



**Town of Vienna  
Department of Public Works**

**Project Title:**

**Creek Crossing Road  
Pedestrian Enhancements**

**RFP Number:**

**IFB 16-08**

**Project Funding/Type:**

**Local Funds Only – Non State/Federal Funding**

**Prepared by:**

**Rinker Design Associates, P.C.**



**Date: April 10, 2018**



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## **RINKER DESIGN ASSOCIATES, P.C.**

Engineering • Surveying • Transportation • Traffic • Structures & Bridge  
Right of Way • CEI • Land Planning • Environmental

### ***Town of Vienna – Department of Public Works Creek Crossing Road Pedestrian Enhancements Town of Vienna RFP# 16-08***

## **SECTION 1: General Project Information**

### **Introduction:**

The following describes the scope of professional services which will be provided by Rinker Design Associates, P.C. (herein, RDA) to the Town of Vienna Department of Public Works (herein, Town) on this project per provisions outlined in the Town's RFP# 16-08.

### **Project Description:**

Pedestrian Facility Enhancement: Design and development of construction plans for the upgrade and expansion of the following:

- Section A: Approximately 2,430 feet of existing road and pedestrian facilities mostly within the Town along Creek Crossing from Beulah Road to Fairway Drive. Storm sewer upgrades are assumed.
  - This portion of the plans will be submitted to Town Department of Public Works and reviewed/approved by the Town.
- Section B: Upgrade and expansion of approximately 3,050 feet sidewalk from Miller Lane to Old Courthouse Road. Improvements will include curb and gutter, and drainage, and utility improvements, as well as updating curb accessible ramps at all intersection crossings within the project limits. Additional improvements will include replacing and expanding asphalt trail and ditch. In Section B, these improvements are located within Fairfax County and generally limited to the south side of the roadway, to replace the existing non-ADA compliant asphalt trail. Section B will also be designed based on the guidance provided by FCDOT's Pre-Scoping Document for the County's "Creek Crossing Pedestrian Enhancements", dated August 19, 2015 and through coordination with FCDOT throughout the course of the project.
  - This portion of the plans will be submitted as a County Public Improvement (PI) Plan, and reviewed/approved by County LDS. Once the plan has been approved by County LDS-SDID to be sent to bonding and agreements phase, "design approval" has been achieved.

General Pedestrian Improvements: Will include curb and gutter, drainage improvements and utility relocation coordination within the Town of Vienna and Fairfax County. Additionally, the project will include replacing/expanding the asphalt trail and ditch updating curb accessible ramps at all intersection crossings within the project limits. Finally, improvements will include improving awareness of the pedestrian/bike trail crossing, at Fairfax County Park Authority's Foxstone Park, along Creek Crossing Road.

Further details regarding project scope are provided in **SECTION 2A** and **SECTION 2B**.



**Project Design Criteria:**

Given the proposed parameters of the pedestrian facility and adjacent roadway improvements, it is assumed the Town will maintain all facilities within the Town and VDOT will maintain the improvements outside the Town. The following design standards have been determined for this project:

Proposed Pedestrian Improvements

- **Section A:** Town of Vienna Public Facilities Manual.
- **Section B:** VDOT Road Design Manual, Appendix A, Fairfax County Public Facilities Manual (PFM) and FCDOT Standards, as applicable.

Creek Crossing Road:

- Functional Classification: Local Street/Urban Local Street
- Posted Speed Limit: 25 MPH
- Design Speed Limit: 25 MPH (Same as posted speed as permitted by VDOT Standards/IIM's)

## **SECTION 2A: Plan Development**

The following represents all the tasks to be performed by RDA and/or its sub-consultants. The project's development of design plans (& assembly of plans) will be as follows:

**Section A:** The plan development and design work for this section will follow plan development requirements of a typical transportation/pedestrian improvement plan for construction, meeting Town of Vienna requirements.

**Section B:** The plan development and design work for this section will follow the plan development requirements of a Fairfax County LDS Public Improvement (PI) plan.

This project will be prepared and designed in accordance with the applicable manuals, design standards, and guidelines, as of the date of the 1<sup>st</sup> Submission of either section of the project.

### **Task 1: Project Management & Coordination:**

Management activities for this task order will include oversight of all services, resource assignment, sub-consultant management, and progress monitoring. RDA will implement its standard management plan to maintain clear lines of communication, file management, QA/QC protocols, and project development to ensure the success of this task order.

A progress report will be prepared to accompany invoices which will be submitted approximately once a month. The progress report will document work undertaken during the prior billing period, status percent complete, and will identify design directives, issues/concerns, and planned work elements.

A schedule highlighting tasks, subtasks, and major milestones for this assignment will be prepared as part of the project's development and monitored for the duration of the project.

General Project Management: The work hour estimate is based on the need for the following:

- Project coordination with Town. RDA will also coordinate with County LDS, SDID for the plan submission process and all reviewing stakeholders for a Public Improvement (PI) Plan.

Project Coordination Meetings: The work hour estimate is based on the need for the following coordination meetings:

- Ten (10) meetings are anticipated for general project coordination (or plan comment resolution) with Town staff and affected stakeholders representing public agencies (i.e. VDOT, etc.). (Anticipated two [2] RDA staff would attend.)
- Four (4) site/field meetings are anticipated with the Town and affected stakeholders representing public agencies or private entities. (Anticipated two [2] RDA staff would attend.)

Meetings are anticipated to occur at Town offices or the project site. RDA will prepare minutes (as applicable) for digital distribution to those attending, and will finalize and distribute final minutes in digital format based on comments received. RDA will attend any additional meeting requested by the Town.

### **Task 1.1 DPE Review and ESI Review, For Section B's Plan Submission to County LDS:**

RDA is participating firm in Fairfax County's ESI Peer Review program for all submittals to LDS, RDA is **required** perform the DPE Review and ESI Review as follows:

*Background:* The ESI Peer Review Program in Fairfax County consists of a Minimum Submission Review (MSR). This program provides a plan quality control review to save the time of the County regulatory reviewers and speed up the process of the plan approval. The Minimum Submission Review involves peer review performed by the RDA DPE and then ESI Peer Review Team which consists of rotating private industry/governmental peer review engineers and ESI Staff Engineer(s).

Town understands that any plan elements being developed by other agents are required to be submitted to RDA prior to start of review of plans by RDA's DPE.

**1<sup>st</sup> Submission to LDS (Section B Plan Only): Designated Plan Examiner (DPE) and Engineers & Surveyors Institute (ESI) Peer Review:** Since the project's **Section B** plans are being submitted to County LDS, RDA is required to conform to the ESI Peer Review Program process.

Upon authorization to submit the 1<sup>st</sup> Submission plans for Section B, RDA's DPE (for Fairfax County submission plans) will review the project's plans internally and provide internal comments to be addressed prior to signing DPE signature block on LDS's title sheet. Once approved by the RDA DPE, RDA will then submit the plans to ESI for the peer review and address any ESI comments. Following approval from ESI, RDA will then be permitted to submit the project's plans to County LDS with concurrent authorization from the Town.

**2<sup>nd</sup>/Final Submission to LDS (Section B Plan Only): Designated Plan Examiner (DPE) and Engineers & Surveyors Institute (ESI) Peer Review:** Since the project's **Section B** plans are being submitted to County LDS, RDA is required to conform to the ESI Peer

Upon authorization to submit the 2<sup>nd</sup>/Final Submission plans for **Section B**, RDA's DPE (for Fairfax County submission plans) will review the project's plans internally and provide internal comments to be addressed prior to signing DPE signature block on LDS's title sheet. Once approved by the RDA DPE, RDA will then submit the plans to ESI for the peer review and address any ESI comments. Following approval from ESI, RDA will then be permitted to submit the project's plans to County LDS with concurrent authorization from the Town.

### **Task 2: Topographic/Boundary Survey and Basic Property Research**

RDA will perform topographic and property boundary research along Creek Crossing Road and adjacent property site(s) adequate to complete the design of the proposed pedestrian enhancements.

**Property Owner Notification:** RDA will perform all survey notification efforts to adjacent property owners. RDA will provide a copy of the survey notification letters for Town approval, prior to mailing. Survey notifications letters will be mailed and RDA will keep records of mailings for project file. Survey notifications will be mailed a minimum 15-20 days prior to survey crews prior to conducting field work, in accordance with State of Virginia Code.

RDA will obtain a survey permit for performing topographic survey on Fairfax County Park Authority (FCPA) property. RDA will provide the Town with a copy of the permit for the project file. RDA assumes NTP of this project will grant access for Town recreational park.

Topographic Field Survey: RDA will conduct a field survey of the existing condition to provide all field topographic data that may be required for development of the project's plans. RDA will follow the general requirements outlined by Town of Vienna and VDOT for conducting field survey and the limits of RDA's survey are outlined in **Attachment 6**. RDA will only pick up storm sewer runs four storm structures upstream/downstream once the survey limit is reached. Datum – the horizontal datum for the project will be VCS NAD83, North Zone and the vertical datum for the project will be US Survey Foot, NAVD88, with a minimum closure of 1:20,000. RDA will set a minimum of three (5) bench marks/traverse points for each section of the project. All trees larger than 4" within the project area will be surveyed. RDA is responsible for any damages to private property by the survey crew.

Property Boundary Research: RDA will conduct basic property research based on public available records and property corners located in the field. RDA will hold the property information contained in the deed of record for all property lines and easements.

Utility Designations: Insight, Inc., sub-consultant to RDA, will perform utility designating and test hole excavation in compliance with Quality Level B and A, respectively, as defined in CI/ASCE 38-02, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, herein after referred to as Standard 38-02. Known non-locatable utilities shall be added to the designating mapping at Quality Level "C" or "D", as deemed appropriate. A total of 30 test holes have been assumed for the project as discussed in **Task 8**.

Digital Survey Files: RDA will prepare digital topographic survey and property boundary files utilizing AutoCAD and MicroStation.

Town and RDA understand that not all existing features are accessible due to lack of maintenance or lack of access without lane closures (i.e. man-holes in roadway) and are excluded from the scope of work. RDA will notify Town of such situation so Town can coordinate with maintaining public agency to enable additional survey efforts to be performed.

**Task 2: Deliverables:**

- Copy of FCPA permit to perform survey on Foxstone Park property.
- Digital PDF (black/white, not multi-colored roll plot) of obtained topographic field and property boundary survey
- CAD Files (on CD) of topographic and property boundary survey

**Task 3: Conceptual Layout Plans**

RDA will prepare a conceptual layout for the proposed pedestrian enhancement (**Section A** and **Section B**) to an approximate 30% level of design completion. Design will utilize topographic survey obtained in **Task 2**. The conceptual layout will follow the general guidance, as provided by the Town's RFP 16-08 and descriptions in **Section 1** of this proposal, to construct the pedestrian enhancements. The layout will



demonstrate the viability of the proposed geometry, as well as the potential improvements to adjacent properties.

Field Walk-Through: Consistent with past working experience with the Town, RDA will walk the project with DPW staff to scope out the desired improvements, trees to try to avoid and general desired alignment based on field conditions. It is assumed for **Section A** only the Town staff would participate, but for **Section B** FCDOT would be invited to provide their input.

Concept Pedestrian Enhancement Design: The concept layout will reflect consideration of design elements such as minimum radii, horizontal alignment/vertical limitations, maximum grades, as set forth by the Town of Vienna Public Infrastructure Manual as of April 2018 for **Section A** and VDOT's Standards as of April 2018 for **Section B**. The concept layout will show the pedestrian enhancement's horizontal layout, typical section, and any potential unique design features. Anticipated Right-of-Way and/or Easement impacts will be identified. A typical section, profile and conceptual cross-sections will be prepared and will reflect limiting or otherwise critical design elements. These activities will enable the evaluation of potential construction limits and earthwork requirements at a relatively coarse level, consistent with a 30% design.

Conceptual Layout of Hydraulic Design: Two (2) RDA staff will conduct a field visit to assess the existing conditions. RDA will develop the potential drainage layout for proposed enhancements based on the field visit and topographic survey obtained as part of **Task 2**. No improvements to the existing VDOT maintained culvert, for Wolftrap Creek are scoped.

Stormwater Management (SWM) Concept Design: For **Section A**, RDA will evaluate SWM requirements for the project based on approach that involves the use of existing local/regional facilities or construction of a BMP facility, to satisfy water quality treatment requirements. One (1) BMP/SWM facility is assumed to be constructed as part of **Section A**. In **Section A**, the use of nutrient credit purchase will be considered the option of last resort in conformance with Town standards of practice. For **Section B**, RDA will evaluate SWM requirements for the project based on approach that involves the use of existing local/regional facilities or purchase of nutrient credits, to satisfy water quality treatment requirements consistent with current VDOT policy for VDOT maintained facilities. A BMP/SWM facility is not assumed to be constructed as part of **Section B** per VDOT IIM-LD-251.

**Task 3: Deliverables:**

- Graphics for field visit layout conceptual agreements for project file
- PDF (black/white, not multi-colored) of conceptual design layout for Town
- PDF (black/white, not multi-colored) of conceptual design layout for FCDOT

**Task 4A: Environmental Services**

RDA and its sub-consultants (the Project Team) will provide limited environmental services, as applicable to the project, as outlined below for the project's proposed improvements:

Wetland Delineation/WOTUS Boundary/JPA: The project team will perform the wetland delineation, determination of WOTUS boundary and JPA. Please see **Attachment 7** for additional details and deliverables.

Local Environmental Review Process (LERP): The project team will perform the LERP as outlined in **Attachment 7**. Please see **Attachment 7** for additional details and deliverables.

Cultural Resources and Endangered Species Review: The project team will perform the cultural resources and endangered species review as outlined in **Attachment 7**. Please see **Attachment 7** for additional details and deliverables.

RDA will prepare a brief technical memorandum summarizing the Environmental results for FCDOT's project files. (Efforts for this will be incidental all efforts required of **Task 8**)

Any archeology review/analysis is excluded. A VSMP/VPDES is considered a **Section 2B – Project Construction** element, as it's not required for design approval.

#### **Task 4B: Geotechnical Investigation**

Geotechnical Investigation: RDA's sub-consultant DMV will perform the required geotechnical exploration and investigation per Town of Vienna and County PFM as applicable. Additionally all recommendations will be consistent regulatory/maintaining authority's requirements for facilities construction, to ensure acceptance of maintenance when constructed. Please see **Attachment 8** for additional details, assumptions and deliverables.

#### **Task 5: Public Involvement**

RDA will assist the Town to hold two (2) separate Citizen's Information Meetings (CIM's) for **Section A** and **Section B** respectively. (Entire project information will be presented at both.) One CIM is understood to be held in a location within the Town, and the other CIM will be held in a location within Fairfax County.

Citizen Information Meetings: RDA's services for public involvement will consist of the following:

- 1) **Section A**: RDA will assist the Town with holding a Citizen's Information Meeting, including preparation of flyers, handouts, and presentation materials (i.e. exhibit boards and power-point), summarizing and preparing responses to citizen comments, and if requested, providing presentation to the public.
- 2) **Section B**: RDA will assist the Town with holding a Citizen's Information Meeting, including preparation of flyers, handouts, and presentation materials (i.e. exhibit boards and power-point), summarizing and preparing responses to citizen comments, and if requested, providing presentation to the public.

RDA will provide a CIM flyer to mail to all potential property owners directly impacted by the proposed improvements. On Town approval, RDA will mail the letters (regular mail) thirty (30) days prior to both scheduled CIMs.

Following both meetings and closure of comment period, RDA will assemble all the comments received and work with the Town to provide responses. RDA will review impacts to the conceptual plans and provide mitigations where possible per Town discretion.

Other Stakeholders: RDA will also assume that coordination will be required with the following:

- 1) Fairfax County Park Authority (FCPA, Foxstone Park): RDA will assist the Town to review the project's impacts and improvements with FCPA. RDA will seek acceptance of the project's improvements from FCPA and provide mitigations where possible. (Two [2] meetings are assumed.)
- 2) Town Council/County Supervisor's Office: RDA will assist the Town to provide technical support and/or exhibits as appropriate, including meeting with public stakeholders as needed. Additionally RDA will be responsible for providing all project generated information as necessary to brief County Supervisor's office. (Two [2] meetings total are assumed.)
- 3) Fairfax County DOT: RDA will assist the Town in coordination with Fairfax County to prepare, hold and provide all necessary exhibits, documentations, materials etc., for the Citizen's Information Meetings. (See **Task 1**, Project Coordination Meetings for meetings assumed.)

