



ANNUAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) STATUS REPORT

FOR THE PERIOD 7/1/2022 TO JUNE 30, 2023

GENERAL INFORMATION					
Permittee Name:	Strasburg Borough MS4		NPDES Permit No.:	PAG133715	
Mailing Address:	145 Precision Ave		Effective Date:	March 16, 2018	
City, State, Zip:	Strasburg, PA 17579-9608		Expiration Date:	March 15, 2025	
MS4 Contact Person:	Steven Echternach		Renewal Due Date:	Sept 15, 2024	
Title:	Borough Manager		Municipality:	Strasburg Borough	
Phone:	717-687-7732		County:	Lancaster	
Email:	echterns@Strasburgboro.org				
Co-Permittees (if applicable):					
Appendix(ces) that permittee is subject to (select all that apply):					
<input type="checkbox"/> Appendix A <input checked="" type="checkbox"/> Appendix B <input type="checkbox"/> Appendix C <input checked="" type="checkbox"/> Appendix D <input checked="" type="checkbox"/> Appendix E <input type="checkbox"/> Appendix F					
WATER QUALITY INFORMATION					
Are there any discharges to waters within the Chesapeake Bay Watershed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
Identify all surface waters that receive stormwater discharges from the permittee's MS4 and provide the requested information (see instructions).					
Receiving Water Name	Ch. 93 Class.	Impaired?	Cause(s)	TMDL?	WLA?
Walnut Run	WWF-MF	y	Nutrients, organic, enrichment, low DO, siltation	y	n
UNT-Little Beaver Creek	TSF	y	Nutrients, organic, enrichment, low DO, siltatio	y	n
UNT-Pequea Creek	WWF-MF	y	Nutrients, siltation	y	n
UNT - Pequea Creek	WWF-MF	y	Nutrients, siltation	y	n

GENERAL MINIMUM CONTROL MEASURE (MCM) INFORMATION

Have you completed all MCM activities required by the permit for this reporting period? ☒ Yes ☐ No

List the current entity responsible for implementing each MCM of your SWMP, along with contact name and phone number.

MCM	Entity Responsible	Contact Name	Phone
#1 Public Education and Outreach on Storm Water Impacts	Borough	Steven Echternach	717-687-7732
#2 Public Involvement/Participation	Borough	Steven Echternach	717-687-7732
#3 Illicit Discharge Detection and Elimination (IDD&E)	Borough	Steven Echternach	717-687-7732
#4 Construction Site Storm Water Runoff Control	LCCD	LCCD	717-299-5361
#5 Post-Construction Storm Water Management in New Development and Redevelopment	Borough	Steven Echternach	717-687-7732
#6 Pollution Prevention / Good Housekeeping	Borough	Steven Echternach	717-687-7732

MCM #1 – PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS

BMP #1: Develop, implement and maintain a written Public Education and Outreach Program.

- For new permittees only, has the written PEOP been developed and implemented within the first year of permit coverage?
☐ Yes ☐ No
- Date of latest annual review of PEOP: 3/16/207 Were updates made? ☐ Yes ☒ No
- What were the plans and goals for public education and outreach for the reporting period?

As part of the fall newsletter, the Borough notified homeowners of a stormwater public meeting in November. The goal was to discuss the master plan improvements the Borough and allow for input from homeowners about stormwater issues they have in their neighborhood to see if it can be added to the master plan improvements.
- Did the MS4 achieve its goal(s) for the PEOP during the reporting period? ☒ Yes ☐ No
- Identify specific plans and goals for public education and outreach for the upcoming year:

The Borough will continue to educate through public meetings, regular updates on the website, as well as meetings with the public as well as with key stakeholders – fire, public works, and staff. Because of the creation of the SBA's stormwater function, the Borough will also begin the process of educating the public and begin holding meetings with key stakeholders in excessively-affected areas.

BMP #2: Develop and maintain lists of target audience groups present within the areas served by your MS4.

- For new permittees only, have the target audience lists been developed and implemented within the first year of permit coverage?
☐ Yes ☐ No
- Date of latest annual review of target audience lists: 3/16/2017 Were updates made? ☐ Yes ☒ No

BMP #3: Annually publish at least one educational item on your Stormwater Management Program.

1. For new permittees only, were stormwater educational and informational items produced and published in print and/or on the Internet within the first year of permit coverage?
☐ Yes ☐ No
2. Date of latest annual review of educational materials: 3/16/2017 Were updates made? ☐ Yes ☒ No
3. Do you have a municipal website? ☒ Yes ☐ No (URL:
www.strasburgboro.org)

If Yes, what MS4-related material does it contain?

Stormwater Management Ordinance, previous year's MS4 annual report, stormwater educational information and brochures, etc

4. Describe any other method(s) used during the reporting period to provide information on stormwater to the public:

Handouts of stormwater information is available at the Borough office

5. Identify specific plans for the publication of stormwater materials for the upcoming year:

Stormwater section/article in the newsletter to Borough residents with invitation to public meeting regarding stormwater master plan improvements. Exhibits will be provided to residents where master plan stormwater improvements are slated to occur in the upcoming years.

BMP #4: Distribute stormwater educational materials to the target audiences.

Identify the two additional methods of distributing stormwater educational materials during the previous reporting period (e.g., displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements, bill stuffers, posters, presentations, conferences, meetings, fact sheets, giveaways, or storm drain stenciling).

Pamphlets, booklets, brochures and fact sheets are all available at the Borough office and website.

MCM #1 Comments:

During 2023, the Borough of Strasburg honored the Strasburg Borough Authority's (SBA) request to add stormwater to the existing operating Authority's prelude. This process has gone through legal and during the late summer of 2023, the Authority was recognized as the stormwater operator. The SBA will now begin the process of determining how to fund said work and educate the community in the process of creating a comprehensive stormwater management operations policy for the entire Borough, which will be managed by the Authority. We look forward to addressing stormwater as a utility in the Borough of Strasburg.

