

# Town of Vienna Environmental Professional Services Bear Branch at Onondio Circle Stream Restoration SOW

Vienna Contract Number # RFP 24-16

April 6, 2026

Submitted by Troy Biggs  
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## OVERVIEW

WSP USA Inc. (WSP) has been requested by the Town of Vienna (Town) to provide a scope of work for stream restoration along Bear Branch at Onondio Circle. The project reach extends from the downstream side of the W&OD Trail at 411 Onondio Circle to where it enters a culvert approximately 585 ft downstream (see Figure1 below).

This scope of work anticipates a notice to proceed by May 1, 2026.

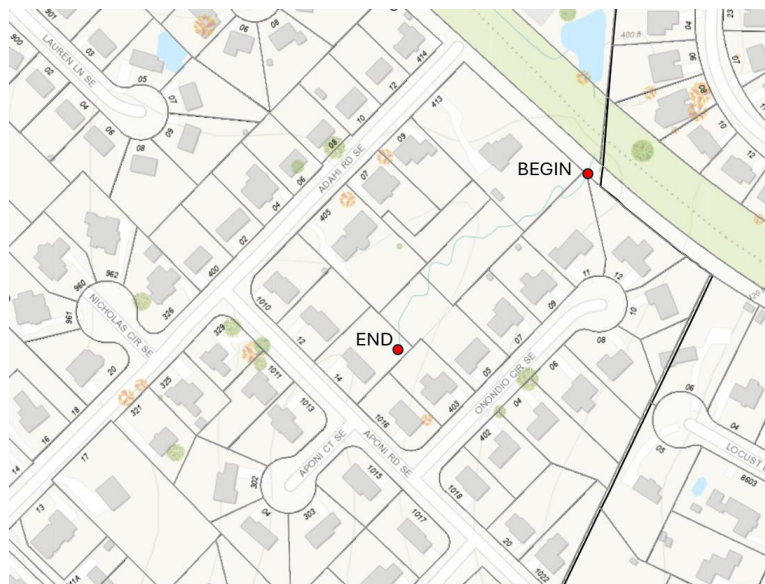


Figure 1. Project Limits

## SCOPE OF WORK

### Task A – Geomorphic Assessment

The geomorphic/stream assessment will include the following items, to be performed sequentially:

- ▶ Watershed Delineation
- ▶ Geomorphic Channel Assessment / Hydrologic Comparison
- ▶ Detailed Stream Characterization

- ▶ Assessment of Stable Reaches Along Bear Branch

### **Watershed Assessment**

WSP will verify existing watershed boundaries to the project area.

### **Geomorphic Channel Assessment/Hydrologic Comparison**

Urban systems such as Bear Branch are supply-limited systems. The watershed has been built out, and sediment coming from colluvium and alluvium from ephemeral streams has been replaced with parking lots and storm sewers. This man-man landscape delivers smaller gravel, sands, and salts from road operations and construction. The primary source of moving sediment in these systems is local bank erosion. When this erosion is corrected through restoration, the amount of sediment delivered downstream is drastically reduced.

Degraded urban streams are out of equilibrium. Due to incision and disconnection from the floodplain, the bankfull discharge or “channel filling discharge” does not necessarily correlate well with the effective discharge or discharge responsible for moving the most sediment over time. Urban streams have such a high degree of instability that there are usually limited physical indicators present to establish a bankfull stage for the project stream reach.

WSP will identify and validate bankfull stage/channel filling stage indicators for the project stream reach prior to completing the morphological survey. The stage validation will be accomplished through an analysis and comparison of field identified indicators within the reach, if available. Investigation of the inner berm features located along the incised channel will help determine the design discharge to be used for sizing the channel. WSP will conduct a hydrologic analysis to determine the channel filling (bankfull) discharge for the site. The analysis will be performed considering regional curve data, best professional judgement, and special geological considerations that may alter expected runoff at the site.

In order to determine discharge values for the project area along Bear Branch, WSP will use the regression equations based on United States Geological Survey Water-Supply Paper 2207.

#### **Deliverable:**

- A one page or less technical memo will be submitted to the Town summarizing the results of the discharge values based on the USGS Water-Supply Paper 2207.

### **Detailed Stream Characterization**

Once the geomorphic map is completed, WSP will survey stream morphological character in within the project limits. The detailed survey will only be conducted on a selected representative section identified during the development of the geomorphic map.

The detailed stream survey will describe the existing morphological character of the stream within the project limits. The Rosgen Stream Classification system will be used to describe the morphological character of the surveyed streams. The Stream Channel Classification (Level II) will be completed for a representative reach, and the following data will be collected:

- ▶ Bankfull/channel filling dimensions
- ▶ Plan-form dimensions
- ▶ Flood-prone dimensions
- ▶ Longitudinal facet profile
- ▶ Channel substrates

Since the urban stream is out of equilibrium, the Rosgen Classification becomes more difficult since it is based bankfull depth. Therefore, the characterization and classification of the channel will be based on the Channel Evolution Model (CEM). The pebble count procedure (developed by Wolman, 1954 and modified by Rosgen, 1996) will be used to determine the composition of the streambed for stream

classification purposes. Channel substrate material will be selected and measured in accordance with the procedure. After counts and tallies are complete, the data will be plotted by size class and frequency.

**Deliverables:**

- ▶ Stream Channel Classification (CEM)
- ▶ Pebble Count Form and Plot

### **Assessment of Stable Reaches along Bear Branch**

WSP will walk along the project reach in order to field verify and locate any stable geomorphic sections which may exist along this section of Bear Branch. WSP will survey a cross section and slope and perform a pebble count along the stable reach. The stable cross section will be modeled (at a section model using Manning's equation) and velocity, shear stress, and stream power for infrequent higher discharges will be determined. This information will provide valuable insight into how the stable sections are able to carry flow, and these parameters will be incorporated into the design along the project reach. However, since a stable section may not be present along the reach, WSP will rely on previous geomorphic data collected and/or previous design parameters used in similar urban watersheds in the Northern Virginia area.

**Deliverable:**

- ▶ A one-page or less technical memorandum will be submitted to the Town summarizing the results of the stable reaches along Bear Branch

### **Task B – Subcontractor (Existing Conditions Survey – As-Built Survey)**

#### **Surveying Services to Support the Stream Restoration for Design and Engineering**

Bowman Consulting Group (BCG) will be supporting WSP by providing all the survey services for this project. The surveying services consist of a topographic survey and limited property survey and as-built survey. Further detail about these services, assumptions, and deliverables can be found in the proposal from BCG (please refer to the attached BCG subcontractor's proposal for additional details).

### **Task C – Environmental Services**

#### **Tree Identification and Assessment**

Any trees greater than 4 inches in diameter at breast height (DBH) that have been tagged and survey located will be assessed in the field by WSP. Trees will be identified to species and their general health and structural stability (i.e., signs of limb die-back, trunk and root damage/rot, leaning or top-heavy growth form) will be visually assessed. Trees will be given a condition rating Good, Fair, Poor, or Dead. A map of tree locations and a table including the tree number, species, DBH, and assessment of each tree condition will be provided with the plan set. WSP will walk the site with the Town's Arborist to identify trees which could potentially be worth saving. The information gathered in the assessment will be used to inform the design with the goal of protecting significant and high-quality trees to the extent practicable.

**Deliverables:**

- ▶ Map of tree locations with table including tree number, species, DBH, and assessment of each tagged tree. Due to the number of potential trees located, the tree inventory in the plan set will most likely be broken into multiple sheets
- ▶ Site walk with the Town Arborist

#### **Waters of the U.S. (WOUS) Delineation**

WSP will review applicable background information, including but not limited to: USGS Topographic quadrangles, soil surveys, National Wetland Inventory maps, and aerial imagery. WSP will conduct a field delineation of Waters of the US (WOTUS), including streams and wetlands, located within the project corridor boundaries. The WOTUS delineation will be performed in accordance with the Corps of

Engineers' Wetlands Delineation Manual (1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0). This methodology requires positive evidence of three criteria: wetland hydrology, hydrophytic vegetation, and hydric soils. Data points will be taken in potential wetland areas to confirm presence or absence of these criteria. The boundaries of areas meeting these criteria, as well as stream channels and other water bodies, will be flagged at the Ordinary High-Water Mark (OHM) using plastic surveyors' tape. The flagged areas will be survey-located by others (see survey task below). Photographs will be taken to document existing site conditions. The results of the field investigation will be summarized in a delineation report and WOTUS location map to be submitted to the USACE.

