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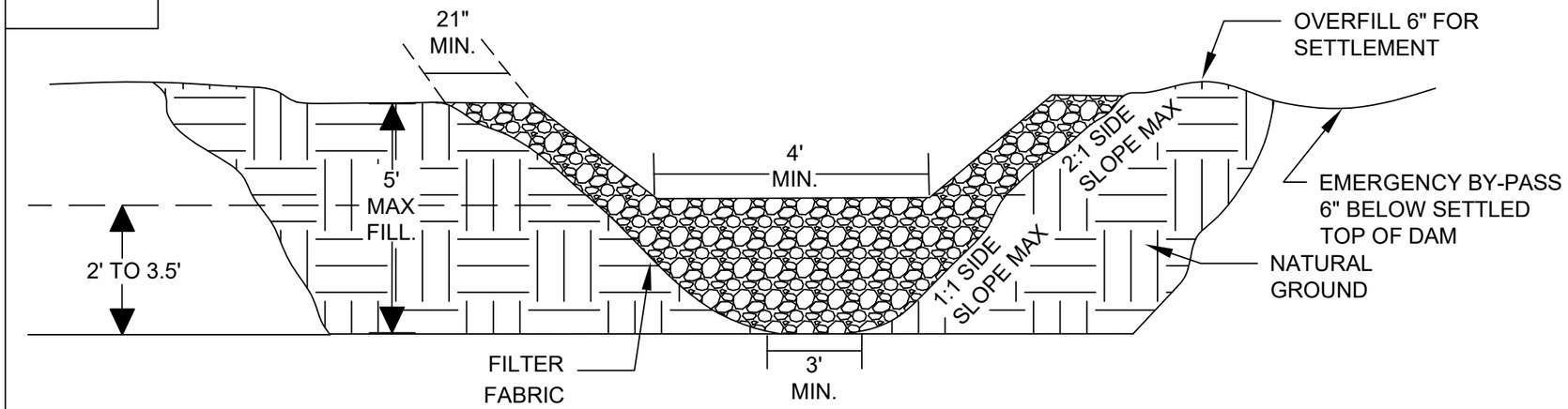
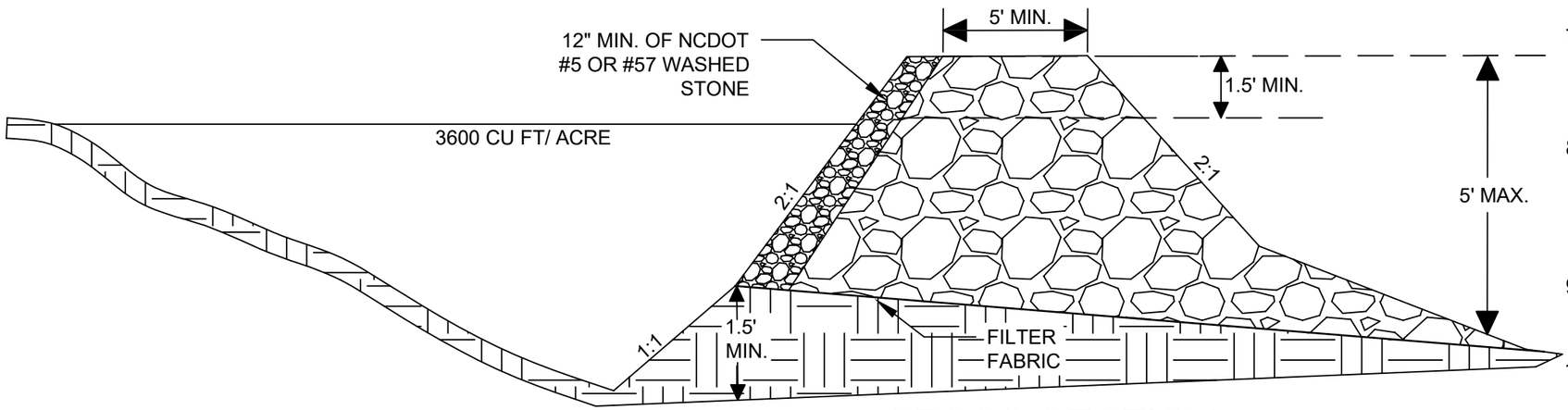


PLAN VIEW



CROSS-SECTION

Spillway Design	
Drainage Area (acres)	Weir Length (ft)*
1	4
2	6
3	8
4	10
5	12
*Dimensions shown are minimums.	

NOTES:

1. Clear, grub, and strip the area under the embankment of all vegetation and root mat. Remove all surface soil containing high amounts of organic matter. Haul all objectionable material to the designated disposal area.
2. Ensure that fill material is free of roots, woody vegetation, organic material and other objectionable material. Place fill in lifts not exceeding 9 inches, and machine compact. Overfill the embankment 6 inches to allow for settlement.
3. Clear the pond area below the elevation of the crest of the spillway to facilitate sediment cleanout.
4. All cut and fill slopes should be 2:1 or flatter.
5. Ensure the stone section of the embankment has a 3 foot minimum, bottom width and maximum side slopes of 1:1 that extend to the bottom of the spillway section.
6. The weir must be level and constructed to grade to assure design capacity.
7. Discharge inlet water in a manner to prevent erosion, using temporary slope drains or diversions with outlet protection to divert sediment-laden water to the upper end of the pool area to improve basin trap efficiency.
8. Ensure the stone spillway outlet section extends downstream past the toe of the embankment until stable conditions are reached and the outlet velocity is acceptable for the receiving stream. Keep the edges of the stone outlet section flush with the surrounding ground, and shape the center to confine the outflow stream.
9. Place emergency spillway in undisturbed soils and direct emergency bypass to natural, stable areas. Locate bypass outlets so that flow will not damage the embankment.
10. Stabilize the embankment and all disturbed areas above the sediment pool and bare soil downstream from the trap immediately after construction.
11. Show the distance from the top of the spillway to the sediment cleanout level(1/2 design depth) on the plans and indicate in the field.
12. Install porous baffles as specified on following sheets.
13. If trap is to be de-watered using a pump and silt bag, show location on plans.

MAINTENANCE:

1. Inspect all measures at least weekly and after each rainfall of 1.0 inch or greater.
2. Remove sediment and restore the trap to its original dimensions when the sediment has accumulated to one-half the design depth of the trap.
3. Place the sediment that is removed in the designated disposal area, and replace the part of the gravel facing that is impaired by sediment.
4. Check the structure for damage from erosion or piping. Periodically check the depth of the spillway to ensure it is a minimum of 1.5 feet below the low point of the embankment. Immediately fill any settlement of the embankment to slightly above design grade.
5. Any riprap displaced from the spillway must be replaced immediately.
6. After all sediment-producing areas have been permanently stabilized, remove the structure and all unstable sediment. Smooth the area to blend and stabilize properly.

NORTH CAROLINA
Department of Environmental Quality

TEMPORARY SEDIMENT TRAP

Effective Date: 9/1/2023
In accordance with the 2013
Design Manual Updates