

Proposed Erosion and Sediment Control Revisions

February 2023

Below is a summary of the proposed changes; the full sections can be found here:

<https://iowasudas.org/esc-committee/>.

7E-1 - Design Information for Erosion and Sediment Control

- Added language recommending the installation of redundant sediment control devices along water bodies.

7E-3 - Filter Berms

- Current filter berm section discusses the use of compost windrows for perimeter control. This product is not being utilized.
- Section was overhauled to move away from compost filter berms and focus on slash mulch (wood chips) generated from site clearing.
- Allow the use of filter berms as ditch checks on very small sites or individual residential lots.

7E-7 - Check Dams

- Added new practices: fiber logs, erosion control blanket (ECB) pillow checks, and sand bags.
- Removed gravel bag berms.
- Removed specification language for products.
- Considered removal of silt fence as check dams. Ultimately retained as an option, but recommended the installation of another practice (wattle, mulch, or straw bale) on upstream side to help prevent failures.
- Added requirement to place triangular check dams on a layer of RECP.
- Clarified that rock check dams be keyed into the bottom and sides.
- Removed limitation on drainage area for check dams.
- Eliminated check dam figure (duplicate of specification figure).
- Added new table with recommended spacing and longevity.

7E-8 - Temporary Earth Diversion Berms

- Renamed section from “Temporary Earth Diversion Structure.”
- Eliminated the drainage area limitations.
- Provided guidance on material recommendations, sizing, and locations.
- Revised table from permissible velocity to permissible slope for easier reference.

7E-12 - Temporary Sediment Basins

- Renamed section to “Temporary Sediment Basins.”
- Added section for “Enhanced Sediment Capture” utilizing solid and porous baffles.
- Added new section with guidance for combining sediment basins within a permanent stormwater management facility.
- Added language regarding the use of proper erosion control within the sediment basin itself.
- Provided additional guidance on skimmer devices and maintaining the required wet storage.
- Clarified the use of anti-seep collars is for temporary structures only.
- Removed figures that are already included in the specifications.

7E-13 - Sediment Traps

- Added information (by reference to sediment basins) for enhanced sediment capture.
- Expanded the sediment trap sizing table to provide more detailed guidelines.
- Removed figures that are already included in the specifications.

7E-14 - Silt Fences

- Minor revisions.

7E-15 - Stabilized Construction Exit

- Changed name from Stabilized Construction Entrance.
- Added discussion on shaker rack systems as an addition to the rock exit.
- Expanded the wheel washing section to provide more guidance on locating a wheel wash station and appropriate sediment control of the wash water.

7E-17 - Erosion Control Mulching

- Considered the addition of corn stalk mulch. There is currently some research underway, but no widespread use of corn stalk mulch. May consider in the future if the results of the research are promising.
- Added a discussion on the use of straw mulch fallback practice over frozen ground.
- Clarified NPDES requirements for stabilization upon completion of grading activities.

7E-21 - Rip Rap Alternatives

- Changed section name from Flow Transition Mats to reflect additional practices.
- Added information on grid-tied concrete block mat (Flexamat) and articulated concrete block (ArmorFlex).
- Referring to manufacturer's recommendations for design guidance as the design of these practices are product and application specific.

7E-30 - Stockpile Management

- New section discussing the importance and methods of protecting stockpiles.

7E-31 - Greenspace and Buffer Area

- New section highlighting the benefits of preserving existing vegetation and providing buffers around sensitive areas.