**Task 5: Deliverables:**

- CIM Notification Letter to be mailed property owners impacted (Regular Mail)
- Power Point Presentation for CIMs
  - RDA will provide computer, projector and easels. It is assumed the facility utilized will have a screen.
- Exhibit Boards for CIMs
- Comment Form for Meeting, Comment Box
- Sign In Sheets for CIMs
- Any additional items needed for CIM

**Task 6: Hydraulic and Hydrologic Analysis**

Hydraulic and Hydrologic Analysis (H&HA) for Wolftrap Creek: Per the Q&A's for RFP 16-08, RDA understands the culvert crossing for Wolftrap Creek is maintained by VDOT. Following the Citizen's Information Meeting receipt of comments that may (or may not) result in some plan revisions, RDA will perform the required H&HA Report to be submitted to County LDS for review and acceptance. RDA assumes the following for the scope of work:

- Obtaining detailed existing study from FEMA.
- Assumes that, based on past experience due to existence of existing detailed FEMA study that the project's improvements will have to achieve zero increase in water surface elevations.
- RDA and the Town assume that the existing culvert will not be modified or improved as part of this project.

The Town and RDA understand that all efforts, outside of modifying the existing culvert will be entertained in order to achieve a no adverse effect (zero increase to existing water surface elevations) to the existing conditions.

**Task 6: Deliverables: [To Be Submitted to County LDS with Task 8 Deliverables]**

- H&HA Analysis – 3 Copies with CD of PDF and Analysis Files

## **Task 7: Right of Way Services**

**Section A: Right of Way Services:** Normal procedure in the Town of Vienna is to obtain right of entry for all properties impacted by construction activity (i.e. re-grading) required beyond existing right of way. The Town has indicated for this project they will perform coordination with all property owners in the Town to obtain Right of Entry. RDA will assist to provide graphics necessary for the Town's property owner discussions.

**Section B: Right of Way Services:** Based on a review of the existing property lines vs. location of potential pedestrian improvements, it is estimated fifteen (15) parcels in the County/**Section B** may require right of services to obtain land rights for the project's construction. The following is anticipated for right of way services in **Section B**:

- Title Reports will be obtained for 15 parcels
- All easements or potential right of way needed, for all properties are assumed to fall within the limits/valuation of a Basic Acquisition Review (BAR).
- RDA will conduct reasonable negotiations with each property owner, but final authorization shall be the Town and/or other stakeholders (i.e. Fairfax County.)
- Court filing of the certificates for the R/W and/or easements is the responsibility of the Town and/or other stakeholders (i.e. Fairfax County)

**Section B: Property Plats:** RDA will provide for up to 15 property plats. Project allowances will be utilized for this effort, when authorized by Town. Any additional plats beyond 15, if required, shall be considered an unanticipated condition.

It is understood that **Task 7** may run concurrent with **Task 5 & Task 8** for plan development to address property owner concerns and revise plans to mitigate property impacts to assist in obtaining agreements with property owners. However, it is understood by the Town/RDA that the project's design plans cannot be submitted to County LDS until all property owner agreements are in place due to the resubmission requirements (1-year timeline resubmittal requirements) by County LDS for final plans.

RDA cannot guarantee that all property owners will be receptive project's improvements. Extended/prolonged negotiation periods shall be considered an unanticipated condition.

**[Notes: RDA's scope/fee does not include payment to the property owners for any potential easements or right of way that may be required.]**

### **Task 7: Deliverables:**

- Section A: Graphics as requested by the Town for discussions with property owners.
- Section B: Signed Agreements for necessary land rights for project construction.
- Section B: Signed Plats (up to 15 plats), when authorized by the Town.

## **Task 8: 1<sup>st</sup> Submission to LDS and Town of Vienna (95% Level Plans)**

RDA will address all stakeholders' comments received (pertaining to current design and SWM strategy) on the concept design phase submission.

Pedestrian Enhancement Design: The plans will reflect the final layout, alignment and typical section developed and approved by the Town in **Task 3 & 4** for **Section A** and **Section B**. The pedestrian enhancement design and plan assembly will be developed consistent with requirements the Town (for **Section A**) and VDOT (for **Section B**) as of the month of actual submission of the plans. RDA proposes preparing plans into two separate sections (**Section A** and **Section B**), so the plan packages submitted to maintaining jurisdictions only review elements within their respective maintaining jurisdictions.

Construction limits and right of way and/or Easement impacts will be identified.

No design waivers related to roadway or pedestrian facilities are assumed to be necessary (or scoped) for this project.

Hydraulic and SWM Management Design: The plans will reflect the final drainage (open channel and/or storm sewer as appropriate) consistent with the, applicable maintaining jurisdiction requirements of as of the month of actual submission of the plans. For **Section A**, RDA will continue evaluate SWM requirements for the project based on approach that involves the use of existing local/regional facilities or construction of a BMP facility, to satisfy water quality treatment requirements. One (1) BMP/SWM facility is assumed to be constructed as part of **Section A**. Similar to **Task 3**, in **Section A**, the use of nutrient credit purchase will be considered the option of last resort in conformance with Town standards of practice. For **Section B**, RDA will continue to evaluate SWM requirements for the project based on approach that involves the use of existing local/regional facilities or purchase of nutrient credits, to satisfy water quality treatment requirements consistent with current VDOT policy for VDOT maintained facilities. A BMP/SWM facility is still not assumed to be constructed as part of **Section B**. For **Section B**, RDA will prepare a County SWM Exemption Waiver, a RPA Exemptions Waiver and a Request to Work in Floodplain as applicable.

RDA will also prepare 1) Erosion & Sediment (E&S) Control Plans, and 2) Underdrain Plans as applicable.

The Town and RDA understand that not all existing features (upstream/downstream) of the project may meet current design standards. No efforts are scoped to upgrade upstream/downstream features outside the design limits outlined in **Attachment 6**.

No improvements to the existing VDOT maintained Wolftrap Creek culverts are assumed to be part of the scope of work.

RDA (thru sub-contractor, INSIGHT LLC), will perform up to 1,200 linear feet of pipe inspection for VDOT maintained facilities if requested by VDOT. VDOT may require existing storm systems being connected to with proposed improvements be inspected to ensure existing infrastructure is in good condition. RDA will provide recommendations in accordance with VDOT's current IIM's and incorporate into the plans as directed by the Town. Alternatively, the Town can request VDOT perform any required maintenance work. RDA will provide final scope/fee for the pipe inspection work once the limits if pipe inspection has been determined in coordination with VDOT. Any pipe inspection work required above 1,200 LF will require additional funding, and anything less will be prorated as a reduction and reallocated to overall project allowances for unanticipated additional design work. (Fee includes necessary VDOT permits, maintenance of traffic needs, in addition to the 1,200 LF to be inspected.)

Lighting Design: Lighting Design is not scoped as part of the project's improvements.

Structural Engineering: Structural engineering for retaining walls and/or review of existing culvert for Wolftrap Creek are not scoped.

Traffic Engineering: Traffic engineering elements will be provided as follows:

**Section A:** RDA will provide applicable pavement markings and signage plans as part of the pedestrian enhancements. It is assumed that any crosswalks within Town limits will be marked as directed by the Town.

**Section B:** RDA will provide applicable pavement markings and signage plans as needed. RDA assumes that a crosswalk analyses will be provided in conformance with VDOT IIM's for 1) Foxstone Park crossing and 2) Miller Drive/Creek Crossing Road intersection location. The Town understands that VDOT has sole authority on approval of installation of crosswalks. RDA assumes maximum of two (2) submissions to achieve approval unless VDOT indicates they will not accept a crosswalk for maintenance at these locations.

Transportation Management Plans (TMP/SOC): RDA will provide TMP/SOC (MOT) plans for both **Section A** and **Section B**.

Landscaping Plans: Landscaping design or reforestation plans have not been included in the scope of work as based on the anticipated impacts, these services are not needed.

Utility Coordination and Utility Design: RDA will perform any required utility coordination services for both **Section A** and **Section B** (within the Town and County). RDA will provide design for waterline and sanitary line relocation, if the need arises. RDA will hold a UFI meeting with utility owners for both **Section A** and **Section B** following the submission of the 95% level plans.

Cross Sections and Grading Plans: RDA will provide cross-sections at 25' intervals and grading plans for both **Section A** and **Section B**. The grading plans will be limited to surface grading and only.

Estimate of Quantities: RDA will prepare a construction cost estimate (consistent with level of plans developed) using current unit prices published by VDOT. If unit prices are not available for particular construction items, RDA will provide a cost based on professional engineering judgement.

Designated Plan Examiner (DPE) and Engineers & Surveyors Institute (ESI) Peer Review: RDA will perform DPE Review and ESI Review, as outlined in **Task 1.1**.

Submission Fees: RDA will submit the plans directly to ESI and LDS, and Fairfax Water Authority (if needed). RDA will submit payment of submission fees on Town's behalf through project allowances when authorized by the Town.

**Task 8: Deliverables:** (See **Attachment 5** for anticipated breakdown of sheets in submission plan.)

- 1<sup>st</sup> Submission Plan: 3 Copies of Plans for Town Review
- 1<sup>st</sup> Submission Plan: 2 Copies of Plans to FCDOT
- 1<sup>st</sup> Submission Plan: 1 original signature set (Wet Signatures) – Submitted to LDS
- 1<sup>st</sup> Submission Plan: 2 Copies of Plans to ESI

- 1<sup>st</sup> Submission Plan: Up to 12 Sets of Plans to LDS
- 1<sup>st</sup> Submission Plan: SWM Exemption Waiver (to DPWES)
- Digital PDF (on CD and FTP)
- Construction Estimate (To be provided approx. three [3] weeks following submission to LDS)
- Submission Fees to LDS and ESI

### **Task 9: 2<sup>nd</sup>/Final Submission to LDS and Town of Vienna (100% Level Plans)**

RDA will address all stakeholders' comments received (pertaining to current design and SWM strategy) on the 1<sup>st</sup> Submission plans.

RDA will prepare 2<sup>nd</sup> Submission Level Plan (100%-Final Plans) following authorization from the Town to advance from **Task 8**. The pedestrian/roadway improvement design plans will be developed to a 100% level of design completion. RDA will obtain approval (required) from all appropriate stakeholder public agencies (shown on LDS title sheet) prior to submission of the 2<sup>nd</sup> Submission of the project's plans. The Town understands that the 2<sup>nd</sup> Submission (for **Section B**) is required to be submitted to County LDS within one (1) year or the project's development must restart with 1<sup>st</sup> Submission level plans.

General Design: The scope of work shall include addressing all stakeholder (as shown on LDS title sheet) comments received (pertaining to current design). Additional requests by other stakeholders to perform additional analyses or reviews to address comments may require additional funding. Comments requesting alignment/typical changes or changes to SWM strategy may require additional funding.

For **Section B**, RDA will design to avoid tree impacts as feasible and practical, to satisfy County Urban Forest Management Division (UFMD). The design of mitigations, such as landscaping plans/planting plans, is not scoped. Any fee(s) or mitigation fees due to tree impacts required by UFMD or Fairfax County Park Authority are the responsibility of the Town.

Utility Coordination and Design: RDA will continue to perform any required utility coordination services. RDA will provide design for waterline and sanitary line relocation, if the need arises. RDA will collect the utility company provided P&E's for review and approval and final recommendations.

Public Agency Approvals: It is required to obtain original signature approvals on the project title sheet from multiple public agencies. RDA will provide services to revise the plans and coordinate with public agencies to obtain these signatures.

RDA and the Town understand that the plans for **Section B** cannot be resubmitted until all stakeholders/agencies approve their respective elements of the plans.

RDA will be responsible for retention of original signature title sheets until 2<sup>nd</sup>/Final Submission package is submitted. Typically six (6) separate public agencies are required to be satisfied, as noted on the LDS title sheet.

Estimate of Quantities: RDA will prepare an updated construction cost estimate (consistent with level of plans developed) using current unit prices published by VDOT. If unit prices are not available for particular construction items, RDA will provide a cost based on professional engineering judgement.



Designated Plan Examiner (DPE) and Engineers & Surveyors Institute (ESI) Peer Review:  
RDA will perform DPE Review and ESI Review, as outlined in **Task 1.1**.

Submission Fees: RDA will submit the plans directly to ESI and LDS. Typically additional submission fees are not required with 2<sup>nd</sup>/Final Submission. If any additional submission fees are required, RDA will submit payment of submission fees on Town's behalf through project allowance, when authorized by Town.

The County Fire Marshall's Office Review fee will be required, and RDA will submit payment of submission fee on the Town's behalf through project allowances when authorized by the Town.

**Task 8: Deliverables:** (See **Attachment 5** for anticipated breakdown of sheets in submission plan.)

- 2<sup>nd</sup>/Final Submission Plan: 3 Copies of the Plans for Town
- 2<sup>nd</sup>/Final Submission Plan: 1 original signature set (Wet Signatures) – Submitted to LDS
- 2<sup>nd</sup>/Final Submission Plan: 2 Copies of Plans to ESI
- 2<sup>nd</sup>/Final Submission Plan: Up to 12 Sets of Plan to LDS
- 2<sup>nd</sup>/Final Submission Plan: Up to 2 Sets of Plan to LDS for Bonding (submitted after County LDS, SDID approval)
- 2<sup>nd</sup>/Final Submission Plan: 2 copies to FCDOT, per Town and Fairfax County MOU (submitted after County LDS, SDID approval)
- 2<sup>nd</sup>/Final Submission Plan: SWM Exemption Waiver (to LDS)
- Digital PDF (on CD and FTP)
- Construction Estimate (To be provided approx. one [1] week following submission to LDS)
- Submission Fees to LDS and ESI (if required)
- Review Fee to Fire Marshall's Office (if required)



## **SECTION 2B: Project Construction**

### **Construction Assistance**

RDA understands all elements of **Section 2B** will only be implemented upon a separate NTP/authorization from the Town, once the Town is ready to start utility relocations and construction of the project. Services in **Section 2B** will generally consist of the following but still part of the overall **RFP 16-08**:

**Pedestrian Facility Enhancement:** For the proposed improvement plans developed, and in compliance with the **RFP 16-08**, as the following isn't required for design approval, RDA will provide Utility Relocation Monitoring, Assembly of Advertisement Plans/Bid Specifications, Permit Approval Assistance (on VDOT maintained facilities in the County), Construction Engineering/Inspection Assistance, Construction Support and Street Acceptance (on VDOT maintained facilities in the County) following Construction.

As discussed with Town and in compliance with RFP 16-08, RDA will submit a scope/fee for all elements **Section 2B** separately for the required services, once the project's design plans are completed and a determination on the scale of efforts required can be reasonably assessed. Therefore, no elements of **Section 2B** are considered part of the scope/fee proposal herein.

## SECTION 3: Project Program and Agreement

### Project Schedule:

Once the Notice to Proceed (NTP) has been issued by the Town, RDA will collaboratively develop a project development schedule and will endeavor to meet the deliverable dates shown below. The Town and RDA acknowledge that milestone dates may vary from the below schedule due to circumstances beyond the control of either the Town or RDA. The Town and RDA agree to work together to advance the project with reasonable diligence. The scope of work efforts for concept design phase through final design phase are based on the schedule outlined below. Any significant extension to the schedule may require additional funding for continued efforts requested by Town.

The durations anticipated for this task order assignment are detailed below by major milestone. Assumed durations of agency review times are included: **TOTAL ESTIMATED PROJECT DURATION: 97 WEEKS (APPROX. 24 MONTHS)**

Item/Task	Weeks to Complete
<b>Task 2:</b> Topographic/Boundary Survey and Basic Property Research	15 Weeks after Project NTP
<b>Task 3:</b> Conceptual Layout Plans	5 Weeks from completion of Task 2.
<b>Task 4A:</b> Environmental Services	10 Weeks from NTP to start Task 4A
<b>Task 4B:</b> Geotechnical Services	10 Weeks from NTP to start Task 4B
<b>Task 5:</b> Public Involvement	8 Weeks from completion of Task 3 (This task will be dependent on when the CIM's are held.)
<b>Task 6:</b> H&HA Analysis	4 weeks from completion of Task 5 and receipt of information from FEMA.
<b>Task 7:</b> Right of Way Services	16 weeks from completion of Task 5*
<b>Task 8:</b> 95% Plan Submissions to Town and County LDS (Section A and Section B)	10 Weeks from NTP to start Task 6
<b>Task 8:</b> 95% Plan Submissions to Town and County LDS (Utility UFI Meetings)	6 weeks from submittal of plans to reviewing agencies
<b>Task 9:</b> Obtain Stakeholder Approval for plans.	Estimated, 10 Weeks to complete, from receipt of all stakeholder comments.
<b>Task 9:</b> Submit Plans for Approval ( <b>Section A</b> and <b>Section B</b> )	Estimated, 3 Weeks to complete from receipt of all stakeholder signatures on LDS Sheet for <b>Section B</b> plans.
<b>**Task 9:</b> Receipt of P&E's from Utility Companies	Estimated, 30 Weeks to complete, from UFI meeting. (Note: Schedule is driven by Utility Companies)
* Task is concurrent with Task 5 & 8. Length is driven by property owner negotiations.	
<b>**Task</b> is concurrent once initial UFI meeting is held.	

