

February 13, 2019

Mrs. Jamie Brierton
City of Coppell
265 E Parkway Blvd.
Coppell, TX 75019

**Re: Civil Engineering Fee Proposal for
Cambria Drive from Willow Springs Drive to the Cul-de-sac (Approximately 1,200 LF) and
Wise Way from Cambria Drive to Shadowcrest Lane (Approximately 250 LF)**

Dear Mrs. Brierton:

Criado & Associates, Inc. (CRIADO) is pleased to be of service to the City of Coppell, by providing surveying, SUE and engineering design services for preparation of PS&E bid documents for paving, drainage, water and wastewater improvements along Cambria Drive and Wise Way.

The project will provide for the full reconstruction of the existing 28-foot-wide residential streets including the replacement of water and wastewater utilities. A storm drain curb inlet and underground pipe will be added at the end of the cul-de-sac on Cambria Drive to replace the existing concrete flume.

CRIADO will perform services for the project in accordance with the Scope of Work contained in **Exhibit A**, attached. The Fee Schedule (**Exhibit B**) for this work is summarized below:

Basic Design Services:	\$ 153,070.00
Special Services:	\$ 38,537.00
<u>Reimbursable Expenses (estimated):</u>	<u>\$ 1,500.00</u>
TOTAL	\$ 193,107.00

A Preliminary Engineer's Estimate of Probable Construction Cost for the proposed improvements along Cambria Drive and Wise Way is included in **Exhibit C**. Basic Design Services proposed including Topographic Survey for Design are approximately 11.6% of the total estimated probable construction cost.

Final plans and specifications shall be submitted in accordance with the design schedule provided in **Exhibit D** after a "Notice to Proceed" has been provided.

We appreciate the opportunity to be of service to the City of Coppell. We trust that our association on this project will be mutually beneficial and continue to serve as the foundation for a long-term relationship. If you have any questions, please do not hesitate to call me at 972-392-9092.

Sincerely,
Criado & Associates, Inc.



Cristina Criado, PE
President / CEO

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EXHIBIT A SCOPE OF SERVICES CAMBRIA DRIVE AND WISE WAY CITY OF COPPELL, TEXAS

BASIC DESIGN SERVICES

0.0 GENERAL

0.1 Project Description

The project will provide for the full reconstruction of the existing 28-foot-wide concrete residential street section including the replacement of existing 8" water (Approx. 1,450 LF) and 8" wastewater (Approx. 1,120 LF) utilities along Cambria Drive from Willow Springs Drive to the western end and Wise Way from Cambria Drive to Shadowcrest Lane (Approx. 250 LF).

All work will be performed within the existing public right-of-way. Plans will be prepared using conventional ground topographic surveying tied to the City of Coppel Geodetic Control Network to produce 1"=20' scale 22"X34" construction documents.

0.2 Project Phasing

This project shall be divided into five phases:

- Schematic Design Phase
- Preliminary Design Phase
- Final Design Phase
- Bid Phase Services
- Construction Phase Services

0.3 Design Standards

Design and preparation of construction drawings and technical specifications required for the project shall be in accordance with the most recent version of the following standards.

- a. City of Coppel Standard Construction Details and Design Standards
- b. NCTCOG Construction Specifications and Details
- c. AASHTO Design Criteria
- d. TDLR Architectural Barriers Act / Texas Accessibility Standards
- e. TxDOT Design and Construction Standards

1.0 SCHEMATIC DESIGN (30% PS&E)

1.1 Data Collection

Obtain and review available reports, pertinent utility plans, street plans, plats and right-of-way maps, existing easement information, and other

features within the project area from the City of Coppell. Contact private utilities along the project for information on existing and proposed facilities.

1.2 Project Kick-Off Meeting

Meet with the City of Coppell staff to review and discuss the primary design criteria, operational concerns, traffic information and other preliminary data. Prepare a record of the preliminary design meeting and distribute it to all attendees.

1.3 Schematic Design (30% PS&E)

a. Establish roadway alignment and right-of-way limits and determine geometry of proposed roadway improvements and other paving improvements.

b. Perform preliminary drainage analysis of existing roadway and determine if any additional storm sewer is required other than at the existing flume replacement on Cambria Lane.

(Note - A Hydraulic Analysis of the channel located west of Cambria is excluded from this scope of services. Downstream WSEL of proposed storm sewer system will be based on WSEL provided by the City.)

c. Perform preliminary construction sequencing and traffic control design.

d. Establish water and wastewater horizontal alignment; including locations of all associated appurtenances.

e. Contract with local Geotechnical Engineering Firm to begin geotechnical engineering and soil borings for concrete pavement section design recommendations.

f. Determine if any additional easements and/or Right-of-way are necessary for drainage or paving considerations.

1.4 Schematic Submittal

Submit three (3) sets of half size 11"x17" schematic plans and digital PDF to the City for review.

1.5 City Review Meeting

Meet with the City of Coppell to discuss schematic plans, preliminary drainage design, construction phasing, traffic control and utility design.

1.6 Public Meeting

Assist the City in conducting one public neighborhood meeting thru preparation of a project exhibit showing proposed improvements; including proposed pavement, storm sewer, water, and wastewater, along with typical paving section. Attend public meeting to be organized by the City of Coppell, if required.

