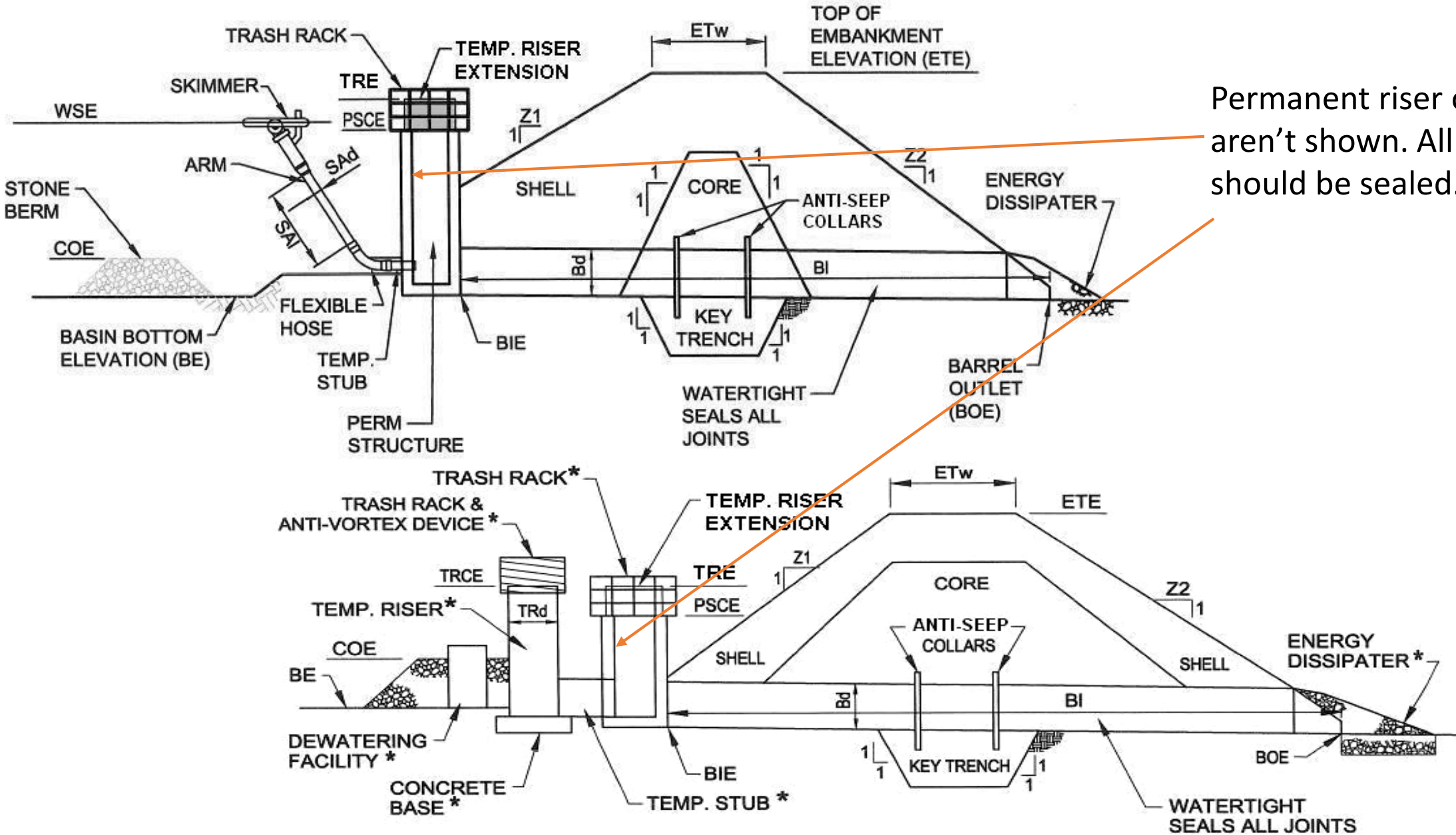


Erosion and Sediment Control Installation and Mistakes

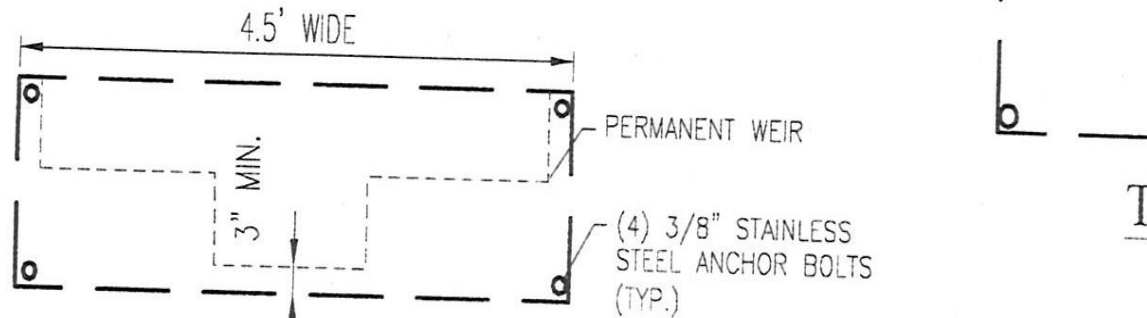
By Cody Schmoyer
Resource Conservationist

Sediment Basins



Permanent riser orifices aren't shown. All orifices should be sealed.

