1. GREEN STORMWATER PRACTICES
   The new stormwater permit emphasizes the adoption of runoff reduction practices for the collection and treatment of stormwater. One of the principal methods for runoff reduction is the utilization of “green stormwater practices” for the collection and treatment of stormwater.

2. EXAMPLES OF GREEN STORMWATER PRACTICES
   Green stormwater practices include collection and treatment devices such as:

1. Rain Gardens – The rain garden is a stormwater management practice utilized to collect and treat small volumes of runoff within a shallow, typically 6” depression. Rainwater is directed to the garden from the adjacent building roof drains, driveway drains or other hard surfaces. The runoff, which temporarily ponds in the garden, seeps into the soil over several days. The system consists of an inflow component, a layer of planting material, and a gravel filter chamber equipped with an overflow mechanism to convey larger rain events to a storm drain.

2. Cisterns – Cisterns capture and store rainwater to be used later for irrigation of lawns and gardens or filtered and reused for household activities such as toilet flushing and clothes washing. Cisterns vary in size and can be located either above or below ground and can be constructed on-site or pre-manufactured.
3. **Green Roofs** – Green roofs consist of a layer of vegetation and soil installed on top of a conventional flat or slightly sloping roof. The rooftop vegetation captures rainwater, allowing evaporation and evapotranspiration processes to reduce the volume of rainwater entering the drain system. The major components of a green roof consist of: roof structure supporting the weight of the green roof system, the waterproofing system, a drainage layer, a geosynthetic layer, planting soil and plants.

4. **Stormwater Planters** – Stormwater planters are small landscaped treatment devices that can be placed above or below the ground and are designed to act as infiltration or filtering practices. There are three (3) types of planters:
   - Contained planters placed above an impervious surface. The planter overflows when the infiltration capacity is exceeded
   - Planters with pervious bottoms that allow the stormwater to infiltrate through the soil media
   - Flow-through planters are constructed with an under drain system that conducts filtered stormwater to the storm drain system

5. **Permeable Paving** – Permeable paving consist of porous types of paving material utilized for parking lots, driveways and sidewalks. Porous or permeable paving permits stormwater to infiltrate through its surface, thereby reducing runoff from the site. In addition to reduction of runoff, permeable paving augments the recharge of groundwater through infiltration as well as providing pollutant uptake in the underlying soils.

3. **BENEFITS OF GREEN STORMWATER PRACTICES**

Green stormwater practices, in addition to reducing the carbon foot print and promoting environmental stewardship, have many benefits, most notable of which include:

- Considerable reduction in stormwater volumes that need to be discharged to nearby waterways and adjacent MS4 storm drains
- Effective pollutant treatment of stormwater
- Groundwater recharge
- Reduction in the use of fertilizers, pesticides and herbicides
- Reduction in grass cutting and lawn maintenance
- Beautification and aesthetic improvements to the landscape
- Practices such as green roofs, reduce building heating and cooling costs, providing energy savings to the owner, as well as help filter and bind airborne and other particulates, thus improving overall air quality