

Uwchlan Township



Stormwater Management Information Packet

UWCHLAN TOWNSHIP STORMWATER MANAGEMENT PERMIT APPLICATION PACKAGE

Regulations:

The Pennsylvania Stormwater Management Act of 1978 (PA Act 167) requires counties to prepare stormwater management plans for all watersheds within the county. Chester County prepared the County-wide Act 167 Stormwater Management Plan (approved July 2, 2013 by the Pennsylvania Department of Environmental Protection (PA DEP)). PA DEP, through Act 167, required that all Chester County municipalities adopt the ordinance requirements included in the Plan. Uwchlan Township adopted the County's model ordinance, Uwchlan Township's Stormwater Management Ordinance, on 12-9-2013 by Ord. No. 2013-07.

Purpose:

The Purpose of the Township's Stormwater Management (SWM) Ordinance requirements is to protect public health, safety and general welfare, property and water quality by implementing drainage and stormwater management practices, criteria, and provisions for land development, construction and earth disturbance activities.

Applicability:

All Regulated Activities, which includes any earth disturbance activity or any activity that involves the alteration or development of land in a manner that may affect stormwater runoff, shall be subjected to the regulations of the Township's Stormwater Management Ordinance. This includes all land development and redevelopment projects, and building / grading permit projects.

General Exemptions (refer to Chapter 214-6 of the Ordinance for additional information):

- Regulated Activities that involve **less than 400 square feet of proposed impervious surfaces** and less than 5,000 square feet of earth disturbance **are exempt**. Proposed impervious surfaces include all new, additional and replacement impervious surfaces.
- Additional exemptions include:
 - In-place replacement of residential dwelling unit (the replacement in the exact footprint of an existing one- or two-family dwelling unit).
 - In-place replacement, repair, or maintenance of residential impervious surfaces (the replacement of existing residential patios, decks, driveways, pools, garages, and/or sidewalks that are accessory to an existing one- or two-family dwelling unit in the exact footprint of the existing impervious surface).

Additional Requirements:

Phased and incremental project requirements

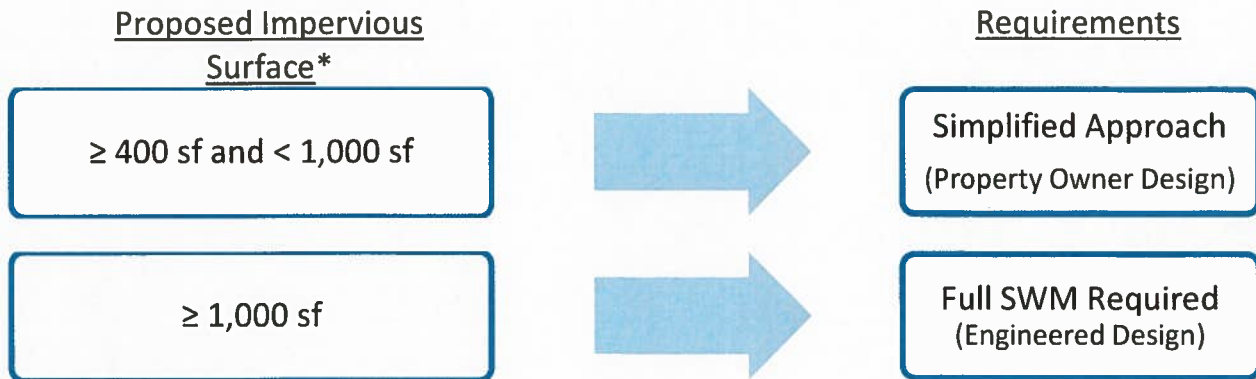
Starting January 2014, any Regulated Activity that is to take place incrementally, or occurs in sequential projects on the same property, shall be subject to regulation of the SWM Ordinance if the cumulative proposed impervious surface or earth disturbance exceeds the corresponding threshold for exemption.

Example: If, after January 2014, a property owner proposes construction of a 300 square-foot garage, that project would be exempted from the requirements of the Ordinance. If, at a later date, an applicant proposes to construct a 900 square-foot room addition on the same property, the applicant would then be required to implement the stormwater management and plan submission requirements of the Ordinance

for the cumulative total of 1,200 square feet of additional impervious surface added to the property since January 2014.

