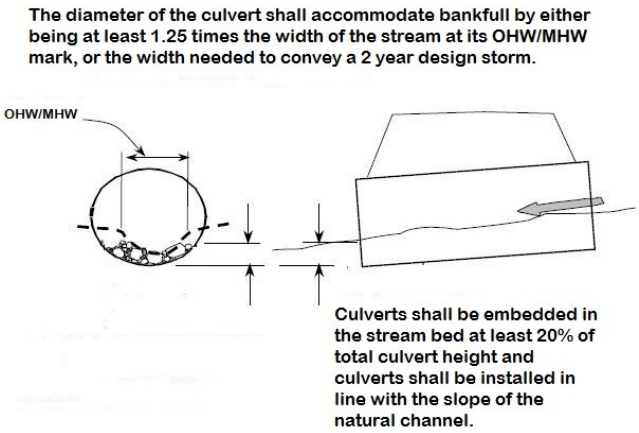
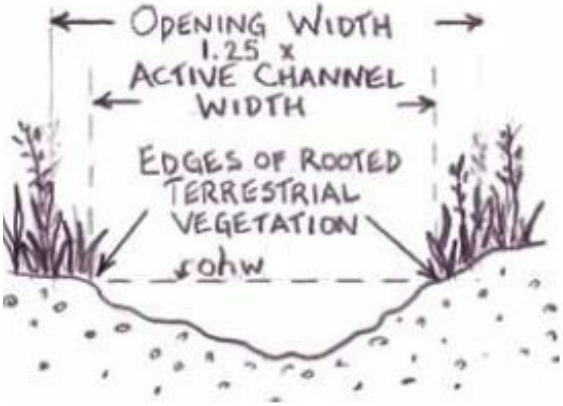
ACTIVITY DETAIL 1 – CULVERT CONVEYING STREAMS (ACTIVITY 1)





Conditions of Authorization

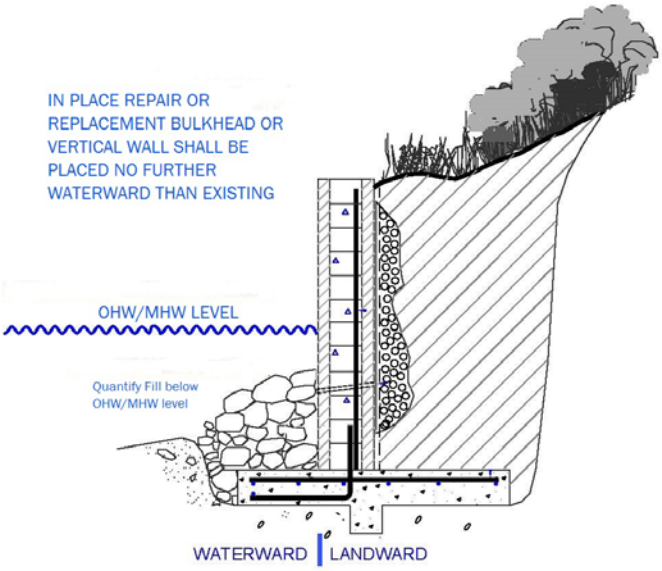
- ***To qualify for coverage, existing structures must have been functional just prior to the storm event.***
- ***Culverts shall have a minimum width of 1.25 times the width of the stream channel at OHW/MHW level.***
- ***Closed bottom culverts shall only be considered if open bottom culverts are not practicable.***
- Closed bottom culverts shall be embedded at least 20% of the total height below the stream bed for entire length.
- Work areas shall be isolated from stream flow and reduce downstream impacts from turbidity and sedimentation.
- Unless otherwise approved, in-stream work is prohibited during the following time periods:
  - in cold water trout fisheries (waters classified under Article 15 of New York's Environmental Conservation Law with a "t" or "ts" designation), beginning October 1 and ending May 31;
  - in perennial warm water fisheries, (non- trout waters classified under Article 15 of New York's Environmental Conservation Law as "A, B or C"), beginning March 1 and ending July 15.
- Stone aprons and scour protection placed in streams shall be installed flush with the invert elevation and filled with native stream bed material and supplemented with similarly sized material, if needed, to fill interstitial spaces. Rock shall be keyed in around the entire perimeter of the apron. Concrete aprons are prohibited.
- Site specific information (i.e., stream bed slope, type and size of stream bed material, stream type, existing natural or manmade barriers, etc.) shall be assessed to determine appropriate culvert design and to ensure management of water flows and aquatic life movement.
- Before replacing a culvert or other crossing structure with a larger structure, it is essential that the replacement be evaluated for its impacts on: downstream flooding, upstream and downstream habitat (in-stream habitat, wetlands), potential for erosion and headcutting, and stream stability.
- The dimension, pattern, and profile of the stream above and below the stream crossing shall not be permanently modified by changing the width or depth of the stream channel.
- The SPGP does not authorize the installation of multiple barrel culverts.
- Slip lining and invert paving of culverts are prohibited.

Category C Activities

a. Greater than 0.1 acre of loss of regulated waters.
b. Extensions greater than 25% of total length of an existing culvert.
c. Greater than 100 linear feet of stream channel realignment to improve flow through culverts.
d. Stone scour protection exceeding a total distance 20 feet from culvert wingwalls/headwalls and/or exceeding an average of 1 CY per linear foot placed below the OHW/MHW level.
e. Replacing a culvert greater than 50 feet from its pre-storm location (outside edge of existing structure to outside edge of new structure).
f. Installation of a culvert that results in a decrease of hydraulic capacity from pre-storm conditions.

Derived from: "Guidelines for the Design of Stream/Road Crossings for Passage of Aquatic Organisms in Vermont, March 2009"

ACTIVITY DETAIL 2 – BULKHEADS AND VERTICAL WALLS (ACTIVITY 2)



Conditions of Authorization

- ***To qualify for coverage, existing structures must have been functional just prior to the storm event.***
- ***Bulkhead or vertical wall shall be replaced in the pre-storm location.***
- ***No bulkhead shall be installed waterward of a pre-existing vertical structure.***

- Dewatering / water handling methods (e.g., cofferdams) shall be utilized to isolate work areas from regulated waters and reduce water quality impacts from turbidity and sedimentation.
- Unless otherwise approved, in-water work is prohibited during the following time periods:
  - in cold water trout fisheries (waters classified under Article 15 of New York's Environmental Conservation Law with a "t" or "ts" designation), beginning October 1 and ending May 31;
  - in perennial warm water fisheries, (non- trout waters classified under Article 15 of New York's Environmental Conservation Law as "A, B or C"), beginning March 1 and ending July 15.
- Restoration of bulkheads and their remnants (including deadman and pierheads) that were not functional prior to the storm event are not authorized by this SPGP.
- Installation of new bulkheads or vertical walls in wetlands, vegetated shallows or mudflats where structures previously did not exist are not authorized by this SPGP.

Category C Activities

a. Greater than 0.1 acre of loss of regulated waters.
b. New toe stone exceeding an average of 1 CY per linear foot placed below OHW/MHW level.
c. Increase of vertical elevation (i.e., height) of bulkheads or vertical walls more than 18” vertically from pre-storm elevation.

Derived from: NC DEQ website: https://deq.nc.gov/about/divisions/coastal-management/coastal-management-estuarine-shorelines/stabilization/stabilization-options

ACTIVITY DETAIL 3 – BRIDGES (ACTIVITY 3)

Conditions of Authorization

- ***To qualify for coverage, existing structures must have been functional just prior to the storm event.***
- ***When a bridge crosses a stream, the bridge shall span the waterway as measured at the OHW/MHW level.***
- Work areas shall be isolated from stream flow and reduce downstream impacts from turbidity and sedimentation.
- Unless otherwise approved, in-water work is prohibited during the following time periods:
  - in cold water trout fisheries (waters classified under Article 15 of New York's Environmental Conservation Law with a "t" or "ts" designation), beginning October 1 and ending May 31;
  - in perennial warm water fisheries, (non- trout waters classified under Article 15 of New York's Environmental Conservation Law as "A, B or C"), beginning March 1 and ending July 15.
- Site specific information (i.e. stream bed slope, type and size of stream bed material, stream type, existing natural or manmade barriers, etc.) shall be assessed to determine appropriate bridge design and to ensure management of water flows and to preserve aquatic life movement.
- Before replacing an undersized culvert or bridge with a larger bridge structure, it is essential that the replacement be evaluated for its impacts on: downstream flooding, upstream and downstream habitat (in-stream habitat, wetlands), and potential for erosion and headcutting, and stream stability.
- The dimension, pattern, and profile of the stream above and below the stream crossing shall not be permanently modified by changing the width or depth of the stream channel.
- Bridges or other structures may be installed outside of original structure footprint to better align with the stream channel location.
- Stone aprons and scour protection extending into the bed of the waterway shall be installed flush or slightly below the elevation of the adjacent bed of the waterway and if in a stream, shall be filled with native streambed material and supplemented with similarly sized material if needed to fill interstitial spaces. Concrete aprons are prohibited.