Overall schedule assumes six (6) weeks between each submission/task for review by stakeholders. The Town and RDA understand that the ESI reviews are dependent on first come, first serve basis. RDA is estimating two weeks for scheduling based on past experience. Town and RDA understand that the 2<sup>nd</sup>

Submission (for **Section B**) is required to be resubmitted within one (1) year of initial submission. LDS does not grant any extensions. If the project does not submit within one (1) year, then the project is required to restart project development with 1<sup>st</sup> submission to LDS and will require additional funding.

### **Project Assumptions & Exclusions:**

This proposal is based on the following assumptions and exclusions:

1. RDA will use Bentley MicroStation and GeoPAK software as the CADD software for the development of these design plans.
2. This project is to develop design plans for pedestrian facilities only and limited roadway widening in **Section A** (maintaining existing cross slopes only) to maintain lane widths or on-street parking. This scope of work does not include any efforts to revise/improve roadway geometrics or revise/improve inadequate existing storm water facilities for **Section A** or **Section B**. If the project finds inadequate existing storm facilities, that would be considered an unanticipated condition.
3. Any permitting or zoning change/zoning plan required by Fairfax County LDS or any other agencies/authority will be handled by others.
4. Any documentation and efforts for proffer review or proffer amendments is excluded.
5. Assistance with bonding and permitting for construction of the project is considered a **Section 2B** activity.
6. Performing the Plan Insert Process, outlined by County Technical Bulletin 16-01 is excluded. If this effort is required, addition funding is required.
7. The Town will be responsible for payment of nutrient credits and transfer to County and/or VDOT, as applicable/required final maintenance of the facilities. RDA will assist with documentation of purchase only.
8. The design of a retaining walls are excluded from the scope of work.
9. A lighting plan is excluded from the scope of work.
10. All assumptions and exclusions by sub-consultant in respective subsequent attachments apply.
11. All property appraisal for land rights required for the project are assumed to be under \$10,000 in value. Any valuation for any individual property greater than \$10,000 shall be considered an unanticipated condition.
12. Payments to property owners for land rights to be obtained for the property owner are excluded and the responsibility of the Town and/or other project stakeholders.
13. Comments or directives received from Town, regulatory agencies or any agency, having approval authority over the work products that alter the assumptions made in the development of this scope of work may require changes to the scope and corresponding adjustments to the contract value. The Town and RDA will review and assess these occurrences on a case-by-case basis.
14. RDA and Town agree any revisions, during any design phase/level, to alignment, typical section and/or drainage strategy requested by any stakeholder having approving authority may be considered an unanticipated changes and may require additional efforts/funding to recapture appropriate the previous design phase/level efforts.

### **Project Allowances:**

Additional services can be provided through a project allowance release when additional efforts are requested by Town. The use of project allowance will be on an as-needed basis and shall be approved by Town, in writing, prior to proceeding with the allowance item. Fees associated with each allowance, as identified in this proposal, are preliminary and are included for the purposes of estimating an overall task order value only. The budgets associated with individual allowances listed below do not represent a specific scope of work; rather it represents a collective budget reserve that could be assigned in part or whole to provide a range of services to be scoped throughout project development, as the need arises. A brief letter refining scope and fee will be prepared prior to the use of allowance for Town review and approval.

The project allowances (#1 thru #6) for this contract are identified as follows:

1. **Allowance #1: Base Contract Direct Expenses, (\$12,500)**
  - a. This includes all of the project's direct expenses incurred by RDA for travel, mileage, reproduction, plan delivery, printing, binding, scanning of plans, and other direct expenses as shown in **Attachment #4.2** (All direct expenses for **Task 1** thru **Task 7** and **Allowance #2** thru **Allowance #5** are included in **Allowance #1.**)
2. **Allowance #2: Property Plats, Title Report and Bar, (\$42,000 Total)**
  - a. This allowance covers the preparation of 15 plats at \$1,000/ea.
  - b. This allowance covers the preparation of a title report and BAR for 15 properties at \$1,800/ea.

**Note:** Requested revisions to plans resulting in changed right of way and/or easement areas to provided plats may require additional funding.
3. **Allowance #3: ESI Submittal Fees, (\$5,500)**
  - a. This allowance is to cover for ESI Review Fees required by ESI. The first submittal plan to ESI is at flat fee of \$2,500. The 2<sup>nd</sup> submittal fee is determined by ESI when the plan is submitted.
4. **Allowance #4: Land Development Services Review Fees & Nutrient Credit Purchase, (\$39,400)**
  - a. This allowance is to cover the required County Land Development Services submittal fees. The following outlines the estimated budget: (Estimated Fees are from LDS Fee Schedule, Appendix Q)
    - i. Public Improvement Plan: \$6,397.80/1<sup>st</sup> submission, rounded to \$7,000
    - ii. BMP/SWM Facility & Sheet Flow Review (on-site or offsite): \$1,900 + \$500, equals \$2400
      - i. Natural Drainage Way : \$856.80, rounded to \$900
    - iii. Plat Submission Fee (if required): \$432.00/plat (15 estimated), \$6,480.00
    - iv. Fire Marshall Plan Review Fee: \$156.00/plan
    - v. SWM Waiver Review (if required): \$876, rounded to \$900
    - vi. Geotechnical Review Due to Problem Soils: \$1,269.60, rounded to \$1,300
    - vii. FCPA Access Fee, Estimated at \$250

- b. This allowance is to cover the cost of the project's nutrient credit purchase. Estimated at \$20,000. Actual cost may vary. Any additional cost for the nutrient credit purchase since purchase rates are variable pending availability in nutrient credit banks, would be an unanticipated cost consideration and require additional funding.

5. **Allowance #5: Minor Sub-Consultant Fee and FEMA Fee, (\$57,400)**

- a. This allowance is to cover the required additional services conducted by minor sub-consultants or additional fees as follows:
  - i. Utility Designations by Insight LLC
    - i. Utility Test-Pits by Insight LLC (up to 30 test-pits. Note, additional test-pits shall be considered an unanticipated condition.)
  - ii. Traffic Counts by Quality Counts
    - i. For Crosswalk Study
  - iii. Existing Floodplain Package from FEMA for H&HA Analysis.
    - i. RDA will obtained from FHWA/FEMA

Please see **Attachment #4.1** for the breakdown/details of the potential project allowance efforts.

RDA Invoices to the Town will only list a total "**Allowance Balance**" for **Allowance #2** thru **Allowance #5** reflecting the total of unauthorized project allowance(s) above. Only when the Town authorizes allowance expenditure (in part or whole etc.) will RDA invoice(s) show a released allowance as approved for invoicing. **Allowance #1** will be listed separately for ease of tracking direct base contract expenses.

**Town of Vienna, Department of Public Works  
IFB 16-08: Creek Crossing Road Pedestrian Enhancement**


	(Exact)	(Rounded)
<b>BASE CONTRACT:</b>		
<b>Lump Sum (LS) Base Contract Total</b>	\$441,815.48	<b>\$441,900</b>
<b>PROJECT ALLOWANCES:</b>		
<b>Allowance No. 1:</b> Direct Non-Salary Costs		<b>\$12,500</b>
<b>Allowance No. 2:</b> Property Plats, Title Report and BAR		<b>\$42,000</b>
<b>Allowance No. 3:</b> ESI Submittal Fees		<b>\$5,000</b>
<b>Allowance No. 4:</b> LDS Submittal Fees & Nutrient Credit Purchase		<b>\$39,400</b>
<b>Allowance No. 5:</b> Minor Sub-Consultants and FEMA Fee		<b>\$57,400</b>
<b>TOTAL ALLOWANCES</b>		<b>\$156,300</b>
<b>SUBTOTAL VALUE (LS + ALLOWANCES)</b>		<b>\$598,200</b>
<b>TOTAL MAXIMUM CONTRACT VALUE (LS + ALLOWANCES)</b>		<b>\$598,200</b>

**COMPENSATION**

Allowances: The use of allowances will be on an as-needed basis and shall be approved by the Town of Vienna, in writing or via email, prior to proceeding with allowance item. RDA will provide a brief scope and hours prior to the use of the allowance for review and approval by the Town of Vienna.

Contingency: The contingency budget is established to address design conditions, circumstances or services unanticipated or otherwise not included in this scope of work and will not be invoiced without prior written authorization from the Town of Vienna.

**SUBMITTED BY:**

  
\_\_\_\_\_  
Mo Kim, P.E.  
President, COO

4/10/18  
\_\_\_\_\_  
Date

**APPROVED:**

\_\_\_\_\_  
Michael Gallagher, Director of Public Works  
Town of Vienna

\_\_\_\_\_  
Date

## **SECTION 4: Attachments/Detailed Fee Summary**

### **Contents:**

- **Attachment 1:** Detailed Fee Summary
- **Attachment 2:** Distribution of Work Hours and Fee Itemization
- **Attachment 3:** Distribution of Work Hours (Plan Development)
  - **3.1:** Task 1: Task Order Management and Coordination
  - **3.1.1:** Task 1.1: DPE/ESI Reviews
  - **3.2:** Task 2: Topographic Survey and Property Research
  - **3.3:** Task 3: Conceptual Layout and H&HA Analysis
  - **3.4:** Task 4A and 4B: Environmental & Geotechnical Services
  - **3.5:** Task 5: Public Involvement
  - **3.6:** Task 6: H&HA Analysis
  - **3.7:** Task 7: Right of Way Services
  - **3.8:** Task 8: 1<sup>st</sup> Submission to LDS & TOV
  - **3.9:** Task 9: 2<sup>nd</sup> Submission to LDS & TOV
- **Attachment 4:** Distribution of Work Hours (Allowances)
  - **4.1:** Project Allowances
  - **4.2:** Detailed Breakdown of Allowance No. 1: Non-Salary Direct Costs
- **Attachment 5:** Project & Plan Reproduction Itemization
- **Attachment 6:** Defined Project Limits
- **Attachment 7:** Sub-Consultant, WSSI of Work & Fee Breakdown
- **Attachment 8:** Sub-Consultant, DMY, Scope of Work and Fee Breakdown



# ATTACHMENT #1

## DETAILED FEE SUMMARY


Town of Vienna: Dept. of Public Works  
Creek Crossing Road Pedestrian Enhancements  
IFB 16-08

Rinker Design Associates, P.C.  
April 10, 2018



### Summary of Fee

	(EXACT)	(ROUNDED)
<b>BASE CONTRACT (LUMP SUM, LS)</b>		
A. Task 1: Task Order Management & Coordination	\$25,952.48	
Task 1.1: ESI Review and DPE Review	\$7,794.56	
B. Task 2: Topographic/Boundary Survey and Basic Property Research	\$96,864.10	
C. Task 3: Conceptual Layout and H&HA Analysis	\$19,292.94	
D. Task 4A & 4B: Environmental and Geotechnical Services	\$51,375.00	
E. Task 5: Public Involvement	\$23,912.76	
F. Task 6: H&HA Analysis	\$20,085.68	
G. Task 7: Right of Way Services	\$28,857.84	
H. Task 8: 1st Submission to LDS & TOV (95% Level Plans)	\$103,722.56	
I. Task 9: 2nd/Final Submission to LDS & TOV (100% Level Plans)	\$63,957.56	
<b>Base Contract Total (LS):</b>	<b>\$441,815.48</b>	<b>\$ 441,900</b>
<b>PROJECT ALLOWANCES</b>		
J.. Allowance No. 1: Base Contract Direct Expenses	\$ 12,500.00	
K. Allowance No. 2: Property Plats, Title Reports & BAR	\$ 42,000.00	
L. Allowance No. 3: ESI Submittal Fees	\$ 5,000.00	
M. Allowance No. 4: LDS Review Fees & Nutrient Credit Purchase	\$ 39,400.00	
N. Allowance No. 5: Minor Sub-Consultant Fee and FEMA Fee	\$ 57,400.00	
<b>Project Allowances Total</b>	<b>\$ 156,300</b>	
<b>SUBTOTAL VALUE (LUMP SUM + ALLOWANCES)</b>	<b>\$ 598,200</b>	
<b>TOTAL CONTRACT AMOUNT (LUMP SUM + ALLOWANCES)</b>	<b>\$ 598,200</b>	