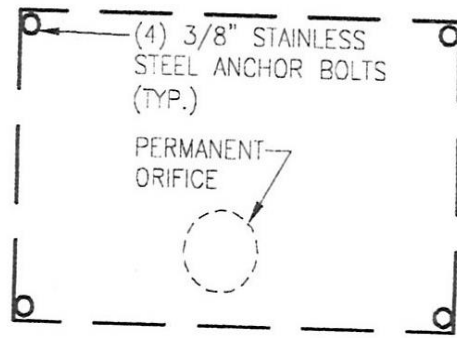
Sediment Basins Outlet Structures



NOTES:

- TEMPORARY WEIR PLATE TO BE USED DURING CONSTRUCTION FOR E&S CONTROLS
- WEIR PLATE SHALL BE REMOVED AS PART OF THE CONVERSION TO A PERMANENT BASIN CONTROL.

TEMPORARY WEIR PLATE DETAIL



*9"x9" (MIN.), 3/8" THICK STAINLESS STEEL ORIFICE PLATE (NEOPRENE GASKET TO BE UTILIZED)

NOTES:

- NON-SHRINK GROUT SHALL BE PROVIDED ALONG ALL EDGES OF THE ORIFICE PLATE
- TEMPORARY ORIFICE PLATE SHALL BE USED DURING CONSTRUCTION FOR TEMPORARY E&S CONTROLS.

TEMPORARY ORIFICE PLATE DETAIL



11/20/2015



- Basin pipe with no outlet structure. Direct pollution if it would rain.
- Basin should be installed once all the pipes and structures are located onsite.