Category C Activities

a. Greater than 0.1 acre of loss of regulated waters.
b. Stone scour protection exceeding an average of 1 CY per linear foot placed below OHW/MHW level.
c. Stone scour protection exceeding a total distance of 50 feet from the bridge abutments.
d. Replacing a bridge greater than 50 feet from its pre-storm location (outside edge of existing structure to outside edge of new structure).
e. Greater than 100 linear feet of stream channel realignment to improve flow through a bridge
f. Installation of a bridge that results in a decrease of hydraulic capacity from pre-storm conditions.

ACTIVITY DETAIL 4A – REPAIR OR REPLACEMENT OF UTILITY LINES FEDERAL NAVIGABLE WATERS (ACTIVITY 4)

Aerial Crossings

All aerial crossings over federal navigable waters must comply with the elevation clearances specified in 33 CFR 322.5(i)(2) and 33 CFR 322.5(i)(3). The following table pertains to aerial transmission lines across federal navigable waters, is located at 33 CFR 322.5(i)(2), and is included here for easy reference:

Nominal System Voltage (kV)	*Min. additional clearance (ft.) above clearance required for bridges*
115 and below	20
136	22
161	24
230	26
350	30
500	35
700	42
750 and above	45

Submerged Crossings

For submerged cables and pipelines buried within federal navigable waterways:

i. The top of the cable or pipeline crossing any Federal project channel, fleeting or anchorage area, shall be located a minimum of 12 feet below the authorized project channel depth.
ii. The burial depth is measured from the authorized project channel depth to the top of the outermost layer of the utility line.
iii. In cases where the channel's existing bottom is already deeper than the authorized project depth, the utility line shall be located a minimum of 4 feet below the existing bottom in sediment and 2 feet below the existing bottom in compacted rock.
iv. In areas outside of Federal project channels, fleeting or anchorage areas, the top of the utility line shall be located a minimum of 4 feet below the existing bottom in sediment and 2 feet below the existing bottom in compacted rock.
v. The District Engineer, on a case-by-case basis, may modify these depth requirements where circumstances are deemed appropriate (i.e. water intake lines, dry hydrants, etc.). Any request to modify these depth requirements must include a discussion of potential effects of the utility line to public safety associated with public use of the waterway (i.e. fishing anchorage, boating, swimming, navigation, etc.), how the line will be protected from ice scour and movement by waves or currents and details as to any anchoring systems.
vi. Where trenching and backfilling are proposed, backfill material shall consist of suitable heavy materials and shall be placed no higher or lower than the adjacent river bottom elevation.

For proposed submerged cables and pipelines placed on the waterway bottom within navigable waters: the application submitted for Category C review shall include justification for the need to place the utility line on the waterway bottom, a discussion on potential effects of the proposed exposed utility line to public safety associated with public use of the waterway (i.e. fishing, anchorage, boating, swimming, navigation, etc.), how the line will be protected from ice scour and movement by waves or currents and details as to any anchoring systems.

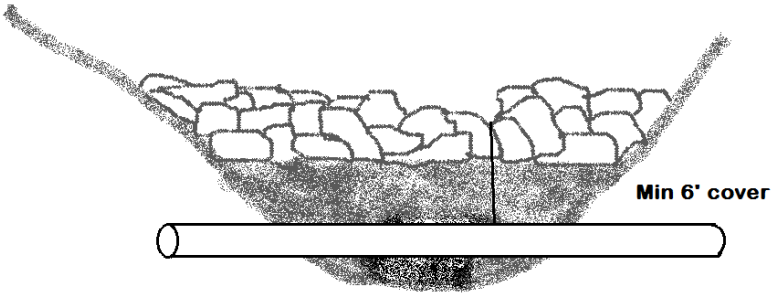
When not present already, within 15 days after completion of the authorized work, the permittee shall post visible signage on weatherproof placards no smaller than 4 feet by 4 feet on each shoreline at the location of the authorized crossing. The placard shall contain language informing waterway users of the presence of a cable or pipeline crossing (e.g., "WARNING – CABLE [or PIPELINE] CROSSING"), unless specifically authorized otherwise by the District Engineer. The sign shall be maintained in place for as long as the pipeline remains in place.

Discharges into waters of the United States of any drilling muds that may be generated through such methods as directional boring or drilling are not authorized. Further, any directional drilling or boring activities must include a plan that addresses prevention, containment and cleanup of any accidental discharges known as "inadvertent returns".

Eligible Activity Number 4 does not specifically authorize bank or channel stabilization activities for utility repair and replacement projects. Refer to Activities 5 and 6 on the Eligible Activities Table in this SPGP for additional authorizations that may be needed for this work.

*** No minor deviations are authorized under Category B for aerial and buried utility lines in federal navigable waters, or for utility lines placed on the bed of federal navigable waters. In federal navigable waters, Category C review is required for any deviations in height above water, shallower depth below the bed, change in alignment, and/or any increase in size.***

ACTIVITY DETAIL 4B – REPAIR OR REPLACEMENT OF UTILITY LINES NON-FEDERAL NAVIGABLE WATERS (ACTIVITY 4)



