Glossary of Stormwater BMP Structure Types (Table 1a), Nonstructural Practices (Table 1b), and Environmental Site Design Practices and Techniques (Table 1c)

Table 1a BMP Structure Types

Structure Type	Code	Structure Function	CBP Urban Stormwater Workgroup (USWG) Classification
1a) Artificial Wetlands (See Shallow Marsh/SM)	SM	A structure with a permanent shallow pool planted with wetland vegetation often designed to provide extended detention.	Wet Pond & Wetlands
2a) Attenuation swale or dry swale	SW	Open drainage channel designed to detain and promote the filtration of stormwater runoff through underlying fabricated soil media (see Grassed Swale or SW).	Filtering Practice
3a) Bio-retention	BIO or BR	Landscape designed such that stormwater runoff collects in shallow depressions before filtering through fabricated planting soil media.	Filtering Practice
4a) Check Dam	CD	A small dam constructed in a gully or other small waterway to decrease flow velocity (by reducing the channel gradient), minimize scour, & promote deposition of sediment.	Filtering Practice
5a) Detention Structure (Dry Pond)	DP	Designed to store runoff without a permanent pool.	Dry Detention Pond & Hydrodynamic Structure
6a) Dry Well	DW	An infiltration trench variant designed to exclusively accommodate rooftop runoff.	Infiltration Practice
7a) Extended Detention Structure (Two types):	ED	Designed to temporarily detain a portion of runoff for 24 hrs after a storm using a fixed orifice to regulate outflow at a specific rate, allowing solids & associated time to settle out.	Dry Extended Detention Pond
1) Extended Detention Structure, Dry	EDSD	Designed for the temporary storage of runoff associated with at least a 24 hr 1-year storm without creating a permanent pool of water.	Dry Extended Detention Pond
2) Extended Detention Structure, Wet	EDSW	Designed for the storage of runoff associated with at least a 24 hr 1-year storm. The detained water drains partially & the remaining portion creates a permanent pool.	Depending upon the structure design, this could be classified as a Dry Extended Detention Pond or Wet Pond & Wetlands
8a) Filter Strip	FS	Vegetated land designed to intercept sheet flow from upstream development.	Filtering Practice
9a) Flow Splitter	FlSp	Hydraulic structure designed either to divert a portion of stream flow to a BMP located away from a channel, direct stormwater to a parallel pipe system or bypass a portion of base flow around a pond.	Not a WQ BMP
10a) Flood Management Area	FLOOD	10 year storm overbank flood protection	Not a WQ BMP

Table 1a BMP Structure Types			
Structure Type	**Code**	**Structure Function**	**CBP Urban Stormwater Workgroup (USWG) Classification**
11a) Forebay	FOREBAY	Storage structure adjoining a SWM BMP inlet designed to trap coarse sediments and thereby lessen their accumulation in the main treatment area.	Dry Detention Pond & Hydrodynamic Structure
12a) Gabion	GABION	A large rectangular box made of heavy gauge wire mesh which holds cobbles and boulders for changing stream flow patterns, bank stabilization, and erosion control.	Filtering Practice
13a) Grass Swale	SW	Open vegetated channel used to convey runoff and provide treatment by filtering pollutants and sediment.	Filtering Practice
14a) Hydrodynamic Structure aka: 1) Oil grit separator 2) Bay Saver© 3) Stormceptor©	 OGS BS SC	An engineered structure used to separate sediments and oils from stormwater runoff using gravitational separation and/or hydraulic flow.	Dry Detention Pond & Hydrodynamic Structure
15a) Infiltration Basin	IB	Designed to allow stormwater to infiltrate into permeable soils. It differs from a retention structure in that it may include a back-up underdrain pipe to ensure eventual removal of standing water.	Infiltration Practice
16a) Infiltration Trench (Three types): 1) Complete Exfiltration 2) Partial Exfiltration 3) Water Quality Exfiltration	IT ITCE ITPE ITWQE	An excavated trench that has been backfilled with exposed or unexposed stones to form an underground reservoir (Also see Dry Well). Runoff can only exit the trench by exfiltrating through the stone reservoir into the underlying soil Runoff exits the trench by exfiltrating a) through the stone reservoir into the underlying soil, and b) via a perforated underdrain at the bottom of the trench that diverts runoff to a central outlet. Storage volume is set to receive only the first ½" of runoff (first flush) from an impervious area of the watershed.	Infiltration Practice
17a) Landscape	LANDSCAPE	Impervious area reduction (Thus far, only Prince Georges County has submitted reports of this practice).	Filtering Practice
18a) Level Spreader	LS	A device for distributing stormwater uniformly over the ground surface as sheet flow to prevent concentrated, erosive flow and promote infiltration.	Infiltration Practice

