

Attachment A
Municipal Separate Storm Sewer System Credit
PA Statewide Contract for the
Chesapeake Bay Watershed

Table of Contents

- I. Definitions**
- II. General Information**
- III. Scope of Work**
- IV. Standard Specifications**
- V. Bid Requirements**
- VI. Invoicing and Billing Instructions**
- VII. Diversity, Inclusion and Small Business Opportunities (DISBO) Program**
- VIII. Pre-Bid Conference**

I. Definitions

The following words and terms, when used in this Statement of Work, have the following meanings, unless the context clearly indicates otherwise.

BMP. A Best Management Practice. BMPs related to stormwater discharge are sometimes also referred to as stormwater control measures (SCM). For this contract, stream restoration is considered a key BMP that must be incorporated into the response.

Construction. When used to denote a period of time, construction means the period that begins when physical work starts on the BMP(s) and ends when the Contractor supplies PennDOT with as-built records sealed by a licensed professional documenting that all BMPs have been fully constructed in accordance with the design drawings.

CCD. County Conservation District.

Direct Nexus. A connection between a BMP and a water quality improvement sufficient that PADEP and EPA will allow credit to PennDOT and the Municipal Partners for the BMP for purposes of complying with MS4 permit requirements and any applicable Total Maximum Daily Load.

EPA. The United States Environmental Protection Agency.

Long-term Operation and Maintenance. Operating and maintaining a BMP on an ongoing basis following construction, as required by the PADEP Guidance Documents, for PennDOT and the Municipal Partners to receive credit for the reductions under an NPDES MS4 PRP.

MS4. Municipal Separate Storm Sewer System.

NPDES. National Pollutant Discharge Elimination System.

Offeror. The person offering the proposal.

PADEP. The Commonwealth of Pennsylvania, Department of Environmental Protection.

PADEP Guidance Documents. PADEP documents that provide guidance for calculating sediment reduction and for developing MS4 PRPs and TMDL plans, along with any updates to them. To the extent that these documents conflict, the most recently published or updated document controls. Most of the PADEP Guidance Documents are available on PADEP's eLibrary (www.elibrary.dep.state.pa.us) under – Permit and Authorization Packages – Clean Water – PAG-13 NPDES General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) and Individual NPDES Permit Application for MS4s. The following PADEP Guidance Documents are of particular importance to this Statement of Work:

- PRP Instructions (Document 3800-PM-BCW0100k Rev. 3/2017)
- TMDL Plan Instructions (Document 3800-PM-BCW0200d Rev. 3/2017)
- BMP Effectiveness Values (Document 3800-PM-BCW0100m Rev. 6/2018)
- Considerations of Stream Restoration Projects in Pennsylvania for eligibility as an MS4 Best Management Practice, May 11, 2018 ([files.dep.state.pa.us/Water/BNPNSM/StormwaterManagement/Municipal Stormwater/PRP_TMDL_Plans/Stream%20Restoration%20Eligibility%20for%20MS4%205.11.2018.pdf](https://files.dep.state.pa.us/Water/BNPNSM/StormwaterManagement/MunicipalStormwater/PRP_TMDL_Plans/Stream%20Restoration%20Eligibility%20for%20MS4%205.11.2018.pdf))

Chesapeake Bay Watershed. The HUC 12 area of the Chesapeake Bay Watershed in PA.

PennDOT. The Commonwealth of Pennsylvania, Department of Transportation.

Post-Construction. When used to denote a period of time, post-construction means the 5-year period of time for a particular BMP that begins at the end of construction but ends at the start of Long-term Operation and Maintenance.

PRP. Pollutant Reduction Plan.

Sediment Reduction Credit. Credit in accordance with the PADEP Guidance Documents (www.elibrary.dep.state.pa.us) toward PennDOT's and the Municipal Partners' current, future or anticipated obligations to reduce sediment discharging to the Chesapeake Bay Watershed. Credit is measured in pounds of sediment reduced annually for purposes of this Statement of Work. The term excludes sediment reduction credit already used or accounted for under other required environmental mitigation.