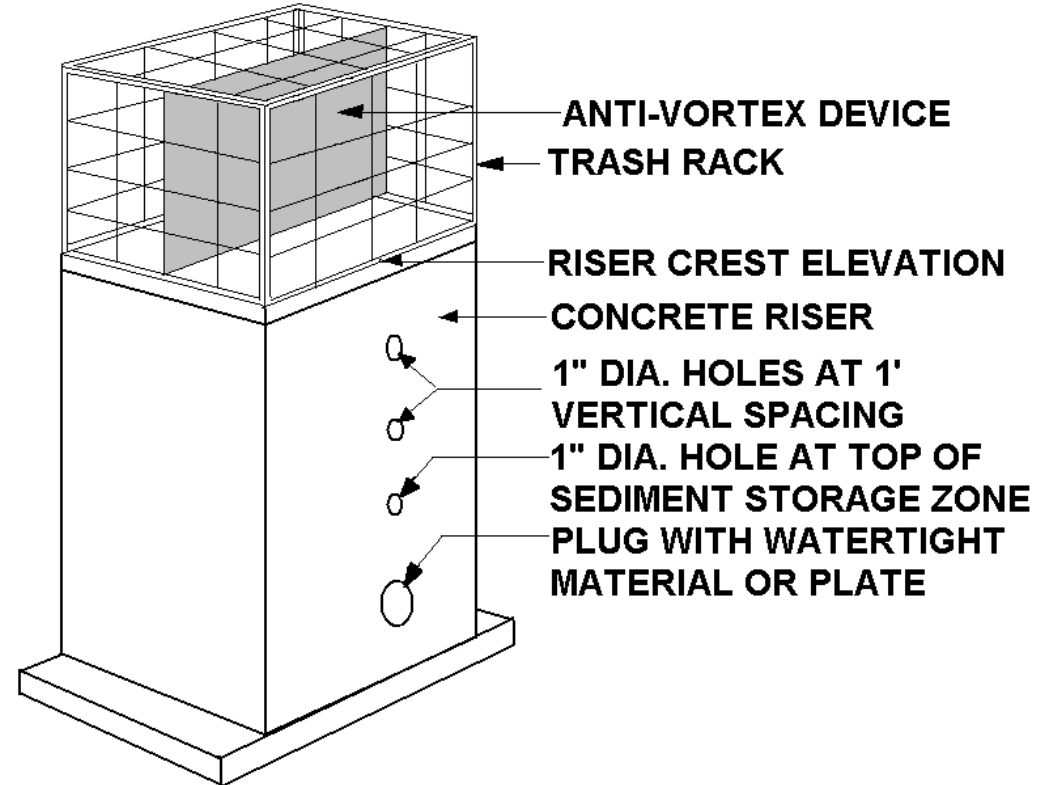
Marlee Float Skimmer



Reverse Q Skimmer



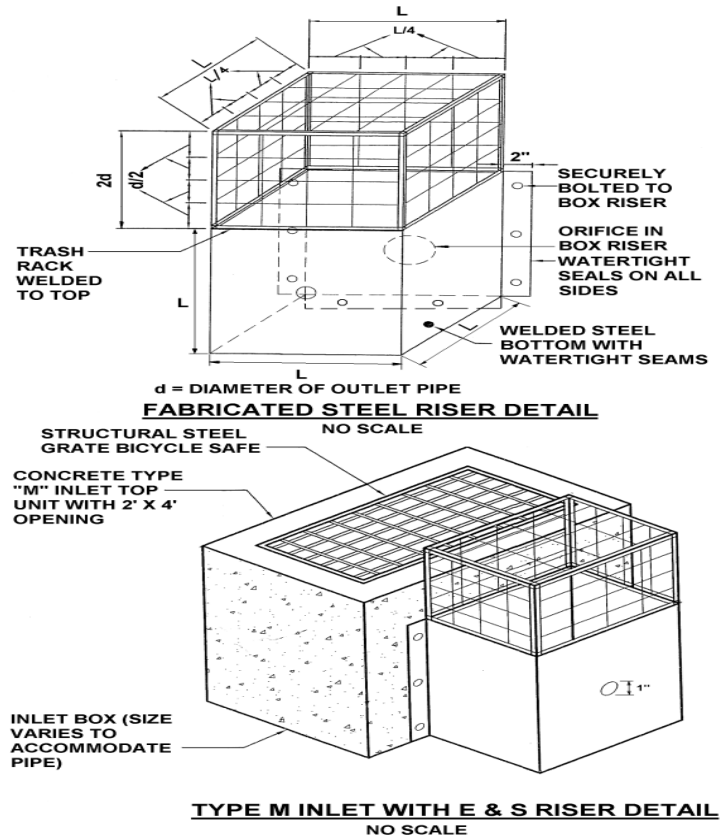
Sediment Traps-Permanent Riser Structure with Dewatering Holes



Permanent Riser with Temporary Dewatering Holes



Type M Inlet with Riser

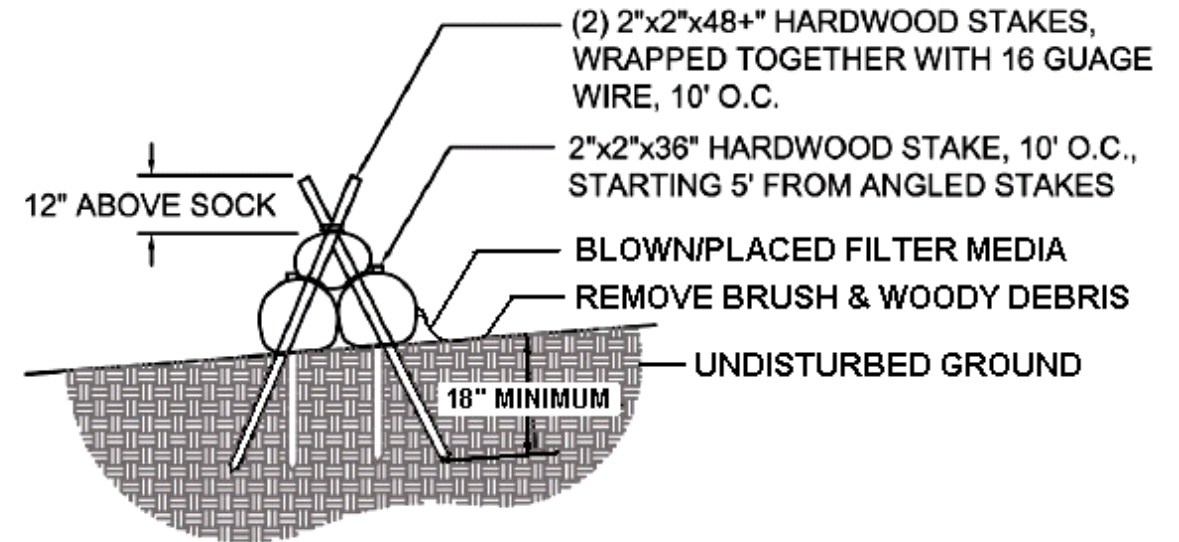
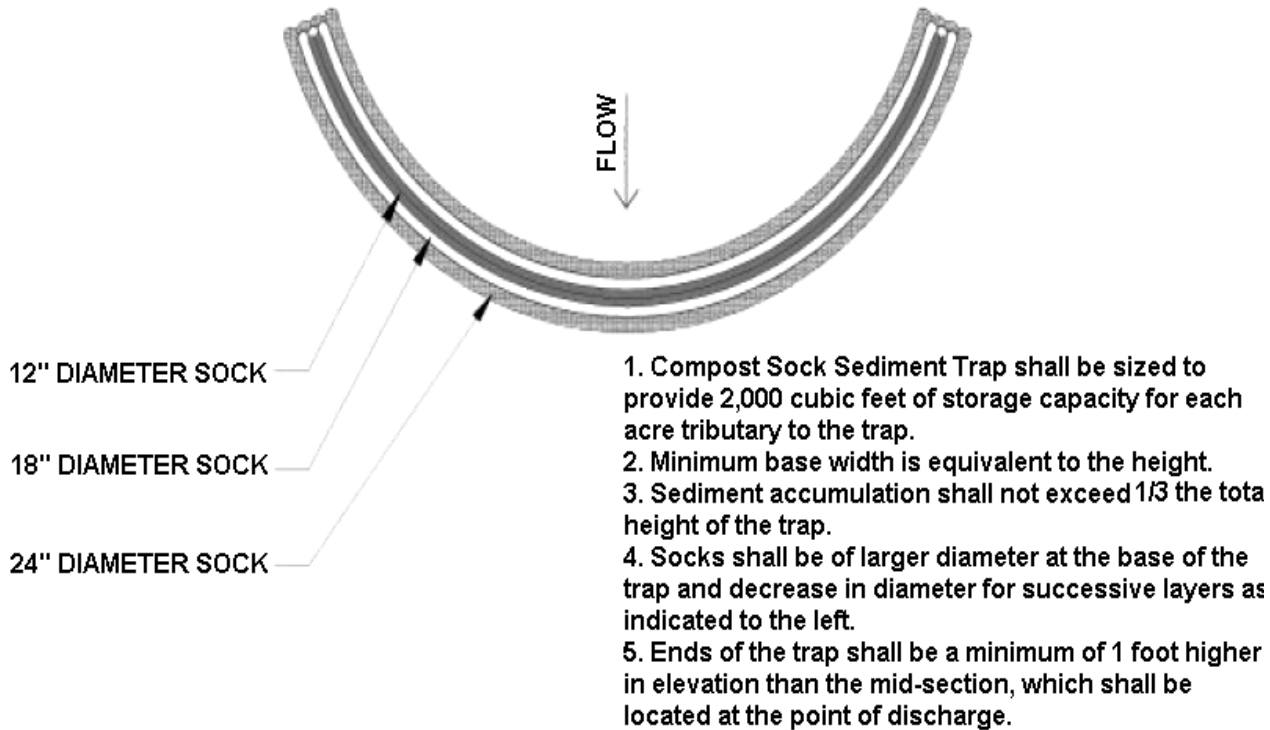