MCM #2 – PUBLIC INVOLVEMENT/PARTICIPATION

BMP #1: Develop, implement and maintain a written Public Involvement and Participation Program (PIPP)

1. For new permittees only, was the PIPP developed and implemented within one year of permit coverage?

☐ Yes ☐ No

2. Date of latest annual review of PIPP: 3/16/2017

Were updates made? ☐ Yes ☒ No

BMP #2: Advertise to the public and solicit public input on ordinances, SOPs, Pollutant Reduction Plans (PRPs) (if applicable) and TMDL Plans (if applicable), including modifications thereto, prior to adoption or submission to DEP:

1. Was an MS4-related ordinance, SOP, PRP or TMDL Plan developed during the reporting period? ☐ Yes ☒ No

2. If Yes, describe how you advertised the draft document(s) and how you provided opportunities for public review, input and feedback:

3. If an ordinance, SOP or plan was developed or amended during the reporting period, provide the following information:

Ordinance / SOP / Plan Name	Date of Public Notice	Date of Public Hearing	Date Enacted or Submitted to DEP

BMP #3: Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods.

1. At least one public meeting or other MS4 event must be held during the 5-year permit coverage period to solicit participation and feedback from target audience groups. Was this meeting or event held during the reporting period?

☒ Yes ☐ No If Yes, Date of Meeting or Event: 5/9/2023

2. Report instances of cooperation and participation in MS4 activities; presentations the permittee made to local watershed and conservation organizations; and similar instances of participation or coordination with organizations in the community.

The Borough held a public meeting on May 9, 2023 and gave a full presentation on the completion of the Eshelman PRP project. It can be found on the Borough's <https://strasburgboro.org/2023/05/11/eshelman-run-streambank-stabilization-ms4-project/>

3. Report activities in which members of the public assisted or participated in the meetings and in the implementation of the SWMP, including education activities or efforts such as cleanups, monitoring, storm drain stenciling, or others.

The Borough has been working with stakeholders in the area of a major stormwater project in what has been identified as Phase 1 Quadrant 3. As well as other areas of concern, specifically Clover Avenue and the Dallas/Ada Avenue areas. The goal for 2023-2024 is to move forward with the Phase 1 Quadrant 3 project as well as to look specifically at some of the smaller projects that could be managed by our existing Public Works staff under their new Authority charge.

MCM #2 Comments:

During 2023, the Borough of Strasburg honored the Strasburg Borough Authority's (SBA) request to add stormwater to the existing operating Authority's prevue. This process has gone through legal and during the late summer of 2023, the Authority was recognized as the stormwater operator. The SBA will now begin the process of determining how to fund said work and educate the community in the process of creating a comprehensive stormwater management operations policy for the entire Borough, which will be managed by the Authority. We look forward to addressing stormwater as a utility in the Borough of Strasburg.

MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)

BMP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges into the regulated small MS4.

1. For new permittees only, was the written IDD&E program developed within one year of permit coverage?

☐ Yes ☐ No

2. Date of latest annual review of IDD&E program: 3/16/2017 Were updates made? ☐ Yes ☒ No

BMP #2: Develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls and, if applicable, observation points, and the locations and names of all surface waters that receive discharges from those outfalls. Outfalls and observation points shall be numbered on the map(s).

1. Have you completed a map(s) that includes all components of BMP #2? ☒ Yes ☐ No

If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.

If No, date by which permittee expects map(s) to be completed:

2. Date of last update or revision to map(s): 6/1/2017

- | | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| 3. | Total No. of Outfalls in MS4: 13 | Total No. of Outfalls Mapped: 13 |
| 4. | Total No. of Observation Points: 0 | Total No. of Observation Points Mapped: 0 |
| 5. | During the reporting period, have you identified any existing outfalls that have not been previously reported to DEP in an NOI, application or annual report, or are any new MS4 outfalls proposed for the next reporting period? | |
| | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, select: <input type="checkbox"/> Existing Outfall(s) Identified <input type="checkbox"/> New Outfall(s) Proposed | |

BMP #3: In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), the permittee shall develop and maintain map(s) that show the entire storm sewer collection system within the permittee's jurisdiction that are owned or operated by the permittee (including roads, inlets, piping, swales, catch basins, channels, and any other components of the storm sewer collection system), including privately-owned components of the collection system where conveyances or BMPs on private property receive stormwater flows from upstream publicly-owned components.

1. Have you completed a map(s) that includes all components of BMP #3? ☒ Yes ☐ No

If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.

If No, date by which permittee expects map(s) to be completed:

2. If Yes to #1, is the map(s) on the same map(s) as for outfalls and receiving waters? ☒ Yes ☐ No

3. Date of last update or revision to map(s): 6/1/2017

BMP #4: Conduct dry weather screenings of MS4 outfalls to evaluate the presence of illicit discharges. If any illicit discharges are present, the permittee shall identify the source(s) and take appropriate actions to remove or correct any illicit discharges. The permittee shall also respond to reports received from the public or other agencies of suspected or confirmed illicit discharges associated with the storm sewer system, as well as take enforcement action as necessary. The permittee shall immediately report to DEP illicit discharges that would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property.

For new permittees, all identified outfalls (and if applicable observation points) must be screened during dry weather at least twice within the 5-year period following permit coverage. For existing permittees, all identified outfalls (and if applicable observation points) must be screen during dry weather at least once within the 5-year period following permit coverage and, for areas where past problems have been reported or known sources of dry weather flows occur on a continual basis, outfalls must be screened annually during each year of permit coverage.

1. How many unique outfalls (and if applicable observation points) were screened during the reporting period? 0
2. Indicate the percentage of all outfalls screened in the past five years. 100%
3. Indicate the percent of outfalls screened during the reporting period that revealed dry weather flows: 0%
4. Did any dry weather flows reveal color, turbidity, sheen, odor, floating or submerged solids? ☐ Yes ☒ No
5. If Yes for #4, attach all sample results to this report with a map identifying the sample location. Explain the corrective action(s) taken in the attachment.
6. Do you use the MS4 Outfall Field Screening Report form (3800-FM-BCW0521) provided in the permit?
☒ Yes ☐ No
If No, attach a copy of your screening report form.

