

Zoning Permit Application Checklist

- _____ 1. Zoning Permit Application - must be signed by property owner
- _____ 2. Sketch Plan - including set back, well and septic measurements
- _____ 3. Fee/Money (credit cards not accepted)
- _____ 4. Adams County Conservation District notification with signature

Stormwater Management

- _____ 1. Stormwater Management Application / Worksheet

For new residential construction – also needed:

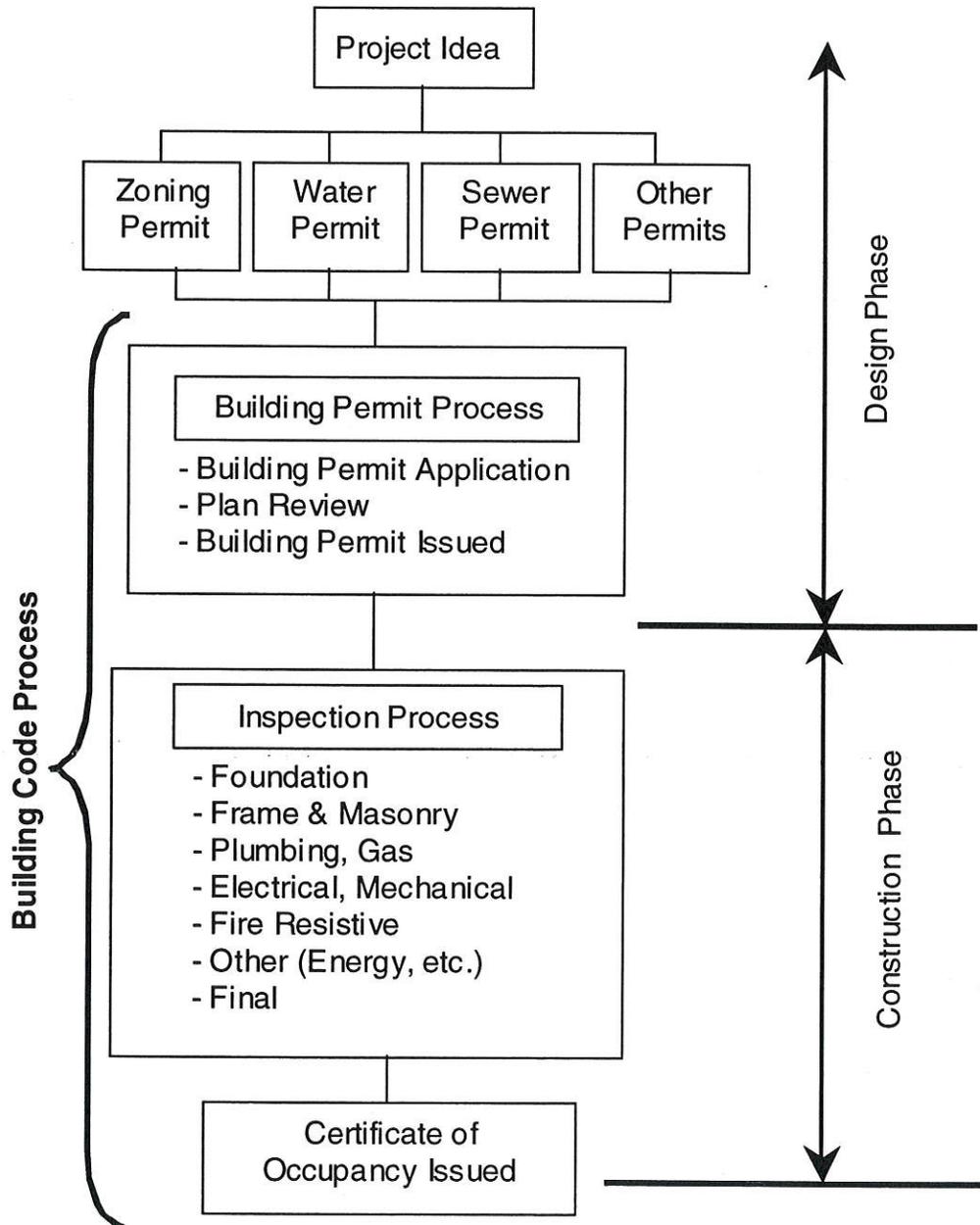
- _____ 1. Driveway Permit (township/state)
- _____ 2. Driveway Final Inspection
- _____ 3. Sewage – Wm. F. Hill, Bryan Leese (717) 334-9137
- _____ 2. Sketch Plan - including set back, well and septic measurements

For Lake Heritage Residents – also needed:

- _____ 1. Homeowner Association approval letter
- _____ 2. White Run Regional Municipal Authority approval letter

*** Projects over \$2,500.00 require an Adams County Permit

THE BUILDING REGULATORY PROCESS



ZONING PERMIT APPLICATION

Voice: (717) 359-4500

Fax: (717) 359-9741

Web: www.mtjoytwp.us

Mount Joy Township Zoning Officer

902 Hoffman Home Road

Gettysburg, PA 17325

Permit# _____

APPLICANT'S INFORMATION

Name	Daytime phone:	Alternate phone:
Address	Email:	
<input type="checkbox"/> legal owner (property owner) <input type="checkbox"/> tenant (application must be accompanied by written permission of property owner) <input type="checkbox"/> equitable owner (application must be accompanied by option or agreement of sale)		

PROPERTY OWNER'S INFORMATION

Name	Daytime phone:	Alternate phone:
Address	Email:	

PROPERTY INFORMATION

Parcel#	Address:	Lot size:	Zoning district:
Water: <input type="checkbox"/> well <input type="checkbox"/> public water: _____	Sewer: <input type="checkbox"/> on-lot <input type="checkbox"/> public sewer: _____		

DESCRIPTION OF APPLICATION

Type of Application: <input type="checkbox"/> New Use <input type="checkbox"/> New Building/Structure <input type="checkbox"/> Special Exception <input type="checkbox"/> Change of Use <input type="checkbox"/> Building/Structure Expansion <input type="checkbox"/> Conditional Use <input type="checkbox"/> Variance <input type="checkbox"/> Appeal from Zoning Officer's Determination <input type="checkbox"/> Other: _____ Describe permit or relief sought (including applicable sections of Zoning Ordinance): _____ _____ _____	Current Use/Building Type: <input type="checkbox"/> non-residential _____ <input type="checkbox"/> residential <input type="checkbox"/> agriculture	
	Proposed Use/Building Type: <input type="checkbox"/> non-residential _____ <input type="checkbox"/> residential <input type="checkbox"/> agriculture Proposed building/structure size: _____ sq. ft.	
	Required setbacks: Front: _____ Rear: _____ Side: _____	Proposed setbacks: Front: _____ Rear: _____ Side: _____
Does application involve: <input type="checkbox"/> nonconforming use <input type="checkbox"/> nonconforming building or structure <input type="checkbox"/> nonconforming lot	Uniform Construction Code Permit required: <input type="checkbox"/> Yes <input type="checkbox"/> No	Land Development Plan required: <input type="checkbox"/> Yes <input type="checkbox"/> No
	Stormwater Management Plan required: <input type="checkbox"/> Yes <input type="checkbox"/> No	

By signing this application, I declare that:

- I am the title owner of record of the property (landowner), agent of the landowner, or tenant with permission of the landowner, or the holder of an option or contract to purchase the property.
- The information provided in this application is accurate to the best of my knowledge.
- By signing this application, I acknowledge that I am responsible for paying any actual expenses, in excess of the application fee for types of application marked with the (*), that the Township incurs in processing the application, and that such payments are due and payable within 10 business days of the date on the Township's invoice.
- I understand that false information provided on this application may result in a stop work order or revocation of the permit and that false statements herein made also are subject to the penalties of 18 Pa.C.S.§4904, relating to unsworn falsification to authorities.

By checking this box, I affirm that I have attached a site plan showing exact size and location of any proposed construction as well as any existing

buildings and structures (including dimensions), septic system, well, easements, rights-of-way, property and lot lines, and site dimensions, or other information as is required by the provisions of the Zoning Ordinance to accompany this application.

By checking this box, I hereby grant permission for the Zoning Officer to enter onto my property to conduct compliance inspections while this application is under consideration and any issued Zoning Permit is in effect.

Signature of Applicant

Date

*This application is an important legal document. Township employees will provide general assistance, but cannot provide legal advice.
If you have secured legal counsel for this application, please provide the contact information for your attorney below:*

Name: _____

Address: _____

Telephone No.: _____ Email address: _____

Date application received:

Date Zoning Permit issued:

Date of Zoning Hearing Board or Board
of Supervisors action:
 approval
 approval with conditions
 denial

Fee: \$ _____ Date paid: _____

check # _____ cash



Know what's below.
Call before you dig.

Homeowners often make risky assumptions about whether or not they should get their utility lines marked, but every digging job requires a call – even small projects like planting trees and shrubs. The depth of utility lines varies and there may be multiple utility lines in a common area. Digging without calling can disrupt service to an entire neighborhood, harm you and those around you and potentially result in fines and repair costs. Calling 811 before every digging job gets your underground utility lines marked for **FREE** and helps prevent undesired consequences.

FEE SCHEDULE FOR MOUNT JOY TOWNSHIP, ADAMS COUNTY

PERMITS

ZONING PERMIT – PERMITTED USE BY RIGHT: \$50.00

All zoning permits are valid for one year. A renewal of one year will be issued upon submission of required documentation.

ZONING PERMIT -- SIGN:

Up to 40 sq. ft.	\$ 50.00
41 sq. ft .up to 60 sq. ft.	\$100.00
61 sq. ft. and over	\$ 4.00 per square foot calculated on both sides

CONDITIONAL USE, SPECIAL EXCEPTION, VARIANCE APPLICATIONS AND APPEALS FROM DETERMINATION OF ZONING OFFICER:

Filing Fee \$500.00

Payment of the filing fee is due upon submission of the application.

In addition to the filing fee, the Township will charge any allowable costs (for example, associated with additional hearings) incurred by the Township that exceed these fees.

SPECIAL EVENTS PERMIT: \$500 per application

WELL CONSTRUCTION PERMIT: \$25.00 per well

Payment is due upon submission of the application.

DRIVEWAY PERMIT:

Permit fees will be charged when a driveway will access onto a Township road and is not in conjunction with a building permit for new construction.

Application Fees: These fees are applied to the administrative costs incurred in reviewing the application and plan(s) and issuing and processing the permit, including the preliminary review of the site location identified in the application.

Minimum use (single-family dwellings, apartments with 5 or fewer units)	\$15.00
Low Volume (office buildings, car washes)	\$30.00
Medium Volume (motels, fast food restaurants, service stations, small shopping plazas)	\$40.00
High Volume (large shopping centers, multi-building apartments or office complexes)	\$50.00

Permit Inspection Fees: These fees are applied to the costs incurred in the preliminary review of the location covered by the permit, and/or spot inspection of the permitted work, and/or subsequent inspection after the permitted work has been completed to ensure compliance with

Township specifications and permit provisions. If the Township determines that the permitted work warrants the Township Engineer to inspect the permitted work on more than a spot inspection basis, the permittee shall be charged for the additional expenses incurred by the Township.

Minimum use	\$15.00
Low Volume	\$20.00
Medium Volume	\$35.00
High Volume	\$50.00

Payment of the application fee and minimum permit inspection fee is due upon submission of the application.