**Deliverables:**

- ▶ WOTUS delineation report and map submitted to the USACE

**USACE Jurisdictional Determination**

Following review and approval by the Town, WSP will submit the delineation report and map to the USACE along with the appropriate Jurisdictional Determination request form. A field visit with USACE personnel will be conducted to review and confirm the flagged boundaries of the WOUS. If necessary, the delineation map will be updated to reflect agreed-upon changes. During the site visit, WSP may also discuss the conceptual site plan with the USACE to obtain preliminary feedback on the restoration project and necessary permitting.

**Deliverables:**

- ▶ JD request to USACE
- ▶ Field meeting with USACE
- ▶ Updated delineation report and map (if necessary)

**Protected Species and Cultural Resources Review**

WSP will conduct database reviews of the project area in applicable State and Federal databases to determine if threatened or endangered species, natural heritage elements, or other historic or cultural resources are listed as present. Databases to be consulted may include but are not limited to U.S. Fish and Wildlife Service's (FWS) Information, Planning and Conservation System (IPaC), Virginia Cultural Resource Information System (VCRIS), and the Virginia Department of Game and Inland Fisheries' (DGIF) Fish and Wildlife Information Service (VaFWIS). WSP will then prepare a summary letter detailing the search results and the potential that listed species or resources may be present onsite. Please note that this task does not include species-specific field surveys or archaeological surveys that may be requested or required during Section 7 and 106 consultations of the 401/404 permitting process.

**Deliverables:**

- ▶ Summary Protected Species and Cultural Resource letter and exhibits

**Section 404/401 Permitting**

WSP will prepare and submit a Nationwide Permit 27 (NWP 27) and the required Preconstruction Notification/Joint Permit Application (PCN/JPA) to the reviewing agencies, including the Virginia Marine Resources Commission (VMRC), Virginia Department of Environmental Quality (DEQ), and the USACE. The permit package includes a discussion of the avoidance and minimization of impacts to WOUS, a discussion of potential impacts to threatened and endangered species and cultural resources, and other supporting information, maps, and exhibits necessary for review of the project. WSP will act as agent for the Town in coordination with the reviewing agencies, including Section 7 Endangered Species Act coordination, Section 106 Historic Preservation Act coordination, Coastal Zone Management Act coordination, and coordinating onsite meetings with the USACE, DEQ, and the USFWS, as necessary. WSP will also respond to additional information requests and comments from the reviewing agencies and negotiate the terms and conditions of the issued permit, as necessary.

**Deliverables:**

- ▶ NWP, JPA/PCN permit application package

- ▶ Approved NWP

### **Task D – 60% Concept Design**

Using the concept design developed for the SLAF grant submission and new information and insight obtained from the geomorphic assessment in Task A, WSP staff will refine the concept design and advance to a 60% design. The 60% design will include the following:

- ▶ Existing Conditions
- ▶ Refined Typical Cross Sections
- ▶ Stream Structure Details
- ▶ Planform layout
- ▶ Preliminary Grading plan

A meeting will be held with the Town and other project stakeholders at the project site to review the 60% design, and a stream walk will take place to review the design. After this field meeting, WSP will incorporate comments and feedback from the meeting where appropriate and prepare a planning level cost estimate based on costs (actual costs from qualified contractors from previous jobs). This planning level cost estimate should be used for budgeting purposes only.

#### **Deliverables:**

- ▶ 60% Design
- ▶ Stream walk with Town and stakeholders to review 60% design
- ▶ Planning Level Cost Estimate for concept design

### **Task E - 100% & Final Construction Documents**

#### **100% and Final Plan Submission**

The final design (100%) will advance the 60% completed and presented to the Town of Vienna and associated stakeholders. As WSP works toward the 90% and final design, hydraulic analysis will be conducted using a combination of HEC-RAS 1-D and/or 2-D. WSP will evaluate the hydraulics for the proposed solutions and evaluate velocity, sheet stress, and stream power. The design will attempt to focus on minimizing any impacts of the 100-yr flood elevation and ensuring no flooding of existing structures. Due to the existing conditions of the stream corridor, it is unlikely the proposed restoration would reduce the 100-yr water surface elevation. Comments from the Town on the 90% submission will be addressed/incorporated as appropriate in the plan set under the 100% Final construction document submission, which will be sealed by a VA Licensed Professional Engineer. The Final construction documents sheet will most likely include:

- ▶ Cover Sheet
- ▶ Design Narrative & Computations
- ▶ General Notes
- ▶ Existing Conditions Legend and Property Owner Information Info
- ▶ Existing Tree Survey with Identification Table
- ▶ Existing Conditions / Demolition Plan
- ▶ Erosion and Sediment Control Ph I
- ▶ Erosion and Sediment Control Ph II
- ▶ Erosion and Sediment Control Notes
- ▶ Erosion and Sediment Control Details
- ▶ Soils Map
- ▶ Geometry Plan
- ▶ Overall Grading Plan
- ▶ Bear Branch Plan and Profile

- ▶ Bear Branch Cross Sections
- ▶ Storm sewer Outfall Plan and Profile
- ▶ Bear Branch Typical Stream Sections
- ▶ Stream Structure Details and Notes
- ▶ Structure Stakeout Plan
- ▶ Water Quality Narrative and TMDL Computations
- ▶ Riparian Planting Plan
- ▶ Riparian Planting Plan Notes & Schedule
- ▶ Riparian Planting Plan Details

The Final Construction Documents will address comments from the 100% and advance to the final completed plans. Once the Town reviews the Final CD, WSP will address one more round of comments (assumed to be minor in nature) and seal the final drawing set.

**Deliverables:**

- ▶ Entire set of 100% and Final CD Plan Submission After 60% design is agreed upon – digital plan sets provided to the Town at 100% and Final CD submissions. WSP will also develop technical specifications for the project. WSP will also meet in the field with DEQ and walk the site and review the proposed design.
- ▶ WSP will submit the final design plans to obtain approval from Town of Vienna Department of Public Works
- ▶ Construction Cost Estimate - WSP will prepare the Bill of Quantities (BOQ) and Cost Estimate for the Final Design using the prevailing unit prices and information provided by the Town of Vienna.

**Task F - FLOODPLAIN ANALYSIS**

The current project reach is not located within an effective Federal Emergency Management Agency (FEMA) approximate (Zone A) floodplain. In support of the Bear Branch stream restoration design, WSP will aim to minimize impacts through iterative design modifications, with the ideal scenario demonstrating no increases (no rise”) to the existing 1% annual chance (100-year) water-surface elevations (WSELs) as a result of the proposed project. WSP will use the field survey information collected as part of Task B to create the existing conditions model. A Proposed Conditions model will be developed along Bear Branch. The Proposed Conditions model may include:

- ▶ Updated stream alignment and channel configuration
- ▶ Revised geometry/cross sections to account for proposed restoration grading
- ▶ Updated roughness coefficients to represent proposed vegetation and in-stream structures
- ▶ Modified ineffective areas based on HEC-RAS modeling updates

The 1% annual chance WSELs associated with the proposed conditions HEC-RAS hydraulic model will be evaluated versus the existing conditions hydraulic model to determine if the proposed design results in WSEL increases. While the overall goal of the design is to minimize impacts to 1% annual chance WSELs, due to the nature of the site, it is possible that increases will occur. The stream restoration principal of floodplain reconnectivity sometimes results in increases, however, additional mitigation measures may offset the impacts. Due to the nature of the project, including adjustments to the stream bed, there may be localized increases in the 100-year water surface elevation. Project design will incorporate best management practices to minimize potential impacts to nearby structures and property. Working alongside the Town and stakeholders, final hydraulic analyses will guide measures to ensure changes remain within acceptable limits.

**Deliverables:**

- ▶ Existing vs. Proposed Conditions HEC-RAS hydraulic models to demonstrate changes to WSE

**Task G - VSMP Permit**

WSP will provide technical assistance to apply for a General VPDES Permit for Discharges of Stormwater from Construction Activities for this Project. As part of this effort, WSP will develop a Stormwater Pollution Prevention Plan (SWPPP) as required by the Construction General Permit (CGP). WSP will complete the Registration Statement for your signature and prepare the SWPPP, in addition to coordinating the submittal of the required Registration Statement and fee forms to the Virginia Stormwater Management Program (VSMP) Authority on behalf of the Town of Vienna. This task excludes all required permit application fees and all CGP annual permit maintenance fees that may be required by the VSMP Authority.