2.0 PRELIMINARY DESIGN (60% PS&E)

2.1 Preliminary Design

Revise schematic plans incorporating comments received from the City and proceed with the development of Preliminary Design plans; including preparation of the following sheets at the engineering scale indicated:

- a. Cover sheet
- b. Quantity sheet
- c. General Notes sheet
- d. Project Control / ROW Map sheet. Scale 1" = 40'.
- e. Removal Plan sheets. Scale 1" = 20'.
- f. Construction Phasing and Traffic Control sheets. Scale 1" = 40'.
- g. Typical Sections
- h. Paving Plan & Profile sheets for street improvements. Scale 1" = 20' vertical and 1" = 2' horizontal.
- i. Storm Sewer Plan & Profile sheets. Scale 1" = 20' vertical and 1" = 4' horizontal.
(Note – Includes review of existing flume capacity on Cambria Lane. A new storm drain curb inlet and underground RCP will be proposed at the end of the cul-de-sac on Cambria Drive to replace the existing concrete flume section.)
- j. Water Plan sheets. Profile provided for water lines 12" and greater. Scale 1"=20' vertical and 1"=4' horizontal.
- k. Wastewater Plan & Profile sheets. Scale 1" = 20' vertical and 1" = 4' horizontal.
- l. Signage and Striping Plan sheets. Scale 1" = 20'.
- m. Erosion Control Plan sheets. Scale 1'=40'.
- n. Standard Detail sheets.

2.2 Utility Coordination

Work with affected utilities such as water, gas, telephone, cable TV, and electric to obtain accurate information for horizontal and vertical data for their facilities. Distribute the plans to local utility companies to obtain information regarding impacts to their facilities.

2.3 Quantities and Engineer's Estimate of Probable Construction Cost

Prepare quantities and a preliminary Engineer's Estimate of Probable Construction Cost.

2.4 Preliminary Submittal

Submit three (3) sets of half size 11"x17" preliminary plans, digital PDF, outline of specifications, and preliminary estimates to the City for review.

2.5 City Review Meeting

Meet with the City to discuss preliminary plans, outline of specifications, estimates, and drainage requirements.

3.0 FINAL DESIGN (95% PS&E)

3.1 Final Design

Revise preliminary plans incorporating comments received from the City. Incorporate comments from utility companies. Prepare final plans for the proposed improvements, including paving plans, details, notes and related information required for bidding.

3.2 Final Quantities and Engineer's Estimate of Probable Construction Cost

Prepare a final estimate of construction quantities and develop final Engineer's Estimate of Probable Construction Cost.

3.3 Specifications

Finalize the technical special provisions. Prepare additional technical specifications, if necessary, for the proposed improvements to supplement the North Central Texas Council of Governments Specifications for Public Works Construction, City of Coppell standards, and other applicable standard specifications.

3.4 Pre-Final Review Submittal

Submit three (3) sets of half size 11"x17" final plans, digital PDF, contract documents, and bid proposal forms prepared by the Engineer to the City.

3.5 City Review Meeting

Meet with the City to discuss pre-final plans, specifications, and Engineer's Estimate of Probable Construction Cost.

3.6 Contract Bid Documents

Assist the City in preparing final bid documents using existing City of Coppell standard documents as directed by the City staff. Bid documents shall include bid proposal forms, construction plans, specifications, and other documents required by the City of Coppell.

3.7 Right-of-way Parcel / Easement Preparation – Not in Contract

4.0 TOPOGRAPHIC SURVEY FOR DESIGN

Establish benchmarks and horizontal control using City's control network, establish scale factor for adjustment to surface coordinates. Project construction control will be set for each location and shown by coordinates and description on the final plans.

Prepare a topographic survey of existing conditions tying all features from ROW to ROW and tying street/alley intersections 50 feet each way along the curb line.

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The finish floor elevation of each adjacent residence will also be obtained to establish grading limits for each property adjacent to the project.

Field verify location and elevation of existing utilities, public and franchise, appurtenances and other utility improvements affecting the design and construction. Texas 811 will be contacted to mark the approximate position of existing franchise utilities prior to the topo survey beginning. City of Coppell Public Works will be contacted to mark existing public utilities.

Field verify location, top of structure, and flowline of structure for existing storm drainage structures affecting design and construction within the project area.

Survey shall include existing corner monumentation as required to assist in defining the street easement/ROW lines. The street addresses of each property will be provided in the existing ROW map product.

No right of entry letters are included as part of this contract. City will provide right of entry coordination.

SPECIAL SERVICES

5.0 BID PHASE SERVICES

5.1 Advertising and Pre-bid Meeting

Assist City staff in advertising for bids. Attend pre-bid meeting coordinated by the City.

5.2 Plan Distribution

Furnish plans and specifications to the City for bid purposes. Cost for these to be repaid by non-refundable deposit from plan holders

5.3 Addenda

Prepare and distribute addendum required to modify the requirements of the project during bidding, respond to requests for clarification, and issue instructions to bidders as directed by the City of Coppell.

5.4 Receive Bids – Not in Contract

City of Coppell Purchasing Department to receive bids; one copy for the City and one copy for CRIADO, to be provided via email.

5.5 Bid Tabulation

Prepare a tabulation of bids for the project and verify the bid amounts. Evaluate the lowest and second lowest bidder, including obtaining information on past work history and physical resources.

5.6 Recommendation for Award

Prepare a recommendation for award of contract or other action and notify bidders of the action taken by the City of Coppell.