Modified requirements for small projects – Simplified Approach

Regulated Activities that involve 400 square feet to less than 1,000 square feet of proposed impervious surfaces and less than 5,000 square feet of proposed earth disturbance may apply the modified requirements presented in the "Simplified Approach to Stormwater Management for Small Projects" – Appendix A of the SWM Ordinance.



* Proposed impervious surfaces include all new, additional and replacement impervious surfaces.

Operation and Maintenance (O&M) Requirements

Continuing operations and maintenance of all permanent stormwater facilities is required for all projects. The following shall be required to be submitted to the Township for review and approval:

- Operation and Maintenance Plans detailing the O&M requirements
- O&M Agreement

The O&M Plan and executed Agreement shall be recorded at the Chester County Recorder of Deeds by the property owner as a restrictive covenant that runs with the land and shall be binding upon the landowner and any heirs or future owners.

O&M Agreements are required for all projects (Simplified Approach and Full SWM design projects). Sample agreements are provided in the Township SWM Ordinance.

The Township or Township representatives shall have the Right to Enter the property to inspect the implementation, condition, or operation and maintenance of all erosion and sediment controls and permanent stormwater facilities.

UWCHLAN TOWNSHIP STORMWATER MANAGEMENT SIMPLIFIED APPROACH SUMMARY

Refer to Appendix A of the Uwchlan Township's Stormwater Management Ordinance - Ord. No. 2013-07 for complete details related to the Simplified Approach.

Small projects with less than 1,000 square feet of Proposed Impervious Surfaces and with less than 5,000 square feet of proposed Earth Disturbance may apply the “Simplified Approach to Stormwater Management for Small Projects” (Simplified Approach).

- Only projects that meet the above size thresholds may use this Simplified Approach and are then not required to submit a formal Stormwater Management Site plan to the Municipality. However, these projects are still required to address water quality and infiltration requirements as outlined in Appendix A of the Ordinance.
- Any project with more than 999 square feet of Proposed Impervious Surface or more than 4,999 square feet of proposed Earth Disturbance can NOT apply this Simplified Approach.
- The Applicant should first review the planned project with the Township staff prior to initiating the Simplified Approach to confirm the following:
 - That the proposed project is not otherwise exempt from the stormwater management control and the engineered Stormwater Management Site Plan requirements of the Township's Stormwater Management Ordinance;
 - That the proposed project is eligible to use this Simplified Approach;
 - To determine which components of the proposed project must be included in the calculation of “impervious surfaces (areas)”; and,
 - Whether any local conditions are known to the Township that would preclude the use of any of the techniques included in this Simplified Approach.

Submittal and Approval Requirements:

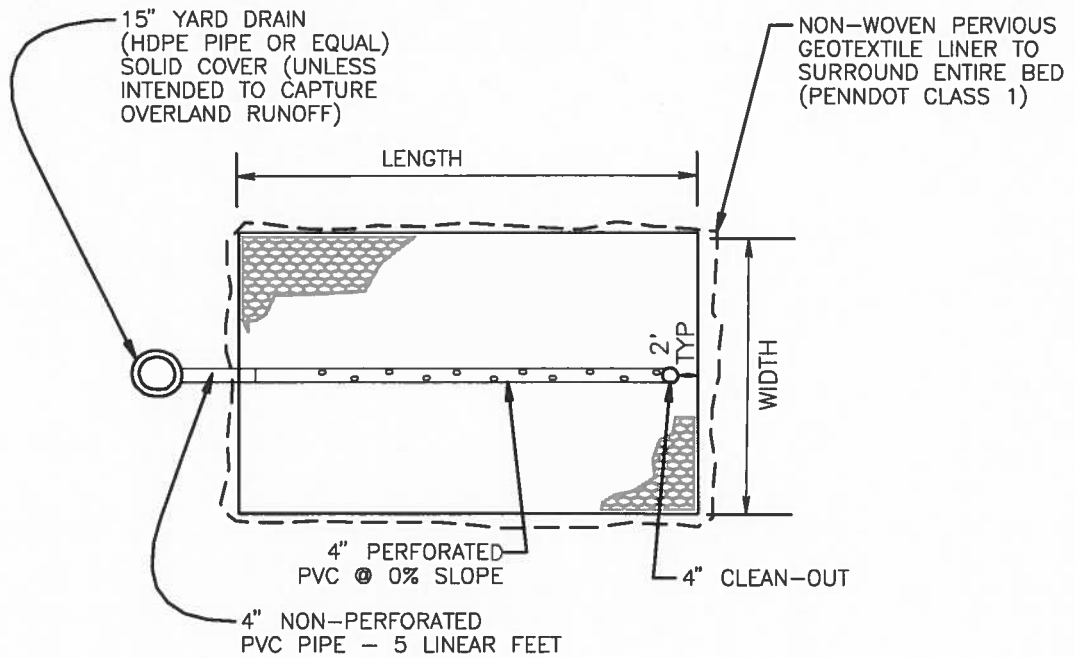
Use of the Simplified Approach requires:

