



Rinker Design Associates, P.C.

*Land Development * Surveying * Land Planning
Transportation * Environmental * Right of Way*

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June 15, 2015

Dennis Johnson, P.E.
Director of Public Works – Town of Vienna
127 Center Street (S)
Vienna, VA, 22180

RE: Proposal for Professional Services
Survey & Design Engineering Services:
Old Courthouse Road NE Extended (Westbriar Ct NE to “East” Town Line) – Install Sidewalk and
C&G Typical Section

Dear Mr. Johnson:

Please find attached our fee proposal for professional engineering design and surveying services for the completion of plans for the proposed pedestrian improvements for the following:

- o Old Courthouse Road NE – The scope of the project is to provide a curb & gutter section (with sidewalk) along Old Courthouse Road between Westbriar Court NE and the Town-Line.

The plans will be prepared in accordance with the Town’s requirements and the RFP 12-01 On-Call Engineering Services (RFP) in conjunction with any Fairfax County Plan submittal requirements since the Town is partnering with Fairfax County for this project, whichever may apply. The plans will be generated per Town format only.

1.0 Scope of Services:

The scope of services, based on information provided by the Town, will consist of the following:

1. RDA will obtain additional topographic and property survey within the project’s scope adequate to provide construction level plans of the pedestrian improvements identified. Survey is anticipated to be necessary to encompass just beyond the project limits to ensure proper drainage design is provided. As requested by the Town of Vienna, the following will also be applicable:
 - a. RDA will provide utility designations and conduct underground utility designation research. RDA may utilize a sub-consultant to conduct the utility designation. (Note: Only 12 test-pits are proposed. Any additional test pits that may be required will be billed at cost with prior authorization/additional P/O from the Town.)
 - b. RDA will conduct boundary research for property lines and show with topographic survey.
2. The project’s design improvements will generally follow the design intent as follows:
 - a. Provide for a curb/gutter section with sidewalk and green-space.

- b. Curb ramps will be provided within the project limits to meet the latest ADA requirements as needed/directed by the Town.
 - c. The plans will also show the potential locations for tree plantings of the Town's choice to be installed in the utility strip (or behind sidewalk) if warranted/desired; however a formal landscaping plan will not be provided within the project's plan set.
 - d. RDA will prepare a TMP/SOC (MOT) plan and sequence of construction plan.
 - i. This may be required since portions of the project may extend out of the Town and require a VDOT permit for construction.
3. No major adjustments to roadway grade/cross-slope are assumed to be necessary for the scoped intersection improvements. The roadway geometry (i.e. super-elevation) will not be fixed/revised or altered with this project.
 - a. Cross-sections will be provided.
4. RDA will provide for drainage improvements within the project limits to address drainage concerns that maybe present. Given cost is a limiting factor, all drainage improvements are subject to actual construction funding and RDA will work with Town to provide as much as possible.
 - a. RDA will review water quantity requirements. For the scope of this project no man-hours have been assumed to design any downstream improvements/design(s) to address any potential substandard conditions. If the Town requires downstream improvements be made, additional man-hours will be required.
 - b. This project assumes the plans will only need to comply with Town of Vienna requirements within the Town and will only need to comply with Fairfax County regulations for an estimated 300' of the total project length.
5. RDA assumes that a **FULL** roadway construction plan package will be required for this project's plan assembly, and will generally follow VDOT's "minimum level" construction plan assembly to enable a wide range of contractors to understand the plans for bidding, particularly for TMP/SOC.
6. RDA has scoped man-hours to provide for a waterline design since it is anticipated the waterline will likely be impacted due to the installation of storm drainage system. No other utility design is included as part of this project. Sanitary Laterals are assumed to be field adjusted by the Contractor.
7. RDA will prepare quantities/estimate for final construction package and project's bid-package. Additionally RDA will prepare a scope of work for the bid-package and assist the Town with any follow up questions from the bid-package.
8. RDA will perform utility coordination services as appropriate. RDA assumes Town's utility franchise agreements will be in effect for all utilities.
9. RDA will provide for Construction Support to assist the Town's construction manager during construction as needed on an hourly basis. If additional man-hours are needed, RDA will request a change order.