5.7 Prepare Final Plans and Specifications (Conformance Set)

A final specification and contract book will be prepared incorporating the contractors executed contract documents and unit bid prices. Provide 3 sets of full size and 3 sets of half size plans and 3 sets of the specifications to the City of Coppell for construction purposes.

6.0 CONSTRUCTION ADMINISTRATION

6.1 Pre-construction Meeting – Not in Contract

Attend the pre-construction meeting with the selected contractor, prepare a record of the meeting, and distribute it to all attendees.

6.2 Site Visits – Not in Contract

6.3 Shop Drawing Review

Review up to five (5) shop drawings, submittals, substitutions and other documents provided by the contractor to determine compliance with the contract requirements and design intent. Prepare responses and comments on each submittal and transmit copies to the contractor and City staff. Maintain a record of submittals and responses. Routine shop drawings and submittals generally will be reviewed and returned within seven working days after receipt.

6.4 Request for Information

Respond to up to four (4) Requests for Information received from the Contractor.

6.5 Final Inspection

Assist the City of Coppell in conducting a final inspection of the completed construction. Prepare a record of observations and items requiring correction by the contractor prior to final payment.

6.6 Prepare Record Drawings

Utilizing Contractor construction record information, prepare record drawings (with "record drawing" stamp) and provide a portable drive containing black and white PDF drawing images. No survey verification of as-built conditions is included in this scope.

7.0 TEXAS DEPARTMENT OF LICENSING AND REGULATION (TDLR) SUBMITTAL

Submit final plans and specifications to TDLR for all pedestrian improvements where the total value of the pedestrian improvements is in excess of \$50,000. City to coordinate final TDLR call for inspection of constructed improvements. Associated TDLR review and inspection fees have been included in the fee schedule.

8.0 SUBSURFACE UTILITY ENGINEERING (SUE)

8.1 Quality Level A (QL-A) Test Holes

Excavate by nondestructive means existing utilities establishing a confirmed vertical & horizontal location to be surveyed and visually depicted via Test Hole Data Sheet (Vertical alignment).

8.2 Quality Level B (QL-B) Utility Designating Services

Perform the necessary electronic utility designating to locate known underground utilities or structures that may be within the limits of the Project. Such utilities include, but are not limited to wastewater, water, gas, electric, storm sewer, telephone and television cable include survey data of field designated locations relative to base map.

9.0 GEOTECHNICAL SERVICES

Services to be provided by outside consultant.

10.0 REIMBURSABLES

Reimbursable expenses include expenses directly related to the project such as (but are not limited to): filing fees; permit fees; review fees; postage; courier service; parking fees; mileage to and from job site or meetings; surveying equipment (such as GPS receivers and Robotic Total Stations) and printing and reprographics for submittals to City or other municipalities/agencies, for construction plans, for cost estimates, and for specifications and/or bidding. Reimbursable expenses shall be invoiced on a monthly basis, separately from the lump sum fees, and will be billed at 1.1 times actual cost.

11.0 EXCLUSIONS

The intent of the scope is to include only the services specifically listed above and none others. Services specifically excluded from this Scope of Services include, but are not necessarily limited to the following:

- Computer modeling and routing of wastewater flows
- Title searches
- Fees for permits and advertising
- Traffic engineering report or studies
- Floodplain reclamation plans
- Construction Inspection Services
- Designs for trench safety
- Retaining walls, etc., not included in proposal
- Revisions to plans as a result of revisions after completion of original final design (unless to correct error on plans)
- Consulting services by others not included in proposal
- Quality control and testing services during construction
- Prints furnished after acceptance of the required sets for construction in accordance with this Agreement
- Environmental Services / Archeological Research
- Prepare to serve or serve as an expert witness on behalf of the City in connection with any public hearings or legal proceedings
- Review monthly requests for payment from the contractor and prepare a recommendation for action by the City of Coppell
- Review the Contractor's monthly progress reports and provide review comments to the City of Coppell

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- This project includes the design of on-site facilities only. Design of any off-site road, utility or drainage facility extensions which may be required to serve the project is not included in the engineer's scope
- Street lighting and electrical design and layout
- Storm drainage and hydraulic design with exception of the Cambria flume replacement
- Hydraulic or Hydrologic Studies including existing drainage channel behind Cambria Drive. Studies to be provided by the City.
- Landscape and Irrigation Design
- TV Inspection of existing wastewater system
- Right-of –Way Determination or Acquisition Services
- Storm Water Pollution Prevention Plan (SWP3)

CITY OF COPPELL
CAMBERIA DRIVE WISE WAY
(APPROX. 1,450 LF)