BMP #5: Enact a Stormwater Management Ordinance or SOP to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that prohibits non-stormwater discharges? ☒ Yes ☐ No
If Yes, indicate the date of the ordinance or SOP: 9/13/22
2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) with respect to authorized non-stormwater discharges? ☒ Yes ☐ No
If Yes to #2 and the ordinance or SOP has not been submitted to DEP previously, attach the ordinance or SOP.

3. Were there any violations of the ordinance or SOP during the reporting period? ☐ Yes ☒ No

If Yes to #3, complete the table below (attach additional sheets as necessary).

Violation Date	Nature of Violation	Responsible Party	Enforcement Taken

4. Did you approve any waiver or variance during the reporting period that allowed an exception to non-stormwater discharge provisions of an ordinance or SOP? ☐ Yes ☒ No

If Yes to #4, identify the entity that received the waiver or variance and the type of non-stormwater discharge approved.

BMP #6: Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.

1. Was IDD&E-related information distributed to public employees, businesses, and the general public during the reporting period? ☒ Yes ☐ No

If Yes, what was distributed? Annual newsletter, website, handouts available

2. Is there a well-publicized method for employees, businesses and the public to report stormwater pollution incidents?
☒ Yes ☐ No

3. Do you maintain documentation of all responses, action taken, and the time required to take action? ☒ Yes ☐ No

MCM #3 Comments:

MCM #4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Are you relying on PA's statewide program for stormwater associated with construction activities to satisfy this MCM?

☒ Yes ☐ No

(If Yes, respond to questions for BMP Nos. 1, 2 and 3 only in this section. If No, respond to questions for all BMPs in this section)

BMP #1: The permittee may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring an NPDES permit unless the party proposing the earth disturbance has valid NPDES Permit coverage (i.e., not expired) under 25 Pa. Code Chapter 102.

During the reporting period, did you comply with 25 Pa. Code § 102.43 (relating to withholding building or other permits or approvals until DEP or a county conservation district (CCD) has approved NPDES permit coverage)?

☒ Yes ☐ No ☐ Not Applicable (no building permit applications received)

BMP #2: A municipality or county which issues building or other permits shall notify DEP or the applicable CCD within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more, in accordance with 25 Pa. Code § 102.42.

During the reporting period, did you comply with 25 Pa. Code § 102.42 (relating to notifying DEP/CCD within 5 days of receiving an application involving an earth disturbance activity of one acre or more)?

☒ Yes ☐ No ☐ Not Applicable (no building permit applications received)

BMP #3: Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance, as applicable.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that requires implementation and maintenance of E&S control BMPs? ☒ Yes ☐ No

If Yes, indicate the date of the ordinance or SOP: 9/13/22

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? ☒ Yes ☐ No

3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

BMP #4: Review Erosion and Sediment (E&S) control plans to ensure that such plans adequately consider water quality impacts and meet regulatory requirements.

Specify the number of E&S Plans you reviewed during the reporting period:

BMP #5: Conduct inspections regarding installation and maintenance of E&S control measures during earth disturbance activities. Maintain records of site inspections, including dates and inspection results, in accordance with the record retention requirements in this permit.

Specify the number of E&S inspections you completed during the reporting period:

BMP #6: Conduct enforcement when installation and maintenance of E&S control measures during earth disturbance activities does not comply with permit and/or regulatory requirements.

Specify the number of enforcement actions you took during the reporting period for improper E&S:

BMP #7: Develop and implement requirements for construction site operators to control waste at construction sites that may cause adverse impacts to water quality. The permittee shall provide education on these requirements to construction site operators.

Specify the method(s) by which you are educating construction site operators on controlling waste at construction sites:

BMP #8: Develop and implement procedures for the receipt and consideration of public inquiries, concerns, and information submitted by the public to the permittee regarding local construction activities.

1. A tracking system has been established for receipt of public inquiries and complaints. ☐ Yes ☐ No

2. Specify the number of inquiries and complaints received during the reporting period:

MCM #4 Comments:

MCM #5 – POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

BMP #1: Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management from new development and redevelopment projects, including sanctions for non-compliance.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that requires implementation and maintenance of post-construction stormwater management (PCSM) BMPs? ☒ Yes ☐ No
If Yes, indicate the date of the ordinance or SOP: 9/13/22
2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? ☒ Yes ☐ No
3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

BMP #2: Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. Measures should also be included to encourage retrofitting LID into existing development. Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices.

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that encourages and expands the use of LID in new development and redevelopment? ☒ Yes ☐ No
If Yes, indicate the date of the ordinance or SOP: 9/13/22
2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? ☒ Yes ☐ No
3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

BMP #3: Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.

1. Do you have an inventory of all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003? ☒ Yes ☐ No
If Yes to #1, complete Table 1 on the next page.
2. Has proper O&M occurred during the reporting period for all PCSM BMPs? ☐ Yes ☒ No
3. If No to #2, explain what action(s) the permittee has taken or plans to take to ensure proper O&M.

The Borough has a goal to obtain full O&M documentation of all its BMPs over the next several years as part of the new Borough Stormwater Authority. The funding mechanisms associated with the Authority's creation will allow for a budget that supports O&M activities.

If you are relying on PA's statewide program for stormwater associated with construction activities, you may skip to MCM #6, otherwise complete all questions for BMPs #4 - #6 in this section.

BMP #4: Require the implementation of a combination of structural and/or non-structural BMPs that are appropriate to the local community, that minimize water quality impacts, and that are designed to maintain pre-development runoff conditions.

1. Specify the number of PCSM Plans reviewed during the reporting period for projects disturbing greater than or equal to one acre (including projects less than one acre that are part of a larger common plan of development or sale): n/a
2. Has a tracking system been established and maintained to record qualifying projects and their associated BMPs?

☐ Yes ☐ No

PCSM BMP INVENTORY

Table 1. To complete the information needed for MCM #5, BMP #3, list all existing structural BMPs that discharge stormwater to the permittee's MS4 that were installed to satisfy PCSM requirements for earth disturbance activities under Chapter 102, and provide the requested information (see instructions).