SOLID WASTE PERMIT

Application fee	\$50.00
-----------------	---------

PLAN REVIEWS / INSPECTIONS

SUBDIVISION & LAND DEVELOPMENT APPLICATION FEES

Preliminary Plan	\$150.00 per lot
Final Plan	\$175.00 per lot
Preliminary/Final Plan	\$325.00 per lot
Minor Subdivision Plan	\$325.00 per lot

Payment of the per lot fees is due upon submission of the plan.

SUBDIVISION & LAND DEVELOPMENT INSPECTION / REVIEW FEES:

In addition to the per lot fees, the Township will charge for reimbursement actual review and/or inspection costs incurred by the Township that exceed the per lot fees. Review and inspection fees are charged at the following rates:

	\$ 93.50/hr.
William F. Hill, P.E., President	
Senior Environmental Engineer, M.S., P.E.	\$ 93.50/hr.
Project Manager, P.E.	\$ 70.00/hr. to \$ 73.00/hr.
Staff Engineer, P.E., Staff Civil/Environmental Engineer	\$ 59.50/hr. to \$ 65.00/hr.
Environmental Planner, SEO, E.I.T., Designer	\$ 47.00/hr. to \$ 59.50 hr.
Engineering Technician II	\$ 44.00/hr. to \$ 48.00/hr.
Construction Monitoring	\$ 47.00/hr. to \$ 56.00/hr.
Survey Party (one man GPS)	\$100.00/hr.
Survey Party (two man GPS)	\$144.00/hr.
Survey Party (two man)	\$135.00/hr.
Clerical	\$ 32.00/hr

If accumulated fees for plan reviews or inspections surpass the initial fees collected, the applicant shall be responsible for payment of these fees in full as a condition of approval of the plan, prior to release of the plan for recording, or at any other time as directed by the Board of Supervisors.

SEWAGE ENFORCEMENT OFFICER (SEO) SERVICES:

Application Review – covers administrative work and paperwork associated with septic permitting.	\$100.00
Repair System Application – depending on minor or major repair, fee covers minor repair permit and final inspection, or entire sewage permit for major repair and/or replacement.	\$100.00 - \$850.00
Deep Soil Probe Evaluation – includes three deep soil probe evaluations per lot. Additional probes above three will be an additional \$40.00 per probe.	\$150.00 + \$40.00 additional
Percolation Test (per 6 hole test)	\$275.00
System Design Review and Permit Issuance	\$150.00
Final System Inspection	\$100.00
Any site visit other than Final Inspection	\$100.00
Miscellaneous Services:	\$75.00
Preparation for hearing and/or court appearance	
Township meeting attendance/correspondence	
Planning Module Review, etc.	

SEO Services costs are to be paid directly to the Township Sewage Enforcement Officer and made payable to “Mount Joy Township.” If actual expense for review and inspection conducted by the Sewage Enforcement Officer exceeds the scheduled fees, the landowner and/or developer shall be responsible for payment in full of the additional costs incurred by the Township prior to issuance of a permit, approval to cover system, or at any other time as directed by the Board of Supervisors.

STORM WATER MANAGEMENT PLAN REVIEW:

Level 1:

Administrative Fee \$ (Zoning Permit Fee)

Level 2:

Administrative Fee.....	\$ 30.00
Engineering Escrow **.....	\$ <u>100.00</u>
Total Fee.....	\$ 130.00

* Engineering Escrow is for review and coordination with Township Engineer to verify site meets the Disconnected Impervious Area exemption criteria.

Level 3:

Administrative Fee.....	\$ 50.00
Engineering Escrow **.....	\$ <u>300.00</u>
Total Fee.....	\$ 350.00

** Engineering Escrow is for coordination with Township Engineer for assistance in preparing a Simplified Stormwater Management Plan to meet site conditions and for inspection of the stormwater management facilities.

Level 4:

Administrative Fee.....	\$ 50.00
Engineering Escrow ***.....	\$ <u>350.00</u>
Total Fee.....	\$ 400.00

*** Engineering Escrow is for review of the stormwater management plan by the Township Engineer to verify compliance with the Stormwater Management Ordinance and for inspection of the stormwater management facilities.

This level plan must be sealed by Applicant's consultant.

Notes:

1. The Engineering Escrow fee is an estimate of the anticipated review and inspection costs for the proposed project. If the engineering costs exceed the escrow amount, the applicant will be responsible for any additional review or inspection costs. Any remaining escrow funds will be returned to the applicant upon issuance of the final completion certificate for the stormwater management facilities.
2. All stormwater management plan reviews for Subdivision and Land Development Plans will be subject to the fee schedules established by the Township for Subdivision and Land Development Plans.
3. Administrative Fees are non-refundable

If accumulated fees for stormwater management plan surpass the initial fee collected, the land owner and/or developer shall be responsible for payment in full prior approval of the plan, at time of completion certificate issuance, or at any other time as directed by the Township Engineer or Township Supervisors.

UNIFORM CONSTRUCTION CODE (UCC)

RESIDENTIAL FEE SCHEDULE

1. RESIDENTIAL UNITS (1- 2 family dwellings and additions)

Services: required UCC building/occupancy permits, plan review, footings, foundation, framing, electrical, plumbing, mechanical, energy, final inspection

Less than 500 sq.ft.	\$362.00
501 to 999 sq.ft.	\$445.00
1,000 to 1,800 sq. ft.	\$600.00
1,801 to 2,000 sq. ft.	\$755.00
2,001 to 2,400 sq. ft.	\$881.00
2,401 up	\$881.00 plus an additional \$0.50 per sq. ft.

Required under slab inspection visit	\$55.00 /visit
Return Inspection	\$55.00 /visit

Fire Sprinkler: plan review and inspections	\$160.00
---	----------

2. STAND ALONE STRUCTURES

A) Detached Buildings, Decks, Porches, Etc.	
Footer, framing, final	\$187.00
Mechanical, plumbing, electrical	\$ 55.00 per Inspection
B) Manufactured Homes at grade.	
Footer, piers, tie downs, r/i inspections, skirting, framing, final	\$320.00
C) In-Ground Pools.	
Pre-pour, post pour, barrier, and final	\$290.00
D) On-Ground pools.	
Final	\$ 95.00
E) PV systems, windmills	
Plan review, footer, framing, electrical, final	\$318.00
Return inspection	\$55.00 per visit

3. <u>INDIVIDUAL INSPECTIONS</u>	\$55.00 per visit
---	-------------------

4. <u>ELECTRICAL SERVICE INSPECTIONS</u>	\$70.00 per visit
---	-------------------

Return inspection	\$55.00 per visit
-------------------	-------------------

5. CONDITIONAL OCCUPANCY PERMIT INSPECTION/PERMIT

\$65.00 per permit

NOTE:

Fee schedule will be reviewed annually.

Permits revoked or suspended for cause - no refunds will be granted.

All fees invoices need to be paid before occupancy permit will be issued.

Written requests for permit extensions will be billed at 5% of original permit fee

COMMERCIAL FEE SCHEDULE

1. COMMERCIAL UNITS

Services: Plan review, footings, foundation, R/I building, R/I electric, R/I plumbing, R/I mechanical, F building, F electric, F plumbing, F mechanical, energy, fire, accessibility, and other inspections as required by project/code.

Plan Review Calculated according to the ICC Valuation Service, actual cost of construction, or other services

Plan review transfer \$91.50 per hour

Permitting and inspections

<u>Project Construction Cost</u>	<u>Base Fee</u>	<u>% Project Cost</u>
0 to \$499,999.99	\$300.00	0.0096
\$500,000.00 to 1-M	0	0.009
1.1-M to 5-M	0	0.0085
5.1-M to 8-M	0	0.0085
8.1-M to 10-M	0	0.0075
Over 10-M	priced per office schedule	

Additional inspections \$122.00 per inspection

2. OTHER COMMERCIAL SERVICES

Customer consultation \$122.00

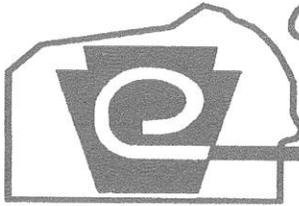
Commercial electrical services inspections

Single Phase:	
Up to 600 AMP	\$125.00
Three Phase:	
Up to 600 AMP	\$183.00
800 to 1200 AMP	\$305.00
Over 1200 AMP	Project priced

Swimming Pools \$300.00

NOTE:

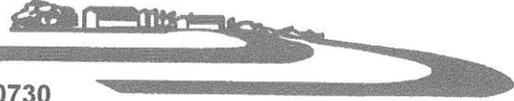
Fee schedule will be reviewed annually.
Permits revoked or suspended for cause, - no refunds will be granted.
All fees invoices need to be paid at time the permit will be issued.
Written requests for permit extensions will be billed at 5% of original permit fee



Adams County Conservation District

670 Old Harrisburg Road
Suite 201
Gettysburg, PA 17325-3404

Phone (717) 334-0636 Fax (717) 337-0730
www.adamscounty.us



Revised February 2011

BASIC CHECKLIST FOR INFORMING THE PUBLIC ABOUT REQUIREMENTS PERTAINING TO EARTH DISTURBANCE ACTIVITIES IN PA

1. Will the project involve an earth disturbance activity? YES NO (circle one)
2. If yes, what is the approximate size of the earth disturbance activity in square feet? _____
** A plan should be provided which depicts to scale, the limits of earth disturbance boundary over the life of the project.
3. Does the project involve earth disturbance activities greater than 5000 sq. ft. but below one acre?
YES NO (circle one) If YES, a written e&s plan is required. Refer to "typical" for general guidance
4. Could the project have a sum total of 1 or more acres of earth disturbance over the entire life of the project? YES NO (circle one) **If YES, you should inform the applicant to contact the Conservation District to obtain an NPDES construction permit application.**
5. Does the proposed project involve earth disturbance activities in, along or adjacent to Waters of this Commonwealth? YES NO (circle one) If YES, contact the Conservation District

Definitions -taken from the Ch. 102 (erosion and sediment control regulations):

Earth disturbance activity – a construction or other human activity which disturbs the surface of the land, including, but not limited to, clearing and grubbing, grading, excavations, embankments, land development, agricultural plowing or tilling, timber harvesting activities, road maintenance activities, mineral extraction, and the moving, depositing, stockpiling, or storing of soil, rock or earth materials

Waters of this Commonwealth – rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs and other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth

****** For earth disturbance activities of less than 5000 sq. ft., erosion and sediment control best management practices shall still be incorporated into the project.******

Your signature implies that the municipality has provided you with an erosion and sediment control ("e&s") checklist. This checklist was prepared by the Adams County Conservation District ("District"). The checklist was developed in order to bring public awareness to the basic requirements pertaining to earth disturbance activities.

It should also be noted that the District has legal authority to enter onto properties to perform inspections of earth disturbance activities.

Print name: _____

Signature: _____

Witnessed by: _____

Date: _____

* The Municipality should provide the applicant a copy of the signed document.