TASK DESCRIPTION	PRINCIPAL	SENIOR PROJECT MANAGER	PROJECT ENGINEER	ENGINEER IN-TRAINING	CADD TECH	SURVEY TECHNICIAN	IPOLS	24MM FIELD CREW	BUS TECHS	CLERICAL	MAN. HOUR	CHARGES	SUB CONSULT	FOR TASK (incl. multi)
BASIC SERVICES														
TASK 1 - PROJECT MANAGEMENT & COORDINATION														
1.1 PROJECT MANAGEMENT / ADMINISTRATION	4.0	24.0								6.0	34.0	\$7,440		\$7,440
1.2 QAD & CONSTRUCTION REVIEW	9.0	12.0									21.0	\$5,655		\$5,655
SUBTOTAL HOURS/COSTS	13.0	36.0								6.0	55.0	\$13,095		\$13,095
TASK 1 - SCHEMATIC DESIGN (ROADWAY, DRAINAGE, TOP & UTILITY)														
1.1 DATA COLLECTION	3.0	3.0	2.0	4.0							7.0	\$1,015		\$1,015
1.2 PROJECT MEETING											6.0	\$1,650		\$1,650
1.3A ROADWAY PLANS (HORIZONTAL & VERTICAL ALIGNMENTS, TYPICAL SECTIONS, CROSS SECTIONS & DETAILS)		10.0	20.0	32.0	40.0						102.0	\$13,950		\$13,950
1.3B DRAINAGE PLANS (DRAINAGE AREA MAP, INLET CALCULATIONS, STORM ALIGNMENT)		3.0	6.0	12.0	18.0						39.0	\$5,205		\$5,205
1.3C CONSTRUCTION SEQUENCING AND TRAFFIC CONTROL PLANS		2.0	4.0	8.0	16.0						30.0	\$3,950		\$3,950
1.3D WATER AND WASTEWATER ALIGNMENT		4.0	8.0	12.0	24.0						48.0	\$6,440		\$6,440
1.4 SCHEMATIC DESIGN SUBMITTAL	3.0	0.5	1.0	2.0	4.0						7.5	\$988		\$988
1.5 CITY REVIEW MEETING		3.0	3.0								6.0	\$1,650		\$1,650
1.6 PUBLIC MEETING	4.0	8.0	2.0	4.0	16.0						34.0	\$5,640		\$5,640
SUBTOTAL HOURS/COSTS	10.0	34.5	43.0	74.0	118.0						278.5	\$40,688		\$40,688
TASK 2 - PRELIMINARY DESIGN (ROADWAY, DRAINAGE, BONDAGE & PAVEMENT, EROSION CONTROL, UTILITY & TOP)														
2.1A GENERAL SHEETS (COVER, QUANTITY & GENERAL NOTES)		2.0	4.0	8.0	16.0						30.0	\$3,950		\$3,950
2.1B CONTROL SHEETS (PROJECT CONTROL & ROW MAP)		1.0	2.0	4.0	8.0	8.0	1.0				9.0	\$1,200		\$1,200
2.1C REMOVAL PLANS		2.0	3.0	6.0	12.0						15.0	\$1,975		\$1,975
2.1D CONSTRUCTION SEQUENCING AND TRAFFIC CONTROL PLANS		10.0	20.0	40.0	80.0						23.0	\$3,080		\$3,080
2.1E ROADWAY PLANS (HORIZONTAL & VERTICAL ALIGNMENTS, TYPICAL SECTIONS, CROSS SECTIONS & DETAILS)		2.0	4.0	8.0	16.0						76.0	\$10,110		\$10,110
2.1F DRAINAGE PLANS (DRAINAGE AREA MAP, HYDROLOGY, INLET CALCULATIONS, STORM PLAN & PROFILE)		2.0	4.0	8.0	16.0						24.0	\$3,220		\$3,220
2.1G WATER LINE PLANS		2.0	4.0	8.0	16.0						19.0	\$2,465		\$2,465
2.1H WASTEWATER LINE PLANS		0.5	1.0	2.0	4.0						30.0	\$3,950		\$3,950
2.1I BONDAGE AND STOPPING PLANS		0.5	1.0	2.0	4.0						9.5	\$1,238		\$1,238
2.1J EROSION CONTROL PLANS		0.5	1.0	2.0	4.0						9.5	\$1,238		\$1,238
2.1K STANDARD DETAILS		0.5	1.0	2.0	4.0						9.5	\$1,238		\$1,238
2.1L UTILITY COORDINATION		1.0	2.0	4.0	8.0						15.0	\$1,985		\$1,985
2.2 QUANTITIES & E.C.O.P.C.		1.0	2.0	4.0	8.0						17.0	\$2,225		\$2,225
2.3 PRELIMINARY DESIGN SUBMITTAL		0.5	1.0	2.0	4.0						7.5	\$988		\$988
2.4 CITY REVIEW MEETING	3.0	3.0									6.0	\$1,650		\$1,650
SUBTOTAL HOURS/COSTS	3.0	23.0	37.0	80.0	148.0	8.0	1.0				300.0	\$40,492		\$40,492
TASK 3 - FINAL DESIGN (ROADWAY, DRAINAGE, BONDAGE & PAVEMENT, EROSION CONTROL, UTILITY & TOP)														
3.1A GENERAL SHEETS (COVER, QUANTITY & GENERAL NOTES)		1.0	2.0	4.0	8.0						13.0	\$1,735		\$1,735
3.1B CONTROL SHEETS (PROJECT CONTROL & ROW MAP)		1.0	2.0	4.0	8.0		0.5				2.5	\$340		\$340
3.1C REMOVAL PLANS		1.0	3.0	6.0	12.0						15.0	\$1,975		\$1,975
3.1D CONSTRUCTION SEQUENCING AND TRAFFIC CONTROL PLANS		6.0	10.0	20.0	40.0						22.0	\$2,845		\$2,845
3.1E ROADWAY PLANS (HORIZONTAL & VERTICAL ALIGNMENTS, TYPICAL SECTIONS, CROSS SECTIONS & DETAILS)		1.0	2.0	4.0	8.0						76.0	\$10,110		\$10,110
3.1F DRAINAGE PLANS (DRAINAGE AREA MAP, HYDROLOGY, INLET CALCULATIONS, STORM PLAN & PROFILE)		1.0	2.0	4.0	8.0						21.0	\$2,705		\$2,705
3.1G WATER LINE PLANS		1.0	2.0	4.0	8.0						19.0	\$2,465		\$2,465
3.1H WASTEWATER LINE PLANS		0.5	1.0	2.0	4.0						30.0	\$3,950		\$3,950
3.1I BONDAGE AND STOPPING PLANS		0.5	1.0	2.0	4.0						9.5	\$1,238		\$1,238
3.1J EROSION CONTROL PLANS		0.5	1.0	2.0	4.0						9.5	\$1,238		\$1,238
3.1K STANDARD DETAILS		0.5	1.0	2.0	4.0						7.5	\$988		\$988
3.2 QUANTITIES & E.C.O.P.C.		1.0	2.0	4.0	8.0					8.0	15.0	\$1,975		\$1,975
3.3 SPECIFICATIONS		6.0	10.0	20.0	40.0						44.0	\$6,030		\$6,030
3.4 PRELIMINARY DESIGN SUBMITTAL		0.5	1.0	2.0	4.0						7.5	\$988		\$988
3.5 CITY REVIEW MEETING		3.0	3.0								6.0	\$1,650		\$1,650
3.6 CONTRACT BID DOCUMENTS		0.5	1.0	2.0	4.0						7.5	\$988		\$988
SUBTOTAL HOURS/COSTS		25.5	45.0	88.0	158.0	2.0	0.5			8.0	305.0	\$40,975		\$40,975
TASK 4 - TOPOGRAPHIC SURVEY FOR DESIGN														
SUBTOTAL HOURS/COSTS														
SUBTOTAL HOURS/COSTS														