BMP No.	BMP Name	DA (ac)	Entity Responsible for O&M	Latitude	Longitude	Date Installed	O&M Requirements	NPDES Permit No.
1	See Attached			0 1 "	0 1 "			
2				0 1 "	0 1 "			
3				0 1 "	0 1 "			
4				0 1 "	0 1 "			
5				0 1 "	0 1 "			
6				0 1 "	0 1 "			
7				0 1 "	0 1 "			
8				0 1 "	0 1 "			
9				0 1 "	0 1 "			
10				0 1 "	0 1 "			
11				0 1 "	0 1 "			
12				0 1 "	0 1 "			
13				0 1 "	0 1 "			
14				0 1 "	0 1 "			
15				0 1 "	0 1 "			
16				0 1 "	0 1 "			

BMP #5: Ensure that controls are installed that shall prevent or minimize water quality impacts. The permittee shall inspect all qualifying development or redevelopment projects during the construction phase to ensure proper installation of the approved structural PCSM BMPs. A tracking system (e.g., database, spreadsheet, or written list) shall be implemented to track the inspections conducted and to track the results of the inspections (e.g., BMPs were, or were not, installed properly).

1. During the reporting period have you inspected all qualifying development and redevelopment projects during the construction phase to ensure proper installation of approved structural BMPs?
☐ Yes ☐ No ☐ Not Applicable (no qualifying projects during reporting period)
2. Has a tracking system been established and maintained to record results of inspections?
☐ Yes ☐ No

BMP #6: Develop a written procedure that describes how the permittee shall address all required components of this MCM.

Have you developed a written plan that addresses: 1) minimum requirements for use of structural and/or non-structural BMPs in plans for development and redevelopment; 2) criteria for selecting and standards for sizing stormwater BMPs; and 3) implementation of an inspection program to ensure that BMPs are properly installed? ☐ Yes ☐ No

MCM #5 Comments:

MCM #6 – POLLUTION PREVENTION / GOOD HOUSEKEEPING

BMP #1: Identify and document all operations that are owned or operated by the permittee and have the potential for generating pollution in stormwater runoff to the MS4. This includes activities conducted by contractors for the permittee.

1. Have you identified all facilities and activities owned and operated by the permittee that have the potential to generate stormwater runoff into the MS4? ☒ Yes ☐ No
2. When was the inventory last reviewed? 3/16/2017
3. When was it last updated? 3/16/2017

BMP #2: Develop, implement and maintain a written O&M program for all operations that could contribute to the discharge of pollutants from the MS4, as identified under BMP #1. This program shall address stormwater collection or conveyance systems within the regulated MS4.

1. Have you developed a written O&M program for the operations identified in BMP #1? ☒ Yes ☐ No
2. Date of last review or update to written O&M program: 3/16/2017

BMP #3: Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from operations to the regulated small MS4. All relevant employees and contractors shall receive training.

1. Have you developed an employee training program? ☒ Yes ☐ No
2. Date of last review or update to training program: 3/16/2017 Date of latest training: 5/9/23

3. Training topics covered:

Steve Echternach presented MS4 update of what needs to be done as well as a project review of the Eshelman Run Streambank Stabilization program and the need for O&M in conjunction with staff. This presentation in a similar format was also presented to Borough Council and the public in a public meeting held on May 9, 2023.

4. Name(s) of training presenter(s):

Steve Echternach, Borough Manager

5. Names of training attendees:

Steve Echternach, Borough Manager, Borough Council Members

MCM #6 Comments:

POLLUTANT CONTROL MEASURES (PCMs)

Indicate the status of implementing PCMs in Appendices A, B and/or C by completing the table below. Skip this section if PCMs are not applicable.

Task	Date Completed	Attached	Anticipated Completion Date
Storm Sewershed Map(s)	6/1/2017	<input type="checkbox"/>	
Source Inventory		<input checked="" type="checkbox"/>	
Investigation of Suspected Sources		<input checked="" type="checkbox"/>	
Ordinance/SOP for Controlling Animal Wastes		<input checked="" type="checkbox"/>	

PCM Comments:

Land Studies has completed wet weather testing / sampling in April 2022 for pathogens and was attached to previous annual report.

POLLUTANT REDUCTION PLANS (PRPs) AND TMDL PLANS

1. Complete this section if the development and submission of a PRP and/or TMDL Plan was required as an attachment to the latest NOI or application or was required by the permit, regardless of whether DEP has approved the plan(s).

Type of Plan	Submission Date	DEP Approval Date	Surface Waters Addressed by Plan
<input checked="" type="checkbox"/> Chesapeake Bay PRP (Appendix D)			Chesapeake Bay
<input checked="" type="checkbox"/> Impaired Waters PRP (Appendix E)	9/12/2017	4/30/2018	Walnut Run, UNT Little Beaver Creek, UNT-Pequea Creek, UNT-Pequea Creek
<input type="checkbox"/> TMDL Plan (Appendix F)			
<input type="checkbox"/> Combined Chesapeake Bay / Impaired Waters PRP			
<input type="checkbox"/> Combined PRP / TMDL Plan			

☐ Joint Plan (if checked, list the name of the MS4 group or names of all entities participating in the joint plan below)
Joint Plan Participants:

2. Identify the pollutants of concern and pollutant load reduction requirements under the permit (see instructions).

Type of Plan	TSS Load Reduction (lbs/yr)	TP Load Reduction (lbs/yr)	TN Load Reduction (lbs/yr)
<input checked="" type="checkbox"/> Chesapeake Bay PRP (Appendix D)	52594	390	3851
<input checked="" type="checkbox"/> Impaired Waters PRP (Appendix E)	52594	390	3851
<input type="checkbox"/> TMDL Plan (Appendix F)			
<input type="checkbox"/> Combined Chesapeake Bay / Impaired Waters PRP			
<input type="checkbox"/> Combined PRP / TMDL Plan			

3. Date Final Report Demonstrating Achievement of Pollutant Load Reductions Due: 9/30/2023

4. Have any modifications to the plan(s) occurred since DEP approval? ☐ Yes ☒ No

If Yes to #4, was the updated plan(s) submitted to DEP? ☐ Yes ☐ No

If Yes to #4, did you comply with the public participation requirements of the applicable appendix? ☐ Yes ☐ No

If Yes to #4, describe the plan modifications.