The following rules apply to calculating Sediment Reduction Credit for purposes of this IFB:

For the stream restoration BMPs proposed by the Contractor, the default BMP effectiveness value of 44.88 lbs/ft/yr TSS sediment reduction (edge of stream) shall be used as the minimum criteria to calculate the total load reduction where existing sediment loads have been calculated using the Chesapeake Bay loading rates (i.e., the "Simplified Method"), as established in PADEP's BMP Effectiveness Values (Document # 3800-PM-BCW0100m 6/2018). Sediment reduction credits must be calculated using the centerline of the stream and not the bank length. If the Contractor believes a specific site will produce a sediment reduction credit higher than the default rate, the Contractor must provide written justification for the higher rate with the proposal. The reduction credit provided must follow all aspects of the protocol(s) chosen from the *Expert Panel* Report. For example, proposals utilizing Protocol 1 shall include information on the stream sediment erosion rate estimation methods, sediment delivery ratio, and restoration efficiency as applicable. PennDOT, at its sole discretion, may reject any bid that uses a higher rate if PennDOT is not satisfied by the written justification for the rate. Soil density testing may also be required to verify assumptions. Further, because the actual removal rate is

unknown at the time of bid and because of the potential that PADEP may not approve the higher removal rate during the monitoring period, PennDOT may adjust the payment schedule set forth in Paragraph VI, Invoicing and Billing Instructions of this Statement of Work by reducing the payments at earlier milestones and correspondingly adjust the payments at the final milestone so that the total payment will achieve the unit price bid by the Contractor. The proposed work must adhere to one of the eligible protocols covered in the Chesapeake Bay *Recommendations of the Expert Panel to Define Removal Rates for Individual Stream Restoration Projects* (Schueler, T. and B. Stack), <https://chesapeakestormwater.net/bmp-resources/urban-stream-restoration/>

- If BMP effectiveness values are updated in DEP's BMP Effectiveness Values document or in Chesapeake Bay Program Expert Panel Reports between the time the PRP is approved and the time the final report is developed to document compliance with the permit, those updated effectiveness values may optionally be used, in accordance with prevailing MS4 permit conditions.

TMDL. Total Maximum Daily Load.

Unit Price. The total amount paid to the Contractor pursuant to this IFB divided by the total annual sediment reduction credit to be achieved by the proposal (\$/lb TSS/year).

Urbanized Area. An area identified as urbanized by the 2010 United States Decennial Census.

USACE. The United States Army Corps of Engineers.

Contractor. The awarded offeror. In the terms and conditions and standard specifications included elsewhere in this IFB.

II. General Information

PennDOT is procuring services to reduce sediment pollution in the Chesapeake Bay Watershed in Pennsylvania (PA). PennDOT has Pollutant Reduction Plan (PRP) obligations in the National Pollutant Discharge Elimination System (NPDES) and is operating under an administratively extended prior permit with anticipation of a future permit that will include a sediment reduction requirement. PennDOT requests bids for a project to construct stormwater Best Management Practices (BMPs), specifically stream restoration projects, that reduce sediment pollution discharging to the watershed. Municipal collaboration may be used with both PennDOT and Municipal Partners receiving 100% each of the sediment reduction credit toward their permit obligations.

The municipality must have included state highway impervious surfaces in their Pollutant Reduction Plan (PRP).

The BMPs must be located in the Chesapeake Bay Watershed, in PA, and there must be a direct nexus between the BMPs and water quality improvement for the sediment-impaired waterways in the watershed. The bid, and thus the services and required items of work included in that bid, shall include but not be limited to siting, design, permitting (Chapter 102, Chapter 105, and any Pollutant Reduction Plan revisions), acquisition of property interests, construction, inspection, monitoring during- and after construction, and long-term operation and maintenance of the BMPs. Long-term operation and maintenance must be provided by an entity other than PennDOT.

Sediment reduction credit will be calculated in accordance with PADEP Guidance Documents on PRPs in NPDES permits for MS4s. The length of the contract will be five (5) years unless otherwise stated.

Acceptable Efficiency Rates

Contractors shall follow DEP guidance posted on their MS4 Website on the [PRP/TMDL Plan](#) page. Under the "Resources" heading there are links to checklists that permittees are encouraged to review to become familiar with the level of documentation that DEP expect to see when stream restoration projects are submitted for crediting review.

The Expert Panel Protocol checklist lists the default restoration efficiency of 50%, as well as the option of a higher (up to 75%) efficiency if adequate justification for use of the higher than default restoration efficiency is provided through submission of the following:

- Documentation that a secondary method of assessing the bank erosion rate was used to validate the field assessment (BANCS) data.
- 1 years' worth (minimum) of pre-construction monitoring data collected.
- Documentation of post-construction monitoring plan.

If post-construction monitoring is conducted for at least one year after project completion and it can be shown that a higher efficiency is justified, the permittee may request a re-evaluation of the project efficiency (up to 90%). An efficiency higher than 75% will not be considered by DEP until at least one year after the project has been implemented.

Questions regarding the IFB or contracting procedures should be directed to David Stillions at dstillions@pa.gov.

This IFB is for the payment of sediment removal credit not already used or accounted for under any other required environmental mitigation.