#### **Task H - Prebid Meetings / Response to Bidder Questions**

WSP will attend one pre-bid conference and assist with answering contractor questions about the design documents. WSP shall also attend one (1) pre-construction meeting to assist the Town with Contractor questions. In addition, WSP will respond to bidder questions provided by the Town. WSP will also provide the Town with prequalification language which can be used in the bidding process to ensure a qualified contractor is selected.

#### **Task I - Construction Observation Services**

The WSP team will provide construction oversight services to represent the Town of Vienna and ensure proper construction and installation, provide on-site clarification to contractors, and assist in rectifying the unforeseen.

The construction contractor will be responsible for providing the stakeout and providing stakes at key structure locations and to identify the extent of the work. WSP will field review the stakeout with the contractor and identify and locate key structures and components, and field-adjust the design as needed. WSP will contact the Town as soon as possible if problems or issues are discovered during the site visit.

#### **Construction Inspection and Oversight Services**

- ▶ Responses to Contractor questions through the Client for the duration of the project
- ▶ WSP will review shop drawings, construction submittals, materials, as-builts, and related data submitted by the general contractor
- ▶ Construction inspection for the duration of all construction activities and/or as directed by the Town by a qualified and experienced construction inspector onsite to observe and record all construction activities for the purpose of determining if the construction is in compliance with the construction contract documents. One WSP staff will be onsite during construction.
- ▶ Coordinating with the Town and addressing any necessary field changes due to unexpected field conditions.
- ▶ WSP will be available to attend weekly construction inspection and progress meetings held by the Town and the Contractor.
- ▶ Weekly submittals (summarizing the work completed that week) documenting what features were completed during that week. Construction activities to be inspected and documented include, but are not limited to:
  - ✓ Determining and documenting the acceptability as specified in the construction contract documents
  - ✓ Furnished and salvaged construction materials.
  - ✓ Finished grading.
  - ✓ Constructed proposed channel cross section, longitudinal profile, and channel geometry. Dimensions and elevations of cross sections, structures, and longitudinal profile will be checked as part of the construction inspection using the non-certified as-built survey data
  - ✓ In-stream structures within the channel (rock structures (footer and top rock placement) and reinforced bed material), including photographic documentation of the installation of each structure to highlight key elements such as footer rock placement, etc. Include selected photographs in inspection forms and provide a final digital copy of photographs and reports on CD.
  - ✓ Erosion and sediment control measures.
  - ✓ Plant materials and plant material installation.

- ✓ Approval of the final as-built survey
- ✓ Recommending corrective actions if necessary

WSP will only communicate issues concerning design and construction with the Town. WSP will not supervise, direct, or have control over the Contractor’s work, nor will WSP have authority over or responsibility for the construction means, methods, techniques, sequences, or procedures, or for safety precautions. WSP will observe and report and supply observations and findings to the Town. WSP will follow safety rules of the contractor while on-site.

**Final Construction Certification**

WSP will conduct final construction inspection and submit a punch list of construction work that needs repaired, replaced, adjusted, or finished. This walk-through will occur before the contractor demobilizes from the site. The required submittal includes the punch list, supporting photographs, and other information to support the inspection findings.

**Task K - Project Management & Client Coordination**

Project management activities include budget and schedule management, invoicing, contract management, and overall project coordination.

**Schedule**

This project schedule proposed a general guideline for the project duration is provided below.

<b>Activity</b>	<b>Start</b>	<b>Finish</b>
<i>NTP</i>	<i>May 1, 2026</i>	<i>-</i>
<i>Task A – Geomorphic Assessment</i>		
<i>Field Work</i>	<i>May 1, 2026</i>	<i>June 1, 2026</i>
<i>Memos</i>	<i>June 1, 2026</i>	<i>July 1, 2026</i>
<i>Task B - Field Survey</i>	<i>May 15, 2026</i>	<i>June 30, 2026</i>
<i>Task C - Environmental Services</i>		
<i>Wetland Flagging</i>	<i>May 1, 2026</i>	<i>May 15, 2026</i>
<i>Tree Assessment</i>	<i>July 1, 2026</i>	<i>August 15, 2026</i>
<i>JD Submittal</i>	<i>August 1, 2026</i>	<i>September 15, 2026</i>
<i>JPA submittal</i>	<i>September 1, 2026</i>	<i>March 1, 2027</i>
<i>JPA approval</i>	<i>March 1, 2027</i>	<i>August 31, 2027</i>
<i>Task D - 60%</i>		

<i>Concept Design</i>		
	<i>September 1, 2026</i>	<i>December 31, 2026</i>
<i>60% Design</i>		
	<i>January 15, 2027</i>	<i>January 15, 2027</i>
<i>Stream Walk</i>		
	<i>January 15, 2027</i>	<i>September 30, 2027</i>
<i>Task E – 100% and Final CDs</i>		
	<i>September 1, 2026</i>	<i>August 31, 2027</i>
<i>Task F – Floodplain Analysis</i>		
	<i>September 30, 2027</i>	<i>March 31, 2028</i>
<i>Advertise for Bid</i>		
	<i>May 15, 2027</i>	<i>November 15, 2027</i>
<i>Construction</i>		

### **Cost Estimate Summary**

WSP will provide the services referenced within this scope of work on a Lump sum basis for a total of \$429,801. Additional cost details are provided in Attachment B.

### **EXCLUSIONS & ASSUMPTIONS**

- ▶ A traffic control plan for the project site entrance would not be required.
- ▶ Since the site is not located within a SFHA, FEMA LOMR/CLOMR submission are not included within the scope of work
- ▶ No upfront administrative specifications will be provided. WSP will provide technical specifications for the project.
- ▶ One round of comments will be addressed for the 60%, 100%, and Final CD submission.
- ▶ The major stream construction is assumed to be approximately 6 months. Construction Observation time included is up to 570 hours, which is approximately 24 hours per week. Hours per week would be weighted heavier at the start of the project. Any hours required above the estimate would require a cost modification.
- ▶ Geotechnical borings are not included within this proposal scope.
- ▶ WSP and all subcontractors will have direct access to the project area.
- ▶ The Town of Vienna will provide WSP with all relevant data if available for the project including – existing utility information, easements, previous/proposed development plans in the vicinity of the project area.
- ▶ Since the project will be relocated using the principles of Natural Channel Design, it is expected that any wetland and stream impacts determined by regulators are self-mitigating and will not require additional compensation.
- ▶ The project will be drafted and delivered utilizing the AutoCAD platform.
- ▶ WSP is not responsible for directing the contractor. We will observe and report and supply observations and findings to the Town.
- ▶ WSP will follow the safety rules of the contractor while on-site but is not responsible for on-site safety of others.
- ▶ WSP will not perform materials or laboratory analysis as part of this scope.
- ▶ All plan sets will be digital
- ▶ Post construction monitoring is not included.
- ▶ The survey proposal from Bowman consulting is \$55,300 which includes Task 1, 5, and 6. Tasks 2, 3, and 4 are listed as hourly estimates for additional services and would require a cost modification.

**ATTACHMENTS**

- ▶ Attachment A - Bowman subcontractor survey
- ▶ Attachment B - Cost Summary

**ACKNOWLEDGEMENT**

Agreed and acknowledged:

Town of Vienna, Virginia

WSP Environment & Infrastructure, Inc.



By \_\_\_\_\_

By \_\_\_\_\_

Name \_\_\_\_\_

Name Troy Biggs

Title \_\_\_\_\_

Title Project Manager

Date \_\_\_\_\_

Date April 6, 2026



Revised: 2026-03-20  
2026-03-02

Troy Biggs  
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<b>Re:</b>	<b>Bear Branch, Onondio Circle</b> (the “Project”) North of the intersection of Aponi Road SE and Onondo Circle SE Vienna, Fairfax County, VA 22180 Proposal to provide Surveying Services (the “Proposal”) Bowman Project No. 030425-01-TBA Project Category: PUBLIC/CIVIC - Parks & Recreation
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Dear Troy Biggs:

We are pleased to submit this Proposal to provide Surveying services for the above referenced project. Upon verbal or written direction to proceed with performance of the services described herein, this Proposal, along with all attachments thereto, will constitute a binding agreement (the “Agreement”) between Bowman Consulting Group Ltd. (“Bowman”) and WSP USA Inc. (the “Client”).

