

Virginia Conservation Assistance Program

Presented by Virginia Association of Soil & Water Conservation Districts

Contract Number

CONTRACT

VCAP Form 1

Part A. Application

I, _____ (PRINT) hereby make application to _____ Soil & Water Conservation District for cost-share assistance to purchase and install a best management practice as described in part B below.

I agree that all best management practice(s) approved will be installed, operated, and maintained in accordance with the practice(s) standard(s) and the Landowner Agreement (VCAP Form 3). I/We agree not to use the BMP for purposes of Nutrient Trading or regulatory compliance. I/We shall indemnify and save the District harmless from any and all claims for damages to persons or property arising from the installation, maintenance, repair, operation or use of the BMP(s).

I understand that it is my/our responsibility to pay in full all bills for work completed under this agreement prior to submission of eligible bills for reimbursement.

I understand that VCAP cost-share funds may be combined with other grant or cost-share resources, but may not exceed one hundred percent (100%) of total costs for the practice.

Mailing Address:	Phone:
Address of Practice (if different from mailing address):	Email:
Participant Signature:	Circle one: Landowner or Representative
SSN / Tax ID (Attach IRS Form W-9):	

The local Soil and Water Conservation District (SWCD) is required to issue a 1099-form to the Internal Revenue Service (IRS) for any individual to whom it issues a check for \$600.00 or greater. Because the IRS uses the Social Security number or Federal Tax ID number as a unique identifier, the SWCD must collect that information from any individual to whom it issues a check. The SWCD does not use the Social Security number or Federal Tax ID number for any purpose other than that stated above.

Part B. Technical Determination and District Approval (To be completed by District Staff)

Practice Code & Title	Practice Size (sq. ft., lin. ft., gal)	Total Estimated Cost	Approved Estimated Cost-Share	Required Completion Date
Rain Garden	290 ft ²	\$4,682.75	\$3,500.00	TBD

I have reviewed this application and all supporting documentation and have indicated the quantity authorized based on technical need. This practice must be installed and certified by the completion date.

X

Date

Application Approval:

X

District Director Signature

Date



Virginia Conservation Assistance Program

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JOB SHEET

Contract Number

VCAP Form 2

This Job Sheet is to be filled out by District technical staff. Please document any information that helps to describe any unique aspects of the project from design to completion. The Job Sheet is an active document and will need to be updated as the project progresses. It will document the installed practice and must be submitted to the Program Coordinator at project completion. If completed project differs from the original design approved by the Steering Committee, explain and justify the changes on this Job Sheet.

Tracking and Reporting:

Property Owner: _____ Address: _____
Representative (if applicable): _____ Phone Number: _____
Hydrologic Unit Code: _____ GPS Coordinates: _____
Practice Code & Description: Rain Garden (RG)
Dominant Land Use Treated: Turf/Compaction
Contributing Drainage Area (sq. ft.): 5650ft² Impervious Area Treated (sq. ft.): 1450ft²
Practice Size (sq. ft., lin. ft., gal.): 290ft² Impervious Surface Removed (sq. ft.): 0ft²
Installation Date: TBD

Site Assessment: Describe the current conditions of the site, landowner goals/concerns, resource concern needing to be addressed, and the proposed water quality benefit of the project. Note all ranking considerations and attach ranking spreadsheet. Include photo documentation of site conditions and resource concerns. (Describe or attach.) Ranking Score: 83.2

Attached

Project Layout: Attach an aerial of site and sketch or outline the practice layout, contributing drainage area, impervious area treated, location and flow paths of downspouts/channels, and any known utilities or right-of-ways. Note the proximity to waterways or stormwater conveyance systems. (Describe or attach.)

Attached

Contract Number

Design and Specification: Include sizing calculations, practice dimensions, soil evaluation results, site preparation plan, pretreatment measures, outlet and overflow, cross section and profile, planting plan (with scientific names), and cost estimates. (Describe or attach.)

