TOWN OF COLONIE
PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT

STANDARD FORMAT FOR STORM WATER MANAGEMENT PLANS AND REPORTS

A. Materials to be submitted

I. Drainage maps at scale of 1" = 200' or larger (existing and proposed conditions on separate maps) Sufficient information must be provided on 200 scale mapping to document general drainage patterns in project area, drainage from upland areas, and potential impacts on downstream and adjacent properties. Complete detail on existing piping and surface flows must be shown within at least 200' of the project site. Maps must include:

1.) Location map at scale of 1" = 2000' or larger showing entire watershed area and indicating project site.
2.) Watershed area and subarea boundaries, acreages
3.) Inlet and outlet points
4.) Surface characteristics (wooded, grass, pavement, building, etc.)
5.) Flow directions
6.) Existing and proposed storm sewers, detention basins, streams and other drainage channels
7.) High and low points

II. Report containing the following:

1.) Project description, including
   a) location
   b) watershed description, including total acreage, name of stream or river to which watershed contributes, and description of flow path from site outlet to stream or river (note any restrictions or obstructions along path)
   c) soils
   d) topography
   e) surface characteristics (wooded, grass, building, pavement, etc.)
   f) proposed development

2.) Hydrologic computations for existing and proposed conditions, including
   a) Description of design storm - frequency, intensity, duration
   b) Runoff coefficients or curve numbers
   c) Time of concentration
   d) Peak runoff rates for each watershed area or subarea (provide calculations and summary)
   e) Documentation of sources for all computation methods

3.) Hydraulic computations for each pipe run (in chart form), including
   a) Pipe material, diameter, Manning's coefficient, length, and slope
   b) Pipe capacity
   c) Projected peak flow
   d) Velocity flowing full and at projected peak

4.) Expected drainage impacts and proposed methods to minimize impacts including
   a) Increase in rate and volume of runoff
   b) Calculation of detention storage requirement
   c) Calculation of detention storage as designed
   d) Calculation for release rate from detention facilities and required orifice size.
   e) Existing and future ponding limits for design storm and 100 year storm.

5.) Statement that the drainage system as designed will function adequately, and will not adversely affect adjacent or downstream properties.

6.) Stamp and signature of licensed Professional Engineer

B. General Standards

1.) Peak runoff rates from the project site after development shall not exceed rates prior to development by more than 10% or 1 CFS, whichever is less, based on a 10 year storm frequency. For areas within both the Shaker Creek watershed and the Airport Area GEIS study area, the 10, 25, and 50-year post-development peak flows shall not exceed predevelopment levels for each storm event. For areas within the Lishakill - Kings Road Area GEIS study area, the 10, 25, and 100-year post-development peak flows shall not exceed predevelopment levels for each storm event.

2.) Storage capacity shall be provided on the project site for excess flows resulting from development based on a 25-year storm frequency. For areas within both the Shaker Creek watershed and the Airport Area GEIS study area, storage shall be provided for excess flows based on a 50-year storm. For areas within the Lishakill - Kings Road Area GEIS study area, storage shall be provided for excess flows based on a 100-year storm.

3.) Ponding depth in open detention basins shall not exceed four feet.

4.) Provisions for overflow of facilities shall be made for protection against loss of life and damage to personal property for storms of up to 100-year frequency.

5.) Provision shall be made for continued conveyance of drainage entering the site from upland watershed areas.

6.) Provision shall be made for positive drainage from the project site to an existing storm sewer system or drainage course.

C. Acceptable hydrologic methods

1.) Rational or modified rational method

2.) Soil conservation service technical release No. 55, urban hydrology for small watersheds.

3.) Other recognized methods may be used on approval by the Planning and Economic Development Department.