Basis of Award

The award will be based upon the lowest total cost per pound of annual sediment reduction credit that can be achieved in five years for the compensation of \$2,500,000.00.

PennDOT reserves the right to reject the lowest bidder if PennDOT determines, at its sole discretion, that the vendor's proposal fails to meet the requirements of this Scope of Work.

III. Scope of Work.

The scope of services to be delivered includes all of the following:

Task 1: Prepare Conceptual PRP, Identify Sites and Design the BMPs.

Following award, the Contractor must prepare and submit a Conceptual PRP, which is a document that describes in narrative form the Contractor's approach to achieving the bid cost per pounds of sediment reduction credit in five years for the compensation of \$2,500,000.00. The Conceptual PRP must demonstrate a direct nexus between the BMPs and water quality improvement for waterways in the Chesapeake Bay Watershed that are impaired by sediment and treating flow from urbanized areas.

PennDOT reserves the right to terminate the contract if PennDOT determines, at its sole discretion, that the Conceptual PRP fails to meet the requirements of this Scope of Work.

The Conceptual PRP also must include the following information:

- A. The Conceptual PRP must include stream restoration as the BMP incorporated into the plan as a qualification for the federal funds to be provided to PennDOT for this project.
- B. Visual sketches and schematics for each proposed BMP.
- C. The location for each proposed BMP.
- D. A property acquisition approach. The Contractor's work plan must describe the approach that the Contractor will use to acquire the necessary property interests to construct, operate, maintain and assure long-term operation and maintenance of the BMPs in conformance with Task 3 below.
- E. An estimated timeline for constructing the BMPs.
- F. Preliminary sediment baseline, reduction and effectiveness calculations, including total pounds of sediment reduction annually in accordance with the methods described above under the definition of the term Sediment Reduction Credit.

Task 2: Acquire the Property Interests to Construct, Maintain and Preserve the BMPs.

The Conceptual PRP must describe the approach that the Contractor will use to acquire the necessary property interests to construct, operate, maintain, preserve, and assure long-term operation and maintenance of the BMPs. Examples of property interests include long-term leases, easements, and fee simple ownership. If the property is not owned by the Commonwealth, the areas where BMPs are located will require the Contractor to acquire the right to record, and record an instrument (e.g., a conservation easement or deed restriction) identifying and preserving the BMP; identifying the entity responsible for the long-term operation and maintenance of the BMP; and granting reasonable access for inspection to EPA, PennDOT, PADEP, CCD, potential Municipal Partners, and the entity responsible for long-term maintenance. The Contractor may use their own property, acquire property, acquire easements or leases, or enter into agreements. The Contractor shall obtain local stormwater permits for each project. The Contractor must record easements or deed restrictions conforming to this Task and Task 3 below in the County Recorder of Deeds Office for properties not owned by the Commonwealth or Municipality.

The Contractor, at its sole discretion and risk, may contact the Municipal Partners to inquire whether municipal land is available to be used to implement BMPs. If use of municipal land is being proposed, the Conceptual PRP must include a committal letter from the Municipal Partner. The Municipal Partner must remain non-exclusive for bidding purposes.

The Contractor may use state highway right-of-way for the project only if both of the following requirements are met:

- A. The Contractor must attach to the proposal a committal letter from the District Executive. PennDOT has sole discretion over whether to issue a committal letter. The most likely reason that PennDOT might refuse to issue a committal letter is that the Contractor's proposed use conflicts with the existing use or an anticipated future use of the highway right-of-way. PennDOT, however, reserves the right to refuse to issue a committal letter for any reason whatsoever.
- B. The Contractor must apply for and obtain one or more highway occupancy permits from PennDOT allowing the work prior to beginning construction within the state highway right-of-way. The Contractor must satisfy all highway occupancy permit requirements.

Task 3: Provide for Long-Term Operation and Maintenance of the BMPs

The Contractor will be responsible for post-construction operation and maintenance for 5 years before turning over the long-term maintenance to another entity if the Contractor does not assume long-term operation and maintenance responsibilities. The Contractor must identify an entity other than PennDOT or Municipal Partners that will assume responsibility for long-term operation and maintenance of each BMP conforming to the requirements of the PADEP Guidance Documents. The entity must also agree to provide written documentation to PennDOT and the Municipal Partners upon request confirming that the entity has performed the required long-term operation and maintenance. This entity must be one of the following: a governmental entity; a fee simple owner or easement holder of the BMP site, which could be the Contractor; or an adjacent property owner in the case of stream restoration. The Contractor must prepare an Operation and Maintenance Plan that identifies types of maintenance activities, maintenance frequencies, personnel and equipment requirements, and estimated annual maintenance costs to turn over to the entity that will assume maintenance responsibility. If the entity is a property owner and is not the Commonwealth, then the Contractor must obtain and record fully-executed instruments in the chain of title for the property that make these obligations legally binding and enforceable by PennDOT, the Municipal Partners and PADEP on the owner and subsequent owners. If the entity is a municipality, then the Contractor must obtain a fully executed and binding agreement with an appropriate resolution from the municipality. This agreement between the Contractor and the municipality must be enforceable by PennDOT, PADEP, and the Municipal Partners.