Compost Sock Trap



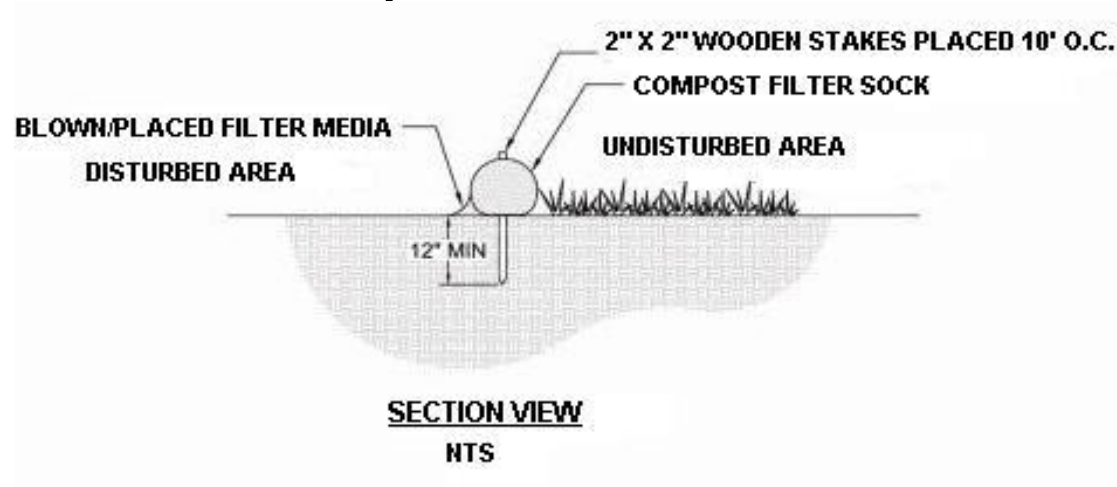
Additional staking to help prevent sock from moving.

Compost Trap Detail

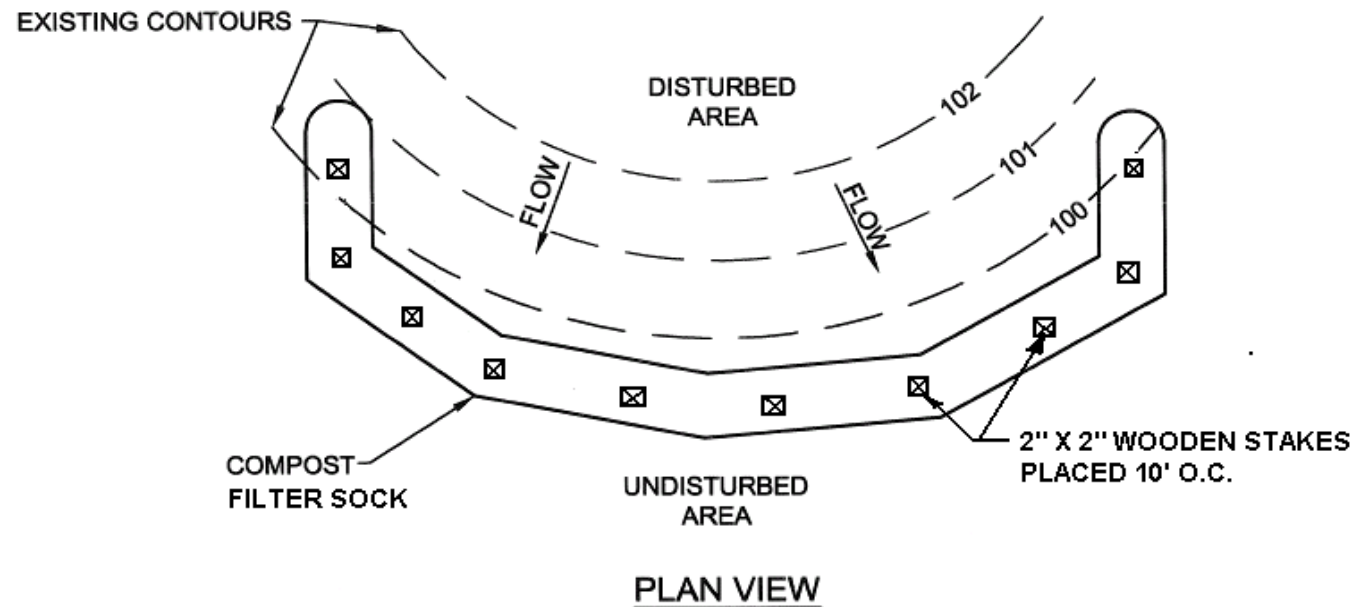


Sediment trap needs to be a minimum 3' tall. In reality a 24" sock and a 1' sump would meet the requirements.