ATTACHMENT #2																												
DISTRIBUTION OF WORK HOURS AND FEE ITEMIZATION																												
Firm: Rinker Design Associates, P.C.			<div></div>																									
			Work Hours By Employee Classification																									
Element of Work			Project Manager		Deputy Project Manager		Senior Engineer (Design) or Senior ROW Agent		Project Engineer (Design) or ROW Agent		Engineer Technician (Design)		Senior Hydraulics Engineer		Hydraulics Engineer		Engineer Technician (Hydraulics)		Land Surveyor		Survey Technician		Two-Man Field Crew		Clerical		Total Hours	Total Cost
			HRS	DOLLARS	HRS	DOLLARS	HRS	DOLLARS	HRS	DOLLARS	HRS	DOLLARS	HRS	DOLLARS	HRS	DOLLARS	HRS	DOLLARS	HRS	DOLLARS	HRS	DOLLARS	HRS	DOLLARS	HRS	DOLLARS		
Classification Rates				\$ 226.42		\$ 180.38		\$ 148.16		\$ 114.58		\$ 101.54		\$ 141.46		\$ 114.52		\$ 101.54		\$ 154.78		\$ 83.75		\$ 150.61		\$ 54.42		
TASKS:																												
TASK 1: TASK ORDER MANAGEMENT AND COORDINATION			19	\$ 4,301.98	57	\$ 10,281.66	69	\$ 10,223.04	10	\$ 1,145.80	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	155	\$ 25,952.48
TASK 1.1: DPE REVIEW & ESI REVIEW			4	\$ 905.68	0	\$ -	15	\$ 2,222.40	5	\$ 572.90	16	\$ 1,624.64	10	\$ 1,414.60	3	\$ 343.56	7	\$ 710.78	0	\$ -	0	\$ -	0	\$ -	0	\$ -	60	\$ 7,794.56
PROJECT HOURS SUBTOTAL			23	\$ 5,207.66	57	\$ 10,281.66	84	\$ 12,445.44	15	\$ 1,718.70	16	\$ 1,624.64	10	\$ 1,414.60	3	\$ 343.56	7	\$ 710.78	0	\$ -	0	\$ -	0	\$ -	0	\$ -	215	\$ 33,747.04
TASK 2: TOPOGRAPHIC/BOUNDARY SURVEY			5	\$ 1,132.10			20	\$ 2,963.20											146	\$ 22,597.88	252	\$ 21,105.00	320	\$ 48,195.20	16	\$ 870.72	759	\$ 96,864.10
SURVEY HOURS SUBTOTAL			5	\$ 1,132.10	0	\$ -	20	\$ 2,963.20	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	146	\$ 22,597.88	252	\$ 21,105.00	320	\$ 48,195.20	16	\$ 870.72	759	\$ 96,864.10
TASK 4A & 4B: ENVIRONMENTAL & GEOTECH SERVICES																												\$ 51,375.00
MAJOR SUB-CONSULTANT SERVICES SUBTOTAL																												\$ 51,375.00
TASK 3: CONCEPTUAL LAYOUT AND H&HA ANALYSIS			2	\$ 452.84	5	\$ 901.90	48	\$ 7,111.68	36	\$ 4,124.88	66	\$ 6,701.64	0	\$ -	0	\$ -	0	\$ -									157	\$ 19,292.94
TASK 5: PUBLIC INVOLVEMENT			12	\$ 2,717.04	28	\$ 5,050.64	48	\$ 7,111.68	38	\$ 4,354.04	30	\$ 3,046.20	4	\$ 565.84	4	\$ 458.08	6	\$ 609.24									170	\$ 23,912.76
TASK 6: H&HA ANALYSIS			0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	30	\$ 4,243.80	94	\$ 10,764.88	50	\$ 5,077.00									174	\$ 20,085.68
TASK 7: RIGHT OF WAY SERVICES			0	\$ -	0	\$ -	136	\$ 20,149.76	76	\$ 8,708.08	0	\$ -	0	\$ -	0	\$ -	0	\$ -									212	\$ 28,857.84
TASK 8: 1ST SUB. TO LDS & TOV (95% PLANS)			9	\$ 2,037.78	27	\$ 4,870.26	105	\$ 15,556.80	184	\$ 21,082.72	230	\$ 23,354.20	72	\$ 10,185.12	112	\$ 12,826.24	136	\$ 13,809.44							0	\$ -	875	\$ 103,722.56
TASK 9: 2ND/FINAL SUB. TO LDS & TOV (100% PLANS)			8	\$ 1,811.36	26	\$ 4,689.88	78	\$ 11,556.48	90	\$ 10,312.20	82	\$ 8,326.28	54	\$ 7,638.84	88	\$ 10,077.76	94	\$ 9,544.76							0	\$ -	520	\$ 63,957.56
DESIGN HOURS SUBTOTAL			31	7019.02	86	15512.68	415	61486.4	424	48581.92	408	41428.32	160	22633.6	298	34126.96	286	29040.44	0	0	0	0	0	0	0	0	2108	\$ 259,829.34
EMPLOYEE CLASSIFICATION PERCENT (DESIGN HOURS)			1.5%		4.1%		19.7%		20.1%		19.4%		7.6%		14.1%		13.6%										100.0%	
TASKS SUBTOTAL			54	\$ 12,226.68	143	\$ 25,794.34	499	\$ 73,931.84	439	\$ 50,300.62	424	\$ 43,052.96	170	\$ 24,048.20	301	\$ 34,470.52	293	\$ 29,751.22	0	\$ -	0	\$ -	0	\$ -	0	\$ -	3082	\$ 441,815.48
ALLOWANCES:																												
ALLOWANCE NO. 1: DIRECT NON-SALARY COSTS																										0	\$ 12,500.00	
ALLOWANCE NO. 2: PROPERTY PLATS, TITLE REPORT & BAR																										0	\$ 42,000.00	
ALLOWANCE NO. 3: ESI SUBMITTAL FEES																										0	\$ 5,000.00	
																										(Rounded)	\$ 5,000.00	
ALLOWANCE NO. 4: LDS SUBMITTAL FEES & NURTIENT CREDITS																										0	\$ 39,386.00	
																										(Rounded)	\$ 39,400.00	
ALLOWANCE NO. 5: MINOR SUB-CONSULT AND FEES			0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -								0	\$ 57,400.00	
																										(Rounded)	\$ 57,400.00	
			0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -								0		
																										(Rounded)	\$ -	
SUBTOTAL			0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ 156,286.00
																										(Rounded)	\$ 156,300.00	
TOTALS																												
TASKS			54	\$ 12,226.68	143	\$ 25,794.34	499	\$ 73,931.84	439	\$ 50,300.62	424	\$ 43,052.96	170	\$ 24,048.20	301	\$ 34,470.52	293	\$ 29,751.22	0	\$ -	0	\$ -	0	\$ -	0	\$ -	3082	\$ 441,815.48
ALLOWANCES			0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ 156,286.00
TOTALS (TASKS + ALLOWANCES)			54	\$ 12,226.68	143	\$ 25,794.34	499	\$ 73,931.84	439	\$ 50,300.62	424	\$ 43,052.96	170	\$ 24,048.20	301	\$ 34,470.52	293	\$ 29,751.22	0	\$ -	0	\$ -	0	\$ -	0	\$ -	3082	\$ 598,101.48
					Based Contract Total		(Rounded)		\$ 441,900.00																			
					Project Allowances		(Rounded)		\$ 156,300.00																			
					Total				\$ 598,200.00																			

NOTES:  
1. ALL ALLOWANCE TOTALS ARE ROUNDED AS SHOWN

# ATTACHMENT #3.1

## DISTRIBUTION OF WORK HOURS



Firm: Rinker Design Associates, P.C.

### TASK 1: TASK ORDER MANAGEMENT AND COORDINATION

#### Work Hours By Employee Classification

Element of Work		Project Manager	Deputy Project Manager	Senior Engineer (Design)	Project Engineer (Design)	Engineer Technician (Design)	Senior Hydraulics Engineer	Hydraulics Engineer	Engineer Technician (Hydraulics)	Senior Traffic Engineer	Traffic Engineer	Clerical	Total Work Hours
<b>TASK 1: TASK ORDER MANAGEMENT AND COORDINATION</b>													
100: TASK ORDER MANAGEMENT													
DEVELOP/MAINTAIN WORK PLAN AND SCHEDULE		11	6	6									23
MONTHLY PROGRESS REPORTS (24 MO. PROJ. DURATION)			4	4									8
SUB-CONSULTANT MANAGEMENT				10	10								20
101: TASK ORDER COORDINATION (GENERAL MEETINGS)													
PREPARE, ATTEND AND DOCUMENT 10 MEETINGS			25	25									50
PREPARE, ATTEND AND DOCUMENT 4 FIELD MEETINGS			12	12									24
													0
102: GENERAL CORDINATION													0
COORD. WITH TOWN FOR NUTRIENT CREDIT PURCHASE			2	4									6
COORDINATION WITH TOV & FCDOT		8	8	8									24
													0
													0
													0
													0
													0
													0
<b>Total Work Hours</b>													
		19	57	69	10	0	0	0	0	0	0	0	155

# ATTACHMENT #3.1.1

## DISTRIBUTION OF WORK HOURS

Firm: Rinker Design Associates, P.C.

### TASK 1.1: DPE REVIEWS AND ESI REVIEWS



#### Work Hours By Employee Classification

Element of Work		Project Manager	Deputy Project Manager	Senior Engineer (Design)	Project Engineer (Design)	Engineer Technician (Design)	Senior Hydraulics Engineer	Hydraulics Engineer	Engineer Technician (Hydraulics)	Clerical	Total Work Hours
<b>TASK 1.1: DPE REVIEW &amp; ESI REVIEW (FOR SEGMENT B ONLY)</b>											
102: 1ST SUBMISSION TO LDS (95% PLANS)											0
RDA DPE REVIEW				3							3
ADDRESS DPE REVIEW COMMENTS		1		3	3	3	3	2	3		18
ESI COORDINATION AND ADDRESS COMMENTS		1		3		2	3		2		11
SCAN SIGNED PLAN AND ASSEMBLE PRINTED SETS						4					4
											0
103: 2ND/FINAL SUB. TO LDS (100% DESIGN LEVEL PLANS)											0
RDA DPE REVIEW				2							2
ADDRESS DPE REVIEW COMMENTS		1		2	2	1	2	1	1		10
ESI COORDINATION AND ADDRESS COMMENTS		1		2		2	2		1		8
SCAN SIGNED PLAN AND ASSEMBLE PRINTED SETS						4					4
											0
											0
											0
											0
											0

Total Work Hours

4

0

15

5

16

10

3

7

0

60

# ATTACHMENT #3.2

## DISTRIBUTION OF WORK HOURS

Firm: Rinker Design Associates, P.C.



### TASK 2: TOPOGRAPHIC AND BOUNDARY SURVEY

#### Work Hours By Employee Classification

Element of Work			Project Manager	Senior Engineer (Design)	Land Surveyor	Survey Technician	Two-Man Field Crew	Clerical	Total Work Hours
TASK 2: TOPO/BOUNDARY SURVEY AND PROPERTY RESEARCH									
									0
	TOPOGRAPHIC/BOUNDARY FIELD SURVEY		2		8	24	192		226
	PROPERTY CORNERS				88	48	64		200
	SET GPS CONTROLS/BENCHMARKS				4	8	16		28
	ADDITIONAL SURVEY EFFORTS FOR TREE LOCATION				4	40	48		92
	BASIC PROPERTY RESEARCH (EXCLUDES TITLE REPORTS)				24	16			40
	DIGITIZING/MAPPING FIELD SURVEY				16	100			116
	INCORPORATE UTILITY DESIGNATION INTO SURVEY		1	12	1	16			30
	SURVEY NOTIFICATION LETTERS		1					8	9
	ASSEMBLY ADDRESSES/PROPERTY OWNER INFO		1	8				8	17
	PROCESS PERMIT WITH FCPA				1				1
Total Work Hours			5	20	146	252	320	16	759

# ATTACHMENT #3.3

## DISTRIBUTION OF WORK HOURS

Firm: Rinker Design Associates, P.C.



### TASK 3: CONCEPTUAL LAYOUT

#### Work Hours By Employee Classification

Element of Work		Project Manager	Deputy Project Manager	Senior Engineer (Design)	Project Engineer (Design)	Engineer Technician (Design)	Senior Hydraulics Engineer	Hydraulics Engineer	Engineer Technician (Hydraulics)	Clerical	Total Work Hours
TASK 3: CONCEPTUAL LAYOUT											
300: CONCEPTUAL LAYOUT DESIGN (30% DESIGN LEVEL)											
CONCEPTUAL PEDESTRIAN FACILITY HORZ. ALIGN.		2	3	8		8					21
TYPICAL SECTION & PROFILE OF IMPROVEMENTS				2	4	4					10
CONCEPTUAL PEDESTRIAN FACILITY DESIGN (GENERAL ELEMENTS)				4	20	20					44
CONCEPTUAL CROSS SECTIONS TO DETERMINE LOD				12		24					36
EVALUATION OF POTENTIAL R/W IMPACTS			1	12	12						25
DEVELOP ROLL PLOT EXHIBIT (DELIVERABLE)			1	10		10					21
											0
											0
SUBTOTAL		2	5	48	36	66	0	0	0	0	157
SUBTOTAL		0	0	0	0	0	0	0	0	0	0
											0
											0
SUBTOTAL		0	0	0	0	0	0	0	0	0	0
Total Work Hours											
		2	5	48	36	66	0	0	0	0	157

# ATTACHMENT #3.4

## DISTRIBUTION OF WORK HOURS

Firm: Rinker Design Associates, P.C.



## TASK 4A & 4B: ENVIRONMENTAL AND GEOTECH SERVICES

## Work Hours By Employee Classification

[illegible]

# ATTACHMENT #3.5

## DISTRIBUTION OF WORK HOURS

Firm: Rinker Design Associates, P.C.



### TASK : PUBLIC INVOLVEMENT

#### Work Hours By Employee Classification

Element of Work	Project Manager	Deputy Project Manager	Senior Engineer (Design)	Project Engineer (Design)	Engineer Technician (Design)	Senior Hydraulics Engineer	Hydraulics Engineer	Engineer Technician (Hydraulics)	Clerical	Total Work Hours
<b>TASK5: PUBLIC INVOLVEMENT</b>										
500: CITIZEN'S INFORMATION MEETINGS										
EXHIBITS FOR SECTION A	2		4	8	10					24
EXHIBITS FOR SECTION B	2		4	8	10					24
POWER POINT PRESENTATION	2	4	8							14
PUBLIC INVOLVEMENT LETTERS		2	4		4					10
										0
MEETING FOR SECTION A	2	4								6
MEETING FOR SECTION B	2	4								6
										0
ASSEMBLE AND ADDRESS CITIZEN COMMENTS	2	4	16	16						38
SUBTOTAL	12	18	36	32	24	0	0	0	0	122
501: STAKEHOLDER COORDINATION										
COORDINATION WITH FCPA		2	4	6	6	4	4	6		32
COORDINATION WITH FCDOT		4	4							8
COORDINATION WITH TOV		4	4							8
										0
										0
										0
										0
SUBTOTAL	0	10	12	6	6	4	4	6	0	48
										0
										0
SUBTOTAL	0	0	0	0	0	0	0	0	0	0
Total Work Hours	12	28	48	38	30	4	4	6	0	170



# ATTACHMENT #3.6

## DISTRIBUTION OF WORK HOURS

Firm: Rinker Design Associates, P.C.



### TASK 6: H&HA ANALYSIS

#### Work Hours By Employee Classification

Element of Work	Project Manager	Deputy Project Manager	Senior Engineer (Design)	Project Engineer (Design)	Engineer Technician (Design)	Senior Hydraulics Engineer	Hydraulics Engineer	Engineer Technician (Hydraulics)	Clerical	Total Work Hours
TASK 6: H& HA ANALYSIS										
SUBTOTAL	0	0	0	0	0	0	0	0	0	0
600: H&HA ANALYSIS AND CONCEPTUAL HYDRAULIC DESIGN										
CONCEPTUAL HYDRAULIC LAYOUT DESIGN						4	6	10		20
REVIEW OF SWM/BMP STRATEGY FOR PROPOSED IMPROVEMENTS						6	8			14
RESEARCH OF LOCAL/REGIONAL PONDS & EVALUATE/SHOW						4	8	4		16
H&HA FOR WOLFTRAP CREEK						16	60	24		100
PROFILE AND CROSS SECTIONS AT CULVERT							12	12		24
										0
										0
SUBTOTAL	0	0	0	0	0	30	94	50	0	174
										0
										0
SUBTOTAL	0	0	0	0	0	0	0	0	0	0
Total Work Hours	0	0	0	0	0	30	94	50	0	174

# ATTACHMENT #3.7

## DISTRIBUTION OF WORK HOURS

Firm: Rinker Design Associates, P.C.



### TASK 7: RIGHT OF WAY SERVICES

#### Work Hours By Employee Classification

Element of Work		Project Manager	Deputy Project Manager	Senior Engineer (Design)/Senior ROW Agent	Project Engineer (Design)/ ROW Agent	Land Surveyor	Survey Technician	Clerical	Total Work Hours
TASK 7: RIGHT OF WAY SERVICES									
700: ASSIST TOWN WITH RIGHT OF ENTRY FOR TOWN PROPERTIES									
PROVIDE COLOR GRAPHICS FOR TOWN R/E LETTERS					16				
ASSIST WITH QUESTIONS/ANSWERS FOR TOWN COORD. WITH PROPERTIES				16					
SUBTOTAL		0	0	16	16	0	0	0	0
701: GENERAL RIGHT OF SERVICES (15 PROPERTIES)									
NEGOTIATION AND PREPARATION OF OFFER LETTER				120	60				180
									0
									0
									0
SUBTOTAL		0	0	120	60	0	0	0	180
									0
									0
SUBTOTAL		0	0	0	0	0	0	0	0
Total Work Hours									
		0	0	136	76	0	0	0	212

# ATTACHMENT #3.8

## DISTRIBUTION OF WORK HOURS

Firm: Rinker Design Associates, P.C.



### TASK 8: 1ST SUBMISSION TO LDS & TOV (95% LEVEL PLANS)

#### Work Hours By Employee Classification

Element of Work	Project Manager	Deputy Project Manager	Senior Engineer (Design)	Project Engineer (Design)	Engineer Technician (Design)	Senior Hydraulics Engineer	Hydraulics Engineer	Engineer Technician (Hydraulics)	Clerical	Total Work Hours
<b>TASK 8: 1ST SUBMISSION TO LDS &amp; TOV (95% LEVEL PLANS)</b>										
<b>800: 1ST SUBMISSION (ENGINEERING DESIGN)</b>										
PEDESTRIAN FACILITY HORIZ. ALIGN. AND DESIGN	1	2	18	24	40					85
TYPICAL SECTIONS AND PROFILE		2	9	24	24					59
FACILITY DESIGN FEATURES	1	2	18	16	32					69
PLAN TITLE SHEETS & REQ'D DPWES PLAN DETAILS			9	12	12					33
GEOMETRIC LAYOUT SHEET(S) AS REQ'D BY DPWES-UDCD			4	8	6					18
SURVEY AND HORIZ. ALIGNMENT DATA SHEETS		2		4	4					10
CROSS SECTIONS		2	9	24	40					75
PLAN ASSEMBLY AND SET UP SHEETS (CADD)		2	4	16	12					34
										0
<b>SUBTOTAL</b>	<b>2</b>	<b>12</b>	<b>71</b>	<b>128</b>	<b>170</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>383</b>
<b>801: 1ST SUBMISSION (HYDRAULIC DESIGN)</b>										
FINALIZE HYDRAULIC DESIGN/LAYOUT	2		1			12	40	40		95
FINALIZE HYDRAULIC COMPUTATIONS						8	12	24		44
FINALIZE STORM PROFILES/DITCH DESIGN	2	1				8	16	24		51
FINALIZE SWM STRATEGY AND ASSEMBLE VRRM & DOCS	2					8	16			26
PREPARE & SUBMIT SWM EXEMPTION WAIVERS	1					4	4			9
E&S PLANS		2				8	16	24		50
GRADING PLANS		2				24	8	24		58
<b>SUBTOTAL</b>	<b>7</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>112</b>	<b>136</b>	<b>0</b>	<b>333</b>
<b>802: MISC OTHER DESIGN ENGINEERING</b>										
UFI MEETING/COORDINATION & DESIGN		10	16	20	20					66
INCLUDE TEST-HOLE SHEETS IN PLANS			1	4	4					9
SHOW TEST-HOLES ON STORM PROFILES			2	8	8					18
CROSSWALK STUDY (2 LOCATIONS)			12	8	12					32
TMP/SOC PLAN			1	8	8					17
PAVEMENT MARKING AND SIGNAGE PLAN			1	8	8					17
										0
										0
<b>SUBTOTAL</b>	<b>0</b>	<b>10</b>	<b>33</b>	<b>56</b>	<b>60</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>159</b>
<b>Total Work Hours</b>	<b>9</b>	<b>27</b>	<b>105</b>	<b>184</b>	<b>230</b>	<b>72</b>	<b>112</b>	<b>136</b>	<b>0</b>	<b>875</b>

# ATTACHMENT #3.9

## DISTRIBUTION OF WORK HOURS

Firm: Rinker Design Associates, P.C.