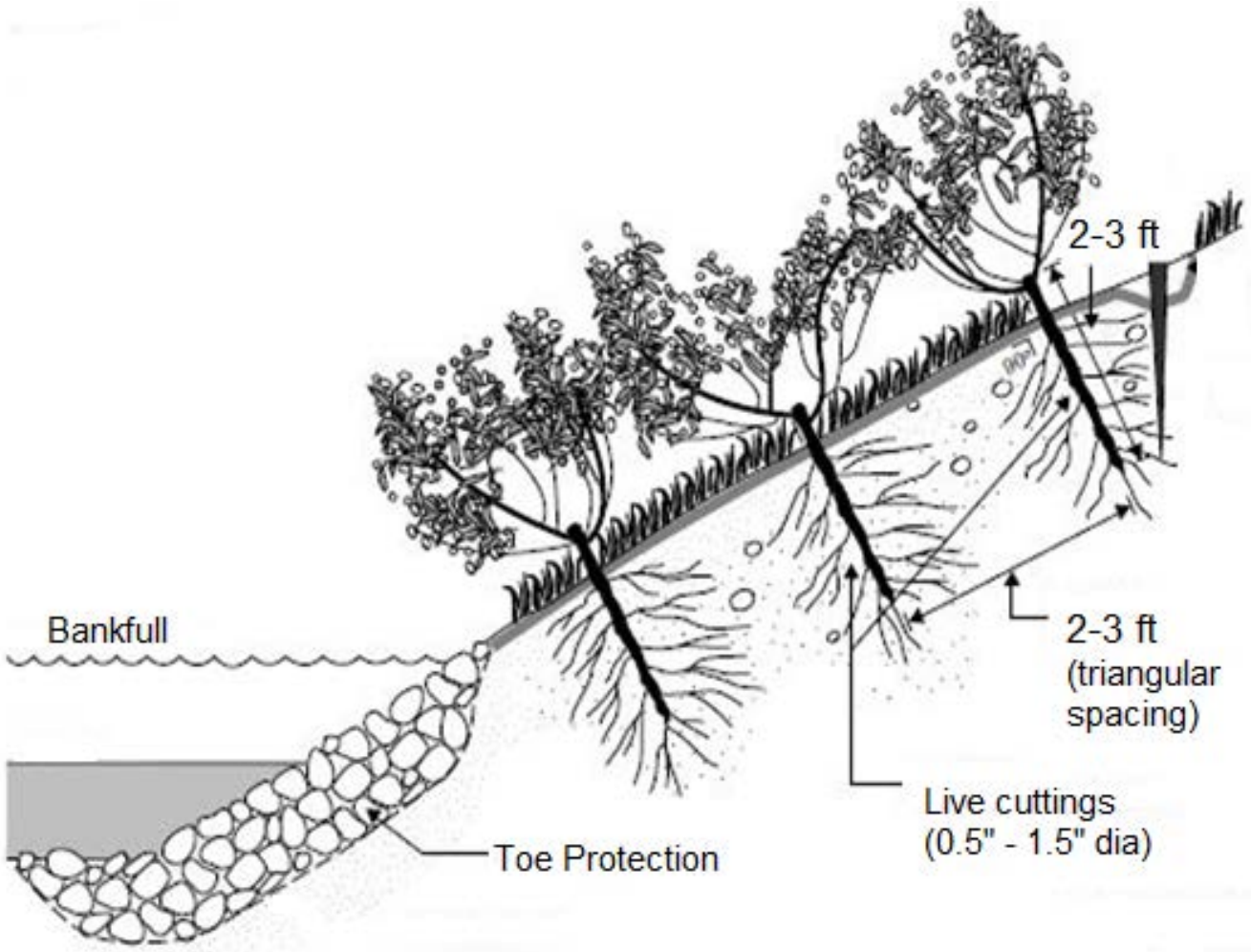
Conditions of Authorization

- Work areas shall be isolated from flowing streams / rivers with one of the dewatering techniques identified in the BMP Details #'s 16-20, or as otherwise authorized by the agencies. Waters accumulated in the isolated work area shall be discharged to an upland settling basin or a well-vegetated area to provide for settling and filtering of solids and sediments before water is returned to the stream. Return waters shall be as clear as the flowing water upstream from the work area. Trenchless installations that do not require excavation of the bed or banks are not required to dewater.
- Temporary dewatering structures and associated fill shall be completely removed and the stream / river banks regraded and re-vegetated immediately following the completion of work.
- Any disturbance to stream /rivers introduced by activities authorized by this SPGP must be restored to the following conditions:
  - The stream /river channel shall be properly sized and stabilized to the natural size and configuration predating storm damage. A natural undisturbed reference reach can be used for sizing or dimensions can be derived from the ESI manual, and
  - A low-flow channel (thalweg) shall be established, and
  - The low-flow channel shall allow for aquatic organism passage (AOP) in a manner that existed prior to the storm event.
- Replacement utilities shall be installed at least 6' below stream / river beds, unless otherwise approved by the agencies. If required by the agencies, a technical assessment, such as a vertical adjustment potential analysis which shows that utilities will not be exposed by erosion during a flood, shall be provided with the application.
- Where practicable, native bed materials shall be utilized to provide cover over the utility.
- Articulated Concrete Mats may be authorized provided that the following conditions are met:
  a. The articulated mat is covered with native stream bed material.
  b. The mat is placed in a manner that maintains a low flow channel (i.e., thalweg) and does not impede AOP.
  c. The mat is keyed into the bed and banks to ensure it is secured and will resist remobilization of the material during normal or expected high flow events.
  d. All applications that propose the installation of articulated concrete mats shall include justification for this use, including why other alternatives are not practicable.
- Trenchless installations including directional drilling and boring activities shall include a plan that addresses prevention, containment and cleanup of any accidental discharges of drilling muds into regulated waters known as "inadvertent returns" or "frack-outs". Inadvertent returns into regulated waters are not authorized by this permit.
- Any extension of a structure or fill must be necessary to maintain the pre-storm function of the facility.

Category C Authorization

- Work results in the loss of greater than 0.05 acre of regulated waters.
- Replacement utilities that do not overlap the footprint of the pre-storm structure and/or fill area.

ACTIVITY DETAIL 5 – VEGETATED BANKS (ACTIVITY 5)



Conditions of Authorization

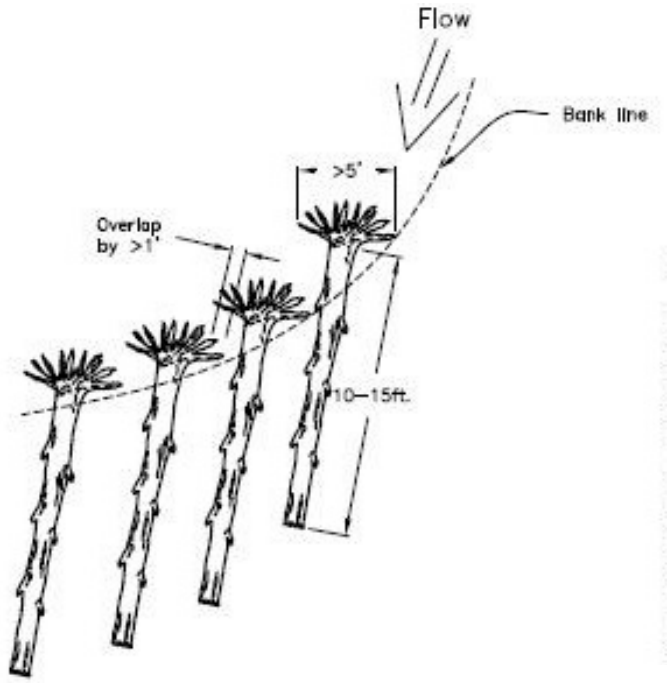
- Soft armoring using live plants, stakes and cuttings shall be utilized whenever feasible to stabilize banks.
- Banks shall be graded to the gentlest slope possible.
- Vegetation shall be native and non-invasive.

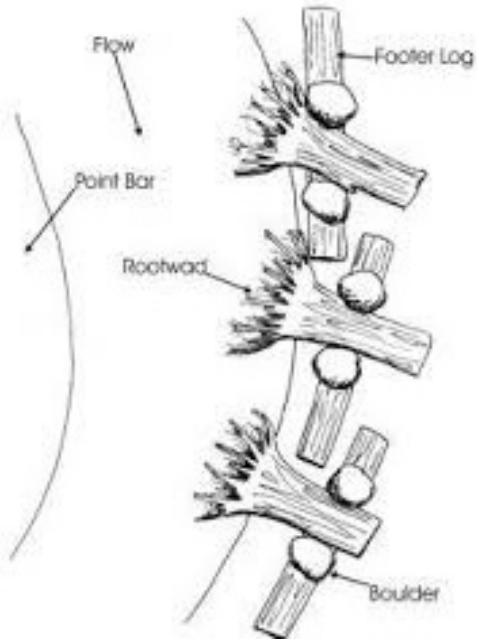
Category C Activities

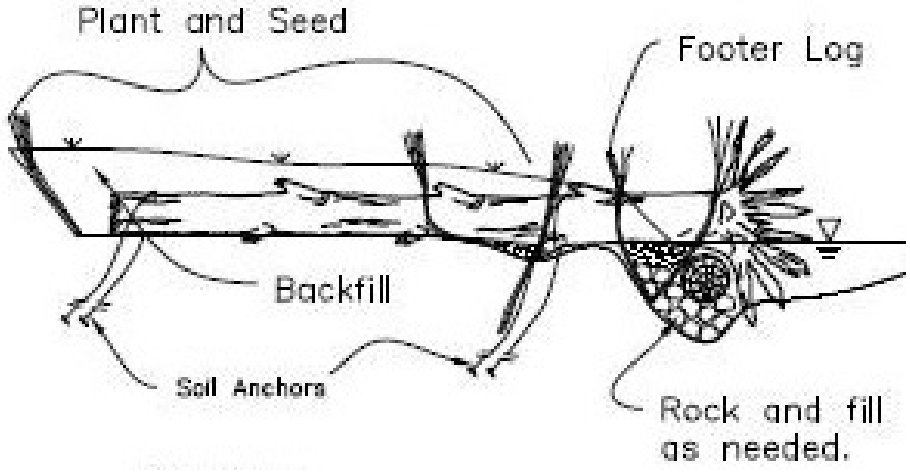
- Bank stabilization over 500 linear feet.
- Rip-rap and/or other fill placement, including backfill, exceeding and average of 1 CY per linear foot placed below OHW/MHW level.

Drawing adapted from USDA NRCS Engineering Field Handbook, Chapter 16 – Streambank and Shoreline Protection, Issued December 1996.