### Project Understanding

Bowman’s team successfully supported the earlier phase of the Bear Branch restoration and is well-versed in the project’s goals, design requirements, and existing conditions along the corridor. Leveraging that prior work, we will collect the additional topographic, boundary, and utility data needed for the next segment near Onondio Circle, ensuring compatibility with previously completed survey deliverables. This continuation of services will provide WSP with a cohesive and dependable survey foundation that streamlines design efforts and maintains consistency across the full restoration project.

Standard of Care - Services provided by Bowman under this proposal will be performed in a manner consistent with the degree of care and skill ordinarily exercised by members of the same profession practicing under similar circumstances, including standard of care at the time the services were provided.

Quality Control - A portion of the stated compensation is set-aside for Quality Control/Quality Assurance, which is part of the Bowman Quality Control Policy.

## **SCOPE OF SERVICES AND FEES**

The scope of services (the “Scope”) and associated fees shall be as follows:



## 1. Topographic Survey and Boundary Verification (SC-01)

Bowman will perform topographic surveying services as needed to complete the design and engineering of the second phase of the Bear Branch stream restoration. Survey services include the following:

Establish a semi-permanent horizontal and vertical control network using GPS and conventional technology. Horizontal datum will be NAD83, and vertical will be NGVD29 as required. This task includes setting temporary control as needed to complete the surveying. Semi-permanent control will be set in locations that will remain usable during construction and as-built operations.

Bowman will perform property research to determine current ownership of the properties adjacent to the stream restoration survey, including research to acquire subdivision plats, public right-of-way information and public utility easements as shown on the subdivision plats.

With parcel and right-of-way research completed and property boundaries processed in AutoCAD; our surveyors will perform reconnaissance and locate sufficient property corner monuments and evidence of property lines including, iron pins, fence corners, fence lines necessary to accurately depict the property boundaries on the topographic survey base.

Concurrent with the property survey, Bowman will perform a field run topography/stream cross-section survey and utility as-built necessary to design the proposed stream restoration. This task shall include the following:

- Perform a field run topographic and cross-section survey on about 500 linear feet of the Bear Branch stream and tributary.
- Cross-section will be taken at approximately 50-foot intervals and includes intermediate cross-sections at bends, or other critical features in the stream.
- Topographic survey includes locating significant natural features within the stream channel.
- It is estimated that approximately 2.5-acres of topography is included as shown in Figure 1.
- Topography will represent 1-foot contour intervals.
- Bowman surveyors will take photographs of significant features and link them to the topographic survey.
- Bowman surveyors will locate all visible indications of utility such as water meter, fire hydrants, valves, poles – including pole numbers, wires, transformers, pedestals, vaults, etc. Sanitary sewer and accessible storm sewer structures will locate and as-built, to acquire invert of pipes, and pipe sizes and pipe material. Any storm culverts will be surveyed and as-built.
- After a complete inspection of the site, Bowman will coordinate with Miss-Utility to locate any suspected subsurface utilities. If subsurface utilities are delineated on the ground, Bowman surveyors will locate the paint or flags, identify the utility and include the information on the topographic survey base.
- *Bowman surveyors will field locate wetlands delineation flags placed by others, as directed by the Client. Surveying services are limited to mapping the observed locations of flags present at the time of survey and do not include wetlands delineation, classification, or jurisdictional determinations.*
- Final deliverable includes a certified topographic survey prepared by a surveyor licensed in the Commonwealth of Virginia and includes delivering an AutoCAD digital file developed at the scale requested for engineering and depicting 1-foot contour intervals and referencing select spot elevations and cross-sections.

### Task Exclusions

- Private subsurface utility designation
- Certified Boundary Survey
- Setting of missing property corners.
- Tagging and locating trees - this will be completed with Task 6

**FEE: \$30,300.00 Lump Sum**



## 2. Easement Plat(s) (SC-01)

Under this task, Bowman will prepare an Easement Plat that dedicates easements as associated with the corresponding site plan.

This task includes the initial required plat computations and submission documentation. Addressing agency review comments and coordinating with client's attorney will be billed under the Processing of Plat and Application task.

### **Task Exclusions**

- Revisions to the Plat resulting from Client generated changes and/or agency review comments.
- Deed preparation.
- Submission fees.

**FEE: \$3,500.00 Unit Price Per Plat (As Needed)**

## 3. Processing of Plat(s) and Application(s) (SC-01)

Under this task Bowman shall perform the following services:

1. Prepare and process application submittal packages.
2. Track review/approval progress.
3. Provide written response to agency review comments.
4. Revise Plat requested by County review agencies, which may be necessary for plat approval.

### **Task Exclusions**

- Recordation of approved documents and/or plats.
- Agency submission fees.

**FEE: \$2,500.00 Hourly, Estimate**

## 4. Miscellaneous Survey Services (SC-01)

Under this task the Consultant will provide field and office surveying services to perform miscellaneous tasks they may be requested by engineering or the client that are beyond the scope of work defined in other tasks. Includes office processing of field data.

**FEE: \$5,000.00 Hourly, Estimate**

## 5. Post-Construction As-built Survey (SC-01)

After construction of the stream restoration is complete, Bowman surveyors will provide an as-built survey of the site to locate the critical constructed features. This task includes as-built topography, utility as-built, as-built of the critical stream restoration hardscape and natural features, provide photographs, etc. The deliverable shall include a certified as-built survey prepared by a licensed surveyor in the Commonwealth of Virginia, and provide an AutoCAD file, upon request

**FEE: \$18,500.00 Lump Sum**



**6. Tree Survey, Inventory and Analysis**

In accordance with the Town of Vienna Tree Preservation Manual, a Bowman Certified Arborist shall GPS locate and prepare a Tree Inventory and Condition Analysis for all trees 4” DBH and greater located within the project limits identified to be surveyed. A tree inventory and condition rating table identifying common name, trunk diameter, species rating, and condition factor for each tree identified through the activities as described above will be provided. Condition factors will be evaluated and documented through field observation using plant appraisal methodologies provided in the latest edition of the Guide for Plant Appraisal as published by the International Society of Arboriculture.

This task will be considered complete after submission to the Town. Revisions or changes requested after Town acceptance that will require substantial additional effort by BCG will require a contract addendum to be approved by the Client prior to initiating the revisions.