Attached

Construction and Installation: Include sizing calculations, practice dimensions, soil evaluation results, site preparation plan, pretreatment measures, outlet and overflow, cross section and profile, planting plan (with scientific names), and itemized cost estimates, including estimated volunteer labor time. (Describe or attach.)

Attached

Infiltration Rate = $\sim 8.0 \text{ in/hr}$

Permits: Confirm local policies, such as land disturbance, grass heights, etc. (Describe or attach.)

Attached

Operation and Maintenance Plan: (Describe or attach.)

HUC: JM86

Total CDA: ~ 5,700 sq. ft.

Narrative

The proposed treatment area is approx. 5,700 sq. ft. The primary resource concerns addressed are poor vegetative cover, semi-compaction, and deposition from too much impervious runoff (sheet flow). The property backs up against _____ Creek and receives upland sheet flow from asphalt and turf. The resource concerns will be treated using a 290 sq. ft. rain-garden at the north-east quadrant of the house. This is a natural low area which will catch overland flow as well as downspout runoff. There is a gradual south-western slope from _____ Rd. towards the house. The area is adjacent to a forested/wetland area (see aerial), and therefore was chosen to maximize mitigation of pollutants. The adjacent section of the rain-garden will be bermed and a gravel flow-spreader will be installed at the downspout.

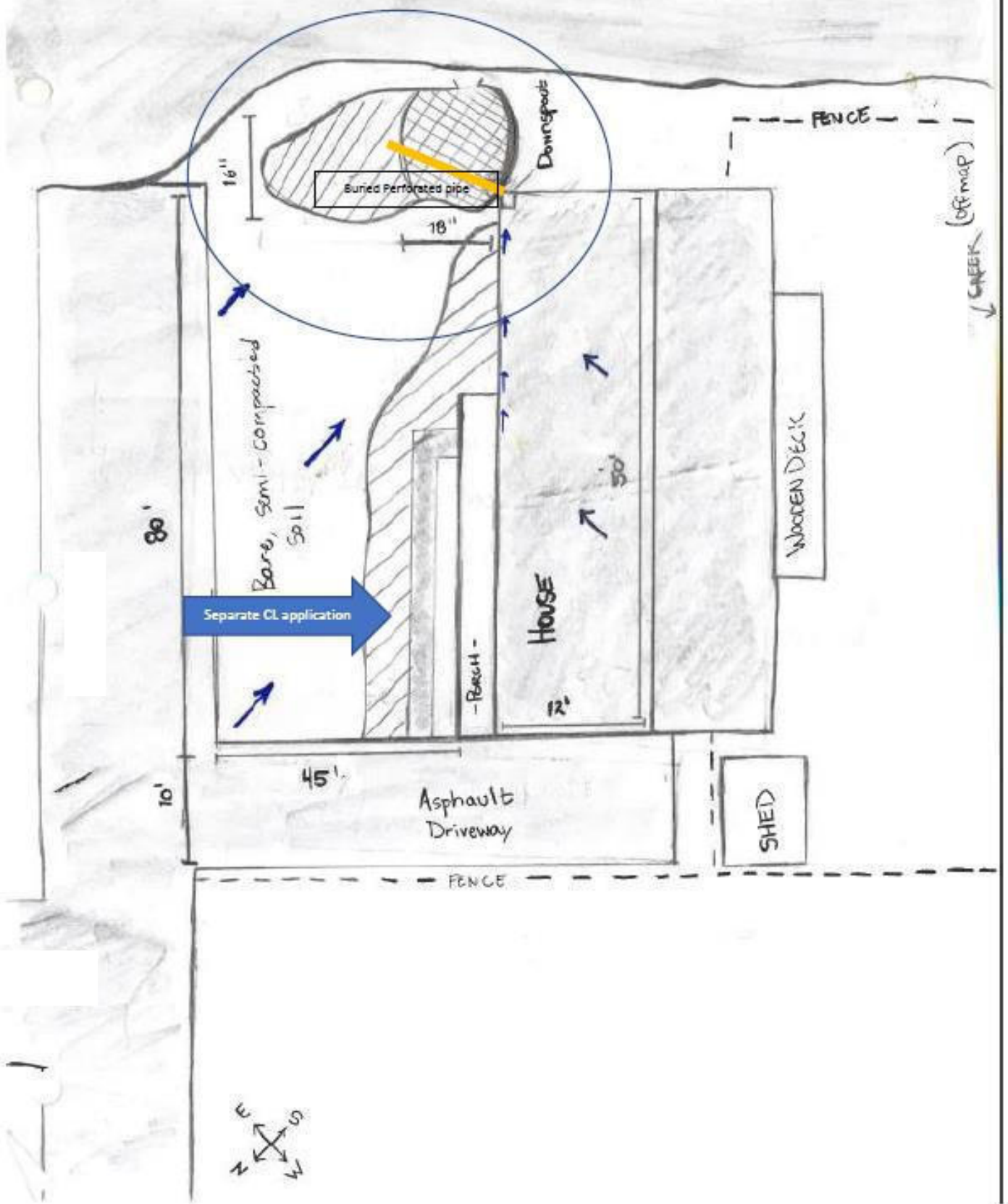
*The design has a ~400 sq. ft. rain-garden, however, this has now been updated for 290 sq. ft. Increased ponding depth to 9-inches to fit VCAP spec.