Task 4: Provide a Final Plan

Following approval of the Conceptual PRP, the Contractor must supply a Final PRP. The Final PRP is based on the Conceptual PRP but also includes the following:

- A. Copies of all recorded instruments and agreements required by Tasks 2 and 3 above.
- B. Final BMP(s) plans consistent with PADEP standards.
- C. Final Schedule for implementing the BMPs.
- D. Accommodations in the project schedule for regular progress meetings and review and approval of design drawings by PennDOT and other entities requiring permits.
- E. Operations and Maintenance Plan consistent with the PADEP Guidance Documents.

- F. Calculations showing the sediment, nitrogen and phosphorus removed per year consistent with the PADEP Guidance Documents.

Task 5: Obtain Necessary Permits.

Perform all activities necessary to obtain and comply with all USACE Clean Water Act Section 404 and Rivers and Harbors Act Section 10 permits; PADEP Chapter 102 and 105 permits; and if applicable, local Floodplain consistency, local Stormwater Management consistency, local zoning approval and any other permits or authorizations required to construct the BMPs. Provide copies of the permits and authorizations to PennDOT and Municipal Partners upon receipt.

Task 6: Construct the BMPs.

Provide all field services necessary to construct all BMPs consistent with the applicable permits and approvals, operation, any inspections and any maintenance required by PADEP to receive credit for the reductions under an NPDES MS4 PRP/TMDL.

Task 7: Provide As-Built Records.

Provide as-built records sealed by a Pennsylvania licensed professional engineer, to document the end of construction and certify the project was constructed as designed.

Task 8: Operate, Monitor and Maintain All BMPs During Construction and Post-Construction.

During construction, the Contractor must operate, monitor and maintain all BMPs as required to comply with the applicable permits and then maintain their effectiveness once constructed.

During post-construction, the Contractor must do all the following:

- A. Monitor all stream restoration BMPs for no less than five years in accordance with the regulations found at Code of Federal Regulations, Title 33, Part 332 ("Compensatory Mitigation for Losses of Aquatic Resources") and USACE Regulatory Letter No. 08-03 ("Minimum Monitoring Requirements for Compensatory Mitigation Projects Involving the Restoration, Establishment, and/or Enhancement of Aquatic Resources"), and any updates to them. The five-year time period starts for each BMP independently.
- B. Perform any other post-construction monitoring or maintenance required by the PADEP Guidance Documents for PennDOT and the

Municipal Partners to receive credit for the reductions under an NPDES MS4 PRP/TMDL.

- C. Repair or reconstruct any BMPs that do not function as designed.
- D. Provide PennDOT and the Municipal Partners with copies of any required inspection reports, record keeping, and other documentation for each BMP conforming to the PADEP Guidance Documents and PennDOT's and the Municipal Partners' MS4 permit conditions for each BMP during construction and post-construction.

IV. Standard Specifications

To the extent that the specific provisions of this Scope of Work conflict with any terms and conditions or standard specifications included elsewhere in this IFB, the specific provisions of this Scope of Work control and supersede the conflicting terms and conditions or standard specifications.

The Contractor must complete the services in accordance with the April 10, 2020 PennDOT Publication 408 specifications:

http://www.dot.state.pa.us/public/PubsForms/Publications/Pub_408/PUB%20408.pdf

If required, conduct Maintenance and Protection of Traffic in accordance with the most current version of Publication 213. Work Zone Traffic Control is considered incidental.

<http://www.dot.state.pa.us/public/PubsForms/Publications/PUB%20213.pdf>

While not guaranteed by PennDOT, PennDOT reserves the right to possibly purchase additional MS4 Credit off of this contract through change orders increasing the value of this purchase by 25%, 50%, 75% or more. Credit may come from extension of initial BMP locations or through the mobilization of new locations. The price per pound shall be the same as the contract award rate. Dollar contributions may come from municipalities or the PTC. Additionally, while the bid is not based upon, PennDOT may use this contract to purchase Wetland Credits. Contractor s must establish their unit cost rate per Wetland Credit as part of their bid. Contractor may choose to provide multiple wetland locations with different unit prices per location.