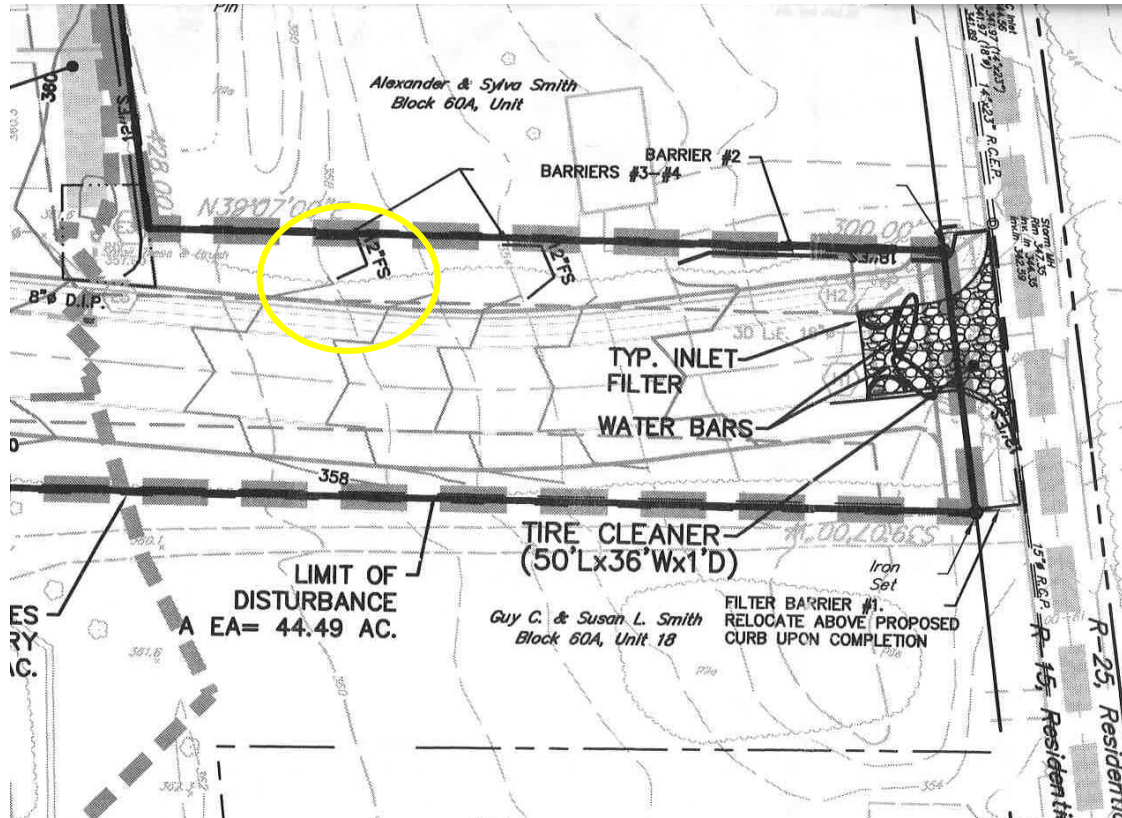
Compost Sock



- Sock should extend at least 8' up slope at a 45 degree angle.
- For example, 12" socks should be pointed upslope at least 12" up slope in elevation difference to ensure that end-around flows are avoided



Compost Sock – end-around flows

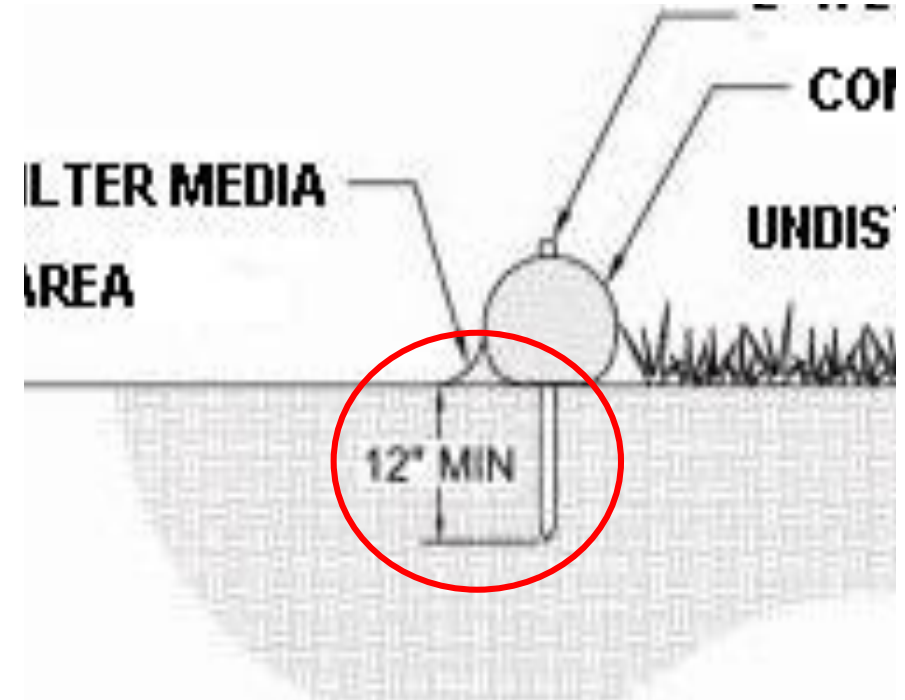


- Compost filter sock shall be placed at existing level grade. Both ends of the sock shall be extended at least 8 feet up slope at 45 degrees to the main sock alignment and prevent end around flows.
- Design shows sock in an area with no grading.



