151,118
OPTIONAL SERVICES:	
Phase VI Architectural Selection	\$3,780
Phase VII Schematic Design	\$5,550
Phase VIII Design Development	\$7,760
Phase IX Construction Document Review	\$21,875
Sub Total	\$38,945

approved 2-8-00
Judge C. Doerfler