### TASK 7: 2ND/FINAL SUBMISSION TO LDS & TOV (100% LEVEL PLANS)

#### Work Hours By Employee Classification

	Project Manager	Deputy Project Manager	Senior Engineer (Design)	Project Engineer (Design)	Engineer Technician (Design)	Senior Hydraulics Engineer	Hydraulics Engineer	Engineer Technician (Hydraulics)	Clerical	Total Work Hours
<b>TASK 9: 2ND/FINAL SUBMISSION TO LDS &amp; TOV (100% LEVEL PLANS)</b>										
<b>900: FINAL SUBMISSION (ENGINEERING DESIGN)</b>										
FINALIZE FACILITY DESIGN	2	3	14	14	14					47
ADDRESS LDS/SDID AND TOV COMMENTS		3	14	14	14					45
COORD. (& PLAN REVISIONS) W/ OUTSIDE AGENCIES		6	28	22	14					70
FINALIZE R/W IMPACTS & UPDATE CONSTR. LIMITS		4	4	10	10					28
SUBTOTAL	2	16	60	60	52	0	0	0	0	190
<b>901: FINAL SUBMISSION (HYDRAULIC DESIGN)</b>										
FINALIZE HYDRAULIC DESIGN	2					12	22	22		58
ADDRESS LDS/SDID & TOV COMMENTS						12	28	28		68
COORD. (& PLAN REVISIONS) W/ OUTSIDE AGENCIES						12	18	18		48
CONDITIONAL ANALYSIS FOR SWM EXEMPTION WAIVERS						6	6			12
FINALIZE E&S PLANS	2					6	10	10		28
FINALIZE GRADING PLANS	1					6		16		23
SUBTOTAL	5	0	0	0	0	54	84	94	0	237
<b>902: MISC OTHER ENGINEERING DESIGN</b>										
FINALIZE UTILITY DESIGN AND COORDINATION		10	8	16	16					50
IMPLEMENT FINAL GEOTECHNICAL MEASURES			4	4	4					12
FINAL TMP/SOC PLAN			2	4	4					10
FINAL SIGNAGE AND PAVEMENT MARKING			2	2	2					6
CONSTRUCTION ESTIMATE	1		2	4	4		4			15
SUBTOTAL	1	10	18	30	30	0	4	0	0	93
<b>Total Work Hours</b>										
	8	26	78	90	82	54	88	94	0	520

ATTACHMENT #4.1											
DISTRIBUTION OF WORK HOURS											
Firm: Rinker Design Associates, P.C.		PROJECT ALLOWANCES									
		Work Hours By Employee Classification									
Element of Work	TOTAL ALLOCATED DOLLAR AMOUNT	Project Manager	Deputy Project Manager	Senior Engineer (Design)	Project Engineer (Design)	Engineer Technician (Design)	Senior Hydraulics Engineer	Hydraulics Engineer	Engineer Technician (Hydraulics)	Clerical	Total Work Hours
ALLOWANCE NO. 1: NON-SALARY DIRECT COSTS	\$12,500.00										0
ALLOWANCE NO. 2: PROPERTY PLAT, TITLE REPORT & BAR											
SURVEY PLATS FOR SEGMENT B (15 PROPERTIES)	\$15,000.00										0
TITLE REPORT AND BAR FOR SEGMENT B (15 PROPERTIES)	\$27,000.00										0
ALLOWANCE NO. 3: ESI SUBMITTAL FEES											
ESI SUBMITTAL FEE - 1ST SUBMISSION	\$2,500.00										0
ESI SUBMITTAL FEE - 2ND SUBMISSION (IF REQ'D.)	\$2,500.00										0
ALLOWANCE NO. 4: LDS SUBMITTAL FEES & NUTRIENT CREDITS											
PI PLAN - DPWES-LDS SUBMISSION FEE	\$7,000.00										0
BMP/SWM FACILITY REVIEW AND RUN-OFF FLOW FEE	\$2,400.00										0
NATURAL DRAINAGE WAY FEE	\$900.00										0
PLAT SUBMISSION FEE (15 PLATS MAX.)	\$6,480.00										0
FIRE MARSHALL REVIEW FEE	\$156.00										0
SWM WAIVER REVIEW	\$900.00										0
GEOTECHNICAL SUBMISSION (PROBLEM SOILS)	\$1,300.00										0
FCPA ACCESS & WORK PERMIT FEE	\$250.00										0
NUTRIENT CREDIT PURCHASE	\$20,000.00										0
ALLOWANCE NO. 5: MINOR SUB-CONSULTANTS FEE & FEMA FEE											
INSIGHT UTILITY DESIGNATION	\$27,000										0
INSIGHT UTILITY TEST-PITS (UP TO 30 TEST-PITS - 8 DAYS)	\$26,900										0
QUALITY COUNTS (TRAFFIC COUNT FOR X-WALK STUDY)	\$2,500										0
DETAILED STUDY FEE FOR FEMA FLOODPLAIN STUDY	\$1,000										0
SUBTOTAL		0	0	0	0	0	0	0	0	0	0
											0
Total Work Hours		0	0	0	0	0	0	0	0	0	0

- NOTES:
1. ALLOWANCE #2: PROPERTY PLATS - RATE PER PLAT IS \$1,000 PER PLAT)
  1. ALLOWANCE #2: TITLE REPORT AND BASIC ACQUISITION REPORT (BAR) - RATE PER PLAT IS \$1,800 PER PROPERTY)
  3. ALLOWANCE #5: UTILITY TEST PITS REQUIRE COSTS FOR TRAFFIC CONTROL AND PERMITS (@ \$175 PER TEST-PIT AND \$550 PER DAY OF TRAFFIC CONTROL, ALL INCLUDED)
  4. ALLOWANCE #1: SEE ATTACHMENT #4.2 FOR ADDITIONAL DETAILS AND DIRECT COST BREAKDOWN

## ATTACHMENT #4.2

### Direct Non-Salary Costs

Firm: Rinker Design Associates, P.C.



### ALLOWANCE #1: NON-SALARY DIRECT COSTS

<b>A. TRAVEL</b>					
1. Mileage	700	Miles @	\$0.535 per Mile	\$374.50	
				<b>Subtotal:</b>	\$374.50
<b>B. REPRODUCTIONS</b>					
1. 8.5" X 11" Copies (B/W)*	200	Sheets @	\$0.05 per Sheet	\$10.00	
2. 11" x 17" Copies (B/W)*	200	Sheets @	\$0.15 per Sheet	\$30.00	
3. 8.5" x 11" Color Copies	423	Sheets @	\$0.35 per Sheet	\$148.05	
4. 11"x 17" Color Copies*	100	Sheets @	\$1.00 per Sheet	\$100.00	
4a. 12" x 18" Prints (B/W) (Half-Scale Plan Prints)	2224	Sheets @	\$0.25 per Sheet	\$556.00	
5. 24" x 36" Prints (B/W)	8826	Sheets @	\$1.00 per Sheet	\$8,826.00	
6. 24" x 36" Prints (Color)*	100	Sheets @	\$5.00 per Sheet	\$500.00	
7. Mylar Prints (24" x 36")	0	Sheets @	\$5.00 per Sheet	\$0.00	
8. Roll Plot (B/W)	300	SQFT @	\$0.15 per SQFT	\$45.00	
9. Roll Plot (Color)	300	SQFT @	\$0.80 per SQFT	\$240.00	
10. Presentation Board	90	SQFT @	\$2.50 per SQFT	\$225.00	
				<b>Subtotal:</b>	\$10,680.05
<b>C. POSTAGE &amp; PLAN DELIVERY</b>					
1. Plan Delivery	8	at Cost	\$81.63 per Trip	\$653.04	
2. Postage & Envelope and Processing	183	at Cost	\$2.50	\$457.50	
				<b>Subtotal:</b>	\$1,110.54
<b>D. PLAN ASSEMBLY/DOCUMENT PREPARATION</b>					
1. 1-50 sheet/doc	0	plan/document @	\$0.00 per doc	\$0.00	
2. 51-75 sheet/doc	0	plan/document @	\$0.00 per doc	\$0.00	
3. > 75 sheet/doc	0	plan/document @	\$0.00 per doc	\$0.00	
				<b>Subtotal:</b>	\$0.00
				<b>Total</b>	\$12,165.09
				<b>(Rounded)</b>	\$12,500.00
*Items noted by asterisk are estimated based on past performance only*					

# Attachment #5

## Project & Plan Reproduction Itemization

Firm: Rinker Design Associates, P.C.

### Anticipated Reproduction Schedule



Sheet Title	Number of Sheets per Plan Set			ESI Submission - 95% Plan	95% Plan	ESI Submission - 100% Plan	100% Plan		Total Sheets
Project Title Sheet & LDS Approval Sheets	7			42	84	42	126		294
General Notes Sheets	2			12	24	12	36		84
Survey Alignment Data Sheet	2			12	24	12	36		84
Construction Alignment Data Sheet	2			12	24	12	36		84
Geometric Layout Sheets	8			48	96	48	144		336
Curb Return Details & Curb Ramp Details	5			30	60	30	90		210
Underground Utility Test Hole Data Sheets	14			84	168	84	252		588
Standard Details	5			30	60	30	90		210
Typical Sections	4			24	48	24	72		168
H&HA Analysis	10			60	120	60	180		420
Storm Sewer Profiles	8			48	96	48	144		336
Drainage Computations	4			24	48	24	72		168
Ditch Typical	1			6	12	6	18		42
Drainage Narrative/Summary	4			24	48	24	72		168
E&S Narrative and E&S Details	2			12	24	12	36		84
E&S Plans (Two Phases)	16			96	192	96	288		672
Town/County Soils Map	1			6	12	6	18		42
Project Plan Sheets (1" = 25')	8			48	96	48	144		336
Profile Sheet	8			48	96	48	144		336
Misc. Detail Sheets	4			24	48	24	72		168
TMP/SOC (MOT Plans)	26					156	468		624
Pavement Markings and Signage Plans	20			120	240	120	360		840
Grading Plans	8			48	96	48	144		336
Cross Sections @ 25' Intervals - Three (4) sections per Sheet (1" = 10' Horiz & Vertical)	38			228	456	228	684		1596
Plan Documentation for (Adjacent Site Plans, Regional/Local Pond Info, etc.)	10					60	180		240
Plats	15					90	270		360
<b>Total Anticipated Sheets</b>	<b>232</b>			<b>1086</b>	<b>2172</b>	<b>1392</b>	<b>4176</b>		<b>8826</b>
Conceptual Layout (3' x 5')			2						2
Color Roll Plot for Utility Designations Prints (3'x5')					2		2		4
Color Roll Plots for Meetings (3' x5')									10
Public Involvement Meetings (3' x 5')									6
Plan Sets for Meetings (Assumed 10 Meetings)									2170
Half-Scale Plans (Assumed 4 per submission, upon request only)					928		928		1856
Letters for Mailing (Letters for Survey Notification & Public Involvement)	61								183
Crosswalk Study (4 Copies - 30 pages)					120		120		240

#### Notes:

1. RDA will prepare 24" x 36" standard plan sheets and will utilize project allowances when authorized by TOV for all printing required for the project.
2. Drainage books are NOT generated for LDS Submissions. All information is within the plans.

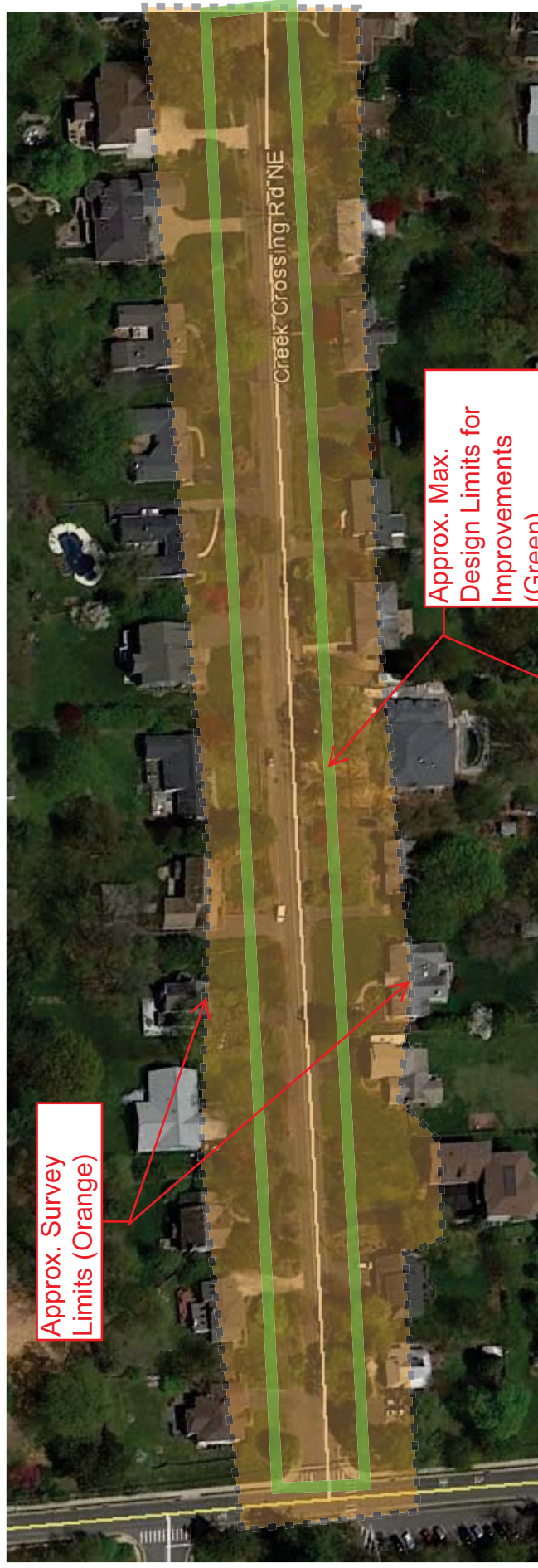
## **Attachment 6**

Defined Project Limits



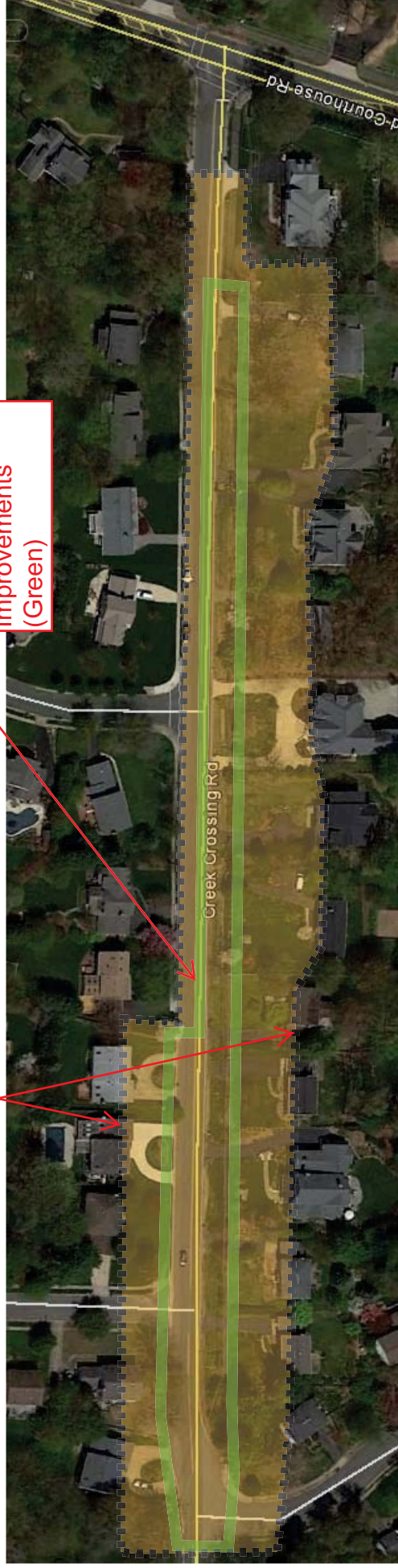
Attachment #6

Survey Limits and Design Limits



Approx. Survey  
Limits (Orange)

Approx. Max.  
Design Limits for  
Improvements  
(Green)



## **Attachment 7**

Sub-Consultant – WSSI Scope of Work and Fee





July 31, 2017  
Revised August 3, 2017

John Cummings, P.E.  
Rinker Design Associates, P.C.  
9385 Discovery Boulevard, Suite 200  
Manassas, VA 20109

Via e-mail: [jcummings@rdacivil.com](mailto:jcumings@rdacivil.com)

Re: Revised Proposal for Waters of the U.S. (including wetlands) Boundary  
Delineation and Location; Resource Protection Area Evaluation and Clean  
Water Act Section 404/401 and Virginia Water Protection Permit Program  
General Permit Consultation  
Creek Crossing Road Improvements ( $\pm$  10 acres)  
Town of Vienna and Fairfax County, Virginia  
WSSI Proposal #P12359A

Dear Mr. Cummings:

Wetland Studies and Solutions, Inc. (WSSI) is pleased to submit this revised proposal to delineate and locate the boundaries of the jurisdictional Waters of the U.S. (WOTUS), including wetlands, and assess the nature of flow (*i.e.*, perennial, intermittent, or ephemeral) on the referenced site, to prepare and submit a Resource Protection Area (RPA) Evaluation to the Town of Vienna in Fairfax County, and to obtain approvals of each for Rinker Design Associates, P.C. (hereinafter referred to as "Client"). Our proposal is based upon your email request on July 28, 2017, as well as your August 2, 2017 request to cap all fees and modify the meetings task.