If it wasn't for the fence going between the sock it would have worked very well. Sock placed on asphalt or concrete should use concrete blocks every 10ft instead of stakes.

Proper Staking



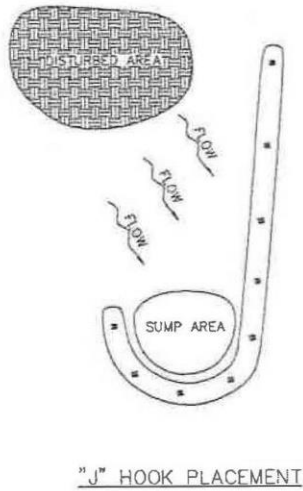
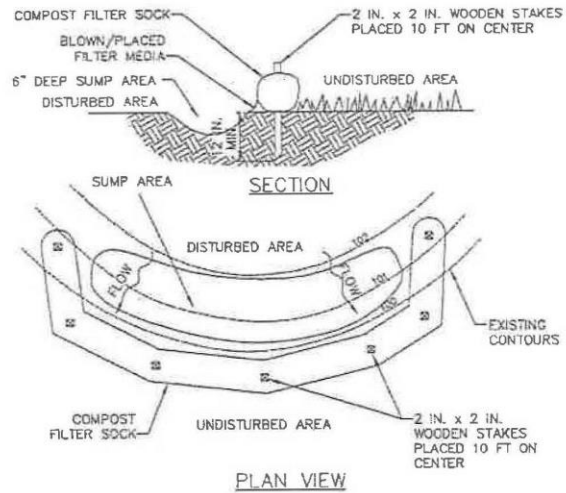


Make sure stacks are driven down far enough.



Stack length in regards to how much is still sticking out of the 32" compost sock. Minimum 12" should be in the ground.

J-Hook Detail



NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

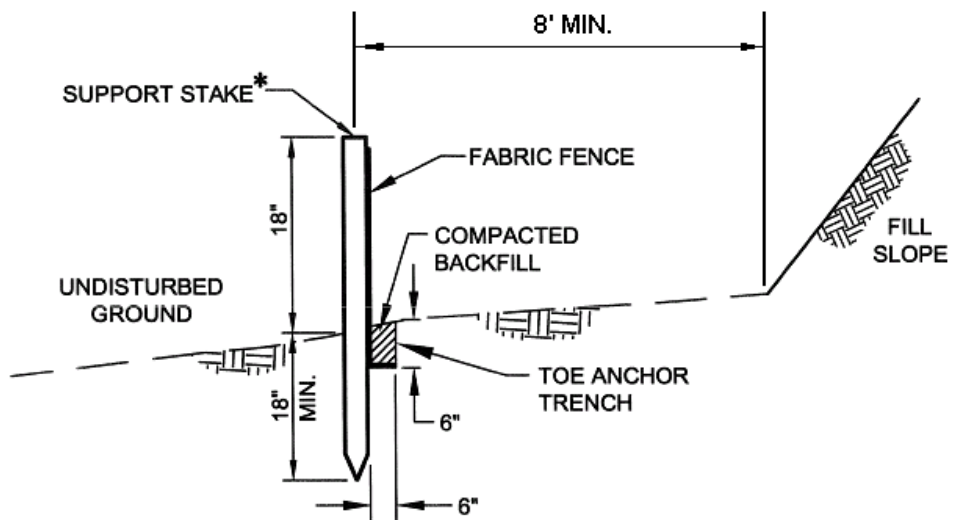
UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

**STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK**

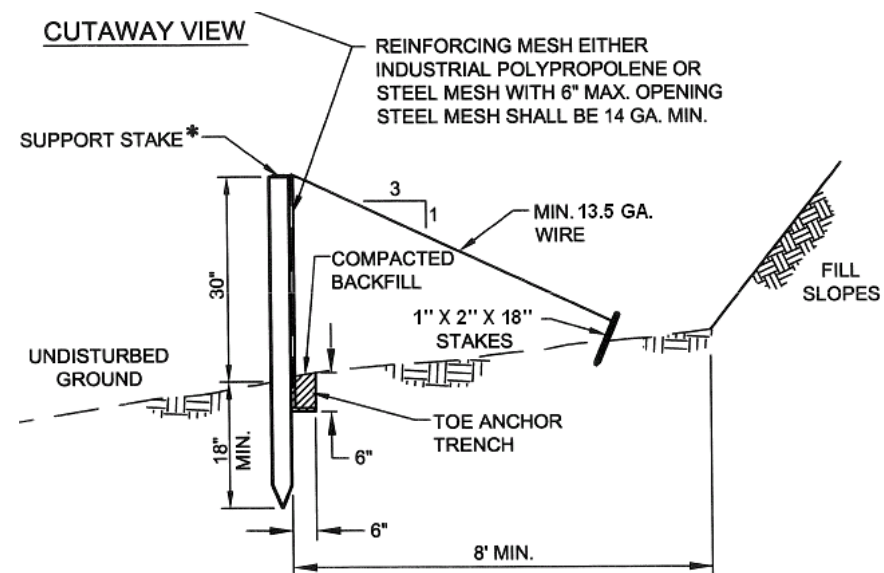
NOT TO SCALE

Silt Fence

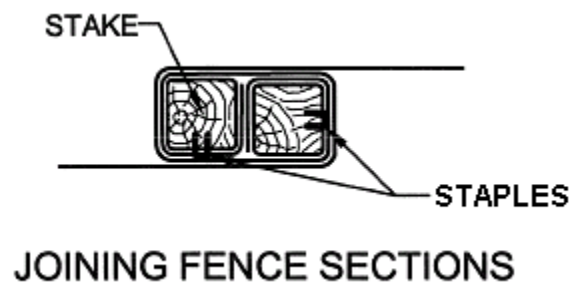
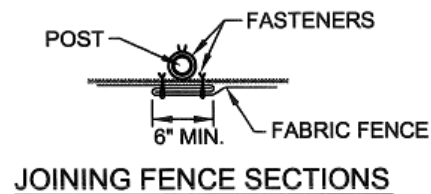
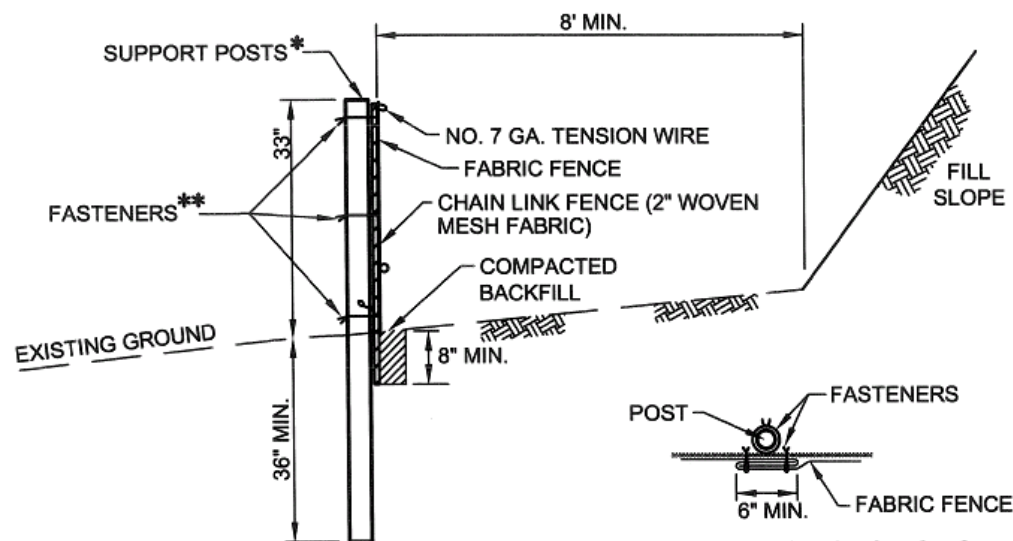
18" Silt Fence



30" Reinforced Silt Fence

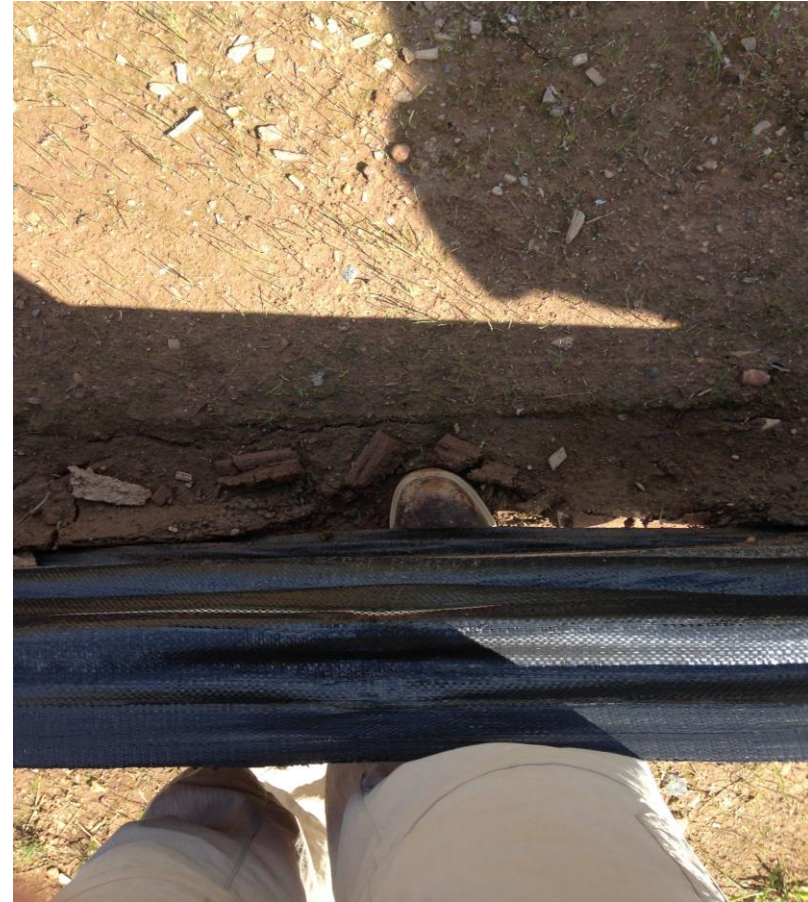


Super Silt Fence





- Silt fence not entrenched 6" and installed backwards.