5. Summary of progress achieved during reporting period.

The Borough completed the Eshelman Streambank restoration project in November 2022. This 417 LF streambank restoration project resulted in a pollutant reduction of 47,955lb/yr.

In total, the Borough's two completed PRP projects during the permit cycle have resulted in a total annual reduction in sediment of 72,705lb/yr, well exceeding the load reduction of 52,594lb/yr required.

Therefore, the Borough has exceeded its sediment load reduction by 20,111 lb/yr which is to be banked in the manner deemed appropriate by PADEP.

6. Anticipated activities for next reporting period.

The Borough is currently evaluating and looking for Grant Funding to expand the 417LF Eshelman Project another 550 LF to fully complete the entire length of streambank. Even though pollutant reduction goals have already been met and it is unclear what "banked" credit could be obtained, the Borough is committed to furthering progress in its clean water program and is working with Center for Watershed Protection in this effort to fully stabilizing this entire stream corridor.

PRP/TMDL Plan Comments:

The Borough, as part of its Master Plan Stormwater Improvements, have worked with Center for Watershed Protection (CWP) to complete an inventory of the Borough and look for BMP retrofit opportunities. CWP conducted site investigations around the Borough and provided the Borough with a final report documenting their findings, opportunities for BMP retrofits and pollutant reduction areas, and a grade for each BMP opportunity. That Report is attached.

NEW BMPs FOR PRP/TMDL PLAN IMPLEMENTATION

Table 2. List all new structural BMPs installed and ongoing non-structural BMPs implemented during the reporting period that are being used toward achieving load reductions in the permittee's PRP and/or TMDL Plan (see instructions).

BMP No.	BMP Name	DA (ac)	% Imp.	BMP Extent	Units	Latitude	Longitude	Date Installed or Implemented	Planning Area?	Ch. 102?	Annual Sediment Load Reduction (lbs/yr)
2	Eshelman Streambank	116	70	417	feet	39°59'17.12"	76°11'3.01"	12/2022	<input checked="" type="checkbox"/>	<input type="checkbox"/>	47,955
						° ' "	° ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						° ' "	° ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						° ' "	° ' "		<input type="checkbox"/>	<input type="checkbox"/>	

BMP INVENTORY FOR PRP/TMDL PLAN IMPLEMENTATION

Table 3. List all existing structural BMPs that have been installed in prior reporting periods and are eligible to use toward achieving load reductions in the permittee's PRP and/or TMDL Plan (see instructions).

BMP No.	BMP Name	DA (ac)	% Imp.	BMP Extent	Units	Latitude	Longitude	Date Installed	Annual Sediment Load Reduction (lbs/yr)	Date of Latest Inspection	Satisfactory?
1	Mill Bridge Campground Streambank and Buffer	41.3	30	920	feet	40°0'36"	-76°9'43"	2019	24,750	2021	<input checked="" type="checkbox"/>
						° ' "	° ' "				<input type="checkbox"/>
						° ' "	° ' "				<input type="checkbox"/>
						° ' "	° ' "				<input type="checkbox"/>
						° ' "	° ' "				<input type="checkbox"/>

CERTIFICATION

For PAG-13 Permittees: I have read the latest PAG-13 General Permit issued by DEP and agree and certify that (1) the permittee continues to be eligible for coverage under the PAG-13 General Permit and (2) the permittee will continue to comply with the conditions of that permit, including any modifications thereto. I understand that if I do not agree to the terms and conditions of the PAG-13 General Permit, I will apply for an individual permit within 90 days of publication of the General Permit. I also acknowledge that any facility construction needed to comply with the General Permit requirements shall be designed, built, operated, and maintained in accordance with operative laws and regulations.

For All Permittees: I certify under penalty of law that this report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Derrick Musser,

ELA Group, Inc. - Borough Engineer

Name of Responsible Official

717-626-7271

Telephone No.



