

APPENDIX C - 1

DRAINAGE PLAN APPLICATION

Application is hereby made for review of the Stormwater Management Plan and related data as submitted herewith in accordance with the Chapter 78 of the General Laws of the Township of Haverford, Erosion and Sediment Control; Stormwater Management.

_____ Final Plan _____ Preliminary Plan _____ Sketch Plan

Date of Submission _____ Submission No. _____

1. Name of subdivision or development _____

2. Name of Applicant _____ Telephone No. _____

(if corporation, list the corporation's name and the names of two officers of the corporation)

Officer 1

Officer 2

Address _____

Zip _____

Applicant's interest in subdivision or development
(if other than property owner, give owner's name and address)

3. Name of property owner _____ Telephone No. _____

Address _____

Zip _____

4. Name of engineer or surveyor _____ Telephone No. _____

Address _____

Zip _____

5. Type of subdivision or development proposed:

_____ Single-family Lots _____ Townhouses _____ Commercial (Multi-lot)

_____ Two-family Lots _____ Garden Apartments _____ Commercial
(One Lot)

_____ Multi-family Lots (Multi-lot) _____ Mobile Home Park _____ Industrial
 _____ Cluster Type Lots (Lot) _____ Campground _____ Industrial (One Lot)
 _____ Planned Residential Development _____ Other (_____)

6. Linear feet of new road proposed
L.F. _____

7. Area of proposed and existing impervious area on the entire tract.

a. Existing (to remain) _____ S.F. _____ % of property
 b. Proposed _____ S.F. _____ % of property

8. Stormwater

a. Does the peak rate of runoff from proposed conditions exceed that flow which occurred for existing conditions for the designated design storm? _____

b. Design storm utilized (on-site conveyance systems) (24 hr.) _____
 No. of Subarea _____
 Watershed Name _____

Explain: _____

c. Does the submission and/or district meet the criteria for the applicable management district? _____

d. Number of subarea(s) from Appendix A _____

e. Type of proposed runoff control _____

f. Does the proposed stormwater control criteria meet the requirements/guidelines of this Chapter? _____

If not, what variances/waivers are requested? _____

Reasons _____

g. Does the plan meet the requirements of this Chapter? _____

If not, what variances/waivers are requested? _____

Reasons why _____

- h. Was TR-55, June 1986, utilized in determining the time of concentration? _____
 - i. What hydrologic method was used in the stormwater computations? _____
 - j. Is a hydraulic routing through the stormwater control structure submitted? _____
 - k. Is a construction schedule or staging attached? _____
 - l. Is a recommended maintenance program attached? _____
9. Erosion and Sediment Pollution Control (E&S):
- a. Has the stormwater management and E&S plan, supporting documentation, and narrative been submitted to the Delaware County Conservation District? _____
 - b. Total area of earth disturbance _____ S.F.
10. Wetlands
- a. Have the wetlands been delineated by someone trained in wetland delineation? _____
 - b. Have the wetland lines been verified by a state or federal permitting authority? _____
 - c. Have the wetland lines been surveyed? _____
 - d. Total acreage of wetland within the property _____
 - e. Total acreage of wetland disturbed _____
 - f. Supporting documentation _____
11. Filing
- a. Has the required fee been submitted? _____
Amount _____
 - b. Has the proposed schedule of construction inspection to be performed by the Applicant's engineer been submitted? _____
 - c. Name of individual who will be making the inspections _____
 - d. General comments about stormwater management at the development _____

CERTIFICATE OF OWNERSHIP AND ACKNOWLEDGMENT OF APPLICATION:

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF DELAWARE

On this the _____ day of _____, 20____, before me, the undersigned officer, personally appeared _____ who, being duly sworn according to law, deposes and says that _____ are owners of the property described in this application and that the application was made with _____ knowledge and/or direction and does hereby agree with the said application and to the submission of the same.

_____ Property Owner

My Commission Expires _____ 20____
Notary Public _____

THE UNDERSIGNED HEREBY CERTIFIES THAT TO THE BEST OF HIS KNOWLEDGE AND BELIEF THE INFORMATION AND STATEMENTS GIVEN ABOVE ARE TRUE AND CORRECT.

SIGNATURE OF APPLICANT _____

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(Information Below This Line To Be Completed By the Township)

Haverford Township official submission receipt:

Date complete application received _____ plan number _____

Fees _____ date fees paid _____ received by _____

Official submission receipt date _____

Received by _____

Township

APPENDIX C – 2

DRAINAGE PLAN CHECKLIST

Project: _____

Municipality: _____

Engineer: _____

Submittal No: _____

Date: _____

Project ID: _____ (for County use ONLY)

SECTION I: REGULATED ACTIVITIES

Reference: Section 105

1. Is the Proposed Project within the Darby-Cobbs, Crum, or Ridley Creek watershed? Yes No
2. Does the Proposed Project meet the definition of a "Regulated Activity"? Yes No

STOP – If you have checked NO for either of the above questions, you are not required to submit a Storm Water Management Plan under this Ordinance.

SECTION II: EXEMPTION

Reference: Section 402

Note: Parent Tract refers to the total parcel configuration on February 15, 2005 and includes any subdivision of lands which may have occurred after than date.