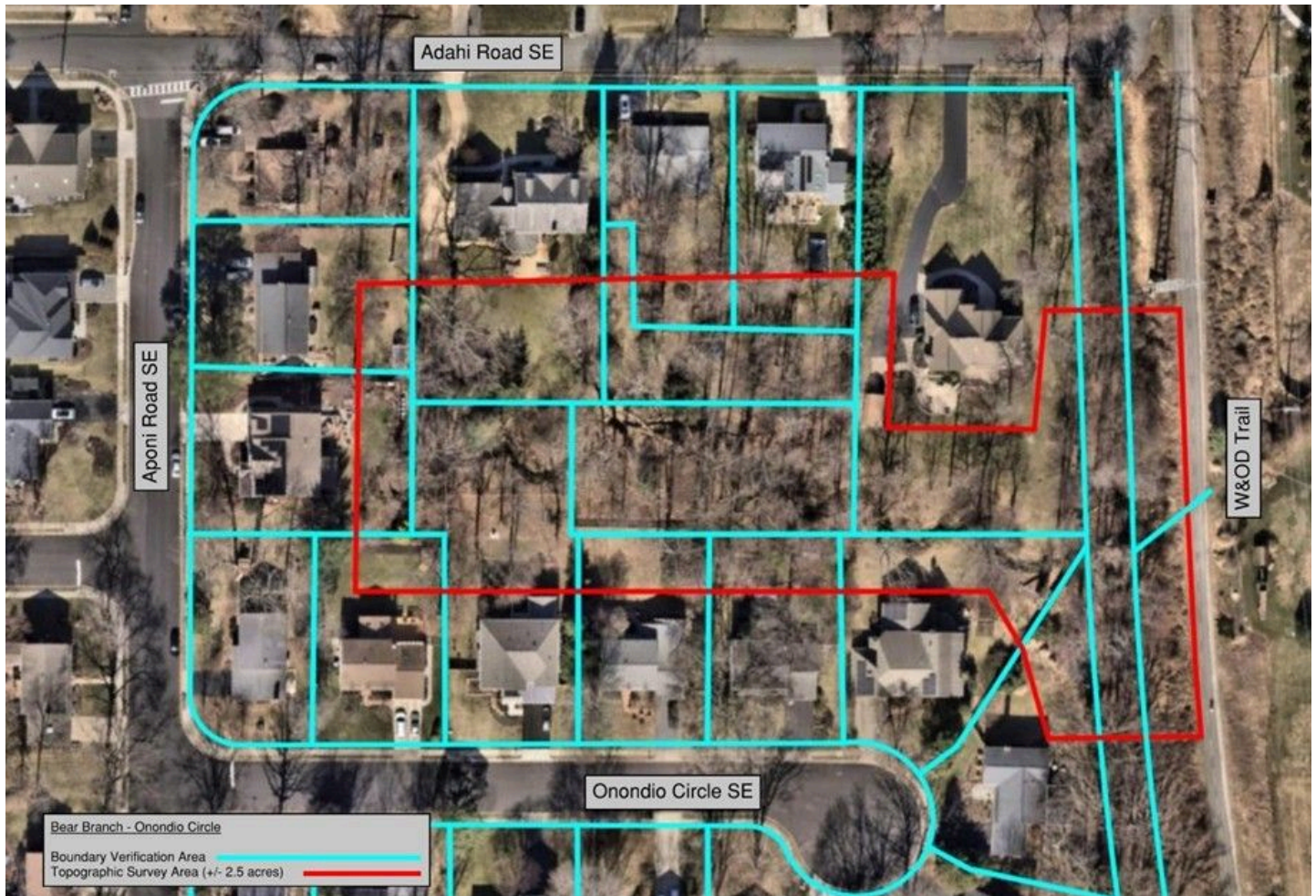
**FEE: \$6,500.00 Lump sum**

**SUMMARY MATRIX**

Task	Description (SC)	Total	Fee Type
1	Topographic Survey and Boundary Verification (SC-01)	\$30,300.00	Lump Sum
2	Easement Plat (SC-01) \$3,500.00 Per Plat (as needed)	\$3,500.00	Unit, Estimate
3	Processing of Plat(s) and Application(s) (SC-01)	\$2,500.00	Hourly, Estimate
4	Miscellaneous Survey Services (SC-01)	\$5,000.00	Hourly, Estimate
5	Post-Construction As-built Survey (SC-01)	\$18,500.00	Lump Sum
6	Tree Survey, Inventory and Analysis	\$6,500.00	Lump Sum

**Total Estimated Fees \$66,300.00**

## EXHIBIT A



## ASSUMPTIONS

The fees quoted above assume that work will proceed in a systematic, orderly, and progressive manner. This proposal further assumes that project conditions will allow for efficient execution without significant disruptions or complications arising from circumstances unique to the specific operations. The following assumptions, among others, are fundamental to maintaining the quoted scope and schedule:

- Clear, timely, and consistent communication from the Client is essential to ensure project efficiency, alignment with deliverables, and the avoidance of delays or additional costs.
- This proposal assumes that all information, data, and materials provided by the client are accurate, complete, and current; any discrepancies may impact project scope, timeline, and associated fees.
- A minimum 48-hour notification is required for all field requests.
- Bowman field personnel are not authorized to accept survey requests or to provide data in the field.

# Bowman

## EXCLUSIONS

The following services are specifically excluded from the scope of this agreement and may be performed as contract addendums upon request:

- Items not specifically delineated in Scope
- Boundary Surveys
- Wetlands Delineation
- Environmental Services
- Title Report or Abstract Reviews
- Submission Fees

## REIMBURSABLE EXPENSES

Reimbursable expenses shall include actual expenditures made by Bowman in the interest of the Project and will be invoiced at the actual cost to Bowman plus fifteen percent (15%) for handling and indirect costs. Reimbursable expenses shall include but not be limited to costs of the following:

- Mailing, shipping, and out source delivery (i.e. DHL, FedEx) costs.
- Fees and expenses of special consultants as authorized by the Client.
- Parking fees and mileage for employee travel by car to facilitate the project.

## REPROGRAPHIC AND COURIER CHARGES

Reprographic, plotting, in-house courier, and archive retrieval services will be invoiced in accordance with Schedule A attached hereto.

## CLIENT RESPONSIBILITIES

The Client shall be responsible for obtaining permission for Bowman, its employees, agents and subcontractors to enter onto the subject property and any properties in the vicinity as reasonably necessary for Bowman to perform the services described herein. By either countersigning this Proposal or verbally authorizing Bowman to proceed, the Client warrants and represents that it has obtained such permission. The Client shall provide the following items upon request of Bowman in a timely manner and at no expense to Bowman:

- Site Access/Permissions.

## OTHER TERMS

This proposal is based on the scope of services indicated herein and the information available at the time of the proposal preparation. If any additional services are required due to unforeseen circumstances and/or conditions, client or regulatory requested revisions, additional meetings, regulatory changes, etc, Bowman will notify the client that additional scope of work and fees are required and will obtain the client's written approval prior to proceeding with any additional work.

Bowman's Standard Terms and Conditions and Hourly Rate Schedule are attached hereto and incorporated into this Proposal by reference.

# Bowman

Please indicate your acceptance of this proposal by executing below and returning a copy to this office. Thank you for the opportunity to provide service to WSP USA Inc.

Sincerely,

**BOWMAN CONSULTING GROUP LTD.**



William E. Bradford II, LS  
Director, Survey

**WSP USA Inc.** hereby accepts all terms and conditions of this Proposal (including the Standard Terms and Conditions) and authorizes Bowman to proceed with the Project, and the undersigned represents that he or she is authorized by WSP USA Inc. to so execute this Proposal.

**WSP USA Inc.**

By:

Title:

Date:



## BOWMAN CONSULTING GROUP LTD.

### SCHEDULE A - FEES FOR REPROGRAPHIC, DELIVERY, TRAVEL AND OTHER SERVICES

January 2026

#### Reprographic Services

B&W Photo Copies	\$0.35/sf, or \$0.23 for 8-1/2" x11" sheet
Color Photo Copies	\$0.50/sf, or \$0.32 for 8-1/2" x11" sheet
Printing (bond)	\$0.35/sf, or \$2.10 for 24" x 36" sheet
Printing (mylar)	\$3.00/sf, or \$18.00 for 24" x 36" sheet

Binding, Mounting and Folding of plan sets, reports, or drawings will be invoiced at our standard hourly rates. Copying of Plans that have been archived in storage is subject to a minimum archive retrieval fee of \$50 plus applicable reprographic fees above.

#### Delivery Services

In-house delivery services are invoiced at \$2.00 per mile (one way) and subject to a minimum \$20.00 charge for standard delivery during normal business hours. Rush services and times outside normal business hours are subject to a minimum \$20.00 surcharge.

Outsourced courier services (i.e. Federal Express, DHL, etc.) are invoiced at cost plus 15%.

#### Travel

Mileage for employee travel by car to facilitate the project, including travel to the project site and for meetings with the client, project team, contractors, or governmental agencies, will be invoiced at the current IRS standard mileage rate.

Airfare and/or lodging to facilitate the project will be coordinated with the client in advance and will be invoiced at cost plus 15%.

#### Miscellaneous

Other costs associated with sub-consultants, specialty equipment, laboratory testing, field testing, tolls, parking or other miscellaneous items will be invoiced at cost plus 15%.