Maintenance

- Regular watering and pruning of plants in first year
- Clean debris from garden, gutters, and flow-spreader
- Manage/eradicate invasives and weeds
- Clean and reapply mulch as needed
- Limit the use of herbicides/pesticides



FORESTED LOWLAND / Ephemeral pond



Resource Concerns

- Bare, compact soil in front yard.
- Lowest elevation in neighborhood, adjacent properties contributing to drainage area?
- Creek flows just beyond the backyard
- Lowland/Wetland area to the East of property

Plan

Construct a rain garden in the East corner of the property beneath the downspout

Impervious Surface







SERVICE / PRODUCT	DESCRIPTION	QTY.	UNIT COST	TOTAL
Installation	Installation: install dry creek bed leading from down spout to rain garden (dig out put down rock); create rain garden -size to be approximately 290 sq. ft. with a 9" ponding depth(no amended sub-soil; berm only) ; install plants; edge and mulch	1	\$3,120.00	\$3,120.00*
Plants	Plants: see attached spreadsheet for detail-please pay particular attention to estimated size of plant at time of installation. If you wish to have a larger/smaller size quoted please let us know	1	\$442.75	\$442.75*
Material	Material: topsoil for building berm around rain garden-pricing per cubic yard-estimate -will invoice actual amount used-may not need-can probably use dirt that is excavated	1	\$40.00	\$40.00*
Rental Equipment	Equipment for digging out rain garden area	1	\$475.00	\$475.00*
Material	Materials for dry creek bed: estimating approximately 30' long x 2' wide (landscape cloth, pins, rock (1-3" brown river rock)-estimate -will invoice actual amount used	1	\$245.00	\$245.00*
Mulch/Amendments	Mulch/Amendments-estimate-will invoice actual amount used. Labor will adjust accordingly	3	\$45.00	\$135.00*
Mulch Labor	Mulch installation by the cubic yard	3	\$75.00	\$225.00*

Subtotal \$4,682.75

VA Sales Tax (5.3%) \$0.00

Total \$4,682.75

* Non-taxable

Quotation Prepared By: _____

Date: _____

This is a quotation on the goods and services named. Payment in full due within 10 days of invoice being sent.

Forms of payment accepted: Check, Cash, MasterCard, Visa, American Express, Discover. A 3.75% convenience fee will be added to payments via credit card.