Additionally, WSSI proposes to prepare a Joint Permit Application requesting a State Program General Permit (SPGP) from the U.S. Army Corps of Engineers (COE) and a reporting-only Virginia Water Protection (VWP) General Permit from the Virginia Department of Environmental Quality (DEQ) for the impacts to Waters of the U.S. (WOTUS) associated with the construction of the Creek Crossing Road Improvement project.

Enclosed with this proposal is an exhibit depicting the location and boundaries of the project site on which this proposal is based, as well as other sites in the vicinity on which WSSI has performed work. Please notify us if the boundaries of the site on this exhibit do not represent the area where you require our services, or if there are any off-site areas (*e.g.*, for construction staging) that will be part of the project area.

The resulting scope of services and fees are:

## **1.0 SCOPE OF SERVICES**

### ***Section I: Natural and Cultural Resource Studies***

#### **Task A WOTUS BOUNDARY DELINEATION/STREAM ASSESSMENT**

A.1 WSSI will review available sources of WOTUS information, which will include, but will not be limited to:

- USGS topographic maps

- County soil surveys
- National Wetland Inventory maps
- Color infrared and natural color aerial imagery

A.2 WSSI will conduct a field delineation of the jurisdictional WOTUS boundaries.

A.3 Wetlands will be defined using the Routine On-Site Determination Method as defined in the *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1 (1987 Manual) and subsequent guidance, and modified by the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region* (Version 2.0) dated April 2012.

This technique uses a multi-parameter approach, which requires positive evidence of the following criteria:

- Hydrophytic vegetation
- Hydric soils
- Wetland hydrology

A.4 Areas exhibiting the above three wetland characteristics will be considered jurisdictional wetlands and will be marked in the field with plastic surveyors tape suitable for U.S. Army Corps of Engineers (COE) verification. We will also flag the jurisdictional limits along stream channels and other bodies of water that qualify as WOTUS as defined in Section 328.3 (a) of Final Rule for Regulatory Programs of the U.S. Army Corps of Engineers (*Federal Register* Vol. 51, No. 219, November 13, 1986).

A.5 The nature of the connection of all WOTUS delineated relative to core RPA components will be determined in the field (and documented) to ascertain which wetlands are components of the RPA.

A.6 Streams on the site (and within 100 feet of the site) will be evaluated using two stream assessment protocols to determine whether the streams are ephemeral, intermittent, or perennial to determine if they could be RPA components and for the purpose of Clean Water Act Section 404/401 and Virginia Water Protection Permit Program permitting. Both the *Fairfax County Perennial Stream Field Identification Protocol* (May 2003) and the *North Carolina Division of Water Quality, Methodology for Identification of Intermittent and Perennial Streams and their Origins, Version 4.11* (2010) will be used to determine whether streams are intermittent or perennial (the North Carolina method also distinguishes ephemeral streams).

A.7 Photographs and field notes will be collected that will document the observed streamflow condition and describe the presence or absence of flow in streams within the study area during our field work.

Upon completion of the WOTUS delineation and RPA Analysis, a report of the findings will be prepared. The report will include but will not be limited to:

- A.8 A brief report summarizing our findings, including stream assessment results (and data sheets) and an evaluation of the RPA boundary.
- A.9 A map with the jurisdictional boundaries located by Differential GPS or conventional field survey. The map will depict data points, the approximate photograph locations, and the Cowardin classification for each jurisdictional area.
- A.10 Data Sheets, prepared for each plant community as prescribed by the 1987 Manual/Regional Supplement and suitable for COE review and approval, to support the WOTUS boundary delineation.

**Task B DELINEATION LOCATION SURVEY**

WSSI will provide the location of the jurisdictional boundaries by conventional survey techniques (total station) or Survey Grade GPS (1 centimeter (cm) accuracy), depending upon field conditions (*i.e.*, in tree cover, conventional field survey techniques are used to obtain accurate locations since all GPS systems in these conditions can vary from 10' to 30' from the actual location).

**New ALTA Minimum Standards (Effective 2/23/16)** - WSSI field delineation and survey can be used to satisfy Table A item #18.

**Task C ON-SITE REVIEW WITH U.S. ARMY CORPS OF ENGINEERS REPRESENTATIVES**

Upon completion of the WOTUS delineation, a complete copy of the report will be delivered to the COE concurrently with delivery to the client, and a site visit with a COE representative will be scheduled to verify the delineated boundaries and discuss the proposed project. Note that COE review is necessary for verification of the WOTUS boundaries.

In June 2007, the COE and the Environmental Protection Agency (EPA) issued Joint Guidance for documenting Clean Water Act Jurisdictional Determinations (JDs). Within this guidance, the agencies created the *Approved Jurisdictional Determination Form* ("JD form"), a multi-page JD form that must be completed to document the presence or absence of wetlands and other WOTUS on the site and must be completed for each wetland/stream system on the project site. Therefore, WSSI will complete the form in its entirety and will deliver it to the COE concurrently with the complete delineation report and request a JD for the project.

**Task D CHESAPEAKE BAY PRESERVATION ORDINANCE EXCEPTIONS, WAIVERS, ASSESSMENTS AND DELINEATIONS**

- D.1 RPA Delineation: WSSI shall prepare a RPA boundary and will provide this inform to the Client for inclusion in the overall site plans to the Town of Vienna. We will include the RPA delineation plan sheet(s), report summary, and data sheets. If Fairfax County requires an RPA Plan be submitted, we will prepare, submit, and gain approval of a RPA boundary by the County. Said submission shall include the County's cover sheet,

RPA delineation plan sheet(s), report summary, and data sheets. WSSI will respond to all County comments as necessary to obtain approval.

- D.2 The scope and cost of preparing requests for, and obtaining approvals of, other items related to the Chesapeake Bay Preservation Ordinance, such as Resource Management Area (RMA) “Opt-outs”, RPA Exceptions, RMA Performance Criteria Exceptions, Special Exceptions for floodplain fills, Water Quality Impact Assessments, etc. are *not* included within this contract cost. Such services may be contracted separately when the scope of such services is more clearly defined, or WSSI can proceed with said services, if notified by Client, as additional services under Section 3.2 of this Agreement.

**Task E CULTURAL RESOURCE AND ENDANGERED AND THREATENED SPECIES (ETS) RESOURCE EVALUATIONS**

To assist you in determining whether or not this site will achieve a high probability in facing cultural resource or ETS issues during the Clean Water Act permitting process, WSSI will:

- E.1 Coordinate with the Virginia Department of Conservation and Recreation (DCR), the Virginia Department of Game and Inland Fisheries (DGIF), and the U.S. Fish & Wildlife Service (USFWS) using their Information, Planning, and Conservation System (IPaC) regarding any documented endangered or threatened species (ETS), or non-listed species or communities considered rare by DCR, DGIF, or USFWS, on or near this site. WSSI will summarize the results of this coordination in a letter to Client.
- E.2 Photograph structures on and adjacent to this site and review the topography, USGS maps, said photos, and Virginia Department of Historic Resources (DHR) V-CRIS (Virginia Cultural Resources Information System) to determine the likelihood that a Phase I archeology survey will be recommended by DHR during the Clean Water Act process and/or that historic sites are documented on this site or adjacent to it.

**Task F MEETINGS AND COORDINATION**

Follow-up meetings or coordination with Client or Client’s consultants as well as Town and County staff to discuss the implications of the delineation and other tasks undertaken will be billed on an hourly not to exceed basis in accordance with Attachment A.

Similarly, all meetings and coordination related to the preparation of the permit application, including pre-application coordination with the agencies will also be billed on an hourly not to exceed basis in accordance with Attachment A.

This task will also include other work necessary to address either unforeseen circumstances not specifically outlined in this contract and/or to respond to client requests. If additional meetings beyond the hourly not to exceed cap are required, an amendment to this proposal will be necessary.

***Section II: Clean Water Act Section 404/401 and Virginia Water Protection Permit Program  
General Permit Consultation***

This section of the proposal is based on the following delineation and impact information:

**WETLAND DELINEATION SOURCE**

WSSI will prepare the permit application based upon the extent of wetlands and other WOTUS that will be delineated and field surveyed by WSSI as described above.

**SCOPE OF IMPACTS**

It is assumed that the impacts associated with this project are less than one-tenth (1/10) acre of wetlands and less than 300 linear feet (lf) of stream channel under the SPGP and the VWP Reporting Only General Permit limits.

In the event that the project plans are modified such that these thresholds are exceeded, other COE and DEQ permits may be required, as well as mitigation for the proposed impacts necessitating an amendment to our proposal, necessitating an amendment to our contract. Therefore, we are assuming General Permits from the COE and DEQ will be required.

Note that the COE and DEQ may not concur that the proposed impacts are allowed under the Clean Water Act unless it can be demonstrated that the proposed impacts are the Least Environmentally Damaging Practicable Alternative.

The resulting scope of services and fees are:

**Task G      CLEAN WATER ACT SECTION 404/401 AND VIRGINIA WATER  
PROTECTION PERMIT PROGRAM PERMITTING**

- G.1      Consultant shall provide professional services for the purpose of obtaining a SPGP and VWP General Permit necessary under Sections 404 and 401 of the Clean Water Act and the VWP Permit Program for this project to allow for wetland and stream impacts due to the Creek Crossing Road Improvements project. No other impacts are included in the scope of this contract. The general scope of services to be performed by Consultant includes the responsibility of assisting the Client in managing the permit procurement process, the specific tasks outlined in this proposal, and the selection of a permitting type and phasing strategy in consultation with Client and Client's legal counsel (if any). Consultant will also work with Client's land planning and civil engineering consultants to assist in the development by others of a permissible plan and the exhibits necessary for an application (*i.e.*, impact plans, impact profiles and/or cross sections, and an avoidance/minimization sequencing demonstration).
- G.2      WSSI shall prepare and submit:
  - a.      A Joint Permit Application, including the appropriate sections and exhibits, to the Virginia Marine Resources Commission, and the DEQ requesting confirmation that no mitigation is required.
  - b.      A "Courtesy" copy of the JPA transmittal letter to the COE



- G.3 WSSI will also complete DEQ's Registration Statement and submit it to DEQ requesting authorization of the project under one of the General Permits. If project impacts do not qualify for a VWP General Permit, an Individual Water Protection Permit will be required, necessitating an amendment to our contract.
- G.4 The federal, state, and local agencies have gone paperless and now require digital copies of all permit applications (with copies of over-sized maps being sent via mail). Thus, WSSI will convert the permit application into PDF format. WSSI will upload the application via VITASHARE (a state run system) for the state agencies (DEQ and VMRC) and upload the application to WSSI's ftp site or send a digital copy on compact disk (CD) for the COE, EPA, USFWS, and local wetlands board as necessary.
- G.5 No representations or warranties are made as to the likelihood of approval and/or as to the nature, scope and cost of possible approval conditions. Even if no permit is procured, or if you do not desire the resulting conditions, payment for WSSI services is required in full and on time.
- G.6 Please be advised that additional archeology investigations and Endangered and Threatened Species investigations could be requested by the Virginia Department of Historic Resources, the U.S. Fish and Wildlife Service, the Virginia Department of Conservation and Recreation, and the Virginia Department of Game and Inland Fisheries, possibly delaying this permit application and requiring additional expenditures by you.

## **Task H AGENCY RESPONSE**

WSSI shall respond to all agency comments and information requests and, if necessary, shall prepare for and attend meetings to discuss the proposed permit application with the COE and DEQ. This will be billed on an hourly not to exceed basis in accordance with Attachment A. If additional meetings beyond the hourly not to exceed cap are required, an amendment to this proposal will be necessary.

## **2.0 MATERIALS TO BE PROVIDED BY CLIENT**

You are responsible for providing to WSSI, prior to our permit application preparation:

- 2.1 Applicant/Owner Information: the exact legal name and address of the current property owner and the permit applicant entity.
- 2.2 Schedule: the proposed month and year of project commencement and proposed month and year of project completion.
- 2.3 Approvals: a list of any and all permits and land use approvals (*i.e.*, zoning, Special Exceptions, Special Use Permits, subdivision plans, site plans, COE permits and DEQ approvals) procured or applied for on this site by you or any previous land owners (the permit list should include the permit name, agency, application date and approval date). Provide WSSI with copies of approved proffers or staff reports from rezonings, rezoning plans, or Board of Supervisors approval letters.

- 2.4 Plans: a digital file<sup>1</sup> containing the proposed project plan prepared at the level of detail customary for a Generalized Development Plan (GDP) or preliminary subdivision plan, that depicts all surveyed WOTUS, grading impacts, utilities, Stormwater Management Ponds/Best Management Practices and stormwater pollutant calculations.
- 2.5 Project Design Narrative: a detailed narrative describing the project history and evolution of the project design including any formal review comments and site constraints that influenced the development plan as well as justification for why further avoidance and/or minimization is not practicable. Drawings accompanying the narrative will help gain permit approval. Also provide information regarding comprehensive plans, any countywide transportation plans, or rezoning proffers that dictate design elements or impacts.
- 2.6 Impact Plans: your civil engineer is responsible for providing to WSSI, prior to our permit application preparation, 8.5"x11" planviews and cross-sections of each impact area and the exact square footage of the impacted area and length of streambed impacted (if applicable) per the specifications of the current Standard Joint Permit Application.

### 3.0 COMPENSATION

- 3.1 Basic compensation for the above scope of services as described, not including reimbursable expenses, shall be fixed fee, or hourly not to exceed (HNTE) as shown below.

#### ***Section I: Natural and Cultural Resource Studies***

A. Wetland Delineation and Mapping (Fixed Fee)	\$ 3,800
B. WOTUS Survey (Fixed Fee)	\$ 2,600
C. COE Review and JD (Fixed Fee)	\$ 700
D. RPA Plan Preparation (Fixed Fee)	\$ 3,500
E. Cultural Resource and ETS Research (Fixed Fee)	\$ 1,975
F. Meetings and Coordination (HNTE)	\$ 2,100

#### ***Section II: Clean Water Act Section 404/401 and Virginia Water Protection Permit Program General Permit Consultation***

G. JPA Preparation (Fixed Fee)	\$ 5,500
H. Agency Response (HNTE)	\$ 2,000
Z. Reimbursable Estimate (per Attachment A, NTE)	\$ 1,000

The price is fixed for the duration of this contract.