Super Silt fence that has been undermined.



Reinforced silt fence that isn't entrenched and stakes have been pulled out.

Maintenance of silt fence



Sediment shall be removed where accumulations reach half the aboveground height of the fence.

Stabilization



In no case should an area exceeding 15,000 square feet, which is to be stabilized by vegetation, reach final grade without being seeded and mulched. Waiting until earthmoving is completed before making preparations for seeding and mulching is not acceptable.

Straw mulch at 3 tons per acre.





Pipes could have been run from the down spouts to prevent erosion from the newly places seed and mulch.

Hydromulch at 1 ton per acre.



Standard E&S Plan Notes

1. Clearing, grubbing, and topsoil stripping shall be limited to those areas described in each stage of the construction sequence. General site clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the E&S BMPs specified by the BMP sequence for that stage or phase have been installed and are functioning as described in this E&S plan.
2. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to minimize the potential for erosion and sediment pollution and notify the local conservation district and/or the regional office of the Department.
3. Areas which are to be top soiled shall be scarified to a minimum depth of 3 to 5 inches — 6 to 12 inches on compacted soils — prior to placement of topsoil. Areas to be vegetated shall have a minimum 4 inches of topsoil in place prior to seeding and mulching. Fill out slopes shall have a minimum of 2 inches of topsoil.
4. Immediately after earth disturbance activities cease in any area or subarea of the project, the operator shall stabilize all disturbed areas. During non-germinating months, mulch or protective blanketing shall be applied as described in the plan. Areas not at finished grade, which will be reactivated within 1 year, may be stabilized in accordance with the temporary stabilization specifications. Those areas which will not be reactivated within 1 year shall be stabilized in accordance with the permanent stabilization specifications.

Site Inspections

- Until the site is stabilized, all erosion and sediment BMPs shall be maintained properly. Maintenance shall include inspections of all erosion and sediment BMPs after each runoff event and on a weekly basis. All preventative and remedial maintenance work, including clean out, repair, replacement, regrading, reseeding, remulching and renetting must be performed immediately. If the E&S BMPs fail to perform as expected, replacement BMPs, or modifications of those installed will be required.
- A log showing dates that E&S BMPs were inspected as well as any deficiencies found and the date they were corrected shall be maintained on the site and be made available to regulatory agency officials at the time of inspection.



VISUAL SITE INSPECTION REPORT

Note: It is a condition of National Pollutant Discharge Elimination System and Erosion and Sediment permits that a maintenance program be conducted to provide for the operation and maintenance of all BMPs to be inspected on a weekly basis and after each stormwater event. Please list in the space provided comments to note if repairs or replacement are needed or have been made for BMPs as a result of the inspection. Failure to conduct the required inspection may result in permit suspension or the imposition of civil penalties. If supplemental monitoring is required as part of a permit condition this form may be used to meet those monitoring requirements.

Project Site Name: _____ Date: _____ Inspection #: _____

Time: _____ Weather: _____

Permit #: _____ Photos Taken: Yes No

Inspector/Title: _____

Municipality(s): _____

County(s): _____

Inspection Type (check one): Weekly Stormwater Event

1. Are the approved (Stamped) E & S plan and PCSM plan present on site? Y N

2. Are there activities occurring outside of the limits of disturbance shown on the plan drawings? (If yes, notify conservation district and explain.) Y N

3. Is Construction Sequence being followed? (If No, notify conservation district and explain.) Y N

4. E & S BMPs (List BMPs and note if installed and maintained as per the plan.)

	Y	N		Y	N
_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
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_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>

Were repairs/maintenance/replacement BMPs necessary (if so, describe): _____

5. **Site Conditions** Y N
Sediment Discharge is occurring to waters or wetlands from earth disturbance activity?

Stabilization of inactive disturbed areas, stockpiles, or at final grade? (exceeding 4 days inactive)

Are slopes 3:1 and greater stabilized with appropriate BMPs?

6. **PCSM BMPs** Y N
Are areas intended for PCSM BMPs being protected from compaction?

PCSM BMPs (List BMPs and note if installed and maintained as per the plan.)

	Y	N		Y	N
_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
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_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>

Were repairs/maintenance/replacement BMPs necessary (if so, describe): _____

7. Department/Conservation District has been notified within 24 hours of non-compliance, including discharge to waters or wetlands?

8. Identify all remedial measures that have been taken or will be taken on this site.

Inspector's Signature: _____ Date: _____

Company Name: _____

Attach additional sheets for comments/repairs/remedial measures if necessary.

A blue 3D stick figure is holding a white sign with a black border. The sign contains the text "QUESTIONS?" and "COMMENTS?" in bold black letters. The figure is positioned behind the sign, with its arms extended to hold the bottom edge. The sign is slightly tilted upwards.

QUESTIONS?
COMMENTS?