ACTIVITY DETAIL 6 – ROOT WADS (ACTIVITY 5)







Conditions of Authorization

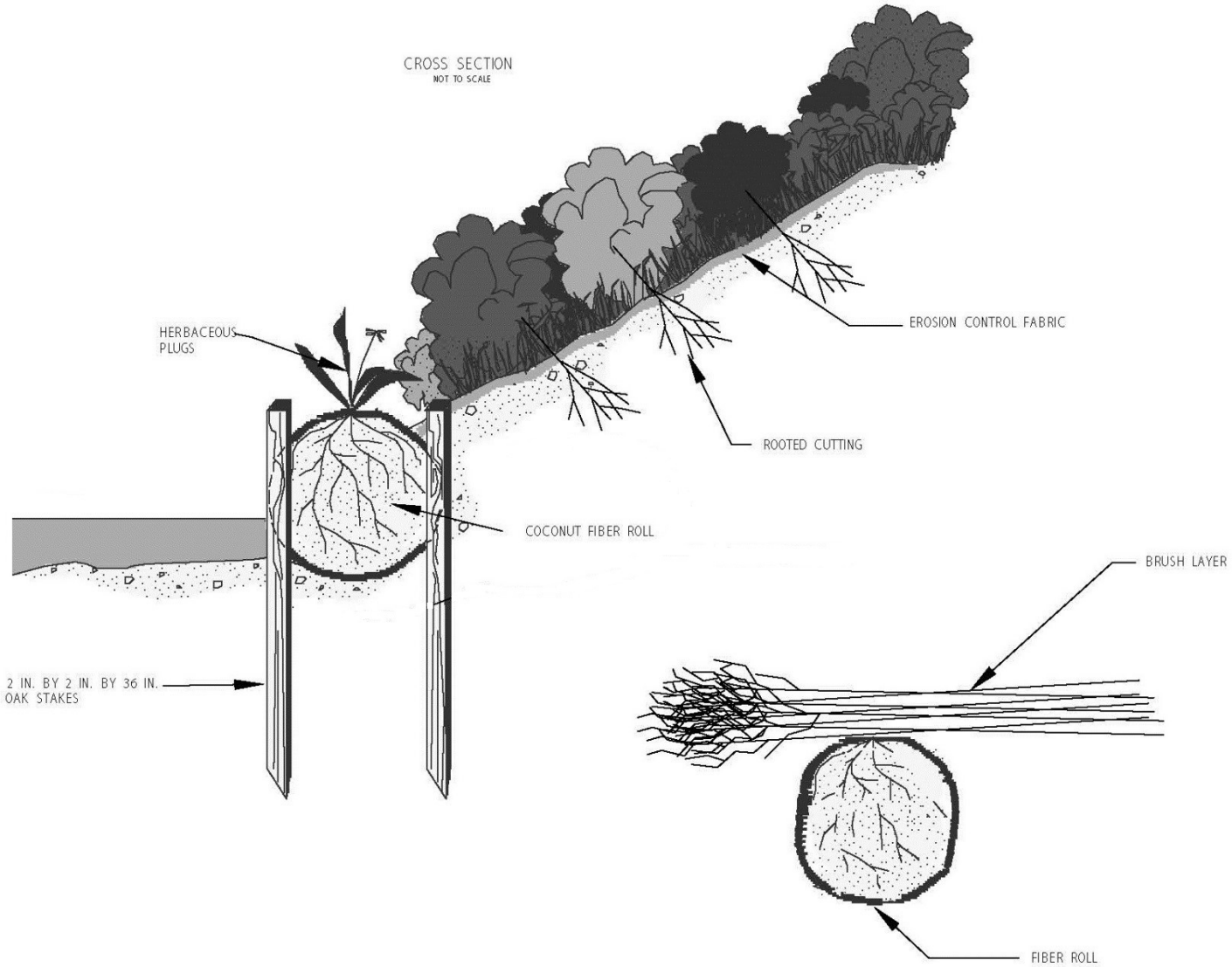
- Soft armoring using live plants, stakes and cuttings shall be utilized whenever feasible to stabilize banks.
- Banks shall be graded to the gentlest slope possible.
- Vegetation shall be native and non-invasive.

Category C Activities

- Bank stabilization over 500 linear feet.
- Rip-rap and/or other fill placement, including backfill, exceeding an average of 1 CY per linear foot placed below OHW/MHW level.

Drawings adapted from NRCS – Conceptual Plan dated 01/07 and www.storwmwatercenter.net.

ACTIVITY DETAIL 7 – COIR LOGS (ACTIVITY 5)



Conditions of Authorization

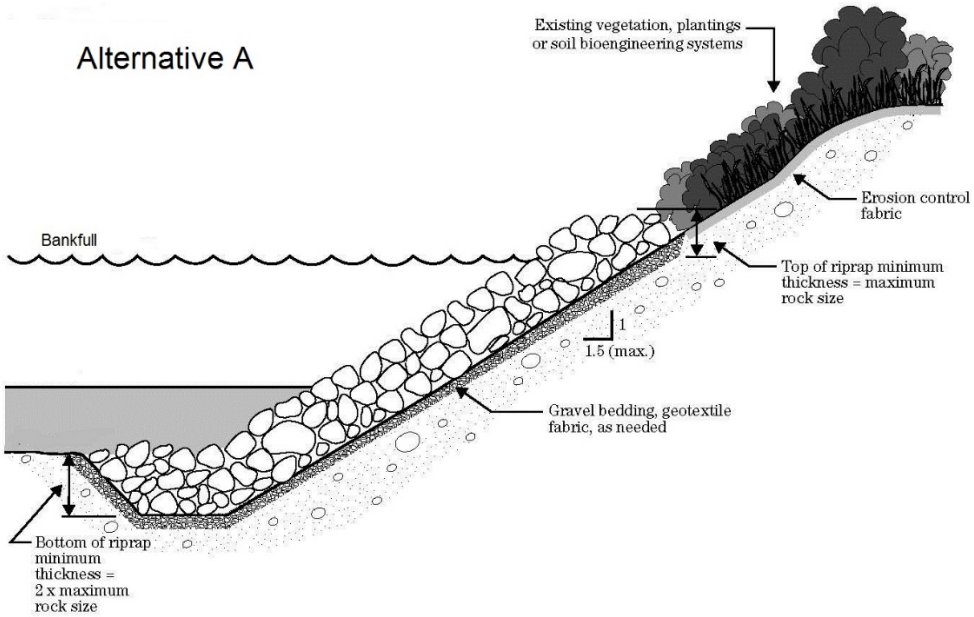
- Soft armoring using live plants, stakes and cuttings shall be utilized whenever feasible to stabilize banks.
- Banks shall be graded to the gentlest slope possible.
- Vegetation shall be native and non-invasive.

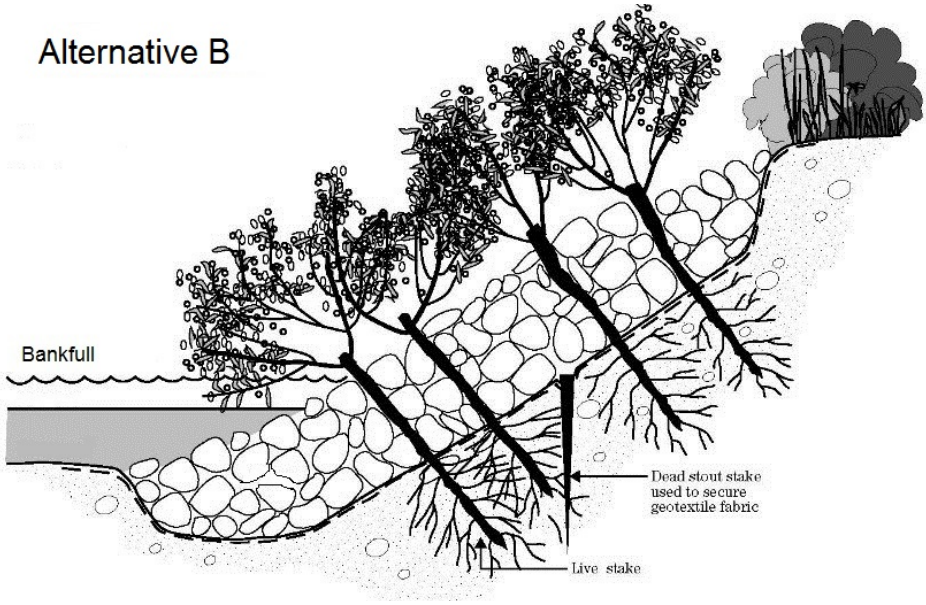
Category C Activities

- Bank stabilization over 500 linear feet.
- Rip-rap and/or other fill placement, including backfill, exceeding an average of 1 CY per linear foot placed below MHW.

Drawing adapted from USDA NRCS Engineering Field Handbook, Chapter 16 – Streambank and Shoreline Protection, Issued December 1996.