Signature

9/28/23

Date

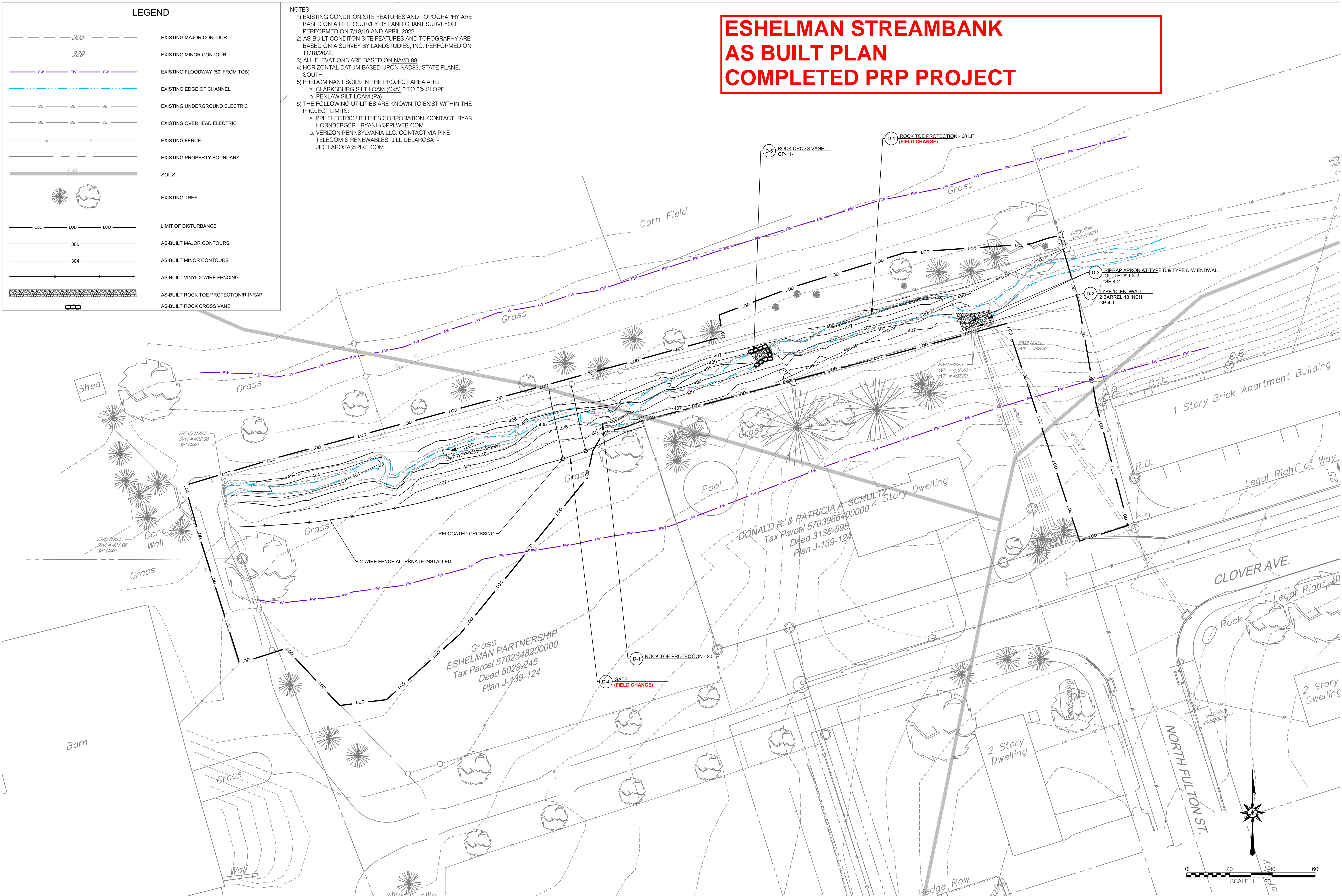
Project Name	Name/ID	Latitude	Longitude	Facility Type	NPDES Permit #	Owner/Operator	Total Treated Area (acr	Date Installed
Trails at Strasburg	Infiltration Bed (INF 1-1)	39.984083	-76.195978	Subsurface Infiltration Bed	PAG2003004096	Chatham Creek, LLC	0.83	2005-2006
	Infiltration Bed (INF 2-1)	39.984313	-76.194993	Subsurface Infiltration Bed	PAG2003004096		2.26	2005-2006
	Infiltration Bed (INF 3-1)	39.98327	-76.194797	Subsurface Infiltration Bed	PAG2003004096		0.69	2005-2006
	Infiltration Bed (INF 4-1)	39.98346	-76.195357	Subsurface Infiltration Bed	PAG2003004096		0.55	2005-2006
	Detention Basin A	39.982796	-76.195204	Detention Basin	PAG2003004096		9.33	2005
	Detention Basin B	39.982341	-76.195716	Detention Basin	PAG2003004096		3.69	2005
	Detention Basin C	39.982672	-76.196260	Detention Basin	PAG2003004096		3.54	2005
Historic Strasburg Pharmacy	Detention Infiltration Basin	39.988062	-76.178439	Infiltration Detention Basin	PAG2003603066	Stephen Smoker		2003
Strasburg Fire Company	Basin A	39.980856	-76.185444	Detention basin	PAG2003604086	Strasburg Fire Dept, Attn: Willis Lefever, Jr.,	3.79	2006
	Swale	39.981575	-76.185992	Swale				2006
	Re-vegetation			130 deciduous tree & 23 evergreen				
Strasburg Commons	Wetland/Basin 2	39.984302	-76.172653	Basin 2	PAG200360691, PAG02003612006-R	Charter Homes / HOA after dedication	21.62	not complete yet
	Soil Amendments			Amended soil				
	Detention Basin 1	39.98694	-76.178126	Detention Basin 1			12.34	2019
	Street Sweeping			Onsite Sweeping				
Strasburg Business Place	Swale 1	39.985960	-76.178121		PAG2003605058	Stephen Smoker Historic Properties Partners 717-687-7008 Lampton Strasburg School District Terry Sweigart-Business		
	Swale 2	39.985506	-76.177106	Swales				2007-2008
	Infiltration Basin	39.988053	-76.178547	Infiltration Basin				2007
	Swale 1	39.988086	-76.177300	Swale				2007
	Wetland	39.988053	-76.178547	Artificial Wetland	PAG2003605058 (Revised 2014)		6.43	2014
Strasburg Elementary School		39.980867	-76.182804		PAG2003606076			
	Detention Basin			detention Basin			4.52	2006
Holiday Inn / Historic Strasburg Inn	P1A	39.984981	-76.172858	InfiltrationBasin	PAG02003614004	Lancaster Dutch Hospitality B.C. Desai 717-926-8610	1.8	
	P1B	39.985583	-76.173083	Infiltration Basin			1.19	
	P1D	39.984889	-76.174509	Infiltration Basin			1.91	
	RG1	39.98549	-76.173674	Rain Garden			0.18	
	RG2	39.984845	-76.172985	Rain Garden			0.39	
	SW1	39.985389	-76.173954	Swale				
	SW2	39.984828	-76.173193	Swale				
Rutter's	Basin1	39.989149	-76.176486	Subsurface Infiltration Basin	PAG02003616023	M&G Realty, Inc. Tim Rutter 717-771-5970	1.24	
	Basin 2	39.989179	-76.175915	Infiltration Basin			0.41	
	Basin 3	39.988329	-76.176375	Subsurface Infiltration Basin			1.58	
Ephrata National Bank	Street Sweeping			Street Sweeping	PAC360065	Ephrata National Bank 717-733-4181		
	Water Quality Inlet			Water Quality Inlet				
	Basin A	39.98821	-76.1795501	underground detention basin			1.3	
	Basin B	39.988575	-76.179033	Aboveground detention basin			1.08	
	Landscape Restoration							2017-2018
	Soil Amendments							
	Landscape Restoration							

LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING FLOODWAY (50' FROM TOB)
- EXISTING EDGE OF CHANNEL
- EXISTING UNDERGROUND ELECTRIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING FENCE
- EXISTING PROPERTY BOUNDARY
- SOILS
- EXISTING TREE
- LIMIT OF DISTURBANCE
- AS-BUILT MAJOR CONTOURS
- AS-BUILT MINOR CONTOURS
- AS-BUILT VINYL 2-WIRE FENCING
- AS-BUILT ROCK TOE PROTECTION/RIP-RAP
- AS-BUILT ROCK CROSS VANE

- NOTES:
- 1) EXISTING CONDITION SITE FEATURES AND TOPOGRAPHY ARE BASED ON A FIELD SURVEY BY LAND GRANT SURVEYOR, PERFORMED ON 7/18/19 AND APRIL 2022.
- 2) AS-BUILT CONDON SITE FEATURES AND TOPOGRAPHY ARE BASED ON A SURVEY BY LANDSTUDIES, INC. PERFORMED ON 11/18/2022.
- 3) ALL ELEVATIONS ARE BASED ON NAVD 88
- 4) HORIZONTAL DATUM BASED UPON NAD83, STATE PLANE, SOUTH
- 5) PREDOMINANT SOILS IN THE PROJECT AREA ARE:
- a. CLARKSBURG SILT LOAM (CkA) 0 TO 5% SLOPE
- b. PENLAW SILT LOAM (Pa)
- 5) THE FOLLOWING UTILITIES ARE KNOWN TO EXIST WITHIN THE PROJECT LIMITS:
- a. PPL ELECTRIC UTILITIES CORPORATION. CONTACT: RYAN HORNBERGER - RYANH@PPLWEB.COM
- b. VERIZON PENNSYLVANIA LLC. CONTACT VIA PIKE TELECOM & RENEWABLES: JILL DELAROSA - JIDELAROSA@PIKE.COM

ESHELMAN STREAMBANK
AS BUILT PLAN
COMPLETED PRP PROJECT



PA 042324
717-627-4440
landstudies.com
land@landstudies.com
315 North Street
Lititz, PA 17543




PROJECT:
ESHELMAN RUN STREAMBANK STABILIZATION
STRASBURG BOROUGH
145 PRECISION AVENUE
STRASBURG, PA

SHEET TITLE:
AS-BUILT PLAN

REVISIONS		
NO.	DATE	DESCRIPTION

SIGNATURE BLOCK

PROJECT NUMBER:
D-1313.2-19
DRAWN BY:
AR
CHECKED BY:
BE
DATE:
11/18/2022
SCALE:
1" = 20'
PLAN TYPE:
AS-BUILT
SHEET NUMBER:



Strasburg Borough Council Meeting
Tuesday, May 9, 2023

ESHELMAN RUN MS4 PROJECT

Funded through Lancaster Clean Water Partnership

by Steve Echternach,
Strasburg Borough Manager

ESHELMAN RUN

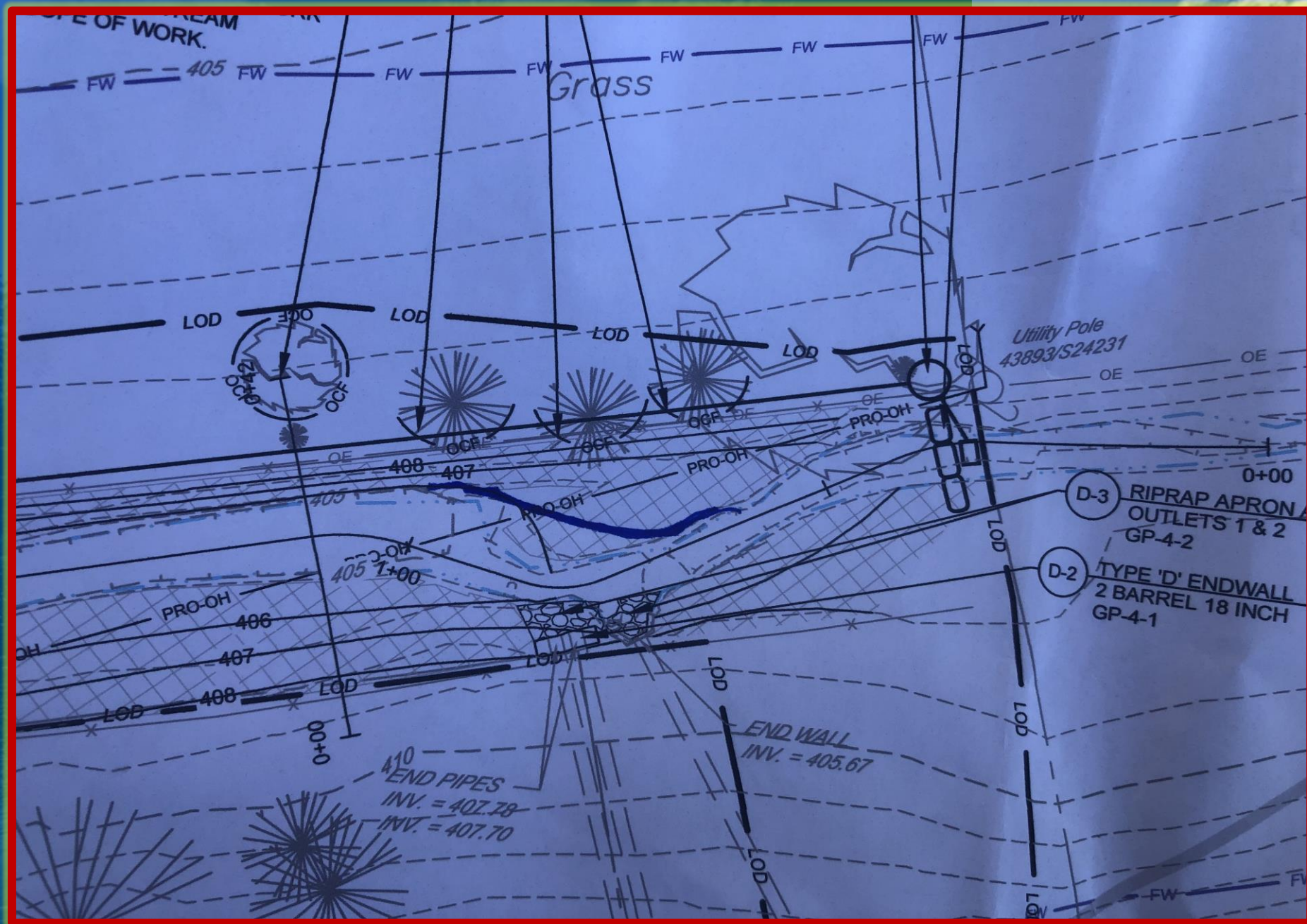


BEFORE

2



AFTER



ESHELMAN RUN

Plan Details

ESHELMAN RUN

October 19, 2022



CONSTRUCTION BEGINS...