CITY OF COPPELL
CAMBRIA DRIVE WISE WAY
(APPROX. 1,450 LF)

TASK DESCRIPTION	PRINCIPAL	SENIOR PROJECT MANAGER	PROJECT ENGINEER	ENGINEER IN-TRAINING	CADD TECH	SURVEY TECHNICIAN	RPLS	24HR FIELD CREW	CLERICAL	MAN. HOURS	CHARGES	RUR CONSULTS	FOR TASK (INCL. MULTS)
SPECIAL SERVICES													
TASK 1 - BID PHASE SERVICES													
1.1 ADVERTISING & PRE-BID MEETING		4.0								4.0	\$940		\$940
1.2 PLAN DISTRIBUTION		0.5		1.0	4.0					5.5	\$723		\$723
1.3 ADDENDA		2.0	4.0	4.0	8.0					18.0	\$2,490		\$2,490
1.4 RECEIVE BID - NOT IN CONTRACT		0.5		4.0						4.5	\$618		\$618
1.5 BID TABULATION		3.0								3.0	\$705		\$705
1.6 RECOMMENDATION FOR AWARD		0.5	1.0	2.0	4.0					7.5	\$988		\$988
1.7 PREPARE FINAL PLANS & SPECIFICATIONS (CONFORMANCE SET)													
SUBTOTAL HOURS/COSTS		10.5	5.0	11.0	16.0					42.5	\$6,464		\$6,464
TASK 4 - CONSTRUCTION ADMINISTRATION													
4.1 PRE-CONSTRUCTION MEETING - NOT IN CONTRACT													
4.2 SITE VISITS - NOT IN CONTRACT		2.5	10.0							12.5	\$1,988		\$1,988
4.3 SHOP DRAWING REVIEW (UP TO 4)		2.0	4.0	8.0	4.0					18.0	\$2,510		\$2,510
4.4 REQUEST FOR INFORMATION (UP TO 6)		6.0								6.0	\$1,410		\$1,410
4.5 FINAL INSPECTION		1.0	2.0	4.0	20.0					27.0	\$3,415		\$3,415
4.6 PREPARE RECORD DRAWINGS													
SUBTOTAL HOURS/COSTS		11.5	16.0	12.0	24.0					63.5	\$8,323		\$8,323
TASK 7 - TOLA SUBMITTALS & REVIEW (TO BE BILLED AS A DIRECT REIMBURSABLE EXPENSE AT ACTUAL COST X 1.1)													
		1.0								1.0	\$235		\$1,735
SUBTOTAL HOURS/COSTS		1.0								1.0	\$235		\$1,735
TASK 8 - SUBSURFACE UTILITY ENGINEERING													
8.1 LEVEL "N" (UP TO 1.5 FEET HOLE)											\$8,000		\$8,000
8.2 8" - 12" DEPTH @ 11-140' EACH, 4" - 8" DEPTH @ 11-240' EACH, 6" - 12" DEPTH @ 11-240' EACH		1.0	6.0		8.0	4.0		6.0	16.0	41.0	\$6,075		\$6,075
8.3 LEVEL "W"													
SUBTOTAL HOURS/COSTS		1.0	6.0		8.0	4.0		6.0	16.0	41.0	\$14,075		\$14,075
TASK 9 - PAVEMENT DESIGN (GEO-TECHNICAL)													
		1.0	3.0							4.0	\$655		\$6,940
SUBTOTAL HOURS/COSTS		1.0	3.0							4.0	\$655		\$6,940
TASK 10 - REIMBURSABLES													
10.1 REIMBURSABLES (TO BE BILLED AT ACTUAL COST X 1.1)											\$1,500		\$1,500
SUBTOTAL HOURS/COSTS											\$1,500		\$1,500
SEE SUMMARY													
BASIC SERVICES													
TASK 2 - PROJECT MANAGEMENT & COORDINATION	13.0	36.0	43.0	74.0	118.0				6.0	55	\$13,095		\$13,095.00
TASK 3 - SCHEMATIC DESIGN (ROADWAY, DRAINAGE, TOP & UTILITY)	10.0	34.5	43.0	80.0	148.0	8.0	1.0			280	\$40,688		\$40,688.00
TASK 4 - PRELIMINARY DESIGN (ROADWAY, DRAINAGE, SIGNAGE & PMT MGN, EROSION CONTROL, UTILITY & TCP)	3.0	23.0	37.0	80.0	136.0	2.0	0.5			300	\$40,492		\$40,492.00
TASK 5 - FINAL DESIGN (ROADWAY, DRAINAGE, SIGNAGE & PMT MGN, EROSION CONTROL, UTILITY & TCP)		25.5	45.0	88.0	2.0	44.0	16.0	60.0	8.0	305	\$40,875		\$40,875.00
TASK 6 - TOPOGRAPHIC SURVEY FOR DESIGN					2.0					122	\$18,120		\$18,120.00
SUBTOTAL BASIC DESIGN SERVICES													\$153,070.00
SPECIAL SERVICES													
TASK 1 - BID PHASE SERVICES		10.5	5.0	11.0	16.0					43	\$6,464		\$6,464.00
TASK 4 - CONSTRUCTION ADMINISTRATION		11.5	16.0	12.0	24.0					64	\$9,323		\$9,323.00
TASK 7 - TOLA SUBMITTALS & REVIEW (TO BE BILLED AS A DIRECT REIMBURSABLE EXPENSE AT ACTUAL COST X 1.1)		1.0						6.0		1	\$235		\$1,735.00
TASK 8 - SUBSURFACE UTILITY ENGINEERING		1.0	6.0		8.0	4.0			16.0	41	\$14,075		\$14,075.00
TASK 9 - PAVEMENT DESIGN (GEO-TECHNICAL)		1.0	3.0							4	\$655		\$6,940.00
SUBTOTAL SPECIAL SERVICES													\$38,537.00
TASK 10 - REIMBURSABLES													
											\$1,500		\$1,500.00
SUBTOTAL REIMBURSABLES													\$1,500.00
TOTAL HOURS	26.0	144.0	165.0	285.0	492.0	58.0	17.5	66.0	16.0	1214	\$185,322		\$7,785
TOTAL COSTS	\$315.00	\$140.00	\$125.00	\$125.00	\$125.00	\$125.00	\$100.00	\$100.00	\$100.00	\$90.00			
TOTAL FEE													\$193,107