- The applicant to submit the following to Uwchlan Township for review and approval prior to beginning construction:
 - **Site Plan & Design.** A Simplified Stormwater Management Site Plan (i.e. sketch plan) showing compliance with the required stormwater design (the first 1-inch of rainfall runoff from Proposed Impervious Surfaces must be captured and removed on the applicant's property).
 - **Agreement.** A completed, signed and notarized “Simplified Operation, Maintenance and Inspection Plan and Agreement”.
- After approval of the Plan, Agreement and Design, **the applicant must record the above referenced Plan and Agreement at the Chester County Office of the Recorder of Deeds.**

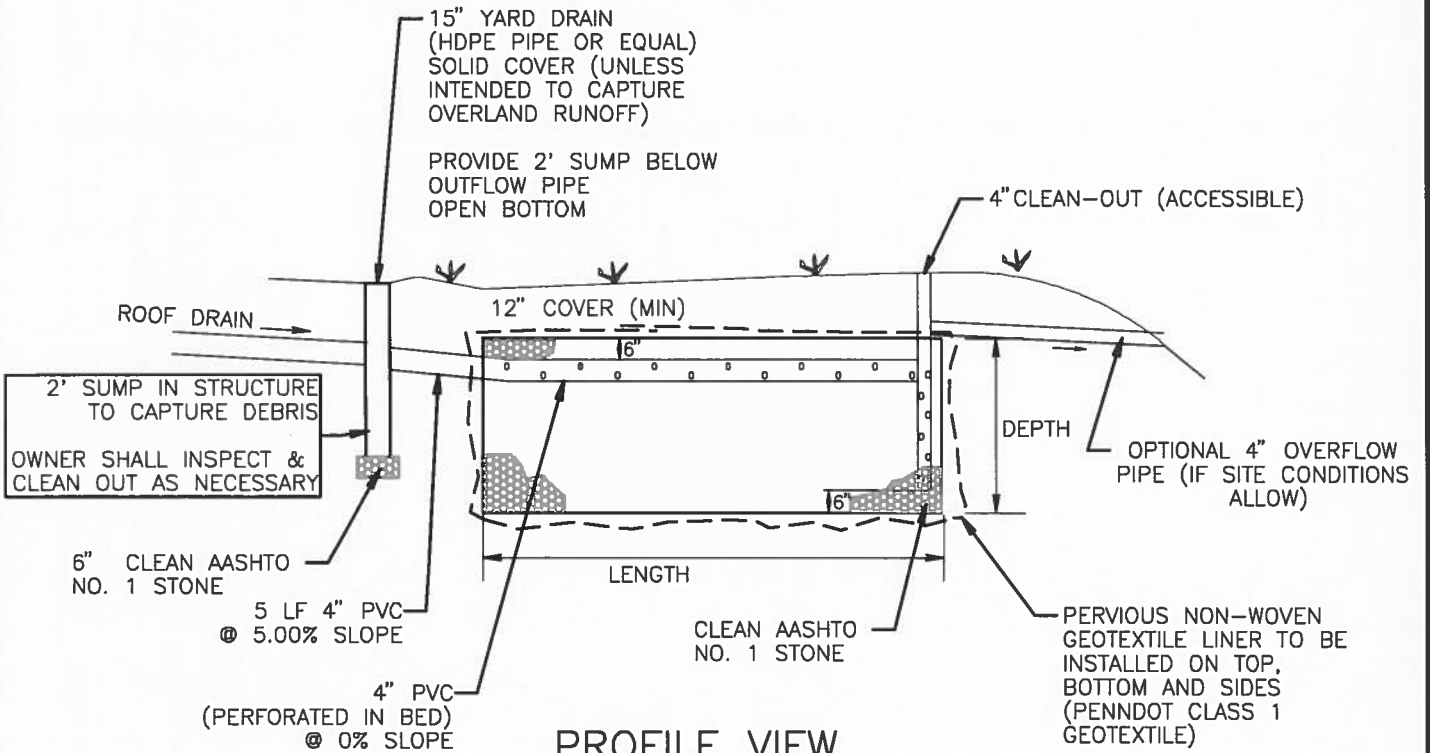
Uwchlan Township Stormwater Management

Recharge Bed Sizing Worksheet

New Impervious Coverage (square feet)	Required Volume of Bed (cubic feet)	Typical Bed Sizing		
		Width	Length	Depth
400	83	5'4"	x 5'4"	x 3'
500	104	5'11"	x 5'11"	x 3'
600	125	6'6"	x 6'6"	x 3'
700	146	7'	x 7'	x 3'
800	167	7'6"	x 7'6"	x 3'