Table 1a BMP Structure Types			
Structure Type	**Code**	**Structure Function**	**CBP Urban Stormwater Workgroup (USWG) Classification**
19a) Observation well	OBS_WELL	A test well installed in an infiltration trench to monitor draining time after installation.	Not a SWM BMP – Observation Well
20a) Other	OTH	A stormwater facility that is known to have been implemented but whose type cannot definitively be identified at the time of submitting a Notice of Construction Completion report to MDE.	Defaults to Dry Detention Pond & Hydrodynamic Structure, evaluated as the least efficient class of facilities in removing TSS, TN, and TP from stormwater runoff.
21a) Porous Pavement	PP	A porous asphalt surface designed to have bearing strength similar to conventional asphalt but provides a rapid conduit for runoff to reach a subsurface stone reservoir.	Infiltration Practice
22a) Retention Pond (See Wet Pond/WP)	WP	A structure with a permanent pool of water for treating incoming storm runoff.	Wet Pond & Wetlands
23a) Sand Filter	SF	A bed of sand to which the first flush of runoff is diverted. Water leaving the filter is collected in underground pipes & returned to a waterway. A layer of peat, limestone, and/topsoil may be added to improve removal efficiency.	Filtering Practice
24a) Shallow Marsh	SM	A structure with a permanent shallow pool planted with wetland vegetation often designed to provide extended detention.	Wet Pond & Wetlands
25a) Underground Storage	UGS	Vault like structure designed for the temporary storage of storm flow.	Dry Detention Pond & Hydrodynamic Structure
26a) Vegetated Buffer	VB	A vegetated protective zone of variable width located along both sides of a waterway.	Filtering Practice
27a) Water Quality Inlet	OGS	See Hydrodynamic Structure-Oil Grit Separator.	Dry Detention Pond & Hydrodynamic Structure
28a) Wet Pond	WP	A structure with a permanent pool of water for treating incoming storm runoff.	Wet Pond & Wetlands

Table 1b Nonstructural Practices (Pre-2010)			
Practice Type	**Code**	**Function**	**CBP Urban Stormwater Workgroup (USWG) Classification**
1b) Environmentally Sensitive Development	ESD	Techniques applied to low density developments and thereby eliminate the need for structural practices to treat both recharge volume (Re_v) and water quality volume (WQ_v).	TBD
2b) Natural Area Conservation Credit	NAC	Natural areas that help maintain predevelopment hydrology. Examples: Forest retention or *Tree Save Areas*, non-tidal wetlands and buffers and stream systems.	TBD
3b) Non-Rooftop Disconnection	NRTD	Runoff from surface impervious areas is disconnected and then directed to a pervious area where it either infiltrates or is filtered. Examples: Overland sheetflow, permeable pavers, rain gardens and small scale filters.	TBD
4b) Open Grass Channels	OPGC	Include open section roads used to reduce storm volume and pollutants, and meet groundwater recharge requirements.	TBD
5b) Other Site Planning Techniques	OSPT	Include practices that lessen the amount of impervious surfaces and thereby reduce runoff from a site.	TBD
6b) Redevelopment	RED	A construction, modification or improvement that exceeds 5,000 sq ft of land disturbance at a site whose existing land use is commercial, industrial, institutional or multifamily residential.	TBD
7b) Rooftop Disconnection	RTD	Rooftop runoff is disconnected and then directed to a pervious area where it either infiltrates or is filtered. Examples: Rain gardens and green roofs.	TBD
8b) Sheetflow to Buffers	SFTB	Runoff is discharged to a buffer area (e.g. stream buffers, forest buffers) or filter strips through overland flow.	TBD

Table 1c Environmental Site Design Practices & Techniques (Post-2010)			
Practice Type	**Code**	**Function**	**CBP Urban Stormwater Workgroup (USWG) Classification**
1c) Alternative Surfaces (Three Types)			
1) Green Roof	GR	Alternative surface used in place of traditional flat or pitched roofs to reduce runoff.	
2) Permeable Pavements	PERMP	Any of the available materials that are used to replace traditional pavements (e.g., asphalt, concrete) and reduce runoff.	
3) Reinforced Turf	RTRF	Grassed or gravel area with open, load-bearing matrix for structural integrity.	
2c) Nonstructural Practices (Three Types):			
1) Disconnection of Rooftop Runoff	ESDRTD	Rooftop runoff is disconnected and then directed to a pervious area where it either infiltrates or is filtered.	
2) Disconnection of Non-Rooftop Runoff	ESDNRTD	Runoff from surface impervious areas is disconnected and then directed to a pervious area where it either infiltrates or is filtered. Examples: Overland sheetflow, permeable pavers, rain gardens and small scale filters	
3) Sheetflow to Conservation Areas	ESDSFNAC	Runoff is discharged to a natural conservation or buffer area (e.g. stream buffers, forest buffers) through overland flow.	
3c) Micro-Scale Practices (Nine Types):			
1) Rainwater Harvesting	ESDRH	These practices intercept and store rainfall for future use.	
2) Submerged Gravel Wetlands	ESDSGW	Small-scale filter using wetland plants and a gravel media to provide treatment	
3) Landscape Infiltration	ESDIL	Combination of landscape features with infiltration practices	
4) Infiltration Berms	ESDIB	Series of small berms used in sloped areas to detain, infiltrate, and filter runoff	
5) Dry Wells	ESDDW	An infiltration trench variant designed to exclusively accommodate rooftop runoff	
6) Micro-Bioretention	ESDMB	Small, vegetated filter used to capture and treat runoff from adjacent impervious areas	
7) Rain Gardens	ESDRG	Shallow landscaped feature used to detain and filter runoff and used primarily in residential applications	
8) Swales	ESDSW	Channels that provide conveyance, water quality treatment and flow attenuation of runoff. Variants include the grassed swale, bio-swale, and wet swale.	
9) Enhanced Filters	ESDEF	A modification applied to other filters that increase nutrient removal and groundwater recharge	