**Client
Date**

11/15/2018

Plant Legend				Retail Cost Total		Notes	Rain Garden Only Plants
Purchase Size	Qty	Key	Botanical	Plant	Cost	Mature Size	
Trees		Warranty: one year, one time replacement-see below for exceptions					
6-8'	1		Cercis canadensis 'Forest Pansy'	225.5	225.5	20-30' tall and wide	
30-36"	3		Hamamelis x intermedia 'Diane'	46.95	140.85	10-15' tall and wide	
Shrubs		Warranty: one year, one time replacement-see below for exceptions					
12-15"	13		Azalea 'Gumpo Fancy'	26.25	341.25	1.5' x 3'	
12-15"	3		Cornus stolonifera 'Arctic Fire'	39.75	119.25	3-6' tall and wide	
12-15"	3		Hydrangea quercifolia 'Ruby Slippers'	36	108	3-4' x 4-5'	119.25
12-15"	16		Ilex glabra 'Shamrock'	28.95	463.2	3-4' tall and wide	
12-15"	2		Myrica cerifera	27	54	10-12' x 8-10'	54
12-15"	3		Physocarpus opulifolius 'Diablo'	54	162	6-8' tall/wide	
Perennials & Grasses		Warranty: 30 days, one time replacement					
	6		Aconus calamus	8.25	49.5	1-2' tall/wide	49.5
	18		Anemone x 'Queen Charlotte'	10	180	3-4' flower stalks	
	7		Chelone glabra	10.75	75.25	2-3' x 1-11/2'	75.25
	6		Iris versicolor	8.75	52.5	2-2.5' tall and wide	52.5
	5		Iris virginiana	8.75	43.75	2-2.5' tall and wide	
	5		Onoclea glabra	7.95	39.75	3-4'tall/wide	39.75
	14		Osmunda spectabilis	7.95	111.3	2-3' tall/wide	
	14		Stylophorum diphyllum	7	98	12-18" tall/wide	
			Plant total		\$ 1,940.60		\$ 390.25

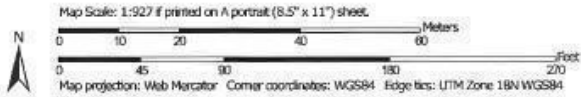
Pricing includes sales tax

WARRANTY INFORMATION

Shrubs and trees guaranteed for one year, with a one time replacement.*
Perennials and grasses guaranteed for 30 days with a one time replacement
*Exclusions: Damage due to excessive moisture, snow, ice, wind, (including falling trees) and damage from humans (i.e. hitting plants with mowers, string trimmers, etc.)

Appendix A: Size worksheet

1. Roof surface area (length times width of roof)	$\sim \underline{600} \text{ ft}^2$	Sq. ft.
2. Other impervious surfaces area (length times width of other surfaces)	$\sim \underline{850} \text{ ft}^2$	Sq. ft.
3. Total impervious surface area (line 1 + line 2)	$\sim \underline{1450} \text{ ft}^2$	Sq. ft.
4. Pervious surface area	$\sim \underline{4200} \text{ ft}^2$	Sq. ft.
5. Depth Factor	$\frac{1.0 \text{ (12 inches)}}{1.3 \text{ (9 inches)}}$	
6. Size of rain garden: Impervious surfaces (Line 3 x line 5 x .072)	$\sim \frac{705 \text{ ft}^2}{135 \text{ ft}^2}$	Sq. ft.
7. Size of rain garden: Pervious surfaces (Line 4 x line 5 x .028)	$\sim \frac{118 \text{ ft}^2}{155 \text{ ft}^2}$	Sq. ft.
8. Size of rain garden: Impervious plus pervious surfaces (Line 6 + line 7)	$\sim \frac{225 \text{ ft}^2}{290 \text{ ft}^2}$	Sq. ft.