ZONING

110 Attachment 3

Township of Mount Joy

Table of Structure Setbacks, Impervious Coverage and Height Restrictions

	Districts									
	RR	SFR1	SFR2	MDR	V and V-H	PC	EC ¹	EC ²	EC ³	LI
All of the following regulations are stated in linear feet, unless otherwise noted										
Minimum front yard setback for principal structures:	40	30	25	30	30	50	75	75	75	50
Minimum rear yard setback for principal structures:	35	25	10	25	25	40	40	20	20	50
Minimum side yard setback for principal structures (each), except 10 feet minimum for one (1) side yard for a single-family detached house:	20	15'	10	10	10	25	40	20	20	25
Minimum principal structure setback from the existing right-of-way line of an expressway (Route 15) for any lot granted preliminary subdivision approval after the date of adoption of this chapter:	75	75	75	75	75	75	125	125	125	75
Minimum principal structure setback from the existing right-of-way of an arterial street	50	50	50	50	50	50	100	100	100	50
Minimum setback of an industrial or commercial principal use from an existing residential building or a residential district boundary	75	75	75	75	75	75	75	75	75	75
Maximum impervious surface coverage (percent)	25	25	25	25	35	35	35	35	35	35
Maximum impervious surface coverage (percent)	30	40	40	50	65	65	65	65	65	65
Maximum building height:	35	35	35	35	35	35	60	60	60	50
Minimum side or rear yard setback for a residential accessory structure of less than 100 square feet of floor area	5	5	5	5	5	5	5	5	5	5
Minimum setback from surface waters:										

Notes:

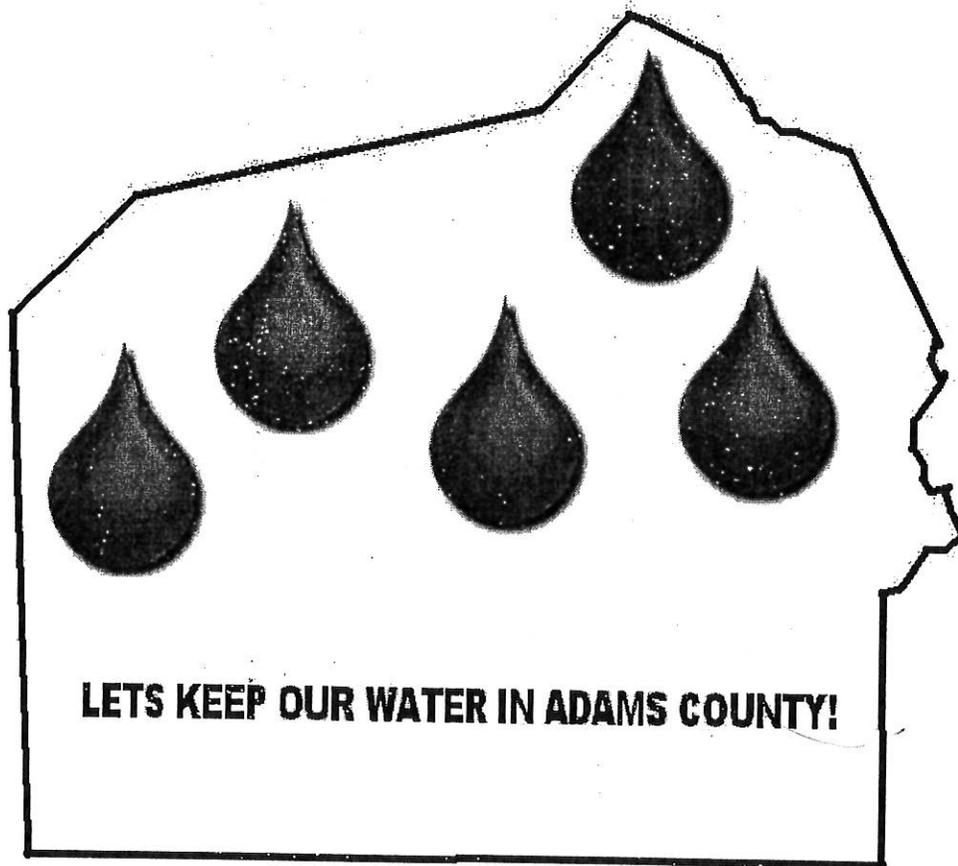
- ¹ Land subdivisions where parcels contain one permitted use, but where nine or fewer parcels are platted and developed under a single unified design scheme and where each parcel would be managed independently of other adjoining land parcels.
- ² Land subdivisions where parcels contain one permitted use, but where 10 or more parcels are developed under a single unified design scheme and where each parcel will remain under the control of a joint management entity, i.e., a centrally managed business park.
- ³ Land developments consisting of one parcel and containing more than one of the permitted uses, and when said land development remains under the control of a single management entity, i.e., a centrally managed business park.

(All other accessory structures must conform to the setback requirement of the district in which they are located)

See § 110-114 of this chapter

STORMWATER MANAGEMENT DESIGN ASSISTANCE MANUAL

**For Minor Regulated Activities in
Mount Joy Township
Adams County, Pennsylvania**



Simplified Approach

TABLE OF CONTENTS

Introduction	2
Importance of Stormwater Management	2
Standard Terms Used in the Manual	2
Determining What Type of Stormwater Management Plan is Needed	3
Using Municipal Stormwater Management Worksheets	4
Site Sketch Plan Requirements	5
Minor Plan Requirements	6
Disconnected Impervious Area (DIA)	7
Selecting BMPs	11
Municipal Stormwater Management Worksheets	12
Stormwater Management/ BMP Facilities & Maintenance Agreement	18
Samples: Site Sketch Plan, Stormwater Management BMPs	20
Guide to Choosing Stormwater BMPs	27

Introduction

This design manual has been created as a tool to help property owners manage stormwater on their property and streamline the process of designing on-site stormwater management facilities for new, relatively minor residential and accessory structure projects. Through the use of this manual, residents have the ability to determine the appropriate facilities for their property, project and budget. This design method is not intended to be used with large-scale subdivision/ land development or activities that include infrastructure such as roadways.

The best management practices (BMPs) listed in this manual should be used as a guide and are not a comprehensive list of options. Residents should contact the municipality or Conservation District to discuss alternative solutions for site specific applications.

Importance of Stormwater Management

Stormwater is the runoff produced by precipitation, snow melt, or ice melt. When land is developed or changed, the flow patterns of water and quality of water are also changed. Land development activities can affect characteristics of stormwater runoff, including the rate of runoff, volume of runoff, and quality of runoff. When runoff is not managed, the increased volume may aggravate flooding and cause pollution downstream.

The objective of stormwater management is to prevent or mitigate the adverse impacts of the increase in rate and volume of stormwater runoff, while also protecting health, safety, and property. Stormwater Best Management Practices aim to maintain water quality, encourage infiltration in appropriate areas, promote groundwater recharge, maintain the natural drainage characteristics of the site to the maximum extent practicable, and protect stream banks and beds.

Standard Terms Used in the Manual

Best Management Practice (BMP) - Activities, facilities, designs, measures, or procedures used to manage stormwater impacts from regulated activities, to meet state water quality requirements, to promote groundwater recharge, and to otherwise meet the purposes of the Ordinance.

Disconnected Impervious Area (DIA) - An impervious or impermeable surface that is disconnected from any stormwater drainage or conveyance system and is redirected or directed to a pervious area, which allows for infiltration, filtration, and increased time of concentration.

Disturbed Area - An unstabilized land area where an earth disturbance activity is occurring or has occurred.

Flow Path – The path that stormwater flows from the discharge point to the nearest property line or channelized flow (ie stream, drainage ditch, etc.). The length of the path is measured along the ground slope.

Impervious Surface (Impervious Area) - A surface that prevents the infiltration of water into the ground. Impervious surfaces and areas include but are not limited to roofs, additional indoor living spaces, patios and decks, garages, storage sheds and similar structures, streets, driveways, access drives, parking areas, and sidewalks. Any areas designed to be covered by loose surfacing materials such as gravel, stone and/or crushed stone, and intended for storage of and/or travel by vehicles, or pedestrians shall be considered impervious. Surfaces or areas designed, constructed and maintained to permit infiltration may be considered pervious.

Karst - A type of topography or landscape characterized by surface depressions, sinkholes, rock pinnacles/uneven bedrock surface, underground drainage, and caves. Karst is formed on carbonate rocks, such as limestone or dolomite.

Minor Stormwater Site Plan – A site plan prepared and submitted to the municipality for proposed projects which qualify to use the Simplified Approach. The plan depicts existing conditions on the property, proposed impervious areas, and, if required, the location of proposed BMPs.

Regulated Activity(ies) - Any earth disturbing activity or any activity that involves the alteration or development of land in a manner that may affect stormwater runoff.

Runoff - Any part of precipitation that flows over the land.

Determining What Type of Stormwater Management Plan is Needed

The chart on the following page provides a guide to determine what type of stormwater plan is needed. Some projects will be exempt from preparing a stormwater management plan, but documentation of the project must still be filed with the municipality. Completion of the **Municipal Stormwater Management Worksheets** will determine what type of documentation is required for each project.

This manual is designed to assist those with projects that qualify for the use of a minor stormwater site plan. If a formal stormwater management plan is required, a **qualified professional must be contacted (ex. Engineer, Surveyor)!**

SWM Plan Requirement	Impervious Area ¹	Disturbed Area ²	Next Steps
<u>LEVEL 1</u> Exempt	Up to 1,000 ft ²	Less than 1 acre	Submit Worksheet A and Site Sketch Plan
<u>LEVEL 2</u> Disconnected Area Exemption	1,000 to ≤ 10,000 ft ² , if 100% disconnected from impervious areas	Less than 1 acre	Submit Worksheets A&B and Site Sketch Plan
<u>LEVEL 3</u> Minor Stormwater Site Plan	1,000 ft ² to ≤ 5,000 ft ² IF connected to impervious areas	Less than 1 acre	Submit Minor Stormwater Site Plan, Including Worksheets A&B, BMPs, and O&M Agreement
<u>LEVEL 4</u> Formal Stormwater Management Plan	Greater than 5,000 ft ² of impervious area if Level 2 and Level 3 criteria are not met	Less than 1 acre	Consult a Qualified Professional

¹ New Impervious Area must be cumulatively calculated, starting at the date of adoption of the Mount Joy Township Stormwater Management Ordinance, August 16, 2012.

² The above table is only applicable to projects with disturbed areas of less than one (1) acre. Any projects that propose more than one (1) acre of disturbed area are subject to NPDES Permit requirements and will require a Formal Stormwater Management Plan.

Using Municipal Stormwater Management Worksheets

Determining the impervious area of a proposed project is the first step in using this Manual. Municipal Stormwater Management Worksheets have been included in the Simplified Approach, which will assist the property owner, or applicant, and municipality determine the impervious area of a proposed project and provide guidance through the next steps.

Municipal Stormwater Management Worksheet A – Step 1: If the total proposed surface area is up to 1,000 square feet, the project may be exempt from the requirements in this guide as a Level 1 project. The owner shall provide a Site Sketch Plan and must sign the Acknowledgement at the top of the sheet and file it with the municipality for approval. If determined to be exempt by the municipality, the worksheet will be considered complete.

If the proposed impervious area is greater than 1,000 square feet, proceed to Worksheet B – Step 2.

Municipal Stormwater Management Worksheet B – Steps 2 through 4: If the proposed impervious area is between 1,000 square feet and 10,000 square feet, the applicant must determine the Disconnected Impervious Area (DIA).

Level 2 Project – If the proposed impervious area is between 1,000 square feet and 10,000 square feet and is determined to be entirely disconnected in accordance with the Disconnected Impervious Area criteria, the project may be exempt from the requirements of this guide. The owner must provide a Site Sketch Plan and Worksheets A and B to the

municipality for approval. If the project is determined to meet the Level 2 exemption criteria, the application will be considered complete.