It is understood by both parties that the scope of work is dependent upon the number of permit phases, the type of mitigation, responses from regulatory agencies, and Client's decisions to agree with such comments or to direct Consultant to attempt to modify such comments. As such, the stated fee amounts may need to be modified at a future time, and the amount stated herein is not to be construed as a fixed and/or guaranteed maximum fee.

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<sup>1</sup> Preferably provided in a Drawing (\*.dwg) file in AutoCAD 2016 or earlier, with each data component on a separate layer, on USB flash drive or transmitted electronically.

- 3.2 For additional services requested by, or agreed to in advance by the Client, compensation shall be computed on an hourly basis per Attachment A.

We trust that this proposal is responsive to your requirements, however, please do not hesitate to call if you have any questions. Based upon our current workload, a complete wetland delineation report can be provided within three (3) to four (4) weeks of receipt of a notice to proceed, subject to weather and/or other scheduling delays. The RPA submission for the Town of Vienna can be complete within one (1) to two (2) weeks of completion of the survey of our flagged wetlands. A complete permit application can be expected to be submitted within three (3) to four (4) weeks of receipt of all specified supporting documents, subject to scheduling delays. Your return of an executed copy of this agreement and its general conditions, which are incorporated by reference herein and made a part hereof, along with the items specified in Section 2.0, will serve as our notice to proceed.

We sincerely appreciate your confidence in WSSI and look forward to working with you.

Sincerely,

WETLAND STUDIES AND SOLUTIONS, INC.



Christie Blevins, P.W.S., LEED® AP  
Manager - Regulatory

Enclosures

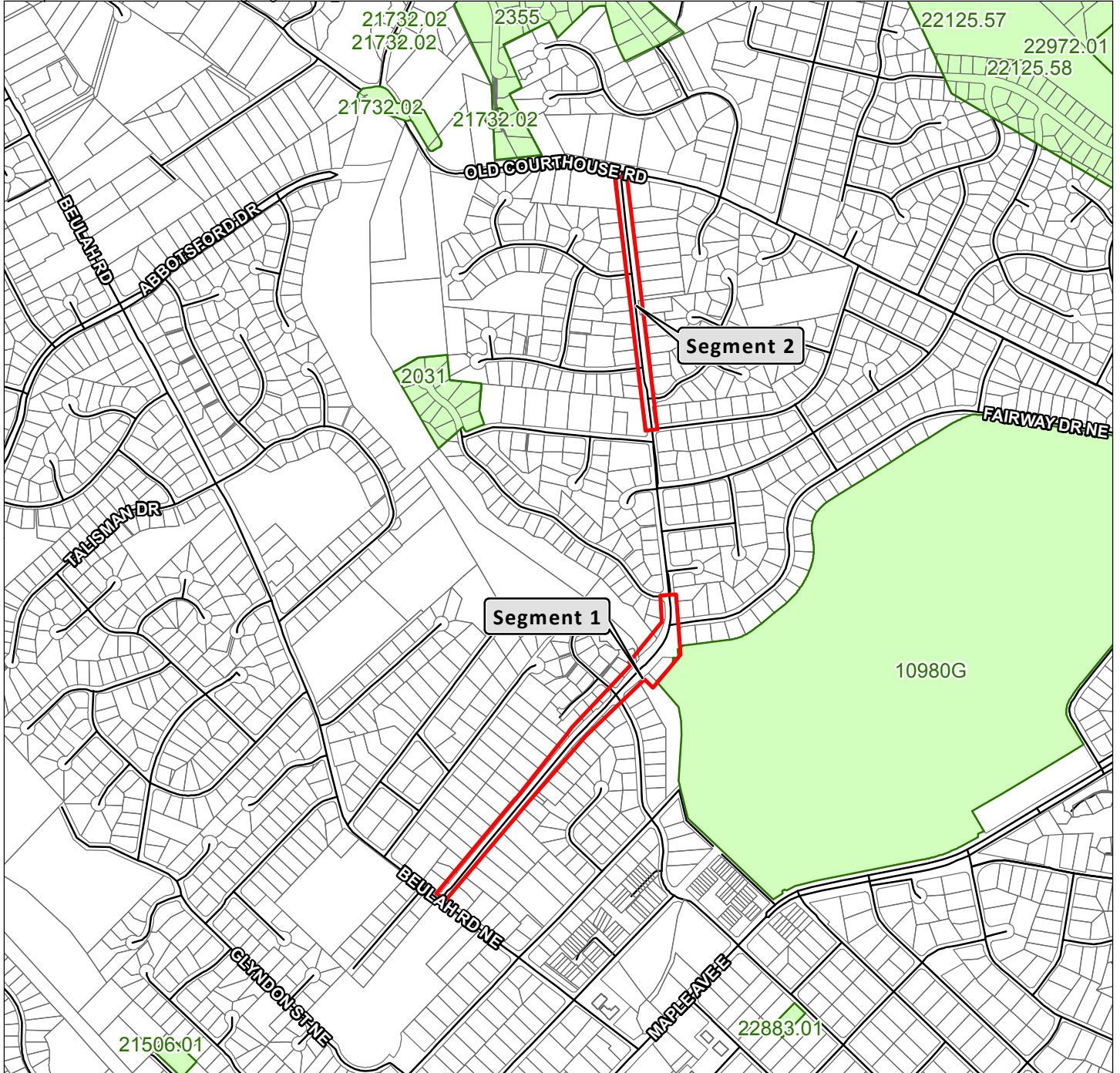
CLIENT OR CLIENT'S AGENT ACCEPTANCE OF THIS PROPOSAL AND ENCLOSED GENERAL CONDITIONS:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

By: \_\_\_\_\_

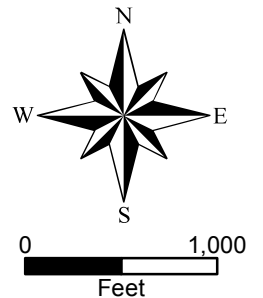
Its: \_\_\_\_\_



**WSSI Project Sites**  
**Creek Crossing: Segments 1 & 2**  
**Original Scale: 1" = 1000'**

Segment 1: ± 6.9 acres (2,600 LF)  
 Segment 2: ± 3.2 acres (1,700 LF)  
 Political Jurisdiction: Fairfax County  
 Magisterial/Voting District: Hunter Mill

Note: Site area is based on GIS data, and does not reflect the legal acreage of the site.



**Attachment A**

March 2017

The following is a listing of the Wetland Studies and Solutions, Inc. (WSSI) rates for professional and reprographic services. These rates will remain in effect through December 31, 2017, after which time they may be adjusted to reflect our current labor and overhead costs.

**PROFESSIONAL SERVICES**

President	\$275.00	Consultant IV	\$170.00
Operations Manager	\$240.00	Consultant III	\$145.00
Director III	\$215.00	Consultant II	\$130.00
Director II	\$195.00	Consultant I	\$110.00
Director I	\$170.00	Technician III	\$95.00
Principal III	\$190.00	Technician II	\$85.00
Principal II	\$155.00	Technician I	\$75.00
Principal I	\$135.00	Assistant	\$60.00
Consultant V	\$185.00	Admin. Assistant	\$55.00
		Intern	\$25.00

**TYPICAL REIMBURSABLE COSTS****In-house Reprographic Services<sup>1</sup>**

	Rate/Square Foot		Rate/Sheet
Paper Cad plots (B&W)	\$0.35	B&W Xerox (8.5x11)	\$0.10
Paper Cad plots (Color)	\$0.75	Color Xerox (8.5x11)	\$0.85
Mylar Cad plots	\$2.00		
Color Cad plots – Photo quality	\$4.00	Standard Report Supplies	minimum \$6.00/rpt

GIS and CAD system charges are included in billable rates. Reimbursable expenses shall include the following:

Local automobile travel @ \$0.535  
 All Terrain Vehicle use @ \$8 per hour<sup>2</sup>  
 Tractor @ \$35 per hour/\$750 per week/\$2,250 per month<sup>2</sup>  
 Morooka @ \$35 per hour/\$900 per week/\$2,700 per month<sup>2</sup>  
 Buggy @ \$10 per hour<sup>2</sup>  
 2200 Bobcat Utility Vehicle @ \$12 per hour<sup>2</sup>  
 T-300 Bobcat @ \$45 per hour/\$1,000 per week/\$2,500 per month<sup>2</sup>  
 E60 Bobcat Trackhoe @ \$55 per hour/\$1,200 per week/\$2,700 per month<sup>2</sup>  
 17' Jon boat @ \$10 per hour<sup>2</sup>  
 20' boat-115 hp @ \$50 per hour<sup>2</sup>  
 SCUBA equipment @ \$75 per diver, per day/\$250 per diver, per week (plus tanks @ \$10 per tank per day)<sup>3</sup>  
 Portable Electro-Fisher @ \$300 per day/\$900 per week<sup>2</sup>  
 Mower @ \$5 per hour<sup>2</sup>  
 Leica Robotic Total Station @ \$30 per hour<sup>2</sup>  
 Hydrone-RCV @ \$30 per hour<sup>2</sup>  
 Dino 6 Dredge @ \$1,500 per week/\$5,000 per month<sup>2</sup>  
 6" trash pump @ \$725 per week/\$2,000 per month

The following expenses shall be charged at cost plus a 20% administrative processing fee:

Permit and review fees, public notice advertisements;  
 Air travel, rental vehicles, lodging and meals for sites outside the Washington/Baltimore Metropolitan Area;  
 Photocopying or reproduction of drawings or documents by third party vendor as requested by Owner or consultants;  
 Postage, long distance telephone charges, and expedited delivery services requested by Owner or consultants;  
 Artifact Archival Storage Fees; and,  
 Third party consulting services, as authorized by Client, for services such as surveying, archeology, endangered species searches, geotechnical surveys, septic field-testing, permeability tests, etc.

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<sup>1</sup> WSSI maintains hard copy files and report copies for our records, regardless of Client deliverables. These in-house copies will be billed in accordance with the listed reprographic pricing.

<sup>2</sup> Excluding operator; mobilization included in hourly rate.

<sup>3</sup> Excluding staff costs.

## **Attachment B**

### **WETLAND STUDIES AND SOLUTIONS, INC.**

#### **GENERAL CONDITIONS OF SERVICE**

These General Conditions of Service are incorporated by reference into the foregoing Proposal and shall be part of the Agreement under which services are to be performed by Wetland Studies and Solutions, Inc. (WSSI) for Client. "Agreement" as used herein shall mean the Proposal, these General Conditions, Supplemental Conditions (if any) and the Fee Schedule.

##### **SECTION 1: SCOPE OF WORK**

- a. The scope of Work shall include all services provided by WSSI, in its discretion, which are reasonably necessary and appropriate for the effective and prompt fulfillment of WSSI's obligations under the Agreement, it being expressly provided that all such services provided shall be invoiced and paid for in accordance with Section 3 below.
- b. It is understood that the Scope of Work and time schedule defined in the Proposal are based on the information provided by Client. If this information is incomplete or inaccurate, or if unexpected conditions are discovered, the Scope of Work may change, even as the work is in progress. If the Client requests additional services or when a change in the Scope of Work or time schedule is necessary, a written amendment to the Agreement shall be executed by the Client and WSSI as soon as is practicable and consent to such amendments shall not be unreasonably withheld or delayed.

##### **SECTION 2: STANDARD OF CARE**

Services performed by WSSI under this Agreement will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the Engineering profession currently practicing in the same locality under similar conditions. No other representation, express or implied, and no warranty or guarantee is included or intended in this Agreement, or in any report, opinion, document or otherwise.

##### **SECTION 3: RELIANCE UPON CLIENT PROVIDED INFORMATION**

- a. WSSI is not required to check or verify client-provided information or the technical adequacy or compliance of any portion of the project designed by the client's consultants.
- b. WSSI assumes no responsibility for the accuracy of information provided by the client or of design information provided by others, excluding WSSI's subconsultants.
- c. The client agrees to defend and indemnify WSSI for any delays, costs, losses, or damages caused by false, inaccurate, or non-compliant information provided by the client or the client's consultants.

##### **SECTION 4: BILLINGS AND PAYMENTS**

- a. WSSI invoices shall be due and payable upon receipt. Payments shall not be subject to a "Pay when Paid" condition between the Client and any other third party, unless the third party contract has such a clause. In such cases, WSSI has the right, but not the obligation, to contact said third party directly to collect payment if payment is not made within 30 days of receipt of invoice.
- b. Billings will be based on either the fee stated in the Proposal, or if not a fixed fee, on actual hours expended at the standard rates shown on Attachment A of this Proposal, plus travel costs and other reasonable expenses as described on Attachment A. Client recognizes that time is of the essence with respect of payment of WSSI's invoices, and that timely payment is a material part of the consideration of this Agreement. Invoices will be submitted by WSSI from time to time, and shall be due and payable upon receipt.
- c. Proposals using hourly rates shall utilize the rates provided on Attachment A. Said rates may be revised from time to time. These rates for contracts will remain in effect for the calendar year in which the proposal was authorized. At the beginning of the following calendar year, the hourly rates shall be updated to the revised rates as published by WSSI.
- d. Client shall pay an additional charge of one-and-one-half (1.5) percent (or the maximum percentage allowed by law, whichever is lower) of the invoiced amount per month for any payment received by WSSI more than thirty (30) calendar days from the date of the invoice.
- e. Client shall pay WSSI, without limitation, all costs and expenses, including but not limited to 25% attorney's fee or \$500, whichever is more, incurred by WSSI in connection with the collection and enforcement of Client's obligation to pay amounts due hereunder.
- f. Payment options are by check, ACH or credit card. A 3 % fee will be applied if paying by credit card.

**SECTION 5: RIGHT OF ENTRY**

- a. Client hereby grants WSSI and its subcontractors or agents the right to enter from time to time the property owned by Client and/or other(s) in order for WSSI to fulfill the scope of services included in the Agreement. Client understands that use of exploration equipment may cause some reasonable disturbance or damage to the Property, the correction of which is not part of this Agreement or any obligation of WSSI. Client also understands that the discovery of wetland areas or uncertain hazardous conditions and/or taking preventive measures relative to these conditions may result in a reduction of the Property's value. Accordingly, Client waives any claim against WSSI and its subcontractors or agents, and agrees to defend, indemnify and hold WSSI harmless from any claim or liability for injury or loss allegedly arising from procedures associated with surface and subsurface exploration activities or discovery of wetlands or of hazardous materials or suspected hazardous materials. In addition, Client agrees to hold harmless, indemnify and compensate WSSI for any time spent or expenses incurred by WSSI in defense of any such claim with compensation to be based upon WSSI's prevailing fee schedule and expense reimbursement policy.
- b. WSSI shall not be liable for damage or injury from damage to subterranean structures (pipes, tanks, cables, or other utilities, etc.) which are not called to WSSI's attention in writing and correctly shown on the diagram(s) furnished by Client to WSSI.
- c. Any exploration, testing, surveys and analysis associated with the work will be performed by WSSI for the Client's sole use to fulfill the purpose of this Agreement and WSSI is not responsible for interpretation by others of the information developed. The Client recognizes that surface and subsurface conditions on the entire Project site may vary from those encountered in selected sample borings, delineations, surveys or explorations and the information and recommendations developed by WSSI are based solely on the information available from such borings, delineations, surveys and explorations.

**SECTION 6: SAMPLES**

- a. Soil, rock, water, vegetation, and/or other samples obtained (if any) from the Project site will be preserved by WSSI for no longer than sixty (60) calendar days after the issuance document that includes that data obtained from them, unless other arrangements are mutually agreed upon in writing. Should any of these samples be contaminated by hazardous substances or suspected hazardous substances, it is Client's responsibility to select and arrange for lawful disposal procedures, that is, procedures which encompass removing the contaminated samples from WSSI's custody and transporting them to a disposal site. Client is advised that, in all cases, prudence and good judgment should be applied in selecting and arranging for lawful disposal procedures.
- b. Cultural Resource Artifacts – After processing, artifacts will be returned to the client or placed on repository with the county or the State Historic Preservation Office (SHPO) (e.g. Virginia Department of Historic Resources [DHR], Maryland Historic Trust [MHT], etc.). Some local governments accept the artifacts without charge; however, the DHR, MHT, and Prince William County have a one-time fee of \$200 per half-sized box (15"x6"x10") and \$350 per standard box (15"x12 1/2"x10"); MHT also offers a one-time fee of \$100 per quarter-sized box. Additional fees may be required for artifact stabilization or for curation of oversized artifacts. Any required repository fees are not included in the direct costs of this proposal and will be treated as reimbursable expenses. WSSI shall not retain the artifacts for more than sixty (60) days after the submission of the report unless other arrangements are mutually agreed upon in writing. WSSI shall notify the client in writing once the artifacts are prepared for delivery to client or a mutually agreed upon repository. If no response is received within 10 business days of receipt of the written notification, WSSI shall assume that the client does not wish to retain ownership of the artifacts and WSSI will dispose of the artifacts in a manner deemed appropriate by WSSI.