V. Bid Requirements

The Electronic Bid Submission must include: Completed Attachment B - Bid Sheet, and Attachment C - Reciprocal Limitations Act Requirement. All shall be completed in its entirety and electronically attached to the bid submission.

- Attachment B, Bid Sheet

- Attachment C, Americans Disability Act Provisions replaces paragraph V.34 CONTRACT-030.1 Americans with Disabilities Act (April 1, 2010) of the Terms and Conditions of this bid.
- Attachment D Iran Free Procurement Certification
- Attachment E Confirmation of Services Form (Form OS-501)
- Attachment F Small Diverse Business Participation Information
- Attachment F.1 Small Diverse Business Participation Form
- Attachment G Veterans Business Enterprise Participation Information
- Attachment G.1 Veterans Business Enterprise Participation Form
- Attachment H Contractor Responsibility Provisions replaces paragraph V.33 CONTRACT-029.1 Contractor Responsibility Provisions (Nov 2010) of the Terms and Conditions of this bid.
- Attachment I Terms and Conditions
- Attachment J General Conditions and Instructions to Bidders

VI. Invoice and Billing Instructions

Payment Milestones are as follows:

#	Milestone Activity	Milestone Date (on or before)	Maximum Payment
1.	Conceptual PRP submitted to PennDOT	2 Months after award	\$0.00
2.	Conceptual PRP approved by PennDOT	varies	\$300,000.00
3.	Final PRP submitted to PennDOT	10 Months after #2	\$0.00
4.	Final PRP approved by PennDOT	varies	\$500,000.00
5.	Federal, State, and Local permits & approvals	6 Months after #4	\$0.00
6.	Begin BMP construction	8 Months after #5	\$0.00
7.	25% construction complete	8 Months after #6	\$200,000.00
8.	50% construction complete	8 Months after #7	\$500,000.00
9.	100% construction complete	16 Months after #8	\$500,000.00
10.	End of Post-Construction	varies	\$500,000.00

PennDOT reserves the right, at its sole discretion, to adjust the milestone dates as necessary, or to deny any request for extension by the Contractor. Where multiple BMPs are proposed, the Contractor must include a construction schedule to be tied with payment milestones for PennDOT approval. At any milestone, if PennDOT determines, in conformity with the PADEP Guidance Documents, that PADEP will allow PennDOT less sediment credit reduction toward PennDOT and Municipal Partners' MS4 permit obligations than necessary to achieve the unit price bid by the Contractor, PennDOT may proportionally reduce all remaining payments due as necessary to achieve the total cost per pound of sediment reduction credit bid by the Contractor. PennDOT, at its sole

discretion, may consult with PADEP in making this determination. PennDOT may also consider any BMP for which the Contractor has failed to fully comply with the Scope of Work as providing no (zero) sediment reduction credit.

A completed **Attachment E, Confirmation of Services Form (Form OS-501)** must be submitted by the Contractor to the Project Manager, for review and verification at each payment milestone.

The Project Manager will notify the Contractor if corrections are needed. Each OS-501 is to be itemized to include sufficient detail to validate that the Payment Milestone has been completed.

Untimely or incomplete submissions of Form OS-501 and required supporting documentation may delay payment as required by the Payment section of the Terms and Conditions.

PennDOT reserves the right, throughout the life of the contract, to make changes to Form OS-501, and its instructions, content, and all other requirements.

VII. Diversity, Inclusion and Small Business Opportunities (DISBO) Program

The requirements of the Diversity, Inclusion and Small Business Opportunities (**DISBO**) **to support this commitment, there is a Small Diverse Business (SDB) goal of six percent (6%) and Veteran Business Enterprise (VBE) goal of three percent (3%) (statutory minimum) of the total contract dollar amount set for this IFB.** Contractor shall complete in its entirety Attachment F.1, Small Diverse Business (SDB) Participation Submittal and SDB Utilization Schedule and Attachment G.1, Veterans Business Enterprise (VBE) Participation Submittal and VBE Utilization Schedule. Failure to complete Attachment F.1 and Attachment G.1 in its entirety shall result in IFB being rejected.

VIII. Pre-Bid Conference

Due to the current COVID pandemic, this conference will take place via SKYPE. The Conference will be held on May 27, 2021 @ 2:00 PM via SKYPE. An RSVP is due via email to David Stillions, dstillions@pa.gov by May 25, 2021 @ 10:00 AM. The link to the SKYPE call, or call in phone# and code for those without SKYPE access, will be provided after registration.