Level 3 Project – If the proposed project proposes between 1,000 square feet and 5,000 square feet of impervious area that does not meet the Disconnected Impervious Area criteria, a Minor Stormwater Site Plan is required. This plan must include fully completed Worksheets A&B, a Site Sketch Plan showing the location of any proposed stormwater BMPs, and the O&M Agreement for the proposed BMPs. Stormwater Management BMPs may be selected from the sample BMPs provided within this document or within the Guide to Choosing Stormwater BMPs. The Minor Stormwater Site Plan must then be submitted to the municipality for review and approval.

Level 4 Project – If the proposed project proposes greater than 5,000 square feet of impervious area that does not meet the Disconnected Impervious Area criteria or greater than 10,000 square feet of Disconnected Impervious Area, the project does not meet the criteria of a Minor Stormwater Site Plan. A Qualified Professional must be contacted to prepare a stormwater management plan in accordance with the Municipal Stormwater Management Ordinance.

Site Sketch Plan Requirements – Level 1 and Level 2

A Site Sketch Plan depicting the key features of the site must be drawn, or depicted, to scale to show the following:

Level 1 Site Sketch Plan Requirements:

- 1) Property boundary, address, and name of landowner.
- 2) Location of all existing and proposed structures (house, shed, addition, etc.) and any proposed downspouts. Include the dimensions of proposed structures and distance to property lines.
- 3) Site conditions and land covers (grassed areas, agricultural fields, direction of slope and stormwater flow on the property).
- 4) All existing and proposed driveways and impervious areas, including dimensions of proposed areas (stone and gravel driveways are considered impervious).
- 5) Natural features such as floodplains, streams, wetlands, tree lines and other vegetation on the property and within 50 feet of the property line for lots smaller than 5 acres.
- 6) Utility lines, sewer or water service location, or wells and on-site septic systems.

Additional Level 2 Site Sketch Plan Requirements (Including all Level 1 requirements):

- 7) Distance from proposed downspouts to property line.
- 8) Approximate slopes of overland stormwater flow paths
- 9) Distance from proposed structures or downspouts along the stormwater flow path to any stream or wooded area.
- 10) Any other pertinent information that may be significant to the project site (existing drainage ways, steep slopes, etc.).

- 11) Soil boundaries and types for the project area [may be obtained from PA Soil Map (soilmap.psu.edu) or NRCS Web Soil Survey (websoilsurvey.nrcs.usda.gov)].

Level 3 - Minor Stormwater Site Plan Requirements

A minor stormwater site plan depicts the existing conditions of a property and the location of proposed impervious surfaces. Depicting the relationship between the proposed activities and distances to things like property lines, streams, and vegetated areas will help determine if the stormwater runoff created by the proposed project can be managed naturally within the property or if additional best management practices (BMPs) are needed to accommodate the stormwater runoff.

If a project qualifies for use of a minor stormwater site plan, the applicant may prepare and submit to the Municipality a minor stormwater site plan and the applicable Municipal Stormwater Management Worksheets. The Adams County GIS Office can also provide assistance to applicants to obtain property maps of existing features. A Site Sketch Plan depicting the key features of the site must be drawn, or depicted, to scale to show the information required for a Level 1 and Level 2 Site Sketch Plan and the following additional information when BMPs are required:

- 12) Any proposed tree or shrub plantings and species
- 13) Location, size, and depth of proposed stormwater BMPs.
- 14) Details of proposed stormwater BMPs, including materials to be used.

Other Considerations for Minor Plans:

- While soil testing is not mandatory for the simplified approach, soil testing is highly recommended to select and apply the appropriate stormwater BMPs. The use of soil maps, infiltration tests, and/ or percolation tests may provide the applicant basic information about soil characteristics.
- Proposed stormwater management facilities must be designed to handle flows from the contributing area.
- The site shall not have any pre-existing stormwater drainage-related problems (as verified by the municipality).
- Water quality shall be protected per Chapter 93 of PA Code (<http://www.pacode.com/>).
- The municipality may inspect all BMPs during and after construction/ installation.
- Infiltration BMPs should not be constructed nor receive runoff until the entire contributory drainage area has achieved final stabilization.
- Ensure that infiltration in geologically susceptible areas such as, but not limited to, carbonate geology/ karst topography does not cause adverse effects. The minor stormwater site plan should incorporate steps to ensure that salt or chloride will not contaminate the groundwater.

- Ø Selected BMPs shall be designed, constructed, and maintained in accordance with the manufacturer's recommendation, the BMP Manual, or other written guidance acceptable to the municipality.
- Ø Proposed sump pumps shall discharge to infiltration or vegetative BMPs to the maximum extent practicable.

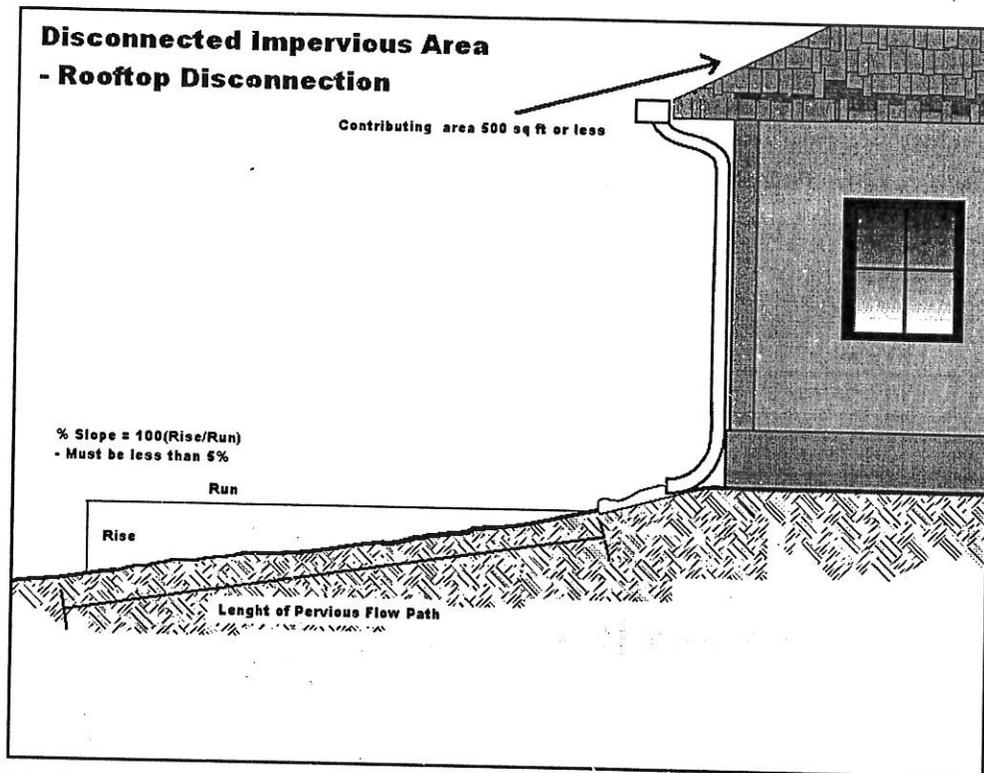
DISCONNECTED IMPERVIOUS AREA (DIA)

When impervious surface areas like rooftops and paved areas are directed to a pervious area that allows for infiltration, filtration, and increased time of concentration, the impervious surface areas may qualify to be treated as Disconnected Impervious Area (DIAs).

Impervious Area is defined as: A surface that prevents the infiltration of water into the ground. Impervious surfaces and areas shall include roofs, home additions, patios and decks, garages, storage sheds and similar structures, driveways, access drives, parking areas, walkways and sidewalks. Any areas designed to be covered by loose surfacing materials such as gravel, stone and/or crushed stone, and intended for storage of and/or travel by vehicles, or pedestrians shall be considered impervious. Surfaces or areas designed, constructed and maintained to permit infiltration may be considered pervious.

Rooftop Disconnection: A rooftop is considered to be completely disconnected if it meets the requirements listed below:

- Ø The contributing area of rooftop to each disconnected discharge (downspout) is 500 square feet or less.
- Ø The overland flow path from roof runoff discharge point has a positive slope of five percent (5%) or less.
- Ø The length of the overland flow path is greater than 75 feet.
- Ø Soils along the overland flow path are not classified as hydrologic group "D" (See Plan Appendix B). i.e. infiltration is at least 1 inch per 24-hour day.
- Ø The receiving pervious area shall not include another person's property unless written permission has been obtained from the affected property owner.



Note: Downspout not required.

Determining Status of DIA

Step 1: Determine contributing area of the roof to each disconnected discharge (downspout). If it's 500 ft² or less, continue to step 2. If it's greater than 500 ft², the area does not qualify as DIA.

Step 2: Determine the length of down slope pervious flow path available for each disconnected discharge.

Step 3: Determine the % slope of the pervious flow path, $\% \text{ slope} = (\text{rise}/ \text{run}) \times 100$. Must be 5% or less.

Step 4: See the table on the next page to determine the percentage of the area that can be treated as disconnected. If the available length of the flow path is equal to or greater than 75 ft, the discharge qualifies as entirely disconnected.

Partial Rooftop Disconnection		
Length of Pervious Flow Path* (ft) Lots 10,000 ft ² and Under	Length of Pervious Flow Path* (ft)	Roof Area Treated as Disconnected
0 – 7.9	0 – 14	0%
8 – 15.9	15 – 29	20%
16 – 22.9	30 – 44	40%
23 – 29.9	45 – 59	60%
30 – 34.9	60 – 74	80%
35 or more	75 or more	100%
*Pervious flow path must be at least 15 feet from any impervious surface and cannot include impervious surfaces.		

