

CHECKLIST FOR INSPECTION OF BIORETENTION SYSTEM/TREE FILTERS

Location: Morrill, STG, 245 W 57th St.

Inspector: Chris Bourbois

Date: August 15th 2023

Time: 11:30 AM

Site Conditions: Sunny, 69°

Days Since Last Rain Event: 1

Inspection Items	Satisfactory (S) or Unsatisfactory (U)	Comments/Corrective Action
1. Initial Inspection After Planting		The plants here are stable and healthy, other than some crown dieback in one of the swamp white oaks. This should be monitored, as the tree may need to be replaced. There is no evidence of preferential flow and inlets and outlets of the rain gardens are functional.
Plants are stable, roots not exposed	Ⓢ U	
Surface is at design level, no evidence of preferential flow/shoving	Ⓢ U	
Inlet and outlet/bypass are functional	Ⓢ U	
2. Debris Cleanup (1 time/year minimum, Spring/Fall)		The site is clean and contains no dead leaves, dead vegetation, or litter. The swamp white oak on site is experiencing crown dieback, but pruning would not help. Additionally, there is not dense enough invasive species pressure to need mowing.
Litter, leaves, and dead vegetation removed from the system	Ⓢ U	
Prune/mow vegetation	Ⓢ U	
3. Standing Water (1 time/year and/or after large storms)		No standing or pooled water one day after rain. Parts of the rain gardens are not vegetated, but those parts are all mulched and show no evidence of pooling water or erosion caused by stormwater.
No evidence of standing water after 24-48 hours since rainfall	Ⓢ U	
4. Vegetation Condition and Coverage		Vegetation condition is very good here overall. There are no real invasive species of concern, although there is a small population of peppergrass. Otherwise, the rain garden is covered with native plants, ornamentals, or mulch. Native trees include swamp white oaks and hackberries, both of which are tolerant of wet conditions. Native plants also include swamp milkweed, common milkweed, sedges, boneset, switchgrass, black eyed susan, wild bergamot, and a couple of varieties of aster.
Vegetation condition good with good coverage (typically >75%)	Ⓢ U	
Final Comments		

This rain garden is in very good shape overall. The native vegetation is abundant, if a little too slanted towards forbs. The garden also includes well-chosen shrubs and trees, giving it a three-layered ecosystem that wasn't seen often throughout these inventories. The site is mostly well vegetated and all areas that are not vegetated are mulched. Peppergrass was the only non-native, non-ornamental plant seen on site, but it is not usually a problem when there is native vegetation to compete with it. Given the lack of real invasives and the already solid native species populations here, the main improvement focus should be vegetating more of the site and improving native diversity, especially with a focus towards getting more grass diversity in the system (little bluestem, prairie cordgrass, and prairie dropseed could all be good options). Other things to watch would be the health of the swamp white oaks on site, as some were experiencing crown dieback. The alley adjacent to the rain garden should also be watched, as it had a number of concerning plants (including tree of heaven) that should be monitored to prevent them from entering the rain garden.