900	187	7'11"	x 7'11"	x 3'
999	208	8'4"	x 8'4"	x 3'



PLAN VIEW



PROFILE VIEW

NOTE: APPLICANT MUST CONTACT TOWNSHIP TO SCHEDULE INSPECTION PRIOR TO THE START OF CONSTRUCTION OF RECHARGE BED.

TYPICAL UNDERGROUND
STONE RECHARGE BED DETAIL

NOT TO SCALE

RECHARGE BED CONSTRUCTION SEQUENCE

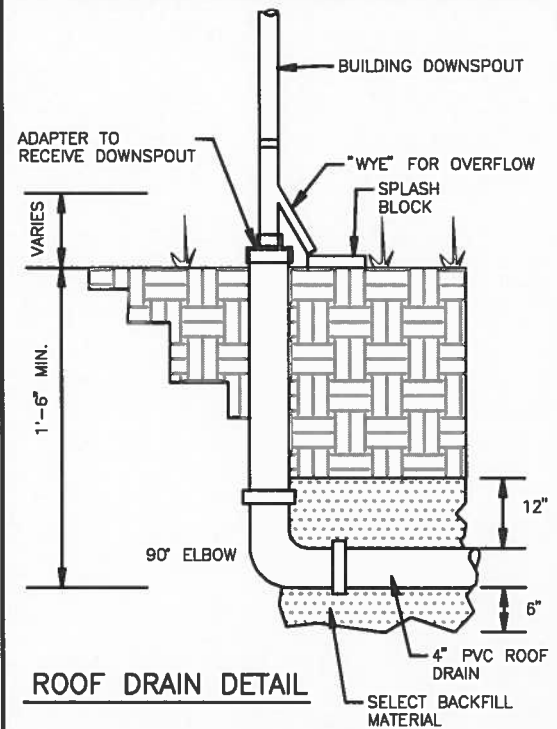
1. EXCAVATE PROPOSED RECHARGE / INFILTRATION BED, BOTTOM OF BED TO BE SCARIFIED AND REMAIN UNCOMPACTED.

EXCAVATION FOR THE INFILTRATION FACILITY SHALL BE PERFORMED WITH EQUIPMENT THAT WILL NOT COMPACT THE BOTTOM OF THE INFILTRATION BED.

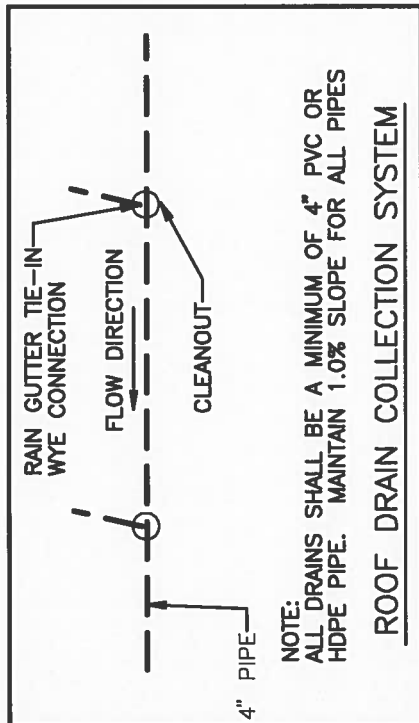
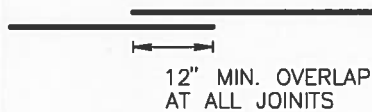
2. CONTACT THE TOWNSHIP STAFF FOR AN INSPECTION.
3. INSTALL GEOTEXTILE FABRIC ON ALL SIDES AND BOTTOM. A 12" MIN. OVERLAP AT ALL JOINTS MUST BE PROVIDED.
4. INSTALL CLEAN AASHTO NO. 1 STONE.
5. INSTALL PERFORATED STORM SEWER AS SHOWN ON DETAIL.
6. CONTACT THE TOWNSHIP STAFF FOR AN INSPECTION.
7. COVER PIPING WITH AASHTO NO. 1 STONE & INSTALL GEOTEXTILE FABRIC ON TOP OF STONE.