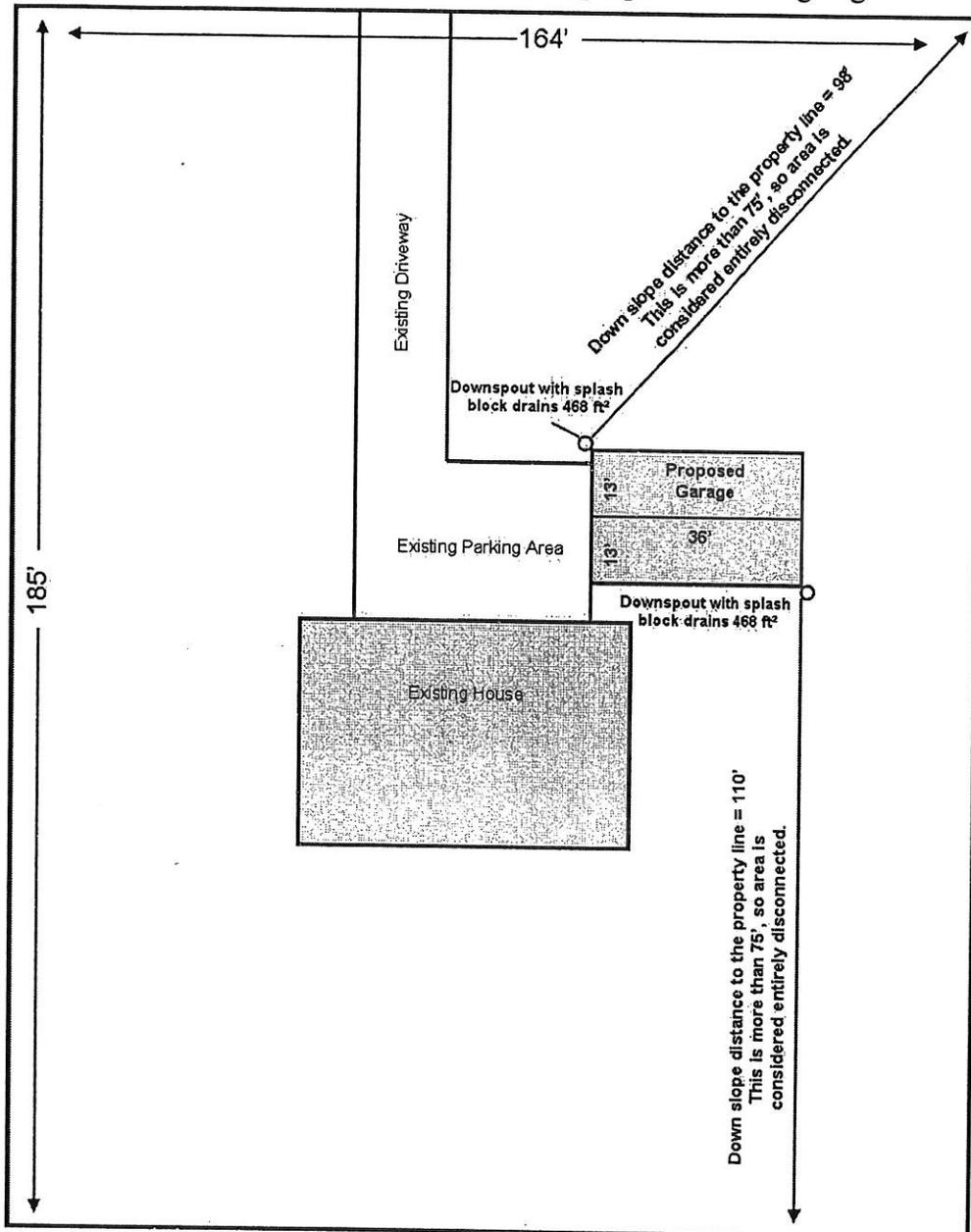
Paved Surface Disconnection: When runoff from paved surfaces is directed to a pervious area that allows for infiltration, filtration, and increased time of concentration, the contributing pavement area may qualify as disconnected. This applies generally to only small or narrow pavement structures such as driveways and walkways. Paved surfaces can be considered disconnected if they, or the adjacent areas, meet the following requirements:

- The contributing flow path over the impervious area is not more than 75 feet
- The length of overland flow is greater than or equal to the maximum length of flow over the impervious area
- The slope of the contributing impervious area is five percent (5%) or less
- The slope of the overland flow path is five percent (5%) or less
- If discharge is concentrated at one or more discrete points, no more than 1,000 ft² may discharge to any one point. In addition, a gravel strip or other spreading device is required for concentrated discharges. For non-concentrated discharges along the entire edge of paved surface, a level spreader is not required; however, there must be provisions for the establishment of vegetation along the paved edge and temporary stabilization of the area until the vegetation is established.

REFERENCE: Philadelphia Water Department. 2006 & 2011. Stormwater Management Guidance Manual. Section 4: Integrated Site Design. Philadelphia, PA.

The following example determines the status of DIA for a proposed 936 ft² garage.

This example meets the criteria to use the Simplified Approach.



Step 1: Determine the area to each disconnected discharge. The area draining to each downspout is 468 ft². This is less than 500 ft², proceed to step 2.

Step 2: The discharge on the north side of the garage has a 98 ft pervious flow path available. The south discharge has 110 ft pervious flow path available.

Step 3: The rise of the north discharge is 2 ft and the run is 75 ft for a slope of 2.6%. This is 5% or less so it qualifies. For the south discharge the rise is 4 ft and the run is 100 ft equaling a slope of 4%. This is 5% or less, so it qualifies.

Step 4: Both of these discharges have pervious flow paths greater than 75 ft, so they qualify as entirely disconnected.

Selecting BMPs

If BMPs are required, the Owner/ Designer should review the compiled information in the enclosed "Guide to Choosing Stormwater BMPs", as taken from the *PA Handbook of Best Management Practices for Developing Areas* and the *PA Stormwater Management BMP Manual*. These documents identify stormwater BMPs that have been deemed to be of a nature and cost that will accomplish the goals of the Adams County Stormwater Management Plan, while not unduly burdening the residents. It will then be the Owner's responsibility to select a facility, determine the appropriate size and agree to construct and maintain that facility or facilities. The property owner is encouraged to utilize both multiple and hybrid versions of the facilities, as outlined in the documents mentioned above.

**Municipal Stormwater
Management Application / Worksheets**

**MOUNT JOY TOWNSHIP
STORMWATER MANAGEMENT APPLICATION**

Property Address _____ Parcel ID # _____

Property Owner (s) Name¹ _____
Address _____
Phone No. _____ E-mail: _____

(if applicable) Engineer Name _____ Firm: _____
Address _____
Phone No. _____ E-mail: _____

PROJECT DESCRIPTION

Proposed improvement (describe): _____
New Impervious Area Proposed: _____ sq. ft.
Estimated Project Disturbed Area: _____ sq. ft. / acres

* * * * *

By signing this application, I declare that:

- I am the title owner of record of the property.
- The information provided in this application is accurate to the best of my knowledge.
- I am aware that stormwater discharges may adversely impact other properties and waterways and that stormwater management is intended to prevent or mitigate adverse impacts.
- I acknowledge that I must obtain stormwater management approval from the Township prior to the start of construction of this project and/or development of the property; that I must obtain Township approval for an alternative to the approved stormwater management; that stormwater discharge shall comply with the stormwater management approval, approved Site Plan and Operations and Maintenance Plan, as may be applicable.
- I acknowledge and agree to assume full responsibility for the implementation, construction, operation and maintenance of the stormwater management facilities and applicable Best Management Practices, if applicable, shall be a permanent fixture of the property that cannot be altered or removed without approval by the Township.
- I understand that false information provided on this application may result in a stop work order or revocation of the permit and that false statements herein made also are subject to the penalties of 18 Pa. C.S. § 4904, relating to unsworn falsification to authorities.

Signature: _____ Date: _____

¹ If more than one owner, information must be provided for each owner and each owner must sign the application.

FOR OFFICE USE ONLY	
Date received: _____	Fee: \$ _____ Date paid: _____ <input type="checkbox"/> Cash <input type="checkbox"/> Check
Total new impervious area since August 16, 2012: _____	
Project Type: <input type="checkbox"/> Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4	
(If no Site Plan required) Date approved _____	
Site Plan: Date submitted _____ approved _____	
O&M Plan: Date submitted _____ approved _____	

Municipal Stormwater Management Worksheet A

Step 1: Determine the amount of new impervious area created by the proposed project. This includes any new surface areas that prevent infiltration of stormwater into the ground. New stone and gravel areas are considered impervious. Impervious areas existing before August 16, 2012 are not included in this calculation. Use additional sheets if necessary

Calculate new impervious area by completing this table.

Surface	Length (ft)	x	Width (ft)	=	Impervious Area (ft ²)
Buildings		x		=	
Driveway		x		=	
Parking Areas		x		=	
Patios/ walkways		x		=	
Other		x		=	
Total Proposed Impervious Surface Area (Sum of all impervious areas)					

- Level 1 - If the total new impervious surface area is up to 1,000 ft², the project is exempt from the requirement to submit a plan for approval. Sign Acknowledgement and file this sheet with municipality.
- Level 2 - If total impervious surface area is 1,001 ft² to 10,000 ft², continue to Step 2.
 - If project area can be entirely disconnected, sign Acknowledgement and file worksheets with municipality.
- Level 3 - If project is between 1,000 ft² and 5,000 ft² and requires BMPs, complete step 3.
- Level 4 - If project area is greater than 5,000 ft² and cannot be disconnected, the project does not qualify for the Simplified Approach.

Municipal Stormwater Management Worksheet B

Step 2: Determine Disconnected Impervious Area (DIA). All or parts of proposed impervious surfaces may qualify as Disconnected Impervious Area if runoff is directed to a pervious area that allows for infiltration, filtration, and increased time of concentration. The volume of stormwater that needs to be managed could be reduced through DIA. Prepare a minor stormwater site plan (see page 6 for requirements).

Criteria

- Overland flow path from the discharge area or impervious area has a positive slope of 5% or less.
- Contributing area to each rooftop discharge (downspout) is 500 ft² or less.
- Soils are not classified as hydrologic soil group “D”.
- The receiving pervious area shall not include another person’s property unless written permission has been obtained from the affected property owner.

Partial Rooftop Disconnection		
Length of Pervious Flow Path (ft) Lots ≤ 10,000 ft ²	Length of Pervious Flow Path (ft)	DIA Credit Factor
35 or more	75 or more	0
30 – 34.9	60 – 74	0.2
23 – 29.9	45 – 59	0.4
16 – 22.9	30 – 44	0.6
8 – 15.9	15 – 29	0.8
0 – 7.9	0 – 14	1.0
Pervious flow path must be at least 15 feet from any impervious surface		

Paved Disconnection Criteria: Paved surfaces (driveways, walkways, etc.) and gravel can be considered disconnected if it meets the criteria above and:

- Runoff does not flow over impervious area for more than 75 feet.
- The length of overland flow is greater than or equal to the contributing flow path.
- The slope of the contributing impervious areas is 5% or less.
- If discharge is concentrated at one or more discrete points, no more than 1,000 ft² may discharge to any one point. In addition, a gravel strip or other spreading device is required for concentrated discharges. Non-concentrated discharges along the entire edge of paved surface must include provisions for the establishment of vegetation along the paved edge and temporary stabilization of the area until the vegetation is established.
- If these criteria can be met, the DIA credit = 0

Using the calculations from Step 1, complete the table below. This will determine the impervious area that may be excluded from the area that needs to be managed through stormwater BMPs. If the total impervious area to be managed = 0, the area can be considered entirely disconnected.

Surface	Proposed Impervious Area	x	DIA Credit	=	Impervious Area (ft ²) to be Managed
Buildings (area to each downspout)		x		=	
Driveway		x		=	
Parking Areas		x		=	
Patios/ walkways		x		=	
Other		x		=	
Total Proposed Impervious Surface Area to be managed (Sum of all impervious areas)					

** If Total Proposed Impervious Surface Area to be managed is greater than 0, continue to Step 3.*

*** If Total Proposed Impervious Surface Area to be managed is greater than 5,000 s.f., a Formal Stormwater Management Plan is required and a Qualified Professional must be contacted.*

Step 3: Calculate the volume of stormwater runoff created by proposed impervious surfaces or see Simple BMP Sizing in Step 4.

Impervious Area (ft ²) to be Managed (Sum of Step 2)	X	3.0 in/12 in = 0.25 (3.0 in is 2-year 24-hour rainfall amount)	=	Amount of Stormwater to be Managed (ft ³)
	X	0.25	=	

Step 4: Select BMPs and size according to the volume of stormwater that needs to be managed. The Guide to Choosing Stormwater BMPs, included in the Simplified Approach, includes sizing calculations for specific techniques. The table below should be used only when a Minor Stormwater Site Plan is appropriate. Other BMPs may be utilized if selected out of the Guide to Choosing Stormwater BMPs provided calculations are provided to show that the required volume has been met.