ACTIVITY DETAIL 8 – RIP-RAP SLOPE PROTECTION (ACTIVITY 5)





Conditions of Authorization

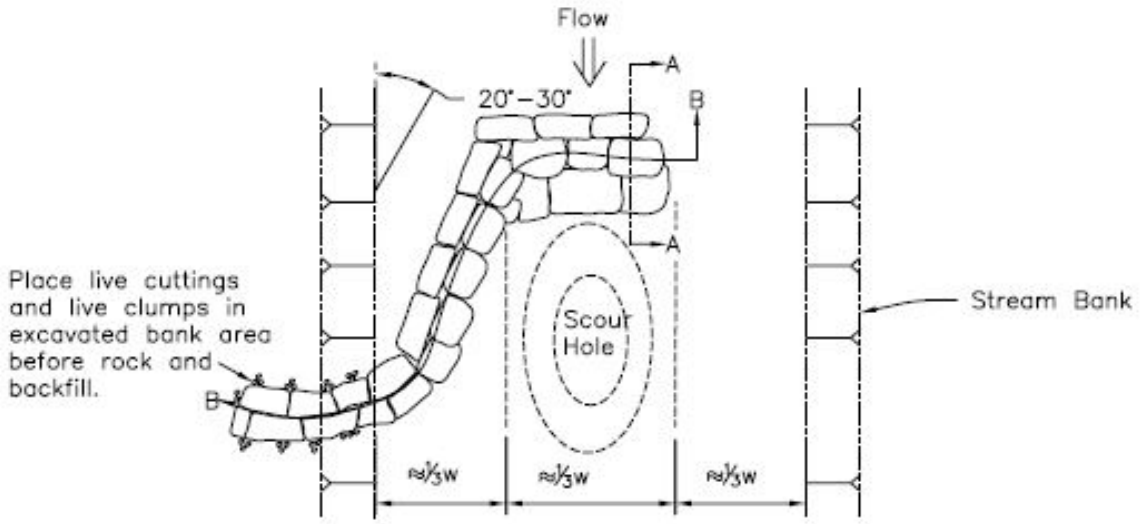
- Rock rip-rap shall only be used when velocity of stream flow precludes the use of vegetative stabilization measures.
- When possible, vegetation shall be planted in the voids of the rocks.
- Bank rock shall be properly sized based to prevent movement or migration of the rock downstream during high flow events.
- Toe rock shall be properly sized and anchored to prevent scour and undermining of the stream bank.

Category C Activities

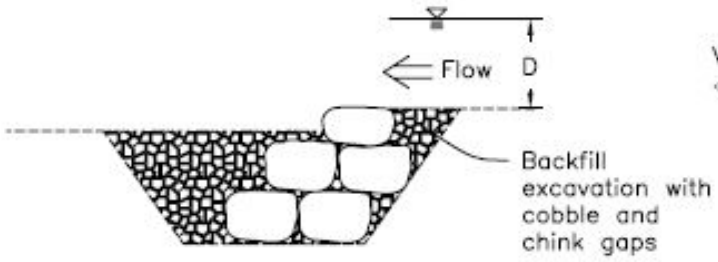
- Bank stabilization over 500 linear feet.
- Rip-rap and/or other fill placement, including backfill, exceeding an average of 1 CY per linear foot placed below OHW/MHW.

Drawings adapted from USDA NRCS Engineering Field Handbook, Chapter 16 – Streambank and Shoreline Protection, Issued December 1996.

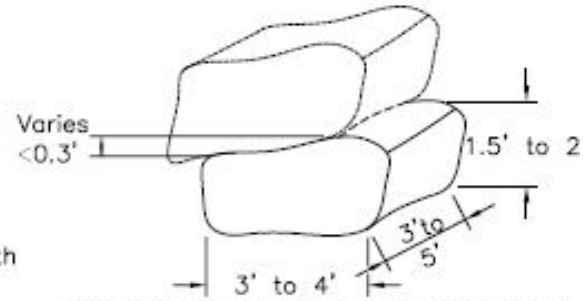
ACTIVITY DETAIL 9 – J-HOOK VANE (ACTIVITY 6)



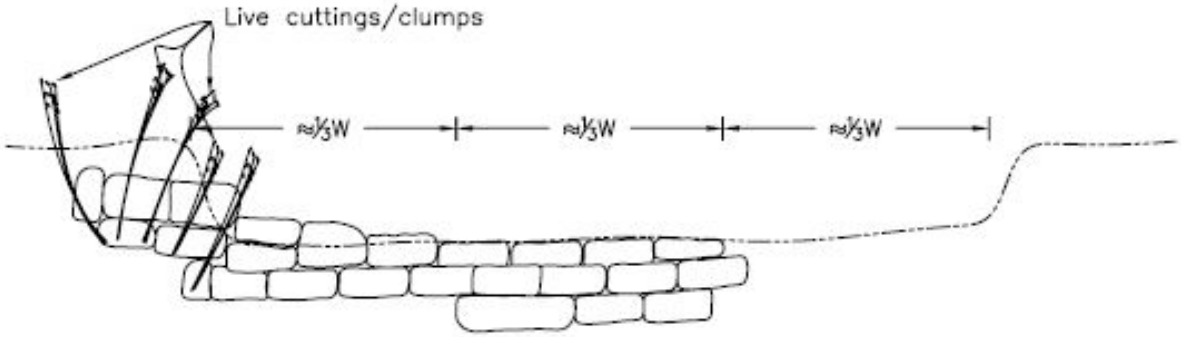
Hook Vane Plan



Rock Vane Section A



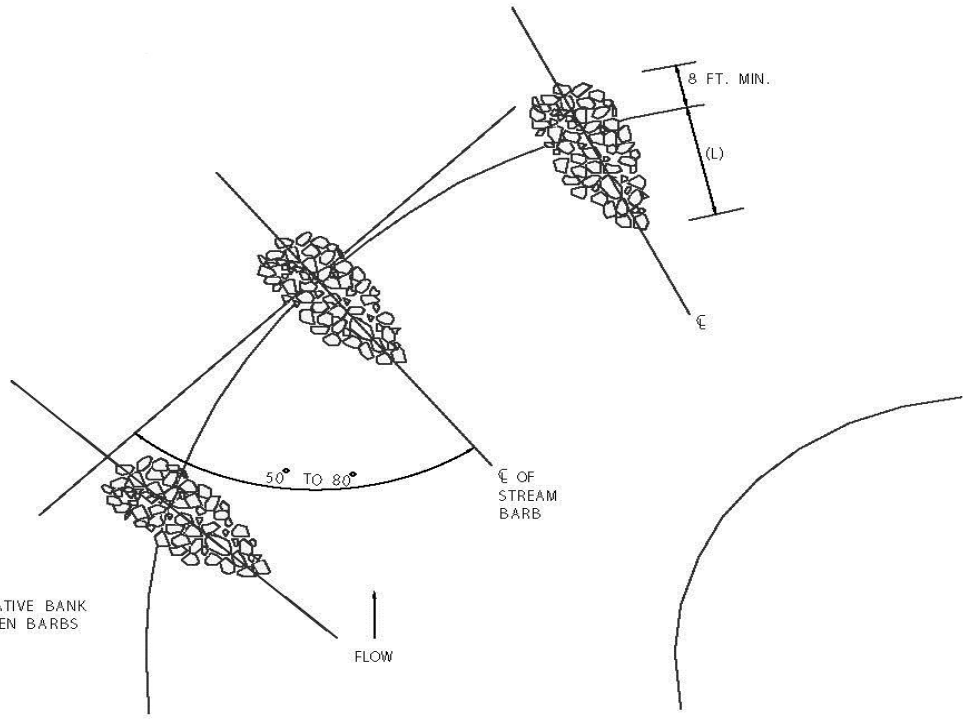
Typical Rock Dimensions and Placement (stone sized to be stable highest design discharge)