NOTES:

1. THE RECHARGE / INFILTRATION AREA SHOULD BE PROTECTED DURING CONSTRUCTION ACTIVITIES FROM COMPACTION.
2. DURING CONSTRUCTION AND AFTER CONSTRUCTION, THE INFILTRATION FACILITY MUST BE PROTECTED FROM SILT ENTERING TO THE SYSTEM. IF THE FACILITY IS INSTALLED PRIOR TO THE UPSLOPE AREA BEING FULLY STABILIZED, THE YARD DRAIN MUST BE SEALED OFF TO PREVENT RUNOFF FROM ENTERING INTO THE BED.



GEOTEXTILE JOINTS



STORMWATER INFILTRATION FACILITY GENERAL NOTES

1. THE CONTRACTOR SHALL USE EXTREME CARE WHEN INSTALLING FILTER FABRIC AND STONE IN ORDER TO PREVENT SEDIMENT, SOIL OR OTHER CONTAMINATION OF STONE AND / OR SEEPAGE BED. STOCKPILED STONE UTILIZED FOR CONSTRUCTION SHALL BE PLACED ON FILTER FABRIC TO PREVENT CONTAMINATION.
2. THE INSTALLATION OF THE STONE SHALL BE CHECKED BY THE DESIGN OR SITE ENGINEER PRIOR TO THE INSTALLATION OF THE SEEPAGE BED TO ENSURE THAT IT IS UNIFORMLY GRADED AND CLEAN WASHED AGGREGATE.
3. APPROPRIATE MEASURES SHALL BE TAKEN TO ENSURE SEDIMENT DOES NOT ENTER INTO THE SEEPAGE BED. MEASURES SHALL INCLUDE A SUMP INLET SHALL BE INSTALLED UPSTREAM TO CAPTURE DEBRIS AND THE SEEPAGE BEDS SHALL NOT BE INSTALLED UNTIL ALL UPSTREAM DRAINAGE AREAS ARE STABILIZED.
4. THE AREA FOR THE INFILTRATION FACILITIES SHALL BE ADEQUATELY PROTECTED WITH ORANGE CONSTRUCTION FENCE DURING CONSTRUCTION TO PREVENT CONSTRUCTION EQUIPMENT FROM ENTERING THE AREA OF THE FACILITY AND COMPACTING THE SUBGRADE.
5. NO CONSTRUCTION EQUIPMENT SHALL BE PLACED WITHIN THE INFILTRATION BED. THE SUBSOIL MUST NOT BE COMPACTED.
6. THE BOTTOM OF ALL SEEPAGE BED SHALL BE UNDISTURBED OR UNCOMPACTED SUBGRADE.
7. IF UNFAVORABLE SOIL CONDITIONS ARE ENCOUNTERED DURING INSTALLATION OF THE ON-LOT INFILTRATION FACILITY (IE. BEDROCK OR GROUNDWATER), CONSTRUCTION IS TO STOP AND THE TOWNSHIP SHALL BE NOTIFIED. THE DESIGN SHALL BE MODIFIED AND APPROVED BY THE TOWNSHIP PRIOR TO THE COMMENCEMENT OF WORK.
8. UPON STABILIZATION (UNIFORM 70% PERENNIAL VEGETATIVE COVER) WITHIN THE INFILTRATION BED DRAINAGE AREA, CONTACT THE TOWNSHIP ENGINEER AND CONSERVATION DISTRICT TO SCHEDULE AN INSPECTION OF THE BED CONSTRUCTION. A MINIMUM OF 48 HRS. NOTICE MUST BE PROVIDED TO THE INSPECTING AGENCY.
9. UPON COMPLETION OF THE BED CONSTRUCTION, IMMEDIATELY STABILIZE ALL DISTURBED AREAS WITH PERMANENT SEED MIX AND EROSION CONTROL BLANKET AS INDICATED ON THE PLANS.
10. SEEPAGE BED SHALL BE SURROUNDED WITH A NON-WOVEN GEOTEXTILE (PERMEABLE FILTER FABRIC). THE FILTER FABRIC SHALL BE TYPAR FABRIC, STYLE 3341 OR APPROVED EQUAL.
11. SEEPAGE BED FILTER FABRIC AND STONE SHOULD BE KEPT CLEAN OF SOIL/SEDIMENT DURING THE INSTALLATION PROCESS. IF INSPECTION INDICATES THAT SOIL SEDIMENT HAS ENTERED ANY OF THE INFILTRATION SEEPAGE BEDS, APPROPRIATE MEASURES (I.E. CLEANING THE SOIL/SEDIMENT FROM THE FABRIC, STONE BED ETC. AND OR REPLACEMENT OF THE FABRIC AND STONE) SHOULD BE ADDRESSED.
12. INFLOW AND OUTFLOW POINTS INTO THE INDIVIDUAL ON-LOT SYSTEMS SHOULD BE KEPT CLEAR OF LEAVES AND OTHER DEBRIS. ANY LEAVES OR DEBRIS WILL NEGATIVELY IMPACT THE PERFORMANCE OF THESE SYSTEMS. ALL DOWNSPOUTS AND OVERFLOW PIPES SHOULD BE KEPT IN GOOD WORKING ORDER.