Best Management Practices need to be used to manage the volume of stormwater created by the proposed impervious areas. The cubic feet of stormwater that need to be managed may also be further reduced by planting new trees. If the criteria below can be met, the amount of stormwater to be managed can be reduced per the following:

Deciduous Trees = 6 ft³ per tree

Evergreen Trees = 10 ft³ per tree

Criteria:

- Trees must be PA native species (See PA Stormwater BMP Manual for a list)
- Trees shall be a minimum 1" caliper tree and 3 feet tall shrub (min)
- Trees shall be adequately protected during construction
- No more than 25% of the required capture volume can be mitigated through the use of trees
- Dead trees shall be replaced by the property owner within 12 months
- Please consider the specifications for each tree species when determining location and spacing

Amount of Stormwater to be Managed (ft ³) (Sum of Step 3)	-	Tree Planting Credit (ft ³)	=	Amount of Stormwater to be Managed (ft ³)
	-		=	

Proposed BMP	Length (Feet)	Width (Feet)	Depth (Feet)	Void Ratio	Volume (Cubic Feet)
Infiltration Bed	x	x	x	0.4	=
Infiltration Berm	x	x	x	1.0	=
Rain Garden	x	x	x	1.0	=
Rain Barrel	Gallons		x	Cubic Feet Per Gallon	=
				0.134	
Tree Credit	Calculated Above (Can be up to a maximum of 25% of the required volume calculated in Step 3)				=
Total Volume Credit (Sum of Volumes above)					=
Required Volume (Calculated above in Step 3)					=
Surplus Volume (Total Volume – Required Volume)					=

Bring the worksheets, Site Sketch Plan, Owner Acknowledgement, and Stormwater Management Practices, Facilities, and Systems Maintenance and Monitoring Agreement to the municipality. If an area greater than 5,000 square feet of earth is disturbed, an erosion and sedimentation (E & S) control plan must be prepared and kept on site during construction activities. If an area greater than 1.0 acres is disturbed during the project, an NPDES Permit will be required to be obtained from the Adams County Conservation District.

**STORMWATER MANAGEMENT/
BMP FACILITIES & MAINTENANCE
AGREEMENT**

APPENDIX A

**STORMWATER MANAGEMENT PRACTICES, FACILITIES, AND SYSTEMS
MAINTENANCE AND MONITORING AGREEMENT**

INSERT MUNICIPALITY SPECIFIC MAINTENANCE AGREEMENT HERE

SAMPLES:

SITE SKETCH PLAN

**STORMWATER MANAGEMENT
BMPs**

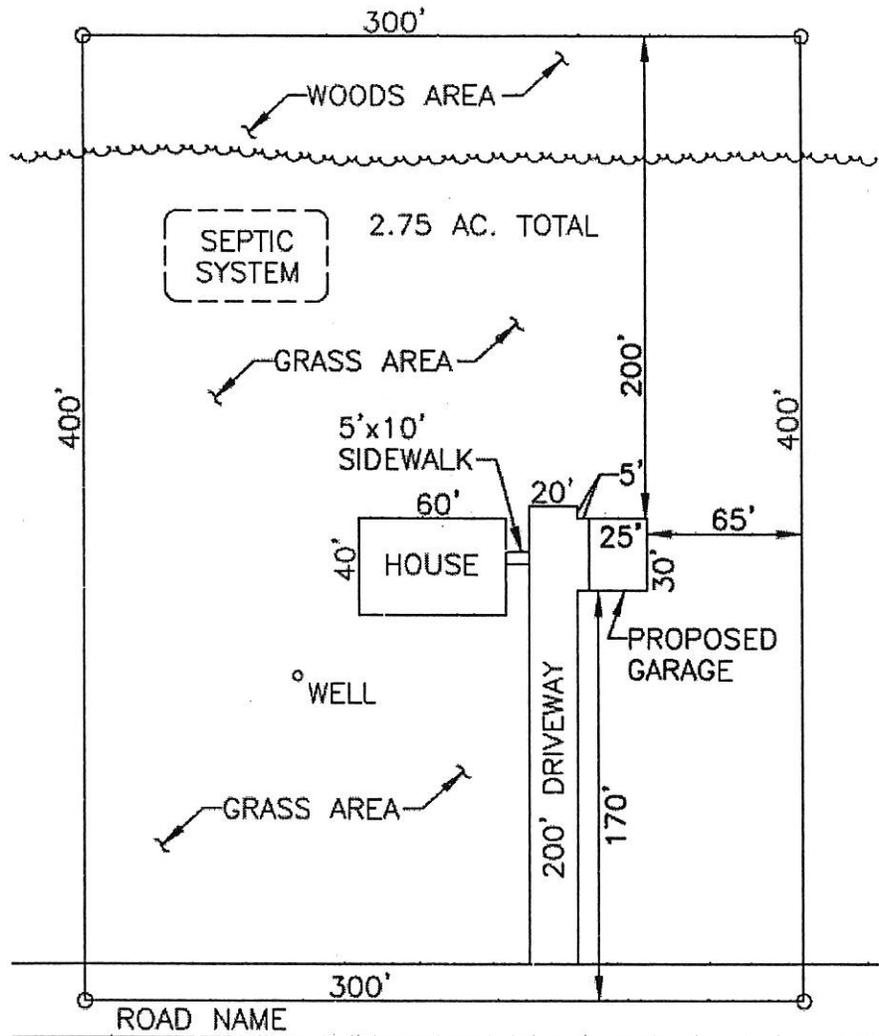
EXISTING
 HOUSE=2400 SQ. FT.
 SIDEWALK=50 SQ. FT.
 DRIVEWAY=4000 SQ. FT.

PROPOSED
 GARAGE=750 SQ. FT.
 DRIVEWAY=150 SQ. FT.
 (5'x30' ADDED)

TOTAL EXISTING AND
 PROPOSED=7350 SQ. FT.

NOTE:
 THERE ARE NO STREAMS,
 WETLANDS, OR FLOODPLAINS
 ON THE PROPERTY.

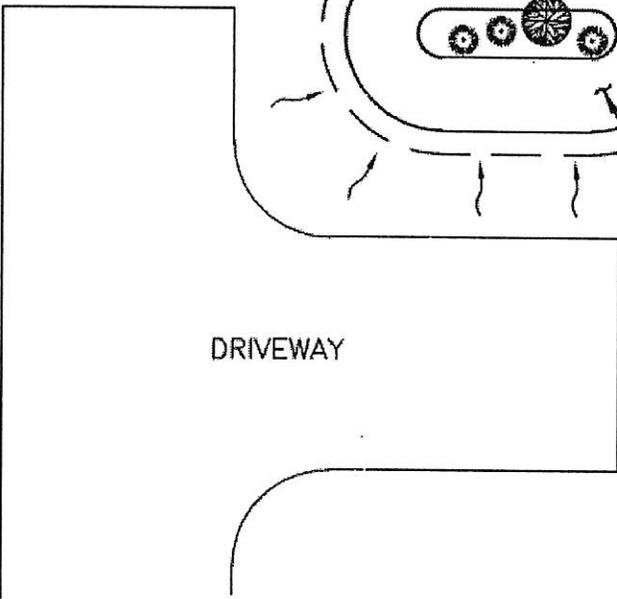
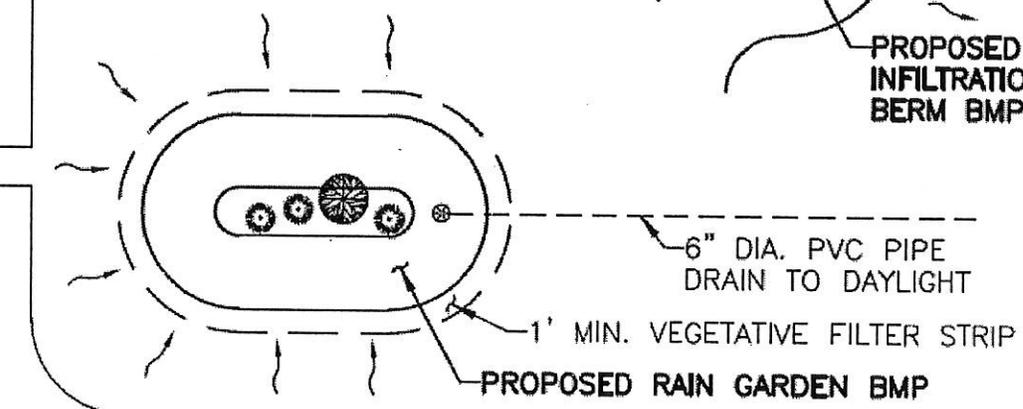
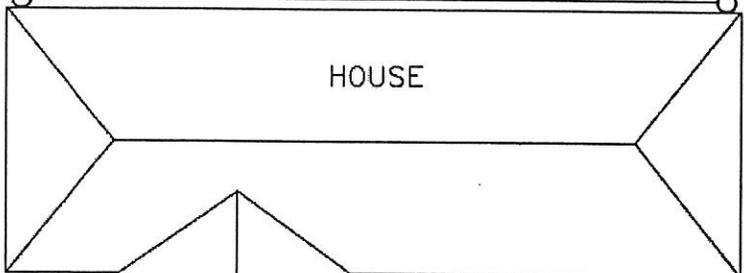
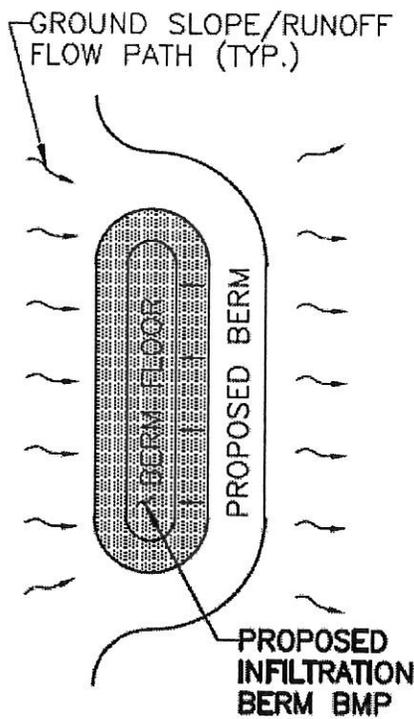
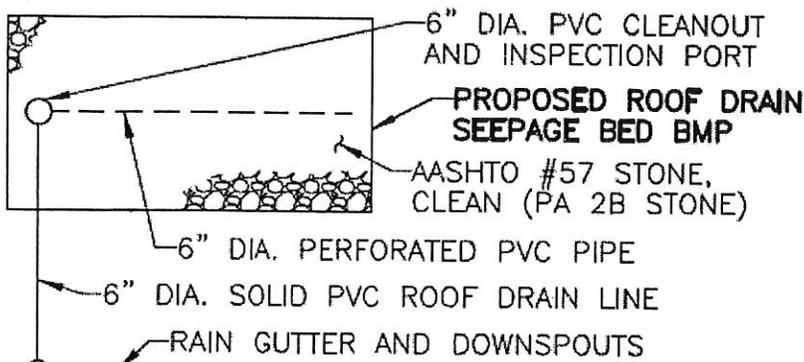
CONTACT INFORMATION:
 PROPERTY OWNER(S)
 ADDRESS
 PHONE NUMBER(S)
 EMAIL ADDRESS



SAMPLE STORMWATER SITE SKETCH PLAN (LEVEL 1)

SCALE: N.T.S.