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1A	Fluvaquents	3.3	76.7%
207C	Colfax sandy loam, 6 to 12 percent slopes	1.0	23.3%
Totals for Area of Interest		4.3	100.0%

VCAP Practice Ranking Sheet (VCAP Form - 6)

This form is to be filled out by District Staff for each application submitted for funding approval to the VCAP Steering Committee. Include the Contract Number (District## - CY## - Application Number###), Practice Code (abbreviation), Estimated Cost (if applicable), Cost Share Requested and Resource Concern.

Contract #	
Practice	RG
Estimated Cost	\$4,682.75
Cost Share Requested	\$3,500.00
What is the Resource of Concern?	Poor Cover

****Please only enter data in the "Input" column. "Points Earned" will be automatically generated.****

RANKING CRITERIA	Input (1/0)	POINT VALUE	TOTAL POINTS EARNED	NOTE
Site Assessment				
Resource Concern Identified and Addressed by the Selected BMP - Select One				
Erosion Impact Area (visible erosion and/or deposition); or	0	20	0	
Poor Vegetative Cover (Density <= 75%); or	1	15	15	
Impervious surface runoff; or	0	10	0	
managed turf runoff.	0	5	0	
Ownership - Select One				
The practice is for an individual Private Residence; or	1	10	10	
The practice is for a HOA or Business or Non-Profit; or	0	7	0	
The practice is for a Public Park or School or Facility.	0	5	0	
Presence of Stormwater Management Facilities Downstream of the Site				
The site runoff is currently untreated	1	10	10	
Proximity to Stormwater Conveyance System or Waterway - Select One if applicable				
Resource Concern within 40 feet; or	0	20	0	
Resource Concern within 100 feet; or	1	10	10	
Slope - Select One if applicable				
The practice treats poorly vegetated or eroding slope equal to or greater than 15 %	0	10	0	
The practice mitigates concentrated runoff to a slope equal to or greater than 15 %	0	5	0	
TMDL Implementation Plan, MS4 Locality, or Comprehensive Stormwater Management Plan				
Practice addresses local sediment or nutrient goals	0	10	0	
BMP Selection				
BMP Type - Select One if applicable				
Is the proposed BMP structural (e.g. RG, DW, CW, VSC, RH, BR, IF, PP, GR)?, or	1	10	10	
Converting Impervious Surface to Conservation Landscaping, or	0	10	0	
Impervious Surface Removed, or	0	5	0	
Living Shoreline proposed on unprotected lands, or	0	10	0	
Living Shoreline replaces failing stabilization practices, or	0	5	0	
Forested Riparian Buffer (minimum 35 feet wide); or	0	10	0	
Vegetated Filter Strip (minimum 35 feet wide)	0	5	0	
Proposed BMP provides Alternative Disconnection				
Selected BMP disconnects and disperses impervious runoff	0	10	0	
Treatment Area (Does Not apply to LS or CL unless configured as Filter Strip with 35 feet minimum length)				
Input Impervious Area Treated in square feet; and	1450	1.45	1.5	
Input Total Contributing Drainage Area in square feet	5650	5.1	5.1	

Installed Area - Select One (Does Not apply to ISR or GR)			
Input Surface Area of the Practice Installed; or	290	0.6	0.6
Input Gallons Storage, or	0	0.0	0.0
Input Linear Foot of Practice installed	0	0.0	0.0
Application Strength			
Partnership			
Applicant is working with a partner agency or NonProfit	0	5	0
Educational Value			
Practice is publicly accessible, or is part of an educational program	0	10	0
Cost Effectiveness			
Cost per Impervious Area Treated (\$/SF), and	3.23	18.6	18.6
Cost per Installed Area (\$/SF or \$/Gal or \$/LF)	16.15	1.2	1.2
Pollutant Removal			
BMP Pollutant Removal Efficiency (EFF)	0.5		
Contributing Drainage Area Weighted Runoff Value (Rv)	0.429646		
Pollutant Load (PL), Lbs Phosphorus per year	0.13	1.3	1.3
TOTAL RANKING POINTS			83.2