Uwchlan Township

715 North Ship Road Exton, PA 19341
ph: 610.363.9450 www.uwchlan.com

PERMIT #: _____
(office use only)

STORMWATER PERMIT APPLICATION

Job Site Location:

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Residential:

Commercial:

Property Owner Information:

Name:	
Address:	
Phone #:	
Email:	

Occupant Information:

Name:	
Address:	
Phone #:	
Email:	

Contractor Information:

Name:	
Address:	
Phone #:	
Email:	
Registration #:	

Project Description:

Lot / Impervious Tabulation:

Total sq ft of property:	_____
Total sq ft of existing impervious coverage:	_____
Total sq ft of proposed impervious coverage:	_____
Total sq ft of existing & proposed impervious coverage:	_____
Total lot % of new & existing impervious coverage:	_____
Zoning District:	_____

Construction Information: *(applicable to Residential Use only)*

Will Twp SWM Simplified Approach design & construction be used:
 YES NO *(If no, prepared construction plan must be provided)*
Proposed dimensions of Recharge Bed area: ____X____X____
of roof downspouts to be connected to recharge area: ____

Supporting Documents:

- Plot / Site Plans
- SWM / Grading Plans & Calculations Report
- Signed & Notarized Operations & Maintenance Agreement

Permit Fee:

I hereby certify that the proposed work is authorized by the owner of record and I have been authorized by the owner to make this application as his/her authorized agent. All work proposed and completed shall be done in accordance with the Uwchlan Township Building Code as adopted and amended.

Signature: _____

Printed Name: _____

Date: _____

Stormwater Management Recharge Bed- Township Approved Simplified Approach

Operation, Maintenance, and Inspection Plan and Agreement

It is the Landowner's responsibility to properly maintain Stormwater Best Management Practices (BMP's). It is also the Landowner's responsibility to inform future buyers of the function, operation, and maintenance needed for any BMP's on the property prior to the purchase of the property. The following maintenance agreement outlines the inspection and maintenance required, the responsibilities of the Landowner, and the rights of the Municipality in regards to the inspection and enforcement of the maintenance requirements.

The Operation, Maintenance, and Inspection Plan and Agreement must be signed, notarized, and submitted to the Municipality. Following approval of installation and signature of the Municipality, the Landowner must have the Agreement recorded at the Chester County Office of the Recorder of Deeds so that the Agreement will be applicable to future landowners. Proof of the recording must be provided to the Municipality prior to final inspection of the BMP.