Parent Tract Area: _____ acres

Total Existing Impervious Area (as of February 15, 2005): _____ acres

Total New Impervious Area (all Phases): _____ acres

Parcel IS Exempt

Parcel IS NOT Exempt

SECTION III: NONSTRUCTURAL PROJECT DESIGN

Reference: Section 304

1. Has an Existing Resource and Site Analysis Map (ERSAM) been prepared?

Yes No, Explain _____

SECTION III: NONSTRUCTURAL PROJECT DESIGN (Continued)

2. Are any of the following Environmentally Sensitive areas identified on site?

- | | | | |
|-------------------------------|------------------------------|-----------------------------|----------------------------------|
| Steep Slopes | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |
| Ponds / Lakes / Vernal Pools | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |
| Streams | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |
| Wetlands | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |
| Hydric Soils | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |
| Flood plains | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |
| Stream Buffer Zones | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |
| Hydrologic Soil Groups A or B | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |
| Recharge Areas | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |
| Others: _____ | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |

3. Does the site layout plan avoid Environmentally Sensitive Areas identified on site?

- Yes No, Explain _____

4. Has a stream buffer been established per Section 306.J.?

- Yes No, Explain _____

SECTION IV: GROUNDWATER RECHARGE

Reference: Section 305

1. Is the proposed activity considered a "Stormwater Hotspot"? Yes No

2. Have provisions been installed to promote groundwater recharge on site?

- Yes No, Explain _____

3. Total Recharge Volume Required: _____ cubic feet (using: Method A; Method B)

4. How is the Required Recharge Volume being addressed?

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> Infiltration Trench | <input type="checkbox"/> Dry Swales |
| <input type="checkbox"/> Infiltration Basin | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Bioretention | |

SECTION IV: WATER QUALITY

Reference: Section 306

1. Have provisions been installed to address stormwater runoff water quality on site?
 Yes No, Explain _____

 2. Total Water Quality Volume Required: _____ acre feet
 3. Is the site in a Special Protection watershed which includes Exceptional Value (EV) of High Quality (HQ) waters? Yes No
 4. How is the Required Water Quality Volume being addressed?

<input type="checkbox"/> Wet Detention Basin	<input type="checkbox"/> Sand Filter
<input type="checkbox"/> Extended Dry Detention Basin	<input type="checkbox"/> Constructed Wetlands
<input type="checkbox"/> Bioretention	<input type="checkbox"/> Other: _____
-

SECTION IV: STREAMBANK PROTECTION

Reference: Section 307

1. Has the 2- year proposed conditions flow been reduced to the 1- year existing conditions flow?
 Yes No, Explain _____

 2. Does the proposed conditions 1- year storm drain over a minimum 24- hour period?
 Yes No, Explain _____

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SECTION IV: OVERBANK AND EXTERME STORM EVENTS

Reference: Section 308

1. In which of the following Storm Water Management District(s) is the site located?

<input type="checkbox"/> A	<input type="checkbox"/> B-2
<input type="checkbox"/> B-1	<input type="checkbox"/> C
2. Does the Proposed Conditions Runoff meet the Criteria established in Table 308.1?
 Yes No, if you answered Yes proceed to Section V.

SECTION IV: OVERBANK AND EXTERME STORM EVENTS (continued)

- a. Are you claiming “No Harm” as described in Section 308.G. in lieu of meeting the requirements of this District?

Yes No, Explain _____

- b. If you are claiming “No Harm”, has a Downstream Impacts Evaluation been prepared in accordance with Section 308.G.?

Yes No, Explain _____

- c. Are claiming “Hardship”, as described in Section 308.I. in lieu of meeting the requirements of this District?

Yes No, Explain _____

SECTION V: CALCULATION METHODOLOGY

Reference: Section 309

1. Which method(s) are utilized in the site stormwater management plan for computing stormwater runoff rates and volumes?

TR-20 PSRM
 TR-55 Rational Method
 HEC-1 / HEC-HMS Other: _____

2. Was Table B-1 or Figure B-4 utilized in rainfall determination?

Yes No, Explain _____

3. Was Table B-2 (Runoff Curve Numbers) or Table B-3 (Rational Runoff Coefficients) utilized in calculations for runoff?

Yes No, Explain _____

4. For any proposed storm water detention facility, were the appropriate design storms routed through the facility using the Storage-Indication Method?

Yes No, Explain _____

SECTION VI: OTHER REQUIREMENTS

Reference: Section 310

1. Is this project subject to PENNDOT approval?

Yes No

a. If "YES" have these plans been forwarded to PENNDOT for review?

Yes No, Explain _____

2. Have proposed wet detention basins incorporated biologic control consistent with the West Nile Guidelines presented in Appendix I?

Yes No Not Applicable

3. Are any proposed stormwater facilities subject to PADEP Chapter 105 permitting?

Yes No

a. If "YES" have these plans been forwarded to PADEP for review?

Yes No, Explain _____

SECTION VI: FACILITY OPERATION AND MAINTENANCE PLAN

Reference: Section 702

1. Has a Stormwater Control and BMP Operations and Maintenance Plan been approved by Haverford Township?

Yes No, Explain _____

2. Who shall assume responsibility for implementing the Stormwater Control and BMP Operations and Maintenance Plan?

Municipality Homeowner Association
 Private Owner Other _____