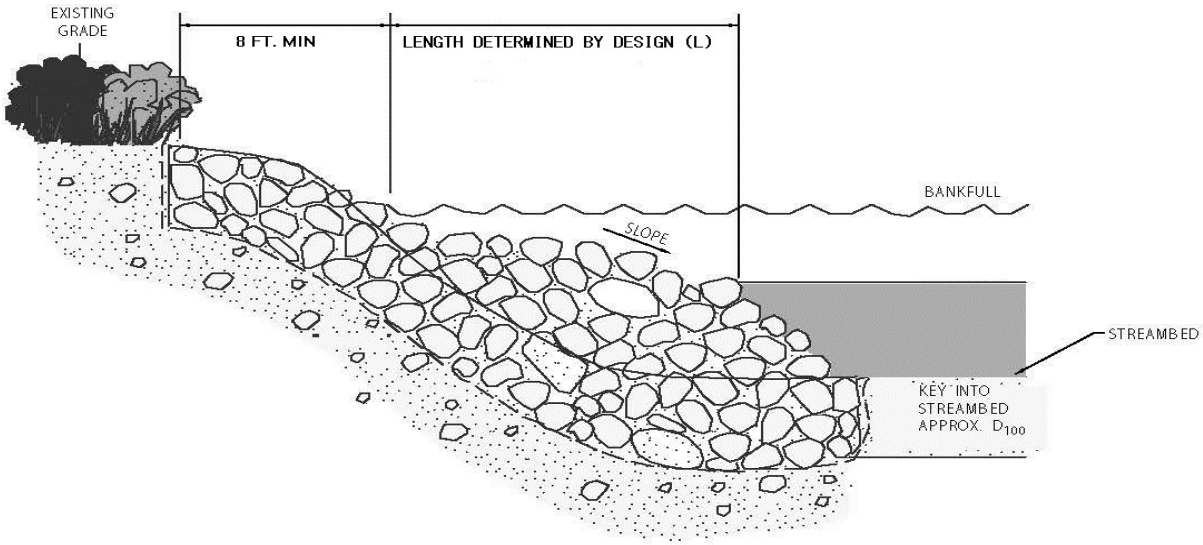


Section B

Notes: The rocks should be rectangular or nearly so at the rock to rock contact. The rock to rock contact should be solid. If rocks are not perfectly flat, the thicker end should be placed downstream.

ACTIVITY DETAIL 10 – ROCK VANES / BARBS (ACTIVITY 6)

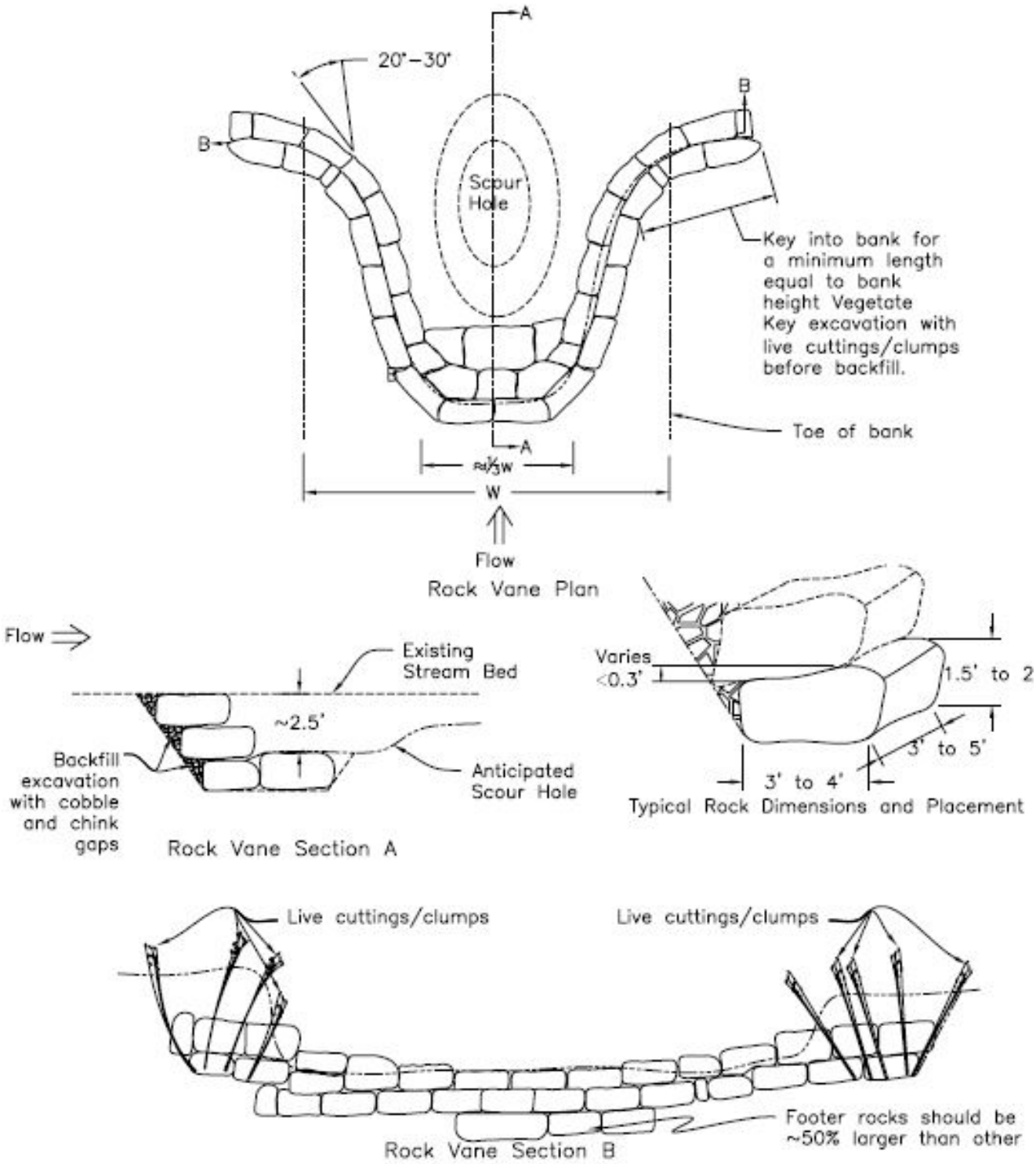




DATE: **DRAFT FOR PUBLIC NOTICE**

Drawing adapted from USDA NRCS Engineering Field Handbook, Chapter 16 – Streambank and Shoreline Protection, Issued December 1996.

ACTIVITY DETAIL 11 – CROSS VANES (ACTIVITY C6)

