

**STATE SOIL CONSERVATION COMMITTEE  
HYDRAULIC AND HYDROLOGIC DATABASE SUMMARY FORM FOR  
STORMWATER MANAGEMENT BASINS**

Pursuant to N.J.S.A. 4:29-39 et. seq. and as required for Application for Soil Erosion and Sediment Control Plan Certification the following hydraulic and hydrologic information regarding the proposed project is provided for Detention, Retention and Infiltration basins. A separate form must be completed for each basin. (See Guidelines to complete form on last page)

1. Name of Project: West campus Storm Water Improvements, V.A. Lyons Med. Ctr. 1a. Date of Submission: 2/4/13

2. Municipality: Bernardsville

3. County: Sommerset

4. As built/Design (Circle) 5. Date: 02/01/2013

6. Basin is in Block: 8001 Lot: 3

7. Height of Dam: 5.6' Top width of Dam: 10'

8. Dam Classification: IV

9. Type of Basin (Circle): Detention/Retention/Infiltration

10. Name of Creek, Stream, or area into which the Basin discharges: Block: 8001, Lot: 3

Basin outlet location (NJSPC feet, NAD83): N 667393 E 475795

For District Use Only

File Name:

County:

Watershed:

Subwatershed

**Basin Outlet Design Data:**

	11 Type of Outlet	12 Orifice Size or Weir Length	12 Elevation (USGS)	14 Discharge Coefficient	15 Exponent
3.0"Dia	orifice	.04908 s.f.	299.98	0.60	
6.0"	orifice	.19634 s.f.	300.50	0.60	
10.0"	orifice	.54542 s.f.	301.60	0.60	
2.0'L x 1.5' rise	weir	2.0 ft	302.50	0.60	
6.0" x 192"	horizontal weir	16.0 ft	304.00	0.60	
10' L x 8' W	spillway	8.0 ft	304.50	2.43 to 2.74	

**Basin Stage-Discharge Data**

16 Elevation (USGS Feet)	17 Storage (Acre-Ft)	18 Total Outlet Structure Discharge (cfs)
301.00	0.3618	0.70
302.00	0.7699	1.94
303.00	1.2265	6.62
304.00	1.7341	16.08
304.50	2.0098	32.09

**Post Development Watershed Data (Submit copy of USGS Map, GIS shape file or CADD file showing the site footprint) <sup>1</sup>:**

19 Drainage Area Name	20 Drainage Area (sq miles)	21 Post-Developm ent CN#	22 Percent Impervious	23 Time of Concentration (hrs)
Side "A"	0.00410	90	64.62%	0.0666
Side "B"	0.00974	80	25.64%	0.1883

1. GIS shape or CADD file should be in NJSPC feet, NAD83

**Project Area Soil Type by Block and Lot Numbers:**

24 Block	25 Lot	26 Soil Type	24 Block	25 Lot	26 Soil Type
8001	3	NeopB			
8001	3	NeopC			

27. Name of responsible parties that will maintain this basin:

Name: Veterans Administration Street Address: 151 Knollcroft Road  
Municipality: Lyons State: NJ Zip Code: 07939  
Phone Number: ( ) (908)-647-0180 Ext 4265 Gary Boehner

**GUIDELINES FOR COMPLETION OF HYDRAULIC AND HYDROLOGIC DATA BASE  
SUMMARY FORM FOR STORMWATER MANAGEMENT BASINS**

- 1 - 3                    As indicated
- 4 & 5    Indicate if data is based upon as-built or design condition. If the project is in the design phase then circle design and the date of design.
6.            As indicated.
7.            The height of the Dam shall be described pursuant to the NJDEP Dam Safety Standards, NJAC 7:20-1.2. If the basin is excavated, then enter "excavated". Indicate in linear feet the top width of dam.
8.            Dam classification as defined in the NJDEP Dam Safety Standards, NJAC 7:20-.8.
9.            Enter either Detention, Retention or Infiltration. A detention basin has a positive outlet. A retention basin holds water as a pond or lake and also serves a detention function. An infiltration basin relies solely on the percolation of stormwater runoff into the soil without any positive outlet.
10.          Enter the name of the creek, stream, lake, etc. into which the basin discharges. If discharge is overland indicate the block and lot number. This includes the receiving area at the emergency spillway of infiltration basins. Provide the basin outfall location in NJSPC feet, NAD83.
- 11 - 15   In this section list all outlets, their sizes, inverts, elevations and outlet discharge data for the basin.
- (11)    Enter either weir or orifice, emergency spillway or top of dam
- (12)    Enter the square feet for orifice size or length in feet for a weir
- (13)    Enter the USGS invert elevation for all outlets listed in column 11 (enter elevation of center of outlet for circular orifice)
- (14)    Enter the coefficient for the outlets listed in column 11.
- 16 - 18   Based on routing calculations, list in column 16 selected basin elevations (USGS), the corresponding storage capacity in acre feet (column 17) and their total outlet structure discharge in cubic ft./ sec. (18)
- 19 - 23   In this section identify the name and size of the contributing drainage area(s), curve number, % impervious cover and time of concentration.
- (19)    Designate the major and /or subdrainage area by name.
- (20)    Indicate in square miles the basin drainage area.
- (21)    Enter the post development Curve Number (USDA-NRCS) for the basin drainage area.
- (22)    Enter the percent imperviousness of the basin drainage area. (Rooftop, paved areas - streets, parking lots, etc.)
- (23)    Enter the time of concentration in hours. DO NOT USE THE LAG METHOD.
- 24 - 26   List the (USDA-NRCS) soil type present within the project by block and lot number.
27.            As indicated.