**SIMPLIFIED APPROACH
STORMWATER BEST MANAGEMENT PRACTICES
OPERATION, MAINTENANCE, AND INSPECTION PLAN AND
AGREEMENT**

THIS AGREEMENT, made and entered into this _____ day of _____, 20____, by and between _____, (hereinafter the “Landowner”), and Uwchlan Township, Chester County, Pennsylvania, (hereinafter “Municipality”).

WITNESSETH

WHEREAS, the Landowner is the owner of certain real property by virtue of a deed of conveyance recorded in the land records of Chester County, Pennsylvania, at Deed Book _____ and Page _____, (hereinafter “Property”); and

WHEREAS, the Landowner recognizes that the stormwater management best management practices or BMPs (hereinafter referred to as “BMP” or “BMP(s)”) located on the Property at

_____ (address of Property where BMP is located) must be inspected and maintained; and

WHEREAS, the Municipality and the Landowner, for itself and for its administrators, executors, successors, heirs, and assigns, agree that the health, safety, and welfare of the residents of the Municipality and the protection and maintenance of water quality require that on-site BMP(s) be constructed and maintained on the Property; and

WHEREAS, for the purposes of this Agreement, the following definitions shall apply:

BMP – “Best Management Practice;” activities, facilities, designs, measures or procedures used to manage stormwater impacts from land development, to protect and maintain water quality and ground water recharge and to otherwise meet the purposes of the Municipality’s Stormwater Management Ordinance, including, but not limited to infiltration trenches, dry wells, bioretention, rain gardens, permeable paving, rain barrels and cisterns, etc. The BMP(s) are permanent appurtenances to the Property; and

Conveyance – As specifically identified in the Simplified Stormwater Management Site Plan (herein after “Plan”), a man-made, existing or proposed facility, structure or channel used for the transportation or transmission of stormwater from one place to another, including pipes, drainage ditches, channels and swales (vegetated and other), gutters, and like facilities or features. The conveyances identified in the Plan are permanent appurtenances to the Property; and

WHEREAS, the Municipality requires that the BMP(s) and conveyances as shown on Plan and in accordance with the sizing calculations found on the Simplified Method Worksheet (herein after “Worksheet”) be constructed by the Landowner; the BMP(s) shall further be maintained by the Landowner, its administrators, executors, successors, heirs, and assigns in accordance with the associated operation and maintenance requirements included herein. The Plan and Worksheet are attached hereto and incorporated herein together as Exhibit “A” hereto; and

WHEREAS, the Municipality requires that stormwater management BMP(s) be constructed and adequately inspected, operated and maintained by the Landowner, its administrators, executors, successors, heirs, and assigns, in accordance with the following maintenance requirements:

1. Dry Wells (aka Recharge Bed)

- a. Dry wells are to be inspected by the landowner at least four (4) times a year and after significant rainfalls, and debris, trash, sediment, and any other waste material need to be removed and disposed of at suitable disposal or recycling sites and in compliance with local, state, and federal waste regulations.
- b. For dry wells, gutters are to be regularly cleaned out and ensure that proper connections are maintained to facilitate the effectiveness of the dry well.
- c. The filter screen for downspouts or roof gutters which intercepts roof runoff and conveys it to the dry well must be cleaned and replaced as necessary.
- d. Dry wells that are damaged are to be fixed or replaced within two (2) weeks of being damaged.
- e. If an intermediate sump box exists in conjunction with a dry well, it must be cleaned out at least once per year.

NOW, THEREFORE, in consideration of the foregoing promises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto, intending to be legally bound hereby, agree as follows:

1. The foregoing recitals to this Agreement are incorporated as terms of this Agreement and obligations of the Landowner as if fully set forth in the body of this Agreement.

2. The Landowner shall construct the BMP(s) in accordance with the specifications identified in the Plan and Worksheet.

3. The Landowner shall inspect, operate and maintain the BMP(s) as shown on the Plan in good working order acceptable to the Municipality and in accordance with the specific inspection and maintenance requirements outlined in this Agreement.

4. The Landowner hereby grants permission to the Municipality, its authorized agents and employees, to enter upon the Property from the public right-of-way or roadway, at reasonable times and upon presentation of proper identification, to inspect the BMP(s) whenever it deems necessary for compliance with this Agreement and the Municipality's Stormwater Ordinance. Whenever possible, the Municipality shall notify the Landowner prior to entering the Property.