RDA assumes the Town of Vienna will send out survey notification letters to properties within the Project's limits prior to RDA survey crews surveying properties.

In the event plats are required, RDA advises that any plats will cost \$2,200.00 per property, per plat for this project. RDA will only proceed with plats when provided with an additional approved P/O received from the Town.

2.0 Excluded Project Services:

The following represents a list of services/items that were not priced as part of this scope of work, and at this time it is not anticipated they will be needed as part of this task. RDA is committed to providing a wide range of services, and if the Town needs additional services including those excluded (provided they are among RDA's services), we will gladly submit a contract modification for any additions at the Town's request.

- Utility Test-Pits and Utility relocation plans (Public and Private)
 - RDA advises the Town if test-pits are required, it will be \$850.00 per test pit and an additional \$75.00 per vertical foot after six feet for the test-pit. If test-pits are required RDA shall submit a contract addendum for approval prior to the work to be completed.
- Shop Drawings or As-built drawings
- Construction Services or Support Services
 - Preparation of complete Construction Bid Documents/Package
 - Construction management and inspection
 - Review/Approve Contractor's Request for Change Orders
 - Any request for design plan changes during construction
- Right of Way Acquisition Services
- Any Traffic Engineering studies, traffic counts, signal plans
- Design Waiver/Exception Request(s)
- Any Construction or Utility Stakeout
- Any Title Reports
- Any stormwater management or BMP facility design
- Any review fees/submittal fees required by VDOT or Fairfax County.
- Fees/Purchase of Nutrient Credits
- Environmental Assessment/Review, Mitigation and any related permits, including VSMP permits.

4.0 Deliverables and Work Schedule:

Schedule:

Upon notice to proceed, RDA will work with the Town on a project schedule. Given the Town is partnering with Fairfax County, it is anticipated the design will take up to one (1) year, excluding review time. RDA is committed to attempting to meet any additional reasonable deadline the Town requires for this project.

Deliverables:

RDA will obtain written (emailed) approval, or receipt of previous stage comments from the Town before proceeding next plan level stage.

- 30% Plan Submission/Concept Plan with Property Owners
- 60% Plan Submission/Plan for Utility Owners
- 75% Plan Submission/Review Plan with Property Owner for Impacts
- 95% Pre-Final Submission



- Final Plans/Construction Plan (100%) – RDA will provide plans that will provide all the additional construction details and quantities.

If significant changes (including any drainage design changes) are requested for following the 95% Submission, RDA shall be permitted, based on man-hours to make adjustments request additional man-hours/funds to make the changes.

Note: No mylar prints are assumed to be required as part of this project.

5.0 Task Order Fee Summary

The estimated Total Project Fee is **\$199,786** of which is \$51,075 is to be administered LUMP-SUM for survey, \$114,482 is to be administered LUMP-SUM for engineering design, \$10,344 is to be administered as Not to Exceed for Construction Support, \$5,723 is to be administered as an allowance for direct costs (i.e. printing etc.) and \$18,162 is a design contingency requested by Fairfax County. The allowance will not be billed for printing unless the Town request prints. The design contingency will not be billed unless written permission is received from the Town.

Please see **Attachment 1 & 2** for a breakdown of the Task Order Fee Summary.

RDA is looking forward to the opportunity to provide these professional engineering services for the Town of Vienna. Should you have any questions, please do not hesitate to contact me at 703-368-7373, or e-mail me at mkim@rdacivil.com.