GENERAL NOTE:
 PLEASE SEE DESIGN ASSISTANCE MANUAL FOR COMPLETE LIST OF REQUIRED
 INFORMATION.



BMP GENERAL LOCATION PLAN
SCALE: N.T.S.

RECOMMENDED BMP SETBACKS
 10' DOWNHILL FROM FOUNDATION
 100' UPHILL FROM FOUNDATION
 50' FROM SEPTIC SYSTEM AREAS
 50' FROM WATER SUPPLY WELLS

GENERAL NOTES:

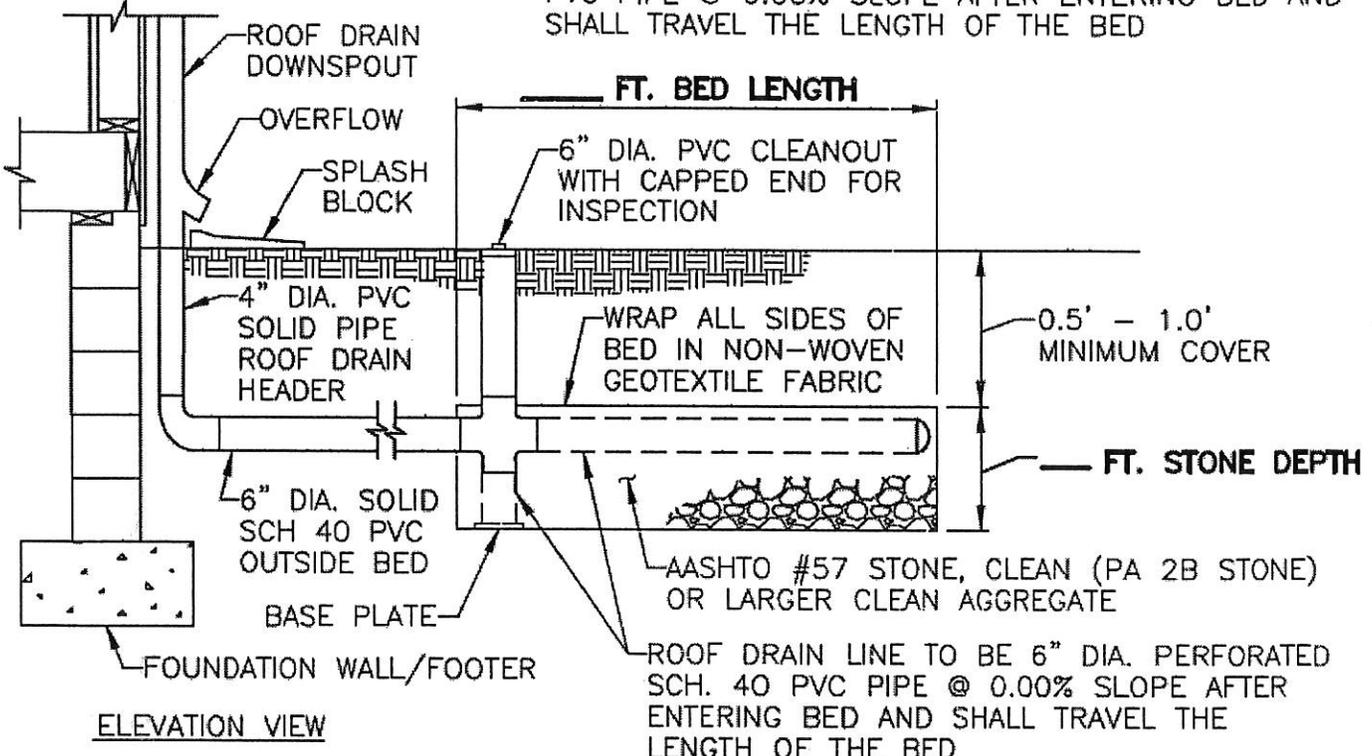
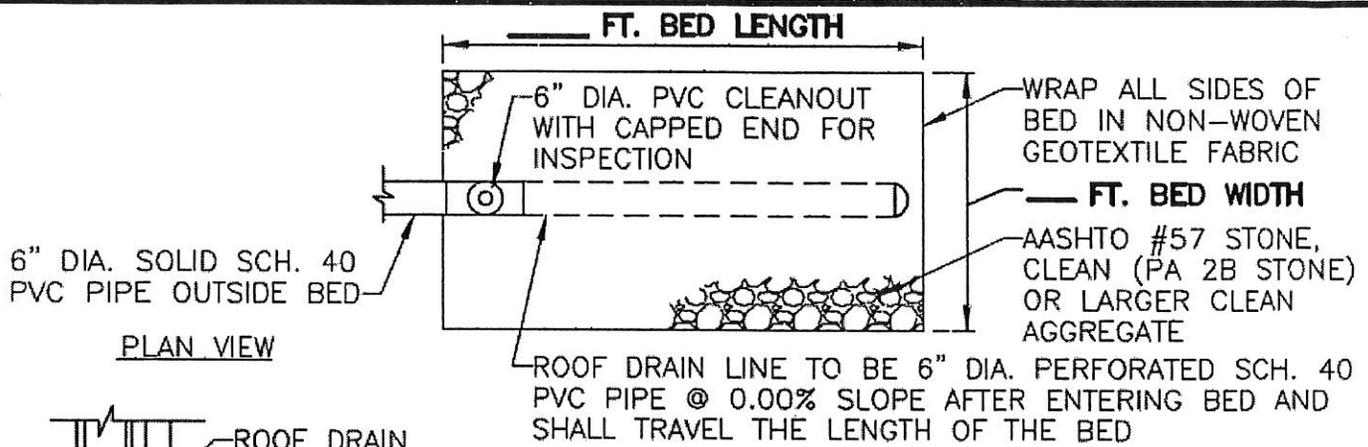
1. FOR ROOF DRAIN SEEPAGE BED, ALL ROOF DRAINS SHALL BE PIPED TO THE PROPOSED ROOF DRAIN SEEPAGE BED AREAS.
2. FOR THE INFILTRATION BERM OR RAIN GARDEN, RUNOFF FROM THE IMPERVIOUS AREAS SHALL BE DIRECTED TO FLOW INTO THESE STORMWATER BMPS.
3. THE CONCEPTUAL LOCATION OF BMPS SHOWN ABOVE ARE FOR INFORMATIONAL PURPOSES ONLY. FINAL LOCATION OF ALL PROPOSED BMPS SHALL BE DEPICTED ON THE SITE SKETCH PLAN SUBMITTED TO THE MUNICIPALITY.

WM. F. HILL & ASSOC., INC.
 PROFESSIONAL ENGINEERS
 CIVIL ♦ MUNICIPAL ♦ ENVIRONMENTAL
 GETTYSBURG, PA 17325
 PH. (717) 334 - 9137

PLAN PREPARATION	
DRAWN BY: PSI	DATE: 08/01/12
DESIGNED BY: SMY	CHECKED BY: WPH

BMP CONCEPTUAL LOCATION PLAN
MOUNT JOY TOWNSHIP SAMPLE STORMWATER MANAGEMENT BMPS MOUNT JOY TOWNSHIP, ADAMS COUNTY, PA

SCALE AS SHOWN
SHEET NO. 1 OF 4



ROOF DRAIN SEEPAGE BED DETAIL
SCALE: N.T.S.

GENERAL NOTES:

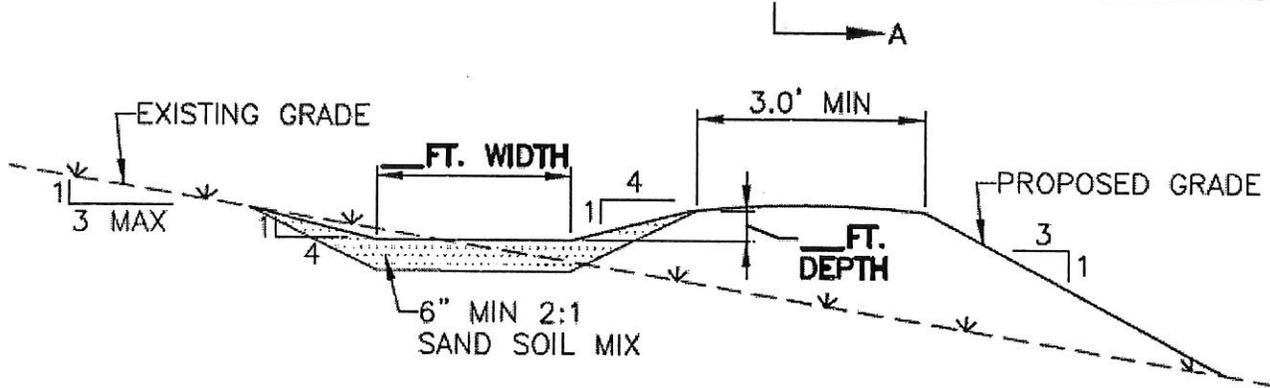
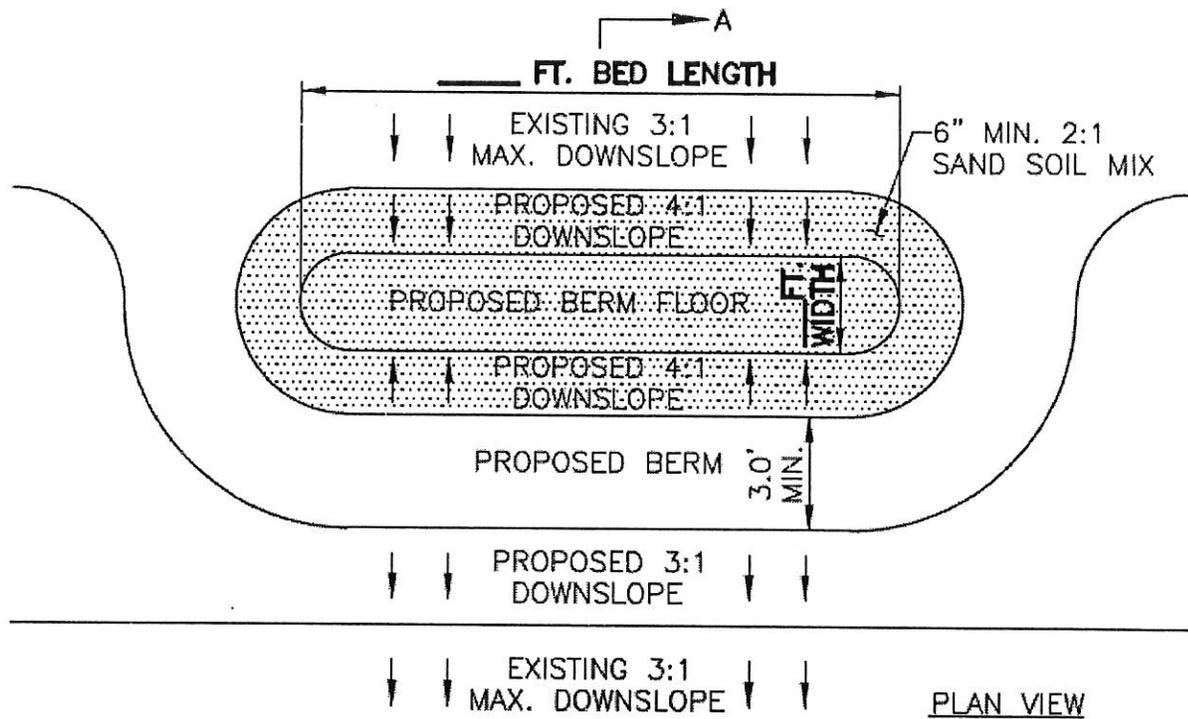
1. SEEPAGE BEDS SHALL BE CONSTRUCTED WITH A FLAT BOTTOM.
2. DEPTH OF STONE SHOULD BE 2.5' OR LESS UNLESS SOIL TESTING HAS BEEN PERFORMED.
3. ALL SCHEDULE 40 PVC PIPE SHALL BE ASTM D-1785.
4. ALL ROOF DRAIN LINES SHALL BE SOLID PVC PIPE PRIOR TO ENTERING THE STONE INFILTRATION BED. UPON ENTERING THE BED, ALL PIPE SHALL BE PERFORATED PVC PIPE.
5. PROVIDE LEAF GUARDS ON GUTTERS.
6. ANY MODIFICATIONS TO THE DEPICTED SEEPAGE BED SHALL BE ONLY AS APPROVED BY THE TOWNSHIP OR DESIGNATED REPRESENTATIVE.
7. THE TOWNSHIP ENGINEER SHALL BE CONTACTED PRIOR TO INSTALLATION OF THE SEEPAGE BED TO COORDINATE ANY NECESSARY INSPECTIONS.