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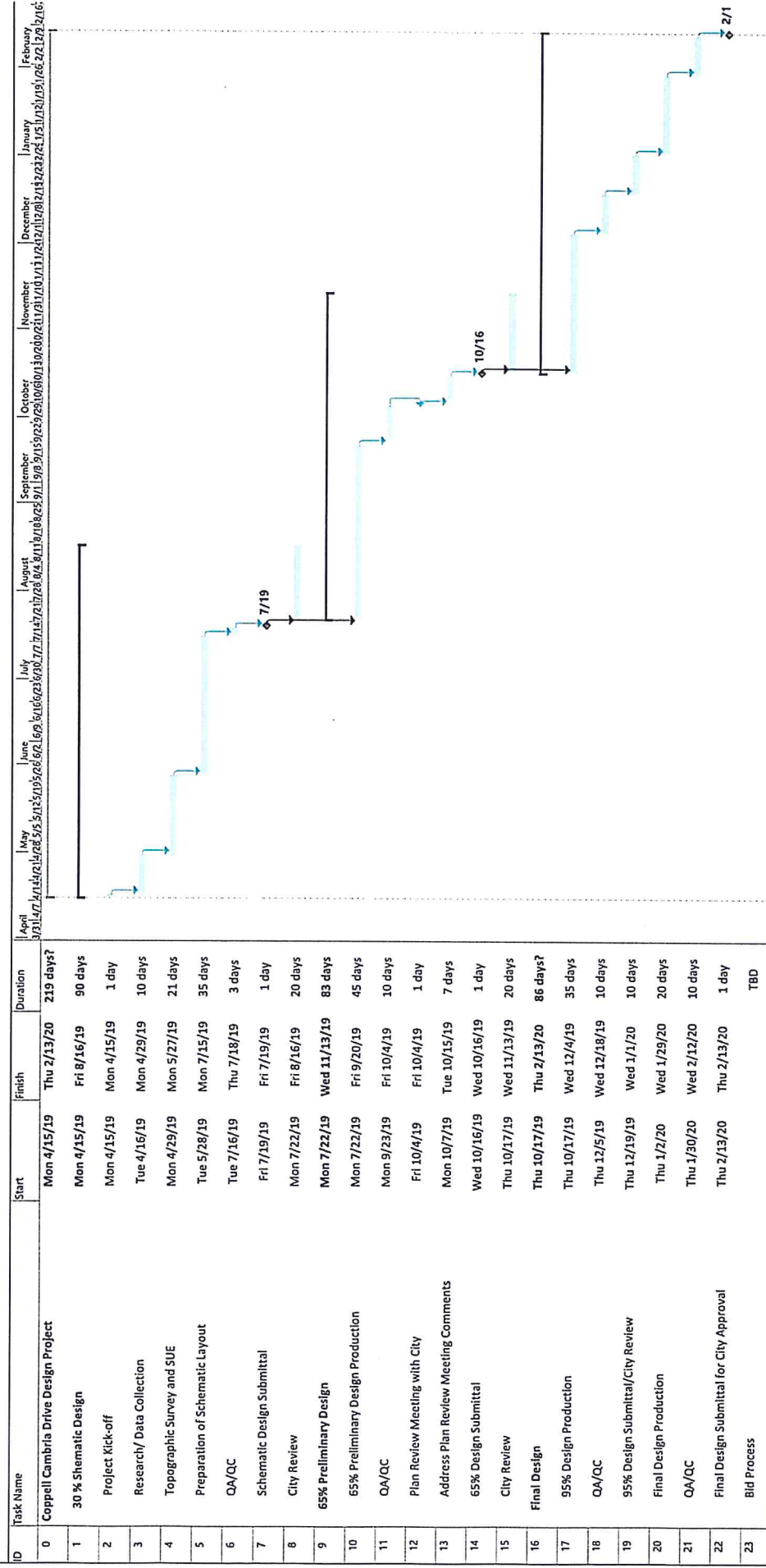
Exhibit C
Engineer's Pre-design Opinion of Probable Costs (Feb, 2019)
City of Coppell, Dallas County, Texas
Cambria Drive / Wise Way Paving & Utility Improvements
From Willow Springs Drive to Western Terminus