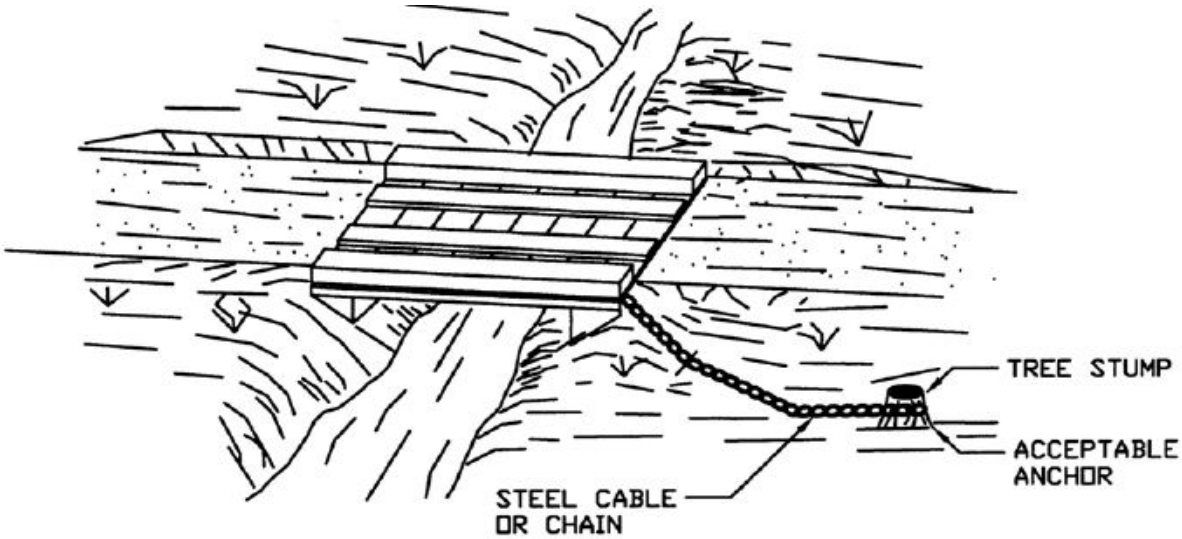


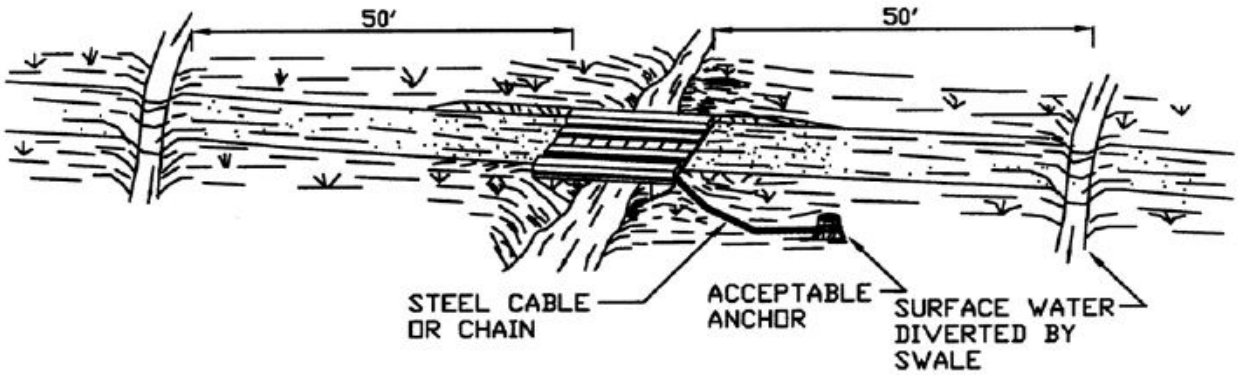
Notes: The rocks should be rectangluar or nearly so at the rock to rock contact. The rock to rock contact should be solid. If rocks are not perfectly flat, the thicker end should be placed downstream.

DATE: DRAFT FOR PUBLIC NOTICE

Adapted from NRCS Small Cross Vane Drawing, dated 11/05.
https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/ndcsmc/?cid=nrcs143_009158

BMP DETAIL 12 – TEMPORARY BRIDGE





Notes:

1) Temporary bridge shall fully span the entire bankfull width of the stream and be placed above the bankfull height of the stream.
2) Bridge ends shall extend onto firm upland to prevent collapse of streambanks.
3) Bridge shall be anchored on one side with a cable to prevent the bridge from being washed downstream during flooding.
4) When possible, the temporary bridge shall be removed prior to storm events or predicted high flows.
5) One in-stream crossing (fording site), if needed, may be used for temporary access to install and remove the temporary bridge. The ford shall be used to cross the stream one-time only for installation and one time only for removal. Fords must be located where stream banks are low and the streambed consists of firm rock or gravel. No rock may be brought into the stream, nor may any rock from the stream channel or banks be used to improve the ford site. Machinery shall not cause the stream bank to collapse. Ford use for the crossing shall be during periods of low or no stream flow only.
6) Temporary bridge shall be immediately removed following completion of the work.

Images from: "New York State Standards and Specifications for Erosion and Sediment Control (Blue Book)" dated July 2016

BMP DETAIL 13 – EQUIPMENT MATS

Notes:

1) Equipment mats shall be utilized in wetlands to minimize soil compaction and protect water quality during construction.
2) Prior to use, all mats shall be inspected to ensure that they are clean and free of invasive species.
3) Mats are typically constructed of plastic, wood or other prefabricated materials.
4) Mats shall be properly sized to avoid unnecessary impact to the wetland. Undersized mats can create ground pressure conditions that can cause damage to wetlands.
5) Mat roads shall be inspected daily to make sure that they don't shift and that they are properly distributing the weight of the equipment.
6) Mats are a temporary measure to be used when equipment is actively working within or adjacent to a wetland; they shall be removed immediately following completion of work.
7) Care shall be taken when remove the mats, working in a backwards fashion. If water flow was impaired by the mats, the area shall be restored to pre-construction contours and drainage patterns.

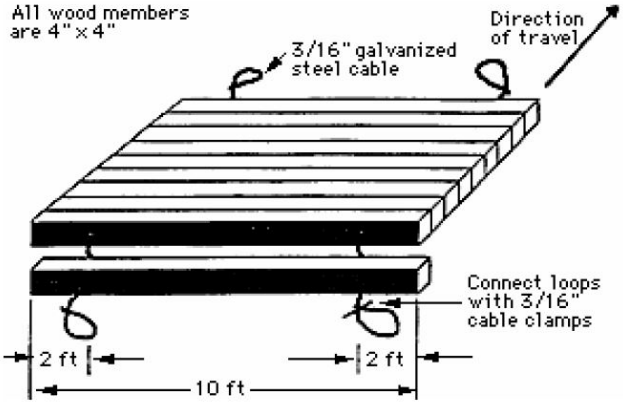
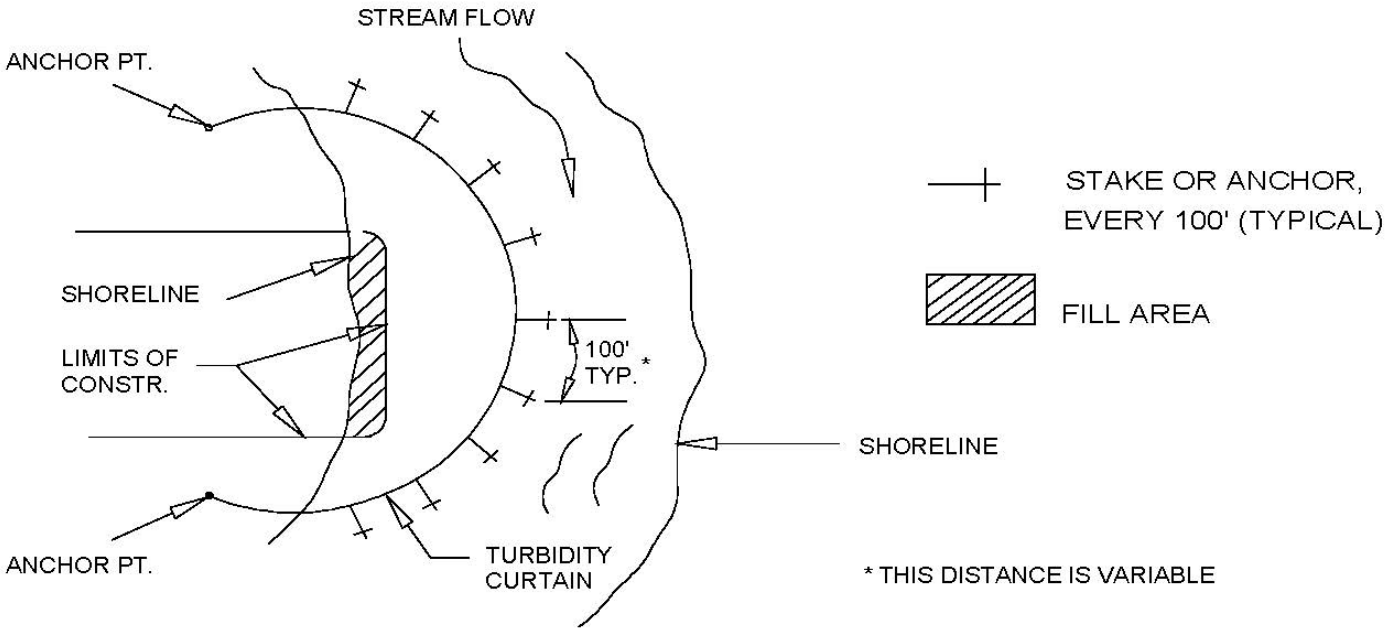


Illustration courtesy University of Mn Extension

Images Adapted from Minnesota Erosion Control Association's, "Temporary Stream, Wetland & Soft Soil Crossings", Dec 2009 (Revision 1, Feb 2010)

