

STORMWATER MANAGEMENT/BMP INSPECTION CHECKLIST

Inspector Name: Rick Ashley, P.E.

Inspection Date: January 14, 2016

Site Address or Location: 3871 Mountain Shade Drive, Marshall, VA 20115

Watershed: Goose Creek

Tax Map or Parcel ID No: 6060-40-5630-000

Type of Stormwater BMP or Structure

- | | |
|---|--|
| <input type="checkbox"/> Culvert
<input type="checkbox"/> Inlet and Storm Drain
<input type="checkbox"/> Open Channel (Vegetated/Geotextile)
<input type="checkbox"/> Open Channel (Concrete)

<input type="checkbox"/> Other (Describe) | <input checked="" type="checkbox"/> Pond (Permanent Pool)
<input type="checkbox"/> Pond (Dry Pool)
<input type="checkbox"/> Bioretention Basin
<input type="checkbox"/> Oil/Water Separator |
|---|--|

Item Inspected	Checked		Observations and Remarks
	Yes	No	
Does the structure show signs of settling, cracking, bulging, or other structural deterioration?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Do embankments, spillways, side slopes, or inlet/outlet structures show signs of erosion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Severe erosion/slope failure on emergency spillway. See attached photos.
Is there evidence of animal burrows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is there woody vegetation growth that may interfere with the flow or operation of the facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Do vegetated areas need mowing or is there a buildup of clipping that could clog the facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Downstream side of embankment needs mowing. See photo.
Are there bare areas which need seeding or sodding?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is there standing water in inappropriate areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	At base of failure area of the emergency spillway.
Is there an accumulation of sediment, debris, or trash?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Riprap in the stream channel. See photos.
Is there evidence of improper use of buffer areas, or construction or fill at channels or embankments which restrict flow or interfere with the proper operation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is there evidence of oil or other pollutant spills?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Item Inspected	Checked		Observations and Remarks
	Yes	No	
Is the culvert or storm drain filled more than 25% with debris, sediment, or trash?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The primary spillway is completely blocked. See photo.
Is there evidence of structural failure of the culvert pipe?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is there evidence of erosion at the inlet and outlet of the culvert or at the storm drain inlet?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there signs of settling, cracking, or misalignment of culverts, storm drain pipe, or concrete inlets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is the emergency spillway clear of obstructions, debris, and vegetation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Please note previous comments regarding failure.
Is the outlet structure and pipe clean of debris and sediment, free of damage, and in working order?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Primary spillway is completely blocked.
Is there an accumulation of debris, litter or trash?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Inlet of primary spillway riser is blocked
(For dry detention ponds) Is there standing water in the pond?	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
(For wet ponds) Is there excessive algae growth or other vegetation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is there evidence of oil or other pollutants in the pond?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is there erosion at the discharge point?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Emergency spillway
Do any safety devices, fences, gates, or locks need repair?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is there sediment, debris, litter, oil, or trash that needs to be cleared for aesthetic or functional reasons?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See previous comments
Is there standing water where there should not be standing water?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See previous comments
Is there structural damage to concrete structures?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there signs of erosion at entrance or exit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See previous comments
Are valves, sluice gates, and other mechanical devices operational?	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable

STORMWATER MANAGEMENT BMP FACILITIES INSPECTION REPORT FORM

Inspection Requirements: See the Stormwater Management BMP Facilities Maintenance Schedule for landowner's responsibilities for frequency of inspection and other requirements. This information is a part of the Maintenance Agreement that is recorded in the land records with the deed.

Inspection Purpose: To assure safe and proper functioning of the stormwater management BMP facilities and associated structures, by providing regular observations of their conditions and operation.

Retention of Records: All inspection/maintenance/repair documentation shall be retained by the landowner for a minimum of five (5) years.

Submission of Records: At the end of each year, by December 31st, mail all BMP inspection and maintenance documentation to:

Fauquier County Department of Community Development
29 Ashby Street, Suite 310
Warrenton, Virginia 20186
Attention: VSMP Administrator

NAME OF BUSINESS OR LANDOWNER:

Mountain Shade Subdivision (Note - No HOA)

ADDRESS:

3871 Mountain Shade Drive, Marshall, VA 20115

INSPECTION DATE:

January 14, 2016

PERFORMED BY:

Rick Ashley, P.E., County Engineer

Facility Management Checklist

The following items should be checked for each BMP:

1. Facility construction meets the requirements of the Fauquier Design Standards Manual, where applicable, and is adequate for the intended function.
2. The facility has been maintained properly according to the requirements of the Recorded Maintenance Agreement, BMP Maintenance Schedule, and the Fauquier County Design Standards Manual.
3. The facility is functioning adequately.
4. There have been no changes to the site conditions or area that would require modification and/or replacement of the existing facilities.
5. Access to the facility is adequate and maintained.

STORMWATER MANAGEMENT BMP FACILITIES INSPECTION REPORT FORM

REFER TO THE RECORDED MAINTENANCE AGREEMENT BMP MAINTENANCE SCHEDULE FOR EACH BMP TYPE – COMPLETE SEPARATE FORM FOR EACH STORMWATER MANAGEMENT BMP FACILITY

Facility Type: Retention Pond

Facility Location: 3871 Mountain Shade Drive, Marshall, VA 20115

Authorization

Yes No

Does the facility comply adequately with all pertinent regulations and requirements?

Requirements to Meet Compliance

The principal spillway is completely block by debris. All debris needs to be removed. The emergency spillway has failed, resulting in sever erosion in a significant portion of the spillway. The filter fabric in the spillway has been ripped away, and much of the riprap from the failure area is now in the outlet channel. Please see attached photographs. The emergency spillway must be repaired, including backfilling and compacting the eroded portion of the spillway; restoration of the filter fabric on the backfilled area; and, replacement of the riprap. The riprap must be removed from the stream channel.

Recommendations - Consult with a geotechnical engineer to ensure that emergency spillway repairs are done properly and in such a manner that would prevent future failure. At a minimum, riprap in the emergency spillway should be grouted.

Additional Observations/Comments

MOUNTAIN SHADE SUBDIVISION
Stormwater Management Pond Inspection



Principal spillway riser completely obstructed by debris



Emergency spillway from top of dam



Emergency spillway from toe of embankment



Close up view of emergency spillway failure



Close up view of emergency spillway failure



Close up view of emergency spillway failure



Riprap in stream channel below spillway



Riprap downstream in stream channel



Riprap at base of spillway obstructing principal spillway outlet channel