Item No.	Description	Estimated Quantity	Unit	Unit Price	Total
Paving and Drainage					
1	TRAFFIC CONTROL	12	MO	\$ 2,500.00	\$ 30,000.00
2	PROJECT SIGNS	2	EA	\$ 700.00	\$ 1,400.00
3	EROSION CONTROL	1	LS	\$ 15,000.00	\$ 15,000.00
4	ROW PREPARATION	16	STA	\$ 4,000.00	\$ 63,600.00
5	UNCLASSIFIED STREET EXCAVATION	285	CY	\$ 15.00	\$ 4,269.44
6	SAWCUT, REMOVE & DISPOSE EXISTING CONCRETE (ALL THICKNESS)	6,000	SY	\$ 10.00	\$ 60,000.00
7	8" LIME OR CEMENT SUBGRADE PREPARATION (DENSITY CONTROLLED)	4,382	SY	\$ 7.00	\$ 30,670.83
8	LIME OR CEMENT MATERIAL FOR TREATED SUBGRADE	90	TON	\$ 220.00	\$ 19,800.00
9	9" REINFORCED CONCRETE PAVING WITH 6" INTEGRAL CURB	4,300	SY	\$ 70.00	\$ 301,000.00
10	4" REINFORCED SIDEWALK PAVING	1,385	SY	\$ 50.00	\$ 69,226.67
11	BARRIER FREE RAMPS	6	EA	\$ 1,800.00	\$ 10,800.00
12	CONCRETE STREET HEADER	114	LF	\$ 15.00	\$ 1,710.00
13	36" CL III RCP	120	LF	\$ 175.00	\$ 21,000.00
14	INSTALL 15' CURB INLET	1	EA	\$ 6,500.00	\$ 6,500.00
15	SLOPED END SECTION HEADWALL	1	EA	\$ 2,500.00	\$ 2,500.00
16	REPAIR, REPLACE, MODIFY EXISTING IRRIGATION SYSTEMS	1	LS	\$ 20,000.00	\$ 20,000.00
17	REMOVE AND RESET SMALL ROADSIGN ASSEMBLY	6	EA	\$ 700.00	\$ 4,200.00
18	FURNISH, INSTALL AND WATER BLOCK SOD	4,000	SY	\$ 8.00	\$ 32,000.00
19	REMOVE AND REPLACE RESIDENTIAL MAILBOX ASSEMBLY	33	EA	\$ 500.00	\$ 16,500.00
Sub-Total: Paving and Drainage					\$ 710,176.94
Water and Wastewater					
1	TRENCH SAFETY	2,600	LF	\$ 2.00	\$ 5,200.00
2	INSTALL & REMOVE TEMP HMA PAVEMENT (TY B 4-INCH)	910	SY	\$ 42.00	\$ 38,220.00
3	INSTALL 8" WATERLINE C900 PVC	1,450	LF	\$ 50.00	\$ 72,500.00
4	INSTALL 6" WATERLINE C900 PVC	30	LF	\$ 45.00	\$ 1,350.00
5	3/4" WATER SERVICE	33	EA	\$ 1,500.00	\$ 49,500.00
6	4" SANITARY SEWER SERVICE	33	EA	\$ 1,500.00	\$ 49,500.00
7	INSTALL METER BOX AND TRANSFER WATER SERVICE	33	EA	\$ 590.00	\$ 19,470.00
8	8" GATE VALVE	4	EA	\$ 1,500.00	\$ 6,000.00
9	6" GATE VALVE	3	EA	\$ 1,000.00	\$ 3,000.00
10	FIRE HYDRANT AND VALVE ASSEMBLY	6	EA	\$ 4,200.00	\$ 25,200.00
11	DI FITTINGS	2	TON	\$ 10,000.00	\$ 20,000.00
12	REMOVE AND SALVAGE EXISTING FIRE HYDRANTS AND VALVE	6	EA	\$ 700.00	\$ 4,200.00
13	INSTALL 8" SANITARY SEWER - SDR 26 PVC	1,120	LF	\$ 70.00	\$ 78,400.00
14	REMOVE EXISTING SANITARY SEWER MANHOLE	3	EA	\$ 800.00	\$ 2,400.00
15	INSTALL 4" DIA SANITARY SEWER MANHOLE	3	EA	\$ 5,625.00	\$ 18,225.00
Sub-Total: Water and Wastewater					\$ 393,165.00
Sub-Total:					\$ 1,103,341.94
20% Contingency:					\$ 220,670.00
Total:					\$ 1,324,020.00