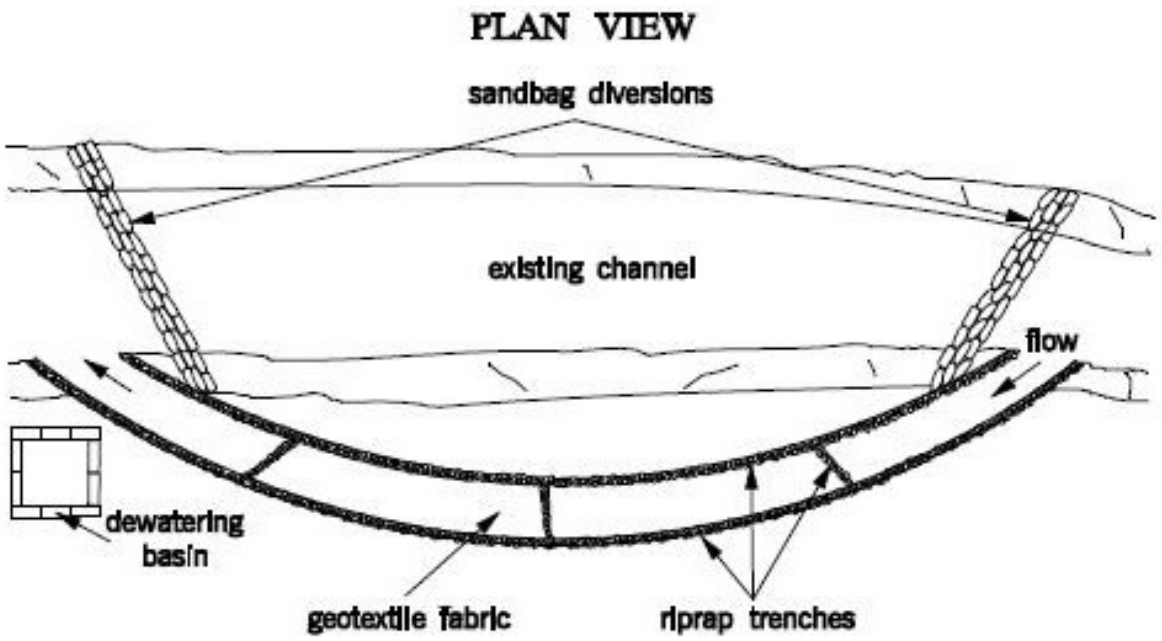
BMP DETAIL 14 – TURBIDITY CURTAIN

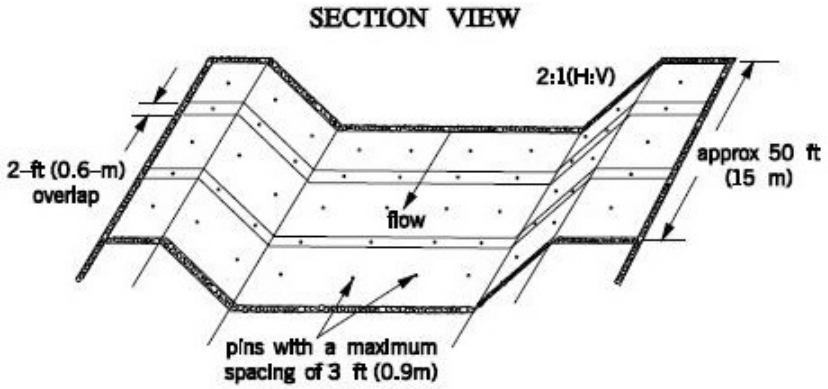


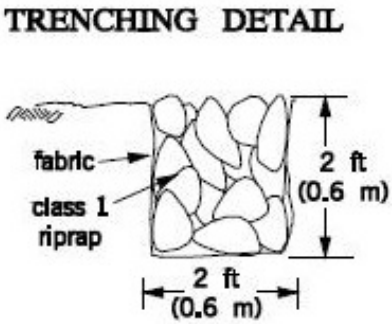
Notes:

1) A turbidity curtain or silt curtain of geotextile fabric or heavy plastic shall be installed in the water around the work area to prevent sediment or sediment-laden water from leaving the immediate work area.
2) Turbidity curtains shall not be installed across flowing water. They are intended to be placed parallel to the shoreline.
3) Prior to a storm event or anticipated high water flows, the work area shall be temporarily stabilized and the curtain shall be removed to prevent damage to the curtain or downstream areas.
4) Curtains shall be marked with bright colors and lights if placed in navigable waters.
5) Curtains shall be properly anchored to shore by a floatation line.
6) Seams shall be sealed and inspected regularly for gaps or openings and if found, repaired immediately.
7) If sediment or sediment-laden waters are observed leaving the immediate work area, operations shall cease and the turbidity curtain shall be inspected. If the curtain is found to not be properly anchored or is damaged, repairs/modifications shall be made to ensure it is functioning properly before restarting operations. If the curtain is found to be properly installed and no other damage is apparent, additional measures shall be put in place to contain sediment or sediment-laden waters within the work area.
8) The turbidity curtain shall remain in place for at least 12 hours following completion of work activities. The turbidity curtain shall be carefully removed by pulling it toward the shoreline to minimize the release of attached sediment back into the regulated water. Sediments shall be properly disposed of in an upland area.

BMP DETAIL 15 – PASSIVE FLOW BYPASS

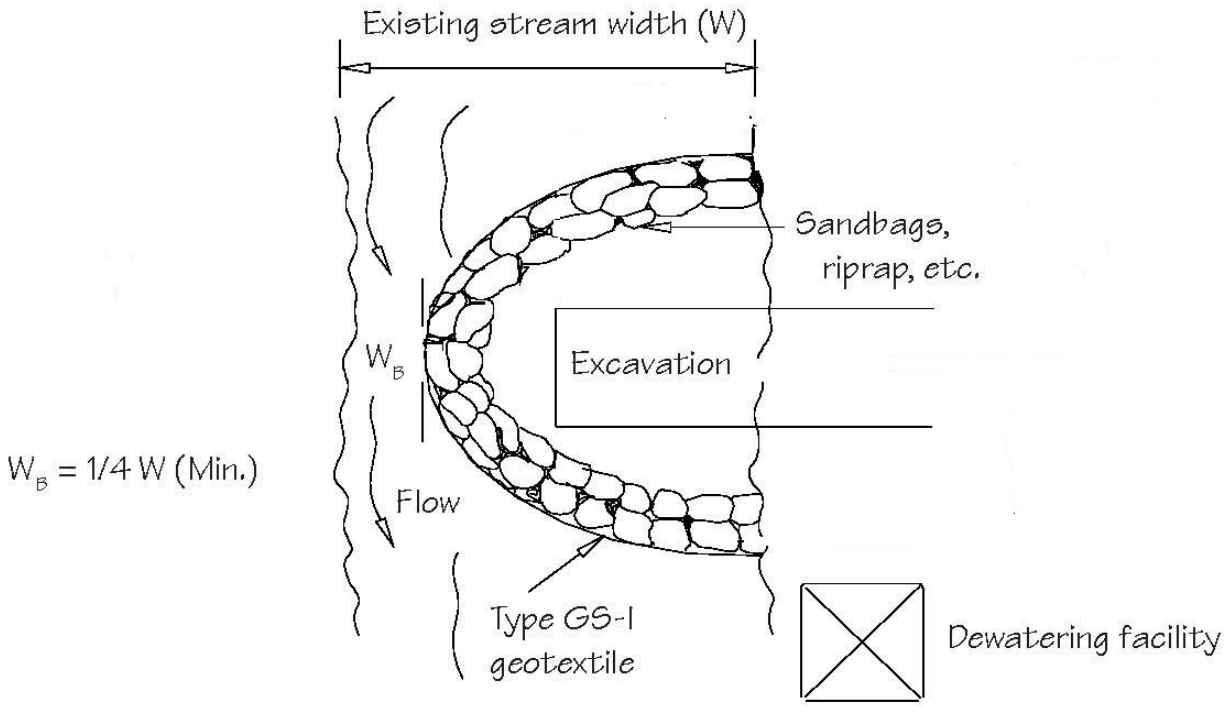






Notes:
1) Excavation of the diversion channel should begin at the downstream end and proceed upstream.
2) The diversion channel shall be built of sufficient capacity to convey expected flows during the project duration.
3) Material excavated from the diversion channel shall be stockpiled outside of floodplain areas and temporarily stabilized to prevent re-entry into the stream channel.
4) Geotextile fabric shall be installed flush against the channel. Fabric should be installed with minimal seams. Where 2 sections of fabric come together, upstream sections should overlap downstream sections of fabric and the overlap width should be at least 2 feet.
5) Fabric should be keyed into 2 by 2-foot trenches of rock rip-rap. Trenches shall be installed at 50 foot intervals. In between trenches, fabric should be anchored per manufacturer's specifications for spacing and anchor material.
6) If stream velocities are anticipated to exceed the recommendations for fabric, rock rip-rap can be installed in the diversion channel instead of the geotextile fabric.
7) Immediately following the completion of work, the geotextile fabric and/or rock rip-rap shall be removed and pre-construction contours shall be restored. All disturbed areas shall be stabilized and revegetated.

BMP DETAIL 16 – COFFERDAM