Sincerely,



Mo Kim, P.E.
Principal/Vice President of Operations



Attachment 1

Rinker Design Associates, P.C.
Town of Vienna
Old Courthouse Road NE, Extended Project

Fee Proposal

Survey Task Total (Lump Sum):	\$51,075
Engineering Design Task Total (Lump Sum):	\$114,482
Construction Support (Not to Exceed)	\$10,344
Total Direct Costs (Allowance)	<u>\$5,723</u>
Sub -Total of Project Fee	\$181,624
Design Contingency (@10%)	\$18,162
Estimated Total Project Fee	\$199,786

RDA will not exceed the man-hours allocated for **Not to Exceed** items without written permission from the Town



Rinker Design Associates, P.C.
Town of Vienna
Old Courthouse Road NE, Extended Project
Fee Estimate

Element of Work	MAN-HOURS									
	Rate /Hr	Lump Sum	Project Manager	Senior Engineer	Project Engineer	Engineer Technician	Land Surveyor	Survey Technician	2 Man Field Crew	Hours / Fee Estimate
			\$155.12	\$129.33	\$99.04	\$80.62	\$142.65	\$87.55	\$152.53	
SURVEY, DESIGN & CONST. SUPPORT										
100 - FIELD SURVEY AND BASE MAPPING										
Land Records Research							16	32		48
Boundary Survey							12	24	24	60
GPS Control							8		10	18
Topographic Survey							10	40	42	92
Check Survey Data for Completeness							32	24		56
101 -UTILITY DESIGNATION										
Utility Designation		\$6,100					2	4	6	12
Test-Pits (12 @ \$850.00 each)		\$10,200								
Hours							80	124	82	286
Subtotal		\$16,300					\$11,412	\$10,856	\$12,507	\$51,075
201 - DESIGN SERVICES (30% PLAN SUBMISSION)										
Title Sheet & Typical Sections/Plan Details				1	4	4				9
Concept Plans/Color Exhibits				2	4	4				10
Prelim. Plan and Profile			2	2	8	8				20
Prelim. E/S Control Measures				1	4	4				9
Prelim. Drainage Design			2	2	8	8				20
Prelim. Cross-Sections				1	4	8				13
Prelim. Quantities				1	8	24				33
Comment/Responses from Stakeholders			8	8						16
Hours			12	18	40	60				130
Subtotal			\$1,861	\$2,328	\$3,962	\$4,837				\$12,988
202 - DESIGN SERVICES (60% PLAN SUBMISSION)										
Typical Sections/Plan Details			1		2	2				5
Plan and Profile				4	8	8				20
Drainage Design			2	8	32	16				58
Prelim. Storm Profiles				8	8	8				24
SWM/BMP Strategy/Approach			4	8	16	8				36
Detention/Outfall Computation			4	8	32	8				52
Prelim. Utility Coordination with Utility Owners			4	24		8				36
Fairfax County LDS Waivers			2	4	8	4				18
Fairfax County LDS Elements/Checklists etc.			2	4	8	4				18
Cross-Sections			4	8	8	8				28
Prelim. TMP/SOC Plan			2	8	4	4				18
Quantities				2	8	8				18
Comment/Responses from Stakeholders			8	8						16
Hours			33	94	134	86				326
Subtotal			\$5,119	\$12,157	\$13,271	\$6,933				\$37,480



Rinker Design Associates, P.C.
Town of Vienna
Old Courthouse Road NE, Extended Project
Fee Estimate