5. The Landowner acknowledges that, per the Municipality's Stormwater Ordinance, it is unlawful, without written approval of the Municipality, to:

- a. Modify, remove, fill, landscape, alter or impair the effectiveness of any BMP or conveyance that is constructed as part of the Plan;
- b. Place any structure, fill, landscaping, additional vegetation, yard waste, brush cuttings, or other waste or debris into a BMP or conveyance that would limit or alter the functioning of the BMP or conveyance;
- c. Allow the BMP or conveyance to exist in a condition which does not conform to the Plan or this Agreement; and
- d. Dispose of, discharge, place or otherwise allow pollutants including, but not limited to, deicers, pool additives, household chemicals and automotive fluids to directly or indirectly enter any BMP or conveyance.

6. In the event the Landowner fails to operate and maintain the BMP(s) as shown on the Plan in good working order acceptable to the Municipality the Landowner shall be in violation of this Agreement and the Landowner agrees that the Municipality or its representatives may, in addition to and not in derogation or diminution of any remedies available to it under the Stormwater Ordinance or other statutes, codes, rules or

regulations, or this Agreement, enter upon the Property and take whatever action is deemed necessary to maintain said BMP(s). It is expressly understood and agreed that the Municipality is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.

7. In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the Municipality for all expenses (direct and indirect) incurred within 30 days of delivery of an invoice from the Municipality. Failure of the Landowner to make prompt payment to the Municipality may result in enforcement proceedings, which may include the filing of a lien against the Property, which filing is expressly authorized by the Landowner.

8. The intent and purpose of this Agreement is to ensure the proper maintenance of the onsite BMP(s) by the Landowner; provided, however, that this Agreement shall not be deemed to create or effect any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.

9. The Landowner, its executors, administrators, assigns, heirs, and other successors in interests, hereby release and shall release the Municipality, its employees, agents and designated representatives from all damages, accidents, casualties, occurrences or claims which might arise or be asserted against the Municipality and/or its said employees, agents or representatives, arising out of the construction, presence, existence, or maintenance of the BMP(s) either by the Landowner or Municipality. In the event that a claim is asserted or threatened against the Municipality, its employees, agents or designated representatives, the Municipality shall notify the Landowner and the Landowner shall defend, at his own expense, any claim, suit, action or proceeding, or threatened claim, suit, action or proceeding against the Municipality or, at the request of the Municipality, pay the cost, including attorneys' fees, of defense of the same undertaken on behalf of the Municipality. If any judgment or claims against the Municipality, its employees, agents or designated representatives shall be allowed, the Landowner shall pay all damages, judgments or claims and any costs and expenses incurred by the Municipality, including attorneys fees, regarding said damages, judgment or claims.

10. The Municipality may enforce this Agreement in accordance with its Stormwater Ordinance, at law or in equity, against the Landowner for breach of this Agreement. Remedies may include fines, penalties, damages or such equitable relief as the parties may agree upon or as may be determined by a Court of competent jurisdiction. Recovery by the Municipality shall include its reasonable attorneys fees and costs incurred in seeking relief under this Agreement.

11. Failure or delay in enforcing any provision of this Agreement shall not constitute a waiver by the Municipality of its rights of enforcement hereunder.

12. The Landowner shall inform future buyers of the Property about the function of, operation, inspection and maintenance requirements of the BMP(s) prior to the purchase of the Property by said future buyer, and upon purchase of the Property the future buyer assumes all responsibilities as Landowner and must comply with all components of this Agreement.

13. This Agreement shall inure to the benefit of and be binding upon, the Municipality and the Landowner, as well as their heirs, administrators, executors, assigns and successors in interest.

This Agreement shall be recorded at the Office of the Recorder of Deeds of the County of Chester, Pennsylvania, and shall constitute a covenant running with the Property and/or equitable servitude, in perpetuity.

ATTEST:

WITNESS the following signatures and seals:

(SEAL)

For the Municipality:

(SEAL)

For the Landowner:

ATTEST: _____ (Township)

County of Chester, Pennsylvania

I, _____, a Notary Public in and for the County and State aforesaid, whose commission expires on the _____ day of _____, 20__, do hereby certify that _____ whose name(s) is/are signed to the foregoing Agreement bearing date of the _____ day of _____, 20__, has acknowledged the same before me in my said County and State.

GIVEN UNDER MY HAND THIS _____ day of _____, 20__.

NOTARY PUBLIC

(SEAL)