EXHIBIT D

Project Schedule

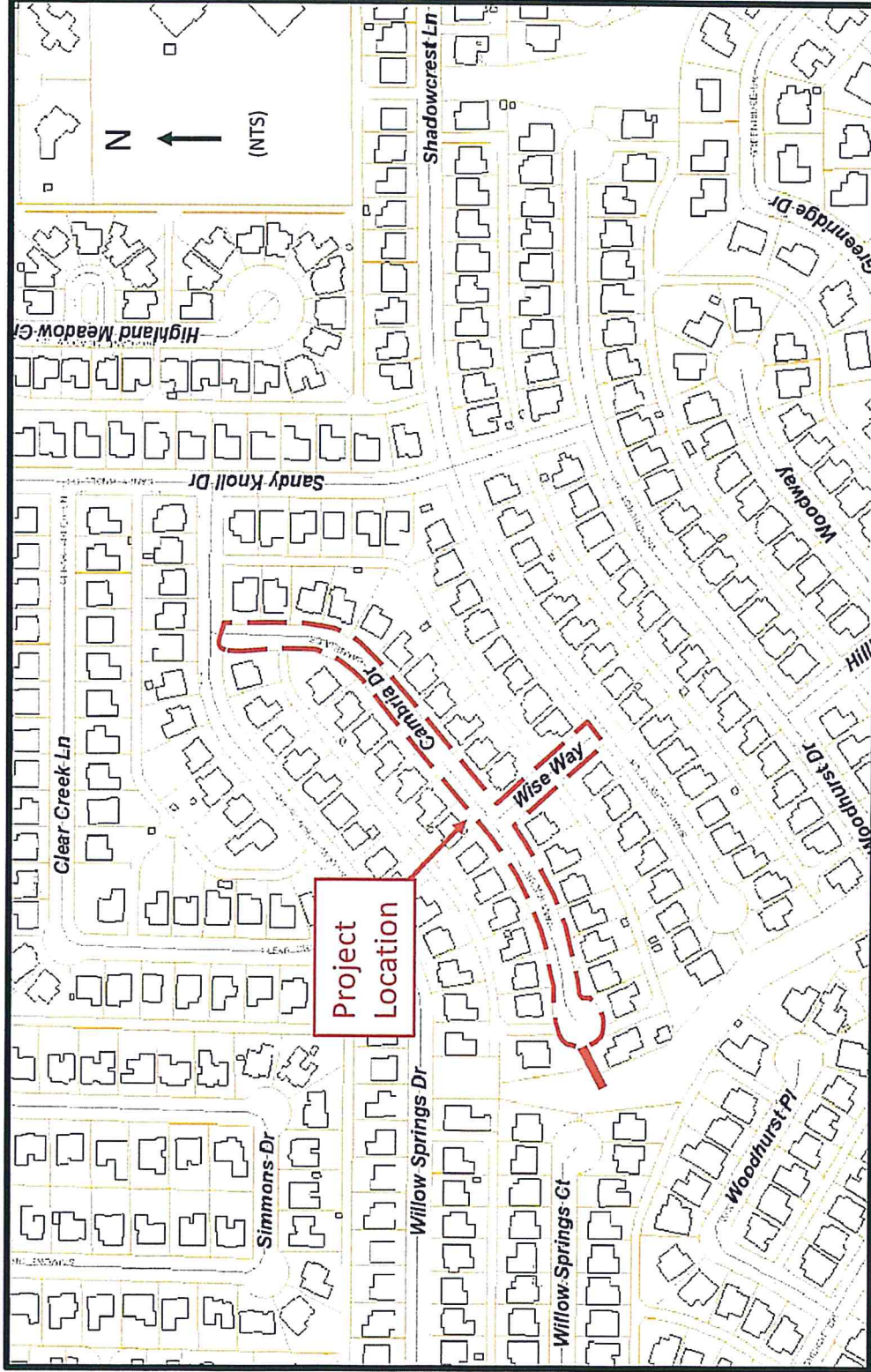
Project Limits: Cambria Drive and Wise Way Coppell, Texas



Task	Project Summary	Manual Task	Start-only	Deadline
Split	Project Summary	Manual Task	Start-only	Deadline
Milestone	Inactive Milestone	Manual Summary Rollup	Finish-only	Progress
Summary	Inactive Summary	Manual Summary	External Milestone	Manual Progress

Project Duration is based on working days (M-F)

Exhibit E



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Project Location Map
Cambria Drive / Wise Way

