

## MANAGED RELEASE CONCEPT (MRC) DESIGN SUMMARY

*Complete One Design Summary Sheet for Each BMP Designed for MRC*

### GENERAL INFORMATION

Applicant Name: \_\_\_\_\_ Project Name: \_\_\_\_\_  
 Applicant Address: \_\_\_\_\_ Municipality: \_\_\_\_\_  
 City, State, Zip: \_\_\_\_\_ County: \_\_\_\_\_  
 Permit Type:  NPDES PAG-02  NPDES IP  ESCGP  ESP

	Pre-Development	Post-Development	Change
Impervious Area (acres):			

### MRC BMP INFORMATION

MRC BMP Type: \_\_\_\_\_ Stormwater BMP Manual Section: \_\_\_\_\_

Will the BMP Include Vegetation?  Yes  No

If Yes, Identify Proposed Vegetation: \_\_\_\_\_

For Non-Vegetated BMPs Will There Be Pre- or Post-Treatment?  Yes (Pre-)  Yes (Post-)  No

If Yes, Identify Proposed Pre- or Post-Treatment: \_\_\_\_\_

Name of Surface Water to Receive MRC BMP Discharges: \_\_\_\_\_

Designated Use of Surface Water: \_\_\_\_\_ Existing Use of Surface Water (if different): \_\_\_\_\_

Is the Surface Water Impaired?  Yes  No

If Yes, Identify Cause(s): \_\_\_\_\_

Will the BMP Have a Liner?  Yes  No

If Yes, Identify the Type or Liner Material: \_\_\_\_\_

BMP Media Description: \_\_\_\_\_

Are Any Deviations from MRC Design Standards Proposed?  Yes  No

If Yes, Identify Deviations: \_\_\_\_\_

### MRC BMP DESIGN VALUES AND STANDARDS

Parameter	Design Value	Design Standard
Actual Contributing Impervious Area to BMP (acres)		
Equivalent Contributing Impervious Area to BMP (acres)		
MRC BMP Release Rate (cfs)		No greater than 0.01 cfs / acre of equivalent contributing impervious
BMP Footprint Area (ft <sup>2</sup> )		
Total Drainage Area to BMP (acres)		
Bottom BMP Elevation (ft)		

MRC BMP Design Summary

Parameter	Design Value	Design Standard
2-Yr/24-Hr Storm Ponding Depth (ft)		1 ft (recommended) (2 ft max)
Max. Ponding Depth (ft)		4 ft (max)
Overflow Bypass Elevation (ft)		
Media Depth (ft)		2 ft (min) – 4 ft (max)
Media Void Space (%)		
Internal Water Storage (IWS) Depth (ft)		
Top of IWS Elevation (ft)		
Underdrain Pipe Diameter (in)		
Underdrain Orifice Diameter (in)		
Underdrain Outlet Elevation (ft)		
IWS Used for Routing (%)		50% max
Separation Distance (Groundwater) (ft)		1 ft (min) (2 ft recommended)
Infiltration Rate (in/hr)		
1-Yr/24-Hr <b>Pre</b> -Development Peak Rate (cfs)		
2-Yr/24-Hr <b>Post</b> -Development Peak Rate (cfs)		1-Yr/24-Hr Pre-Development Peak Rate (or per approved Act 167 Plan)
10-Yr/24-Hr <b>Post</b> -Development Peak Rate (cfs)		10-Yr/24-Hr Pre-Development Peak Rate
50-Yr/24-Hr <b>Post</b> -Development Peak Rate (cfs)		50-Yr/24-Hr Pre-Development Peak Rate
100-Yr/24-Hr <b>Post</b> -Development Peak Rate (cfs)		100-Yr/24-Hr Pre-Development Peak Rate
a. Total 2-Yr/24-Hr Runoff Volume Managed by BMP (cf)		
b. Total 1.2-inch/2-Hr Runoff Vol. Permanently Removed (cf)		
c. 2-Yr/24-Hr Volume Managed (cf)		Difference of a. and b.
Ponding Time @ 2-Yr/24-Hr Storm (hrs)		72 hrs max
Ponding Time @ 10-Yr/24-Hr Storm (hrs)		72 hrs max
Ponding Time @ 50-Yr/24-Hr Storm (hrs)		72 hrs max
Ponding Time @ 100-Yr/24-Hr Storm (hrs)		72 hrs max

\_\_\_\_\_  
Licensed P.E. Name

\_\_\_\_\_  
Licensed P.E. Signature

\_\_\_\_\_  
License No.

\_\_\_\_\_  
Date

*Licensed  
Professional's  
Seal*