**SECTION 7: REPORTS AND OWNERSHIP OF DOCUMENTS**

WSSI shall furnish three (3) copies of each report to Client. Additional copies shall be furnished at the rates specified in the fee schedule (employee time plus reimbursables). With the exception of the physical copies of reports provided by WSSI to Client, all documents, including reports, photographs, permits applications, plans, original boring logs, field data, field notes, laboratory test data, calculations and estimates are and remain the property of WSSI. Client agrees that all reports and other work furnished to the Client not paid for in full will be returned to WSSI upon demand and will not be used for design, construction, permits or licensing.

**SECTION 8: CLIENT DISCLOSURES**

- a. The Client shall notify WSSI of any known or suspected hazardous substances which are or may be related to the services to be provided.
- b. Following any disclosure as set forth in the preceding paragraph, or if any hazardous substances are discovered or reasonably suspected by WSSI after its services are undertaken, WSSI may, at its discretion, discontinue its services.

**SECTION 9: LIMITATION OF PROFESSIONAL LIABILITY**

- a. Client agrees to limit WSSI's liability to Client and all construction contractors arising from WSSI's professional acts, errors or omissions in performing this Agreement, such that the total aggregate liability of WSSI to all those named shall not exceed the total fee for the services rendered on this Project. Client further agrees to require of the Client's Consultants (Civil Engineer, Architect, Attorney, etc.), General Contractor and their subcontractors an identical and cumulative limitation of WSSI's liability for damages that may be suffered by the contractor or the subcontractors arising from professional acts, errors or omissions of WSSI.

- b. Documents, including but not limited to, technical reports, original boring logs, field data, field notes, laboratory test data, calculations, and estimates furnished to the Client or its agents pursuant to this Agreement are not intended or represented to be suitable for reuse by the Client or others on extensions of the Project or on any other project. Any reuse without WSSI's written consent will be at Client's sole risk and without liability to WSSI or to WSSI's contractor(s) and Client shall indemnify and hold harmless WSSI and WSSI's contractor(s) from all claims, damages, losses and expenses including attorney's fees arising out of or resulting therefrom.
- c. Under no circumstances shall WSSI be liable for extra work or other consequences due to changed conditions or for costs related to failure of the construction contractor or materialmen or service providers to install work in accordance with the plans and specifications.

#### SECTION 10: LIABILITY INSURANCE

WSSI represents that it and its agents, and consultants employed by it, are protected by Workers Compensation insurance and that WSSI has coverage under liability insurance policies which WSSI deems reasonable and adequate. WSSI shall furnish certificates of insurance upon request. WSSI shall not be responsible for bodily injury and property damage or losses arising directly or indirectly, in whole or in part, from acts by the Client, its employees, agents, staff, consultants or subcontractors employed by it or by any other person or combination of persons. WSSI agrees to maintain at least \$2,000,000 in general liability insurance and the Client agrees to limit the liability of WSSI to \$2,000,000. The Client is responsible for requesting specific inclusions or limits of coverage that are not present in WSSI insurance, the cost of such inclusion or coverage increases if available, to be at the sole cost and expense of the Client.

#### SECTION 11: ARBITRATION OF DISPUTES

At the sole option of WSSI, claims, disputes or controversies arising out of, or in relation to the interpretation, application or enforcement of this Agreement shall be decided through arbitration, as adopted and described by the then most current rules of the American Arbitration Association.

#### SECTION 12: TERMINATION

Client or WSSI may terminate this Agreement for breach of this Agreement, or for any other reasons which may arise. In the event of termination, the party effecting termination shall so notify the other party, and termination will become effective fourteen (14) calendar days after receipt of the termination notice. Irrespective of which party shall effect termination or the cause therefore, WSSI shall promptly render to Client a final invoice and Client shall immediately remunerate WSSI for services rendered and costs incurred, in accordance with WSSI's prevailing fee schedule and expense reimbursement policy. Services shall include those rendered up to the time of termination, as well as those associated with termination itself, such as demobilizing, modifying schedules and reassigning personnel. Upon such termination, Client and WSSI shall deliver to each other all reports and documents pertaining to services performed up to termination.

#### SECTION 13: GENERAL PROVISIONS

- a. Any provision of this Agreement later held to violate a law or regulation shall be deemed void, and all remaining provisions shall continue in force.
- b. The titles used in this Agreement are for general reference only and are not part of the Agreement. Parties to this Agreement are advised to read each provision and rely on the guidance of legal counsel as necessary to help assure a complete understanding of all provisions and the obligations imposed through acceptance.
- c. All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating responsibility or liability between the Client and WSSI shall survive the completion of services and the termination of this Agreement.
- d. Neither the Client nor WSSI may delegate, assign, sublet or transfer its duties, responsibilities or interests in this Agreement without the written consent of the other party.
- e. This Agreement shall be interpreted according to the laws of Virginia.



## **Attachment 8**

Sub-Consultant – DMY Scope of Work and Fee

July 26, 2017

Mr. Adam D. Welschenbach, PE  
Senior Project Manager  
Rinker Design Associates, P.C.  
9385 Discovery Boulevard, Suite 200  
Manassas, VA 20109

Reference: Proposal and Work Plan for Geotechnical Engineering Services  
Creek Crossing Road Improvement Segment 1 & Segment 2  
Town of Vienna and Fairfax County, Virginia  
DMY Project No. 01.03622.01

Dear Mr. Welschenbach,

In response to your request for proposal dated July 24, 2017, DMY Engineering Consultants Inc. (DMY) is pleased to submit this scope of services, work plan, and cost proposal to provide geotechnical engineering services to support the design and construction of the subject project. Please find the enclosed documents for our scope of services, work plan, and cost proposal. Per your request, DMY is provide cost estimates for each segment.

We look forward to your review and approval of this proposal. Should you have any questions or comments, please feel free to contact us.

Respectfully,

**DMY ENGINEERING CONSULTANTS INC.**



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**Proposal and Work Plan for Geotechnical Engineering Services  
Creek Crossing Road Improvement Segment 1 & Segment 2  
Town of Vienna and Fairfax County, Virginia  
DMY Project No. 01.03622.01**

**Qualifications**

DMY was founded in 2009 with a mission to offer practical and cost-effective engineering solutions to clients in the Mid-Atlantic region including DC, Virginia, and Maryland. As a professional and innovative firm with traditional work ethics, DMY has quickly established a reputation as the local leader in delivering right solutions through innovative approaches, quality services, and engineering excellence.

DMY currently has a team of over **fifty (50)** engineering professionals including **eleven (11)** professional engineers registered in DC, Virginia, and Maryland with 10 to 25 years of local and regional engineering experience. Our team for this project will include professional engineers as the Project Manager and Principal Engineer for quality control. Our engineers have extensive local experience on sites with similar geology, site conditions, and type of development.

DMY has **in-house drilling fleet** consisting of three (3) truck-mounted drill rigs and three (3) track-mounted drill rigs. DMY also maintains three (3) **in-house AASHTO certified laboratory** to satisfy the geotechnical and materials testing needs. These in-house resources allow us to better control the project schedule and quality and meet our clients' needs.

**Project Understanding**

It is our understanding that Segment 1 is about 0.5 miles in length, extending from Beulah Road NE to Foxstone Drive; while Segment 2 is about 0.3 miles, extending from Miller Lane (Rte. 3820), to Old Courthouse Road (Rte.677). Segment 1 will be within Town of Vienna and Fairfax County and will consist of roadway widening, curb/gutter, and sidewalk installation; Segment 2 will be located entirely within Fairfax County and will consist mainly of sidewalk and shoulder work with no roadway widening.

**Scope of Services**

Rinker Design Associates, P.C. (hereinafter referred to as "Client") requested DMY Engineering Consultants, Inc. (DMY) to provide the following geotechnical engineering services to support Client for the subject project:

- Perform geotechnical investigation using soil borings within the existing alignment;
- Extract asphalt pavement cores from the existing pavement;
- Conduct laboratory testing on selected soil samples;
- Prepare geotechnical report to summarize our work, geotechnical recommendations (pavement design/construction and unsuitable soils), assumptions, and limitations.

Below are our proposed geotechnical field investigation plans:

- Segment 1
  - We propose thirteen (13) Standard Penetration Testing (SPT) borings of 10 ft each within the alignment of the existing roadway and proposed widening area and shoulder area. It is VDOT MOI requirements to obtain one boring every 200 feet.

- At ten (10) of the SPT boring locations, pavement cores will be extracted. The existing pavement composition, including the type and thickness of sub-base, will be determined at each location.
  - Five (5) CBR samples will be obtained to evaluate the existing and proposed subgrade conditions for pavement design purpose.
  - We propose one (1) SPT profile boring of 10 ft depth and two (2) infiltration borings of 5-ft depth each at the location of the planned SWM facility.
- Segment 2
  - We propose eight (8) Standard Penetration Testing (SPT) borings of 10 ft each within the alignment of the existing roadway and proposed widening area and shoulder area. It is VDOT MOI requirements to obtain one boring every 200 feet.
  - At six (6) of those SPT boring locations, pavement cores will be extracted. The existing pavement composition, including the type and thickness of sub-base, will be determined at each location.
  - Four (4) CBR samples will be obtained to evaluate the existing and proposed subgrade conditions for pavement design purpose.
  - We assume no SWM boring and no infiltration testing are required.

Based on our review of project display provided by Client. DMY developed the itemized scope of work and work plan under this proposal as follows:

#### **Task 1. Initiate Project and Coordination**

Under this task, DMY will initiate project, review available information, and meet with Client to discuss project scope, schedule and budget.

Task 1.1 DMY will set up the project in our project management system. DMY will not proceed with the work until a written Notice-to-Proceed is provided by Client.

Task 1.2 DMY will also obtain available additional project information from Client. DMY will review the available project information provided by Client, which may include preliminary plans, design drawings, previous subsurface exploration data, and design standards and guidelines. This review will allow us to understand the detailed project requirements and aid us in our fieldwork and reporting.

Task 1.3 DMY will have a kick-off meeting with Client in person or over the phone to discuss historical data on the project site, existing problems, project constraints, any concerns, and to review project requirements including project scope, schedule, and cost to verify and validate our proposal and work plan.

Task 1.4 If being requested, DMY will attend the Project Kick-off meeting with Client and/or City/County.

#### **Task 2. Perform Geotechnical Field Investigation**

Under this task, DMY will perform geotechnical field investigation to determine subsoil conditions.

Task 2.1 DMY will coordinate with Client to confirm the final boring locations.

Task 2.2 DMY will stake out borings in the field based on information provided on the project plans, profiles, and x-sections. After drilling, the client may locate the final boring locations using survey methods.

Task 2.3 DMY will perform site reconnaissance to assess the site conditions, access requirements, and the specific need for Maintenance of Traffic (MOT).

Task 2.4 DMY will develop and submit a project schedule showing each task, start and end dates, and task duration. This schedule will be updated and coordinated with the Client as appropriate. DMY will provide advance notification to Client prior to beginning this work.

Task 2.5 DMY will contact MISS UTILITY to clear public utilities prior to beginning field investigation work. We assume there is not any private underground utilities.

Task 2.6 It is our understanding that the project site is located on Town of Vienna or Fairfax County property and it is our assumption that all borings will be located within Town of Vienna or Fairfax County Right-of-Way (ROW). DMY will obtain Town of Vienna or Fairfax County and VDOT permit to drill those borings. If there are borings located outside of Town of Vienna or Fairfax County ROW or there are needs to enter private property to access some borings, we assume Client will obtain and provide DMY any necessary permission prior to our field mobilization for DMY to access and perform the field operation.

Task 2.7 DMY will perform the field investigation using our in-house drill rigs, in-house drilling crews, and sub-consultants if necessary. DMY will provide field inspector on each drill crew for drilling supervision and field logging throughout the program.

Soil borings will be advanced using hollow-stem augers or mud rotary drilling methods. DMY will obtain disturbed soil samples using the Standard Penetration Test (SPT) method. SPT samples will be collected at 2-foot intervals to a depth of 10 feet below the existing ground surface and will be then collected at 5-foot intervals thereafter to the scheduled boring depths or auger refusal, whichever occurs first. Auger probe borings without SPT will be drilled for infiltration testing. Infiltration testing will be performed at the location of the planned SWM facility in accordance with Fairfax County requirements. We also assume no site clearing or benching is needed for our drill rig to access any boring locations.

DMY will collect bulk samples from auger cuttings to depths of up to approximately 4 feet below the existing ground for proctor and CBR testing. DMY assumes that there will be no major cut (less than 5 ft) or fill (less than 5 ft) for the subject project and no undisturbed soil samples (e.g. Shelby tube samples) will be collected for consolidation or soil strength testing.

DMY's inspectors will record groundwater measurements and/or boring cave-in depths at completion of each borehole. The roadway borings will be backfilled immediately after completion (i.e., no 24-hour stabilization period). For borings in areas outside roadway, DMY's inspectors will record groundwater measurements and/or boring cave-in depths 24-hour after the completion of each borehole, when possible.

Boreholes will be backfilled after the completion of each borehole and/or after the recordings of 24-hours water level. Borings advanced through existing pavements will be backfilled with pea

gravel and/or auger cuttings to a depth of approximately 2 feet below the pavement surface. The remaining 2 feet will be patched with cold asphalt mixture. We assume that excess drilling spoils can be spread on grassy areas.

All roadway borings will require Maintenance of Traffic (MOT) for lane or shoulder closure. DMY will retain a subconsultant to provide MOT wherever required. DMY assumes that the MOT will use VDOT standard temporary traffic control for lane or shoulder closure. DMY assumes no Truck Mounted Attenuator is needed for the MOT.

DMY assumes that all field exploration activities can be performed during normal business hours (8:00 am to 5:00 pm) and restricted business hours (9:00 am to 3:00 pm) if MOT is needed.

At the completion of the field exploration, soil samples will be transported to DMY's Office for further visual classification and laboratory testing. DMY will retain the samples for 90 days after the completion of the field work.

### **Task 3. Perform Laboratory Testing and Pavement Core Logging**

Under this task, DMY will conduct laboratory tests which will consist of natural moisture content tests, USCS classification tests, standard Proctor and CBR tests. Also, pavement cores will be visually examined and photographed in our laboratory to approximately determine each asphalt pavement course and to document the pavement core conditions. We have estimated the types and quantity of the laboratory testing as shown in cost estimates based on our experience and understanding of the project. The actual testing assigned will be determined by DMY based on the materials encountered and the samples recovered from the borings. DMY will perform the laboratory testing in accordance with pertinent MDSHA, VTM, ASTM, AASHTO standards, or other applicable testing standards.

### **Task 4. Prepare Boring Logs and Lab Results**

Under this task, DMY will prepare field logs using VDOT standard format. DMY will prepare and submit Client the final electronic boring logs in PDF and in gINT© software format. DMY will review boring logs and laboratory testing results to identify locations where unsuitable materials may be anticipated.

### **Task 5. Prepare Geotechnical Engineering Report**

Under this task DMY will prepare and submit Geotechnical Engineering Report (GER) to Client for its review. The GER will summarize pertinent subsurface investigations, lab testing results, infiltration test results, geotechnical recommendations (pavement design/construction and unsuitable soils), assumptions, and limitations. DMY will also address Client's review comments and submit a revised GER.

### **Task 6. Project Progress Reports**

DMY will prepare and submit monthly progress reports for the Client's review. These reports will include progress-to-date, schedule updates, Client's action items, DMY's action items, work product deliveries; problems encountered with suggested solutions, and anticipated work for the next month.

### **Task 7. Meeting/Conference Calls/ Post-Report Engineering Consultation**

DMY will attend up to two meetings or conference calls (up to 8 hours) with Client to discuss the project understanding, geotechnical engineering service outlined herein, and our geotechnical report including one (1) meeting with the Fairfax County Geotechnical Review Board (GRB) during their review process.