Initials: Bowman

/ Client



**BOWMAN CONSULTING GROUP LTD.**

**SCHEDULE B - HOURLY RATE**

January 2026

<b>CLASSIFICATION</b>	<b>HOURLY RATES</b>
Principal	\$410.00/HR
Department Executive	\$354.00/HR
Team Leader	\$323.00/HR
Senior Project Manager	\$292.00/HR
Project Manager	\$248.00/HR
Assistant Project Manager	\$234.00/HR
Project Coordinator	\$194.00/HR
Senior Surveyor	\$250.00/HR
Engineer I   II   III	\$161.00/HR   \$181.00/HR   \$207.00/HR
Planner I   II   III	\$164.00/HR   \$191.00/HR   \$205.00/HR
Designer I   II   III	\$137.00/HR   \$158.00/HR   \$182.00/HR
CADD Drafter I   II   III	\$130.00/HR   \$150.00/HR   \$175.00/HR
Landscape Architect I   II   III	\$143.00/HR   \$158.00/HR   \$178.00/HR
Certified Arborist	\$226.00/HR
SWM Inspector I   II   III	\$145.00/HR   \$163.00/HR   \$186.00/HR
Senior Environmental Scientist	\$218.00/HR
Environmental Scientist I   II   III	\$164.00/HR   \$191.00/HR   \$205.00/HR
Right of Way Specialist I   II   III	\$105.00/HR   \$125.00/HR   \$155.00/HR
Dry Utility Professional	\$240.00/HR
Survey Technician I   II   III	\$140.00/HR   \$165.00/HR   \$190.00/HR
Project Surveyor	\$210.00/HR
Survey Field Crew – 1 Man	\$170.00/HR
Survey Field Crew – 2 Man	\$230.00/HR
Survey Field Crew – 3 Man	\$285.00/HR
3D Scanning Crew	\$280.00/HR
Survey Field Technician	\$135.00/HR
3D/UAV Modeling Technician	\$175.00/HR
UAV Operation	\$275.00/HR
SUE Field Crew - 1 Man	\$150.00/HR
SUE Field Crew - 2 Man	\$210.00/HR
SUE Field Crew - 3 Man	\$260.00/HR
SUE Field Crew - 4 Man	\$310.00/HR
SUE Utility Coordinator	\$200.00/HR
SUE Technician I   II   III	\$130.00/HR   \$150.00/HR   \$180.00/HR
Machine Control Technician	\$270.00/HR
Administrative Professional	\$101.00/HR
Remote Sensing Technician I   II   III	\$110.00/HR   \$130.00/HR   \$150.00/HR

Initials: Bowman

/ Client

Table 5 - DEFAULT 2026 DC Metro



**BOWMAN CONSULTING GROUP LTD.  
SCHEDULE C - REQUEST FOR INFORMATION**

**Accounts Payable Contact:**

Point of Contact:

Phone:

Fax:

E-Mail:

**Billing Information:**

Billing Entity:

Billing Address:  Same as Proposal

If Different, Please Provide:

**Billing Requirements:**

Invoice Due Date:

Requirements/Attachments:

Invoices Transmitted Via Electronic Mail to:

Offer ACH Direct Deposit:  Yes, Contact:

Not Sure, Contact Our Office

Not At This Time

Initials: Bowman

/ Client



## BOWMAN CONSULTING GROUP LTD. TERMS AND CONDITIONS

These Terms and Conditions are incorporated by reference into the Proposal and its exhibits (the "Proposal") from **Bowman Consulting Group Ltd.** ("Bowman") to **WSP USA Inc.** ("Client") for performance of services described in the Proposal and associated with the project described in the Proposal (the "Project"), and in any subsequent approved Change Order related to the Project. These Terms and Conditions, the accepted Proposal, and any Change Orders or other amendments thereto, shall constitute a final, complete, and binding agreement (the "Agreement") between Bowman and Client, and supersede any previous agreement or understanding.

**1. Scope of Services.** Bowman will provide the services expressly described in and limited by the Proposal (the "Scope"). If in Bowman's professional judgment the Scope must be expanded or revised, Bowman will forward a change order agreement to Client that describes the revision to the Scope (the "Change Order") and the adjusted fee associated therewith.

**2. Standard of Care.** The standard of care for all services performed by Bowman for Client shall be the care and skill ordinarily used by members of the applicable profession practicing under similar circumstances at the same time and locality of the Project. Client shall not rely upon the correctness or completeness of any design or document prepared by Bowman unless such design or document has been properly signed and sealed by a licensed professional on behalf of Bowman.

**3. Payment Terms.** Bowman will invoice Client monthly or more frequently based on a percentage of the work completed for lump sum tasks, number of units completed for unit tasks, and actual hours spent for hourly tasks. Invoices are due and payable in full upon receipt without offset of any kind or for any reason. Bowman shall have the discretion to apply payments made by Client to an invoice or retainer account of Client in accordance with its business practices. Client agrees to pay a finance charge of one and one-half percent (1.5%) per month from the invoice date on any unpaid balance not received by Bowman within thirty (30) days of the invoice date. Payment of invoices is subject to the following further terms and conditions:

(a) If any invoice is not paid in full within forty-five (45) days of the invoice date, and Client has not timely and in good faith disputed the invoice as provided below, Bowman shall have the right at its election by giving notice to Client to either: (i) suspend the performance of further services under this Agreement and, at its sole discretion, suspend the performance of further services on other projects which are being performed by Bowman on behalf of Client or any related Client entities, until all invoices are paid in full and Bowman has received a retainer in such amount as Bowman deems appropriate to be held as described below; or (ii) deem Client to be in material breach of this Agreement and proceed pursuant to Section 17 below. Client agrees to pay any and all charges, costs or fees incurred in collection of unpaid invoices, including reasonable attorneys' fees and costs. Following Bowman's election above, Bowman shall bear no liability to Client or any other person or entity for any loss, liability or damage resulting from any resulting delay, and any schedule for the performance of services hereunder prepared previously shall be deemed void with any future schedule for the performance of services requiring the approval of both Client and Bowman.

(b) If Client disputes any submitted invoice, Client shall give written notice to Bowman within thirty (30) days of the invoice date detailing the dispute. If no written notice of a dispute is provided to Bowman within that time period, the invoice shall then be conclusively deemed good and correct. If part of an invoice is disputed, Client shall remain liable to timely pay the undisputed portion of the invoice in accordance with the terms of this Agreement. Client and Bowman shall promptly negotiate in good faith to resolve any disputed portion of an invoice.

**4. Retainer and Other Payments.** Bowman reserves the right to require that Client make a payment to be held by Bowman as an advance against future billings (the "Retainer"). The Retainer is not intended as the regular source of payment for invoices issued to Client under this Agreement or otherwise, and the parties intend that the Retainer be applied to the final invoice for the services described in the Agreement, or against any other unpaid amounts owed to Bowman should Client (or any affiliate of Client) fail to timely pay invoices due Bowman. The Retainer account may consist in part of payments applied by Bowman pursuant to the authority granted it under Paragraph 3 above. If the Retainer is applied during the course of the Agreement, Client agrees to promptly replenish the Retainer upon request of Bowman. Upon the conclusion of this Agreement, or its earlier termination, Bowman shall (a) apply the Retainer to any unpaid amount owed Bowman by Client (or its affiliates), and (b) return any unapplied portion to Client. The Retainer shall not be required to be held in a separate account nor shall it bear interest, and the Retainer may include other amounts paid to Bowman by Client with respect to the Project or other projects.

**5. Client Duties and Responsibilities.** Client shall inform Bowman of any special criteria or requirements related to the Project or Scope, and shall timely and at its cost furnish any and all information in its possession relating to the Project, including reports, plans, drawings, surveys, deeds, topographical information and/or title reports. Bowman shall bear no responsibility for errors, omissions, inaccuracy or incompleteness in third-party information or additional costs arising out of its reliance upon such third-party information supplied by Client. Client warrants and represents that: (a) Client has obtained the full and unconditioned prior written consent from

# Bowman

any third-party for Bowman to use such third-party information; (b) such consent shall be provided to Bowman upon request; and (c) such consent shall be in a form that, in Bowman's reasonable discretion, does not violate any applicable law, regulation, or code of ethics. If the Scope requires a current title report, Client shall timely and at its cost provide such title report to Bowman. If the Scope includes preparation of plats to be recorded in the land records of the Project jurisdiction, Client shall timely prepare, submit, and record necessary deeds and pay all recording fees associated with deeds and plats. All off-site easements are the responsibility of Client. Client shall indemnify and hold harmless Bowman from and against any and all claims, demands, losses, costs, and liabilities, including without limitation reasonable attorney fees and expenses incurred by Bowman and arising out of (a) Client's breach of this Agreement or (b) an action by Client or a third-party with respect to any matter not included in the Scope or that is excluded from the responsibility of Bowman pursuant to this Agreement.

**6. Insurance.** Bowman and its employees are protected by workman's compensation, commercial general liability, automobile liability, and professional liability insurance policies. Upon request of Client, Bowman shall provide a certificate of insurance to Client evidencing such coverage and shall attempt to include Client as an additional insured on those coverages that permit additional insured status. Client acknowledges it has been offered the opportunity to review the current limits of such coverage and finds them satisfactory, and further agrees that in no event shall Bowman's liability to Client or any party claiming through Client be greater than the limits of such insurance. From time to time Bowman may, without notice to Client, amend the carriers, conditions, exclusions, deductibles or limits of any such insurance; provided that prior to any decrease in any insurance limit becoming effective Bowman shall give notice thereof to Client.

