BECKER SOIL AND WATER CONSERVATION DISTRICT

Stormwater Infiltration BMPs

CALCULATION WORKSHEET

Landowner:	Date:

Calculate the impervious surface coverage, include all structures that apply. Use table below to calculate storage requirements.

1.2" Rainfall Runoff Retention will result in a 50% Phosphorus and 90% Sediment reduction

EXISTING & PROPOSED STRUCTURES House, Garage, Shed, Boathouse, Driveway, Parking Area, Boat Ramp, Sidewalk, Patio, Landscaping (incl. plastic), Other (Dog Kennel), etc.	AREA SQ. FT.	X	1.2" =0.1 ft Use 0.2 for Rock Filled French Drain	=	TOTAL CU. FT.
Example: 20' x 30' Roof (example is using a 6" depth for a rain garden)	*600*	*x*	*0.1*	*60*	
		x			
		x			
		x			
		x			
		x			
		x			
			TOTAL		

Depth Factor (DF) DEPTH OF STORMWATER BMP (USE FACTOR, NOT INCHES)	
3" = 4.0	6" = 2.0
8" = 1.5	12" = 1
24" = 0.5	

TOTAL CU. FT. (FROM ABOVE)	X	DF	=	TOTAL AREA SQ. FT.
60	x	*2.0*	*120*	
	x			
		TOTAL		

AREA FORMULAS	
Square/Rectangle:	Length X Width
Triangle:	$\frac{\text{Base X Height}}{2}$
Circle:	π X (Radius^2) (π = 3.14)

STEPS FOR SIZING A STORMWATER BMP:

1. Measure square footage of impervious surface.
2. Multiply by 1.2" Runoff Event = **0.1 (Use 0.2 for rock-filled French Drain)**
3. **This is the cubic feet of storage needed.**
4. Multiply by the Depth Factor (DF)
5. Square footage of area needed for the depth you have chosen.