ESHELMAN RUN

October 21, 2022



GEOTEXTILE
MATERIAL &
BOLDERS TO
BE USED FOR
STREAMBANK
STABILIZATION



ESHELMAN RUN

October 21, 2022



CONSTRUCTION CONTINUES...



ESHELMAN RUN

October 31, 2022



ESHELMAN RUN

October 31, 2022



CONTINUED PROGRESS...

ESHELMAN RUN

November 7, 2022



ESHELMAN RUN

November 7, 2022



ESHELMAN RUN

November 10, 2022

FINANCIAL PROJECT SUMMARY

Award: \$303,400

Cost:	\$117,981	Construction
	\$ 38,148	Design & Engineering
	\$ 2,819	Conservation Development Plan
	\$ 8,582	Administration
	\$167,530	Total (Actual Cost)



ESHELMAN RUN

May 9, 2023

PROJECT SUMMARY

- Eshelman Run Streambank Stabilization project was completed in November 2022.
- Final as-built stream restoration length is 417 linear feet, with native riparian buffer on both sides of the stream, and a livestock exclusionary fence.
- Based on this as-built length, sediment load reduction is calculated to be 47,955 lbs./year for the project.

OUR PARTNERS: Lancaster Clean Water Partnership, Glenn and Shirley Eshelman, Land Studies, & ELA Group





THANK YOU!

Steve Echternach

Phone

717-687-7732

Email

echterns@strasburgboro.org



Site Maintenance Form

315 North St. Lititz, PA 17543
Phone: (717) 627-4440 Fax: (717) 627-4660
www.landstudies.com

No.
01706

Date:
06/08/2023

Project Name:

Eshelman stream bank stabilization
maintenance

Foreman's Name:

Zach Groff

Work Completed

Invasive Plant Control (Herbicide Application)
Invasive Plant Control (Hand Removal)

Maintenance Notes

Spot treatment of Japanese hops, mugwort, bush honeysuckle, mulberry, poison
hemlock, pokeweed

Cut small patch of reed canary at the western end

Future Maintenance Needed

All work completed until next maintenance visit



Site Maintenance Form

315 North St. Lititz, PA 17543

Phone: (717) 627-4440 Fax: (717) 627-4660

www.landstudies.com

No.

01706

Date:

06/08/2023

Image 1





Site Maintenance Form

315 North St. Lititz, PA 17543

Phone: (717) 627-4440 Fax: (717) 627-4660

www.landstudies.com

No.

01706

Date:

06/08/2023

Image 2





Site Maintenance Form

315 North St. Lititz, PA 17543

Phone: (717) 627-4440 Fax: (717) 627-4660

www.landstudies.com

No.

01706

Date:

06/08/2023

Image 3





Site Maintenance Form

315 North St. Lititz, PA 17543
Phone: (717) 627-4440 Fax: (717) 627-4660
www.landstudies.com

No.
01821

Date:
07/28/2023

Project Name:

Eshelman Run

Foreman's Name:

Ops3 Field

Work Completed

Invasive Plant Control (Herbicide Application)

Maintenance Notes

Probably would need to string trim along the fence on the down stream portion of the floodplain during sometime in late August /September

Future Maintenance Needed

All work completed until next maintenance visit



Site Maintenance Form

315 North St. Lititz, PA 17543

Phone: (717) 627-4440 Fax: (717) 627-4660

www.landstudies.com

No.

01821

Date:

07/28/2023

Image 1 Description

Area that can be string trimmed in the next couple months

Image 1





Site Maintenance Form

315 North St. Lititz, PA 17543

Phone: (717) 627-4440 Fax: (717) 627-4660

www.landstudies.com

No.

01821

Date:

07/28/2023

Image 2 Description

Japanese Hops throughout entire site

Image 2





Site Maintenance Form

315 North St. Lititz, PA 17543

Phone: (717) 627-4440 Fax: (717) 627-4660

www.landstudies.com

No.

01821

Date:

07/28/2023

Image 3 Description

Upstream view of restoration

Image 3





Site Maintenance Form

315 North St. Lititz, PA 17543
Phone: (717) 627-4440 Fax: (717) 627-4660
www.landstudies.com

No.
01910
Date:
09/06/2023

Project Name:
Eshleman run

Foreman's Name:
Ops3 Field

Work Completed

Invasive Plant Control (Herbicide Application)
Invasive Plant Control (Weed eating)

Maintenance Notes

Spot treat Japanese hops, mugwort, thistle and string trim along fence

Future Maintenance Needed

All work completed until next maintenance visit



Site Maintenance Form

315 North St. Lititz, PA 17543

Phone: (717) 627-4440 Fax: (717) 627-4660

www.landstudies.com

No.

01910

Date:

09/06/2023

Image 1 Description

Looking upstream from cattle crossing

Image 1





Site Maintenance Form

315 North St. Lititz, PA 17543

Phone: (717) 627-4440 Fax: (717) 627-4660

www.landstudies.com

No.

01910

Date:

09/06/2023

Image 2 Description

String trimmed area along fence line

Image 2





Site Maintenance Form

315 North St. Lititz, PA 17543

Phone: (717) 627-4440 Fax: (717) 627-4660

www.landstudies.com

No.

01910

Date:

09/06/2023