

TOWNSHIP OF SILVER SPRING  
Cumberland County, Pennsylvania

ORDINANCE NO. 8 of 2007

AN ORDINANCE OF THE TOWNSHIP OF SILVER SPRING,  
CUMBERLAND COUNTY, PENNSYLVANIA, AMENDING,  
MODIFYING AND CHANGING THE SILVER SPRING TOWNSHIP  
STORM WATER MANAGEMENT ORDINANCE OF 2003

BE IT ORDAINED by the Board of Supervisors of the Township of Silver Spring, Cumberland County, Pennsylvania, as follows:

SECTION 1: The Silver Spring Township Storm Water Management Ordinance of 2003 (the "Storm Water Management Ordinance") is hereby amended as follows and shall be known as the Silver Spring Township Storm Water Management Ordinance of 2007:

A. Section 203 of the Storm Water Management Ordinance is amended by adding the following new terms:

Carbonate rock. Rock types that are affected by dissolution weathering process caused by slightly acidic groundwater. The most common types of rock that are categorized as carbonate rock are limestone (calcium carbonate and dolomite calcium magnesium carbonate.)

Cavern. Interconnected solution features within the bedrock surface.

Clay liner. Fine grained soil that is used in the construction of a liner that limits the rate of surface water intrusion into the subsurface.

Closed Depression. A bowl shaped depression in the land surface characterized by internal drainage. A ghost lake is a closed depression which has visible standing water after a heavy rainfall event.

Fault. A fracture in bedrock along which movement has taken place.

Fine Grained Soil. Materials that predominantly consist of silt and clay size particles.

Hazardous Materials (chemical or bio-hazard). As defined and regulated by the PADEP or EPA.

Impermeable Liners. A liner system that reasonably prohibits the infiltration or surface water into the subsurface.

Karst. The terrain that results from the dissolution of carbonate rock.

Karst Process. The dissolution of carbonate rock by slightly acidic groundwater. Dissolution weathering – the removal of soluble materials from intact carbonate rock by slightly acidic groundwater.

Lineaments. Linear topographic features that locate faults and fractures.

Residual Soil. Soils derived from the in-place weathering of the underlying bedrock.

Sinkhole. Localized land surface subsidence or collapse due to karst processes. Sinkholes are categorized as solution sinkholes, collapse sinkholes and subsidence sinkholes.

Spring. Where water flows naturally out of the bedrock or the overlying soil mantle on to the land surface.

Toxic and/or biological or Chemical Hazardous Materials. Biological species or chemical compounds which are deemed to be toxic or hazardous by the Pennsylvania Department of Environmental Protection.

B. Section 304.04 of the Storm Water Management Ordinance is amended by adding the following new section: “304.04.10 Storm water management plans shall be designed in a manner that is consistent with Section 617 of the Subdivision and Land Development Ordinance and Section 402.21 of the Storm Water Management Ordinance, and shall also include the submission of a Carbonate Assessment Report, as required in Section 402.05.11 of the Subdivision and Land Development Ordinance.”

C. Section 402.06 of the Storm Water Management Ordinance is amended by replacing the third paragraph, specifically: “Storm water basins located in known sinkhole-prone areas are required to be lined to prevent infiltration into the ground” with: “All stormwater facilities, located in known sinkhole-prone areas, are required to be designed, constructed, and installed in accordance to the provisions of Section 617 of the Subdivision and Land Development Ordinance, and Section 402.21 of the Storm Water Management Ordinance.”

D. Section 402.07 of the Storm Water Management Ordinance, is amended by adding the following text to the end of the first sentence: “The allowance for the use of infiltration and groundwater recharge shall be based on the analysis required as per section 617 Subdivision and Land Development Ordinance and Section 402.21 of the Storm Water Management Ordinance.”

E. Section 402.09.3 of the Storm Water Management Ordinance, is amended by adding the following new sentence to the end of the first sentence: "The use of corrugated metal pipe shall not be allowed in areas prone to sinkholes."

F. A new Section 402.21 "Sinkhole-Prone Areas", is hereby added to the Storm Water Management Ordinance and shall read as follows:

- a) All storm water management plans shall limit surface water runoff and the intrusion of concentrated flow of surface water into the subsurface. Facilities that are required as part of the storm water management plan shall include storm drains with water tight gasketed joint conduits or adequately lined drainage swales and the collection of surface water flow on pavements into drop inlets connected to a water tight gasketed joint storm water conduit or adequate lined drainage swales. The storm water conduit must discharge into lined detention basins.
- b) Approved storm water conduits include HDPE, PVC, and concrete, with water tight rubber gaskets at each joint. The use of corrugated metal pipe is not permitted. Construction of the piping system must follow all other applicable ordinances. Where rock is encountered at or above the planned conduit design grade the rock shall be undercut and over excavated a minimum of one foot and backfilled with a compacted fine grained soil.
- c) All detention facilities in areas of sinkhole prone soil shall be lined. The liner used in a detention basin may consist of a clay liner, a composite synthetic and soil liner or a synthetic liner. The type of liner required shall depend on the condition of the detention basin bottom and the probability of sinkhole occurrence resulting from the construction of the detention basin. The use of low flow channel may also be required depending on the duration and frequency of storm water discharge into the detention basin. Subsurface detention systems must be in leak proof tanks or piping. The Township Engineer shall make the final determination as to what is an acceptable form of liner for the proposed detention basins.
- d) Additional items that must be included in the storm water management plan include details with regard to the sealing of all pavement curbs and gutters, manholes and drop inlets.

SECTION 2: Any ordinances or parts of ordinances inconsistent herewith are hereby repealed.

SECTION 3: This Ordinance shall become effective five (5) days after enactment.


SECTION 4: If any section, paragraph, subsection, clause or provision of this Ordinance shall be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of this Ordinance as whole, or any part thereof.

DULY ENACTED AND ORDAINED INTO LAW as Ordinance No. 8 of 2007 this 28<sup>th</sup> day of August, 2007 by the Board of Supervisors of the Township of Silver Spring.

ATTEST:

BOARD OF SUPERVISORS  
TOWNSHIP OF SILVER SPRING

  
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Township Secretary

  
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Chairman