Element of Work	MAN-HOURS									
	Rate /Hr	Lump Sum	Project Manager	Senior Engineer	Project Engineer	Engineer Technician	Land Surveyor	Survey Technician	2 Man Field Crew	Hours / Fee Estimate
			\$155.12	\$129.33	\$99.04	\$80.62	\$142.65	\$87.55	\$152.53	
SURVEY, DESIGN & CONST. SUPPORT										
203 - DESIGN SERVICES (75% PLAN SUBMISSION)										
75% Level Plan/Profile				1	16	16				33
Prelim. Waterline Relocation Plan				4	16	16				36
Pre-Final Utility Coordination with Utility Owners			4	2	2	8				16
Prelim. Signage/Marking Plan				2	8	8				18
75% Level Drainage Design/Computations				2	4	4				10
75% Level TMP/SOC Plan				2	4	4				6
75% Level Cross-Sections				2	4	8				14
Quantities				2	8	8				18
Comment/Responses from Stakeholders			12	12						24
Hours			16	29	62	68				175
Subtotal			\$2,482	\$3,751	\$6,140	\$5,482				\$17,855
204 - DESIGN SERVICES (95% PLAN SUBMISSION)										
Title Sheet & Typical Sections/Plan Details				1	1					2
Final Approval of Utility Coordination/Relocations			4	4	4					12
Pre-Final Waterline Relocation Plan			4	16	16	16				52
Pre-Final Plan and Profile				1	4	4				9
Pre-Final E/S Control Measures				1	2	2				5
Pre-Final Storm Profiles			2	1	1	1				5
Pre-Final TMP/SOC Plan			2	4	1	4				11
Pre-Final Drainage Computations			2	4	16					22
Pre-Final Cross-Sections			1	8	4	8				21
Pre-Final Quantities			1	2	8	8				19
Comment/Responses from Stakeholders			12	12						24
Hours			28	54	57	43				182
Subtotal			\$4,343	\$6,984	\$5,645	\$3,467				\$20,439
205 - DESIGN SERVICES (FINAL/PERMIT PLAN SUBMISSION)										
Final Typical Sections/Plan Details				1	1	16				18
Final Waterline Design			1	2	3	3				9
Final Plan and Profile			4	4	8	8				24
Final E/S Control Measures			1	2	4	4				11
Final Storm Profiles			1	2	4	4				11
Final Detention/Outfall Computation			1	2	4	4				11
Final Fairfax County LDS Waivers			1	4	8	4				17
Final Fairfax County LDS Elements/Checklists etc.				4	8	4				16
Final Cross-Sections			4	2	4	4				14
Final TMP/SOC Plan			1	4	4	4				13
Final Signage & Pavement Markings (Crosswalks etc)			1	4	4	4				13
Final Quantities			4	8	16	16				44
Comment/Responses from Stakeholders			16	16	4					36
Hours			35	55	72	75				174
Subtotal (LUMP-SUM)			\$5,429	\$7,113	\$7,131	\$6,047				\$25,720
300 - Construction Support Services/Bid Assistance										
Assist with Scope of Project Write-Up/Special Provisions			16	16						32
Construction Support/Help with RFI's			24	16						40
Hours			40	32						72
Subtotal (Not to Exceed)			\$6,205	\$4,139						\$10,344
ESTIMATED DESIGN/SURVEY PROJECT TOTAL										\$175,901

Attachment 2

Rinker Design Associates, P.C. Town of Vienna Old Courthouse Road NE, Extended Project

Direct Cost Summary

1) Meetings/Travel			
a. Project Site			
6 trips @	36 miles r/t x \$0.55 per mi	=	\$118.80
		=	
b. Client/Public Meetings			
4 trips @	36 miles r/t x \$0.55 per mi	=	<u>\$79.20</u>
Subtotal			\$198
2) Presentation Materials (For deliverables only, to be billed at cost)			
a. Xerochrome Color Copies (8 1/2" x 11")			
x	\$1.50 per copy	=	\$0.00
b. Graphic Foam Core Displays (4.0' x 8.0')			
number @	\$400.00 per display	=	<u>\$0.00</u>
Subtotal			\$0
3) Engineering Products (For deliverables only, to be billed at cost)			
a. Engineering Mylar (24" x 36")			
0 x	\$10.00 each	=	\$0.00
b. Engineering Paper Print (11" x 17")			
500 x	\$1.00	=	\$500.00
c. Engineering Paper Print (24" x 36" for submissions)			
2,500 x	\$1.75	=	\$4,375.00
Subtotal			\$4,875
4) Other Miscellaneous Costs (For deliverables only, to be billed at cost)			
a. Reports & Site Plan research for Design		=	\$300.00
a. Long Distance Telephone		=	\$0.00
b. Postage		=	\$0.00
c. Plan/Exhibit Delivery		=	<u>\$350.00</u>
Subtotal			\$650
TOTAL ESTIMATED DIRECT COSTS			\$5,723