**7. Potential Liability of Bowman.** The following provisions shall operate with respect to any potential liability of Bowman arising under the Agreement:

(a) Client may not assert that there is a breach, defect, error, omission or negligence in the services performed by Bowman that Client believes creates liability on the part of Bowman unless Client gave written notice to Bowman not later than the first to occur of (i) the beginning of any corrective work, or (ii) thirty (30) days after Client had knowledge of the existence of the breach, defect, error, omission or negligence. Bowman shall have the opportunity to participate in decisions regarding the corrective work, and Client shall ensure that corrective action is taken at the lowest reasonable expense under the circumstances.

(b) Notwithstanding any other provision of this Agreement, the total liability, in the aggregate, of Bowman and Bowman's officers, directors, partners, employees, agents, and consultants to Client and anyone claiming through Client, shall not in any manner whatsoever exceed the direct losses incurred by Client (to the extent of and in proportion to Bowman's comparative degree of fault) that resulted from the error, omission or negligent act of Bowman in the performance of services under this Agreement.

(c) To the fullest extent permitted by law, Bowman and Bowman's officers, directors, partners, employees, agents, and sub-consultants shall not be liable to Client or anyone claiming through Client for any special, incidental, indirect, or consequential damages whatsoever arising out of, resulting from, or in any way related to the Project or this Agreement, regardless of whether such damages are alleged to be caused by the negligence, professional errors or omissions, strict liability, breach of contract, or breach of express or implied warranty.

(d) Client agrees that Bowman's shareholders, principals, partners, members, agents, directors, officers and/or employees shall have no personal liability whatsoever arising out of or in connection with this Agreement or the performance of services hereunder.

**8. Certificate of Merit.** In addition to the requirement of notice under section 7(a) above, Client shall make no claim (whether directly or in the form of a third-party claim) against Bowman unless Client shall have first provided Bowman with a written certification executed by an independent professional licensed in the state in which the Project is located and licensed in the profession to which the claim relates. Such certificate shall: (a) contain the name and license number of the certifier; (b) specify each and every act or omission which the certifier contends constitutes a violation of the standard of care expected of a professional performing professional services under similar circumstances; (c) state in complete detail the basis for the certifier's opinion that each such act or omission constitutes such a violation; and (d) be provided to Bowman thirty (30) days prior to the presentation of and as a precondition to any such claim, or the institution of any mediation, arbitration, judicial or other dispute resolution proceeding.

**9. Conflict Resolution and Applicable Law.** Any dispute, controversy or claim arising out of or relating to this Agreement, or the breach thereof, that cannot be resolved by the parties and for which the amount in controversy is less than One Hundred Thousand Dollars (\$100,000.00) shall be settled by arbitration administered in Fairfax County, Virginia by the American Arbitration Association in accordance with its Commercial Arbitration Rules and Expedited Procedures, and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction over the parties. For any other dispute, controversy or claim arising out of or relating to this Agreement, or the breach thereof, the parties agree to first submit such dispute, controversy or claim to non-binding mediation, with each party to bear its own costs of such mediation and to equally share the costs of any mediator. If such mediation does not successfully resolve all issues, then the parties agree that the state and federal courts located in Virginia shall have jurisdiction and



venue over such dispute. This Agreement shall be governed and interpreted in accordance with the laws of the state in which the Project is located, without giving effect to conflicts of laws principles thereof.

#### **10. Ownership of Documents and Other Rights of Bowman.**

(a) All reports, plans, specifications, computer files, field data, notes, and other documents and instruments prepared by Bowman as instruments of service ("Work Product") shall remain the property of Bowman up until such time as all monies due to Bowman have been paid in full, at which time (i) Client may take possession of the Work Product, and (ii) Bowman shall be deemed to have granted Client a fully paid, non-exclusive license to use the same solely for the Project. Subject to such license Bowman shall retain all common law, statutory, and other reserved rights, including the copyright to all Work Product. If Client or a party acting on Client's behalf modifies any part of the Work Product or reuses them on a different project, Client agrees to indemnify and hold Bowman harmless from any claim, liability or cost (including reasonable attorneys' fees and defense costs) arising therefrom. Client acknowledges that if Bowman provides Client with Work Product in an electronic or digital format ("Electronic Data"), Client is responsible for cross checking the Electronic Data with the applicable paper document for full conformance and consistency between such paper document and the Electronic Data.

(b) Bowman reserves the right to include photographs and descriptions of the Project in its promotional, marketing, and professional materials. Client grants its consent to Bowman for Bowman to install reasonable signage at the Project equivalent to that which is or could be installed by other vendors to the Project.

**11. Modification.** From time to time Bowman may either in writing or by electronic mail submit a Change Order to Client and Client shall be deemed to have approved such Change Order if: (a) Client signs the Change Order; (b) Client signifies its consent to the Change Order by electronic mail; or (c) a representative of Client with actual or apparent authority to approve the Change Order orally approves it and Bowman subsequently confirms such approval in writing or by email and begins work associated therewith without receiving written or electronic mail objection thereto. Except for Change Orders authorized by Client as provided immediately above, this Agreement may be amended, modified, or supplemented only in writing signed by all parties hereto. Any signature required or permitted hereunder may be either by hand or by electronic signature.

**12. Exclusions from Scope.** By way of illustration and not limitation, unless specifically included in the Scope, Bowman has no obligation or responsibility for: (a) favorable or timely comment or action by any governmental entity; (b) taking into account off-site conditions or circumstances that are not clearly visible or reasonably ascertainable by the performance of on-site services; (c) the accurate location or characteristics of any subsurface utility or feature that is not clearly and entirely visible from the surface; or (d) structural design (including, but not limited, to structural design of retaining wall(s) or of special drainage structure(s)).

#### **13. Limits of Scope.**

(a) Early Bid Documents. Client agrees that if it requests submission of Work Product documents to contractors for bid purposes either prior to full completion thereof by Bowman or prior to final governmental approval, the potential exists for additional design and construction costs arising from required subsequent revisions and additions to Bowman design documents so as to conform to those of other design disciplines and/or governmental agencies, and any such costs shall be Client's responsibility.

(b) Estimates. Any cost, timing or quantity estimates provided as a part of the Scope are estimates only and reflect Bowman's judgment as a design professional familiar with the construction industry, but expressly do not represent a guarantee of quantities or construction costs. Client agrees that Bowman has no control over contractors as to cost, timing, or quantity matters, and further agrees that if Client desires greater accuracy as to construction costs it should engage an independent cost estimator.

(c) Construction Means and Methods. Client agrees that Bowman does not control and is not responsible for construction means, methods, techniques, sequences, or procedures, or for any safety precautions in connection with the Project or for the acts or omissions of any contractor, subcontractor, or any other person or entity performing work for the Project.

(d) Shop Drawing Review. If specifically included in the Scope, Bowman shall review and check the contractor's shop drawings, product data, and samples, but only for the limited purpose of checking for general conformance with the intent of such contract documents. Client acknowledges that such review is not for the purpose of determining or substantiating the accuracy and completeness of other details, such as dimensions or quantities, or for substantiating instructions for installation or performance of equipment or systems designed by the contractor. Bowman's review shall not constitute approval of safety precautions, construction means, methods, techniques, schedules, sequences or procedures, or of structural features.

(e) Plan and Permit Processing. If the Scope includes preparation of plans and/or plats for review and approval by public agencies, submission and processing of such plans and plats in a manner consistent with a normal course of business is included within the Scope. If Client requests Bowman to either expedite the plan review process by attending meetings, hand carrying plans and

# Bowman

documents from agency to agency, or performing similar services, or to prepare and process permit applications of any type, then, unless specifically included in the Scope, those services will be performed by Bowman as hourly rate services under Section 14 below.

(f) **Building Plan Coordination.** If the Scope includes preparation of site plans, site grading plans, subdivision plans, or similar plans that involve coordination with building plans (including architectural, mechanical, structural, or plumbing plans) to be prepared by others, Client shall provide such building plans to Bowman by such date and in such state as Bowman reasonably deems necessary to timely perform its services. If Client fails to so provide building plans to Bowman, Bowman may make reasonable assumptions regarding building characteristics in order to timely perform its services and any later revisions to Bowman plans required to properly coordinate them with building plans will require a Change Order, subject to an additional fee.