WM. F. HILL & ASSOC., INC.
 PROFESSIONAL ENGINEERS
 CIVIL ♦ MUNICIPAL ♦ ENVIRONMENTAL
 OETTSBURG, PA 17325
 PH. (717) 334 - 9137

PLAN PREPARATION	
DRAWN BY: FSI	DATE: 08/01/12
DESIGNED BY: EMV	CHECKED BY: WPH

BMP - SEEPAGE BED DETAIL	
MOUNT JOY TOWNSHIP SAMPLE STORMWATER MANAGEMENT BMPS MOUNT JOY TOWNSHIP, ADAMS COUNTY, PA	

SCALE: AS SHOWN
SHEET NO. 2 OF 4



INFILTRATION BERM DETAIL
SCALE: N.T.S.

SECTION A-A

GENERAL NOTES:

1. INFILTRATION BERM SHALL BE INSTALLED WITH THE TOP OF THE BERM AT A LEVEL GRADE ALONG THE ENTIRE BED, TO ENSURE AN EVEN OVERFLOW DISTRIBUTION.
2. ENTIRE LENGTH OF INFILTRATION BERM SHALL BE UNDERLAIN WITH SIX (6) INCHES MINIMUM OF A 2:1 SAND SOIL MIXTURE.
3. IF THE LANDOWNER DESIRES, TREES AND/OR SHRUBS CAN BE PLANTED IN THE INTERIOR OF THE INFILTRATION BERM. CARE SHOULD BE TAKEN TO ENSURE THAT ALL TREES OR SHRUBS PLANTED WITHIN THE BERM ARE WATER TOLERANT.
4. ANY MODIFICATIONS TO THE DEPICTED INFILTRATION BERM SHALL BE ONLY AS APPROVED BY THE TOWNSHIP OR DESIGNATED REPRESENTATIVE.
5. THE TOWNSHIP ENGINEER SHALL BE CONTACTED PRIOR TO INSTALLATION OF THE INFILTRATION BERM TO COORDINATE ANY NECESSARY INSPECTIONS.

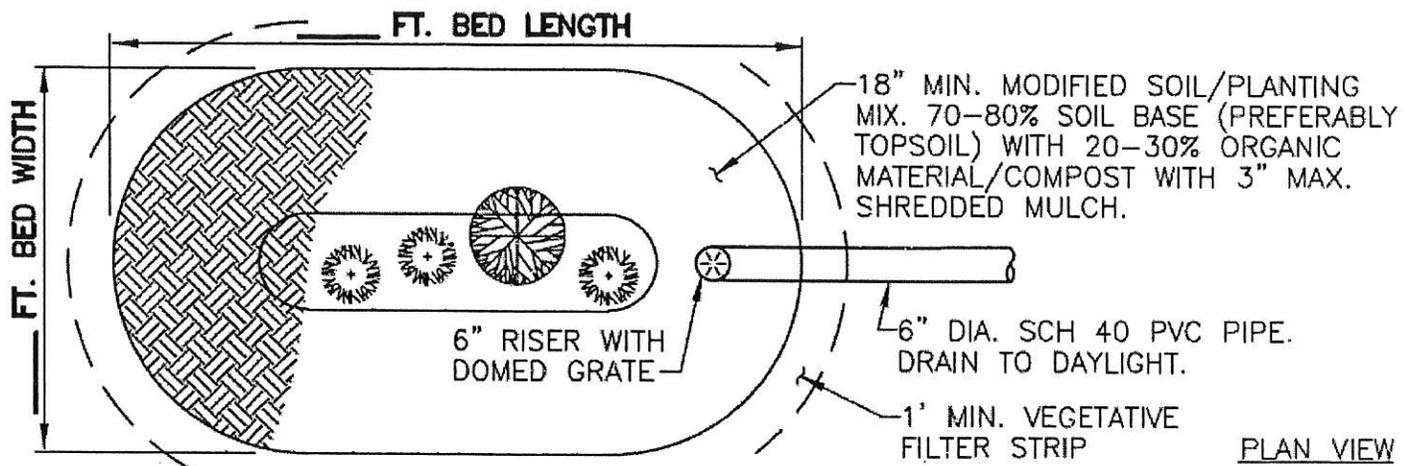
WM. F. HILL & ASSOC., INC.
 PROFESSIONAL ENGINEERS
 CIVIL ♦ MUNICIPAL ♦ ENVIRONMENTAL
 GETTYSBURG, PA 17325
 PH. (717) 334 - 9137

PLAN PREPARATION	
DRAWN BY: FSI	DATE: 06/01/13
DESIGNED BY: RMV	CHECKED BY: WPN

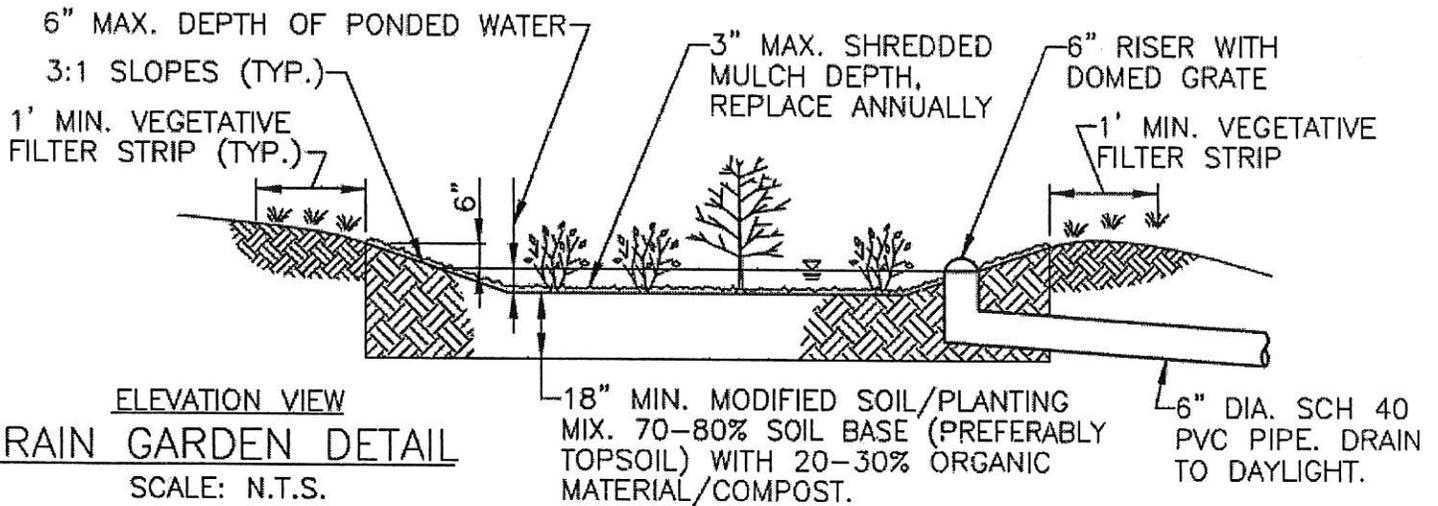
BMP - INFILTRATION BERM DETAIL
MOUNT JOY TOWNSHIP SAMPLE STORMWATER MANAGEMENT BMPS MOUNT JOY TOWNSHIP, ADAMS COUNTY, PA

SCALE:
AS SHOWN

SHEET NO.
3 OF 4



PLAN VIEW



ELEVATION VIEW
RAIN GARDEN DETAIL
SCALE: N.T.S.

MAINTENANCE AND GENERAL NOTES:

1. RAIN GARDENS REQUIRE INITIAL MAINTENANCE TO STAY HEALTHY. FOR THE FIRST 2 WEEKS, WATER THE GARDEN EVERY OTHER DAY (UNLESS IT RAINS).
2. FOR THE FIRST YEAR, THE RAIN GARDEN REQUIRES WEEDING AND ABOUT AN INCH OF WATER A WEEK.
3. REMULCH RAIN GARDEN ANNUALLY. RAKE REGULARLY TO PREVENT WEED GROWTH.
4. ONCE DURING SPRING AND FALL, DEAD VEGETATION SHOULD BE REMOVED FROM THE RAIN GARDEN AND REPLACEMENT PLANTS SHOULD BE PLANTED.
5. A MIX OF TREES AND SHRUBS IS RECOMMENDED FOR PLANTING. ABOUT ONE TREE FOR EVERY THREE SHRUBS.
6. UNDER DRAINS SHOULD NOT BE USED EXCEPT WHERE IN-SITU SOILS FAIL TO DRAIN SURFACE WATER.
7. ANY MODIFICATIONS TO THE DEPICTED RAIN GARDEN SHALL BE ONLY AS APPROVED BY THE TOWNSHIP OR DESIGNATED REPRESENTATIVE.
8. THE TOWNSHIP ENGINEER SHALL BE CONTACTED PRIOR TO INSTALLATION OF THE RAIN GARDEN TO COORDINATE ANY NECESSARY INSPECTIONS.

WM. F. HILL & ASSOC., INC.
 PROFESSIONAL ENGINEERS
 CIVIL ♦ MUNICIPAL ♦ ENVIRONMENTAL
 GETTYSBURG, PA 17325
 PH. (717) 334 - 9137

PLAN PREPARATION	
DRAWN BY: FSH	DATE: 08/01/10
DESIGNED BY: RMV	CHECKED BY: WPH

BMP - RAIN GARDEN DETAIL
 MOUNT JOY TOWNSHIP
 SAMPLE STORMWATER MANAGEMENT BMPS
 MOUNT JOY TOWNSHIP, ADAMS COUNTY, PA

SCALE:
AS SHOWN
 SHEET NO.
4 OF 4

Guide to Choosing Stormwater BMPs

**The Guide to Choosing Stormwater BMPs can be found at the
Mount Joy Township Office or at the Township Website:**

www.mtjoytwp.us