**14. Fees by Hourly Rate Schedule.** If Client requests Bowman to perform services not included in the Proposal or an approved Change Order (including, without limitation, attending meetings and conferences on an as-needed basis with public agencies), Client shall compensate Bowman for such services in accordance with the Hourly Rate Schedule attached to and made a part of the Agreement. Expert witness testimony or participation at legal discussions, hearings or depositions, including necessary preparation time, will be charged at 150% of the quoted rates. If the Project extends beyond the calendar year in which the Proposal is dated, Bowman may revise its Hourly Rate Schedule in January of each subsequent year.

**15. Covenants Benefiting Third-Parties.** Bowman and Client acknowledge that from time to time third-parties may request Bowman to execute documents which benefit that third-party. These documents may include certifications, consent of assignment, and/or waiver of certain of Bowman's rights under this Agreement ("Requested Covenant"). Client acknowledges that execution of Requested Covenants is beyond the Scope, is at Bowman's discretion, and, if Bowman decides to so execute a Requested Covenant, the language, terms, and conditions of such Requested Covenant must be acceptable to Bowman, at Bowman's discretion.

**16. Assignment.** This Agreement may not be assigned by one party without the express written consent of the other party. Notwithstanding the forgoing, Bowman may employ consultants, sub-consultants, or subcontractors as it deems necessary to perform the services described in the scope. Also, Bowman may assign its right to receive payments under this Agreement.

**17. Termination.** Either party may terminate the provision of further services by Bowman under this Agreement for convenience with thirty (30) days advance notice to the other party. In addition, following a material breach by the other party, the non-breaching party may terminate the provision of further services by Bowman under this Agreement by giving ten (10) days prior notice and an opportunity to cure to the reasonable satisfaction of the non-breaching party. Client acknowledges that its failure to timely pay undisputed invoices is a material breach and that full payment of all undisputed invoices is required to cure such breach. Following any termination of services: (a) Client shall immediately pay Bowman for all services performed through the termination date, including reasonable costs of transitioning the Project to a new design professional designated by Client, if applicable; (b) Bowman shall have the right to withhold from Client the use or possession of Work Product prepared by Bowman for Client under this or any other agreement with Client, until all outstanding invoices are paid in full; (c) if the termination by Bowman resulted from a material breach by Client, Bowman shall have the right to withdraw any Work Product or other documents filed with any governmental agency by Bowman in its name on behalf of Client; and (d) if Client selects a new design professional then, as a condition of transferring any files or documents, Client and Client's new design professional shall execute Bowman's standard Electronic File Transfer Agreement or such other similar agreement as the parties shall in good faith negotiate.

**18. Miscellaneous.** If any provision of this Agreement shall be held invalid, illegal or unenforceable, the other provisions of this Agreement shall remain in full force and effect. The failure of a party to enforce any provision hereof shall not affect its right at a later time to enforce same. A waiver by a party of any condition or breach hereunder must be in writing to be effective and, unless that writing provides otherwise, shall waive only one instance of that condition or breach. This Agreement is solely for the benefit of the parties hereto and no provision of this Agreement shall be to confer upon third-parties any remedy, claim, liability, reimbursement, cause of action, or other right. The headings in this Agreement are for convenience and identification purposes only, are not an integral part of this Agreement, and are not to be considered in the interpretation of any part hereof. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. References in this Agreement to any gender shall include references to all genders. Unless the context otherwise requires, references in the singular include references in the plural and vice versa. The words "include," "including," or "includes" shall be deemed to be followed by the phrase "without limitation." The individual who signs this Agreement warrants that he has the authority to sign as, or on behalf of, Client, and to bind Client to all of the terms and conditions of this Agreement. To the extent that they are inconsistent or contradictory, the terms of the Proposal or an authorized Change Order shall supersede these Terms and Conditions.

**19. Notices.** Any notice, request, instruction, or other document to be given hereunder by a party hereto shall be in writing and shall be deemed to have been deemed delivered: (a) on the day sent if delivered personally or by courier service during regular business hours (i.e., prior to 5:00 p.m. on weekdays that are not Federal holidays); (b) on the business day after the day sent if sent by overnight delivery service; or (c) two business days after the day sent if sent by certified mail or delivered by two-day delivery service.

# Bowman

If to Client, notice shall be addressed to the individual signing this Agreement at the address noted on the Proposal.

If to Bowman, notice shall be sent to the address set forth in the proposal, with a copy sent to:

Bowman Consulting Group Ltd.  
12355 Sunrise Valley Drive, Suite 520  
Reston, Virginia 20191  
Attn: Robert A. Hickey

or to such other individual or address as a party hereto may designate for itself by notice given as herein provided.

Initials: Bowman / Client

**Town of Vienna - Bear Branch @ Onondio Stream Restoration**  
**Detailed Cost Estimate**  
**6-Apr-26**



Task	Director, Engineer	Senior Consultant, Engineer	Consultant, Engineer	Senior Consultant, Scientist	Consultant, Scientist	Direct Expenses		Total Cost
						Bowman Consulting Group	Total Expenses (5% Markup)	
<b>Rates</b>	\$256.75	\$138.65	\$123.24	\$138.65	\$123.24			
<b>Task A - Geomorphic Assessment</b>	44		8	48	22	\$0	\$0	\$21,649
Watershed Assessment	7		2	6	6		\$0	\$3,615
Geomorphic Channel Assessment/Hydrologic Comparison	15		2	14	6		\$0	\$6,778
Detailed Stream Characterization	12		2	24	6		\$0	\$7,395
Assessment of Stable Reaches along Bear Branch	10		2	4	4		\$0	\$3,862
<b>Task B - Survey Subcontractor</b>	0		0	0	0	\$55,300		\$58,065
Survey Services						\$55,300	\$2,765	\$58,065
<b>Task D - Environmental Services</b>	38		0	129	53	\$0	\$0	\$34,174
Wetlands and Waters of the U.S. Delineation	2			20	20		\$0	\$5,751
USACE Jurisdictional Determination	5			2	2		\$0	\$1,808
Threatened & Endangered Species Review	2			8	2		\$0	\$1,869
Cultural Resources Review	2			8	1		\$0	\$1,746
Section 404/401 Permitting	8			55	4		\$0	\$10,173
Natural Channel Checklist & Geomorph Table	16							\$4,108
Tree Identification and Assessment	3			36	24			\$8,719
<b>Task E - 60% Concept Design</b>	88		110	50	20	\$0	\$0	\$45,548
Concept Design	60		90	40	20		\$0	\$34,507
Meeting with Town and Stakeholders	8		4	4				\$3,102
Stream Walk	8		4	4				\$3,102
Planning Level Cost for Concept	12		12	2				\$4,837
<b>Task F - 100% and Final Construction Documents</b>	288		155	65	45	\$0	\$0	\$107,604
Submit 100% Set	160		55	40	35		\$0	\$57,718
Meeting with Town to Discuss 90% Comments	8							\$2,054
Address Comments and Finalize Plan Set	60		40	15	10			\$23,647
Technical Specifications	36		40					\$14,173
Develop Engineering Cost Estimate	24		20	10				\$10,013
<b>Task G - Floodplain Analysis</b>	24	48	0	0	0	\$0	\$0	\$12,817
Existing Conditions Model/Validation	8	16						\$4,272
Proposed Conditions Model	8	16						\$4,272
Model Revisions as a result of design iterations	8	16						\$4,272
<b>Task H - VSMP Permit / SWPPP</b>	8		0	30	0	\$0	\$0	\$6,214
Technical Assistance VSMP / SWPPP	8			30				\$6,214
<b>Task I - PreBid Meetings/Response to Bidder Questions</b>	24		16	8	0	\$0	\$0	\$9,243
Provide Town with Prequalification Language	4							\$1,027
Attend one Pre-Bid Conference Meeting	4		8	4				\$2,568
Assist with Answering Contractor Questions	16		8	4				\$5,649
<b>Task J - Construction Observation Services</b>	190		0	190	190	\$0	\$0	\$98,542
Construction Observation	190			190	190			\$98,542
<b>Task L - Project Management</b>	140		0	0	0	\$0		\$35,945
Overall Project Management, Invoicing and Client Coordination	140							\$35,945
<b>TOTAL</b>	<b>844</b>	<b>48</b>	<b>289</b>	<b>520</b>	<b>330</b>	<b>\$ 55,300.00</b>	<b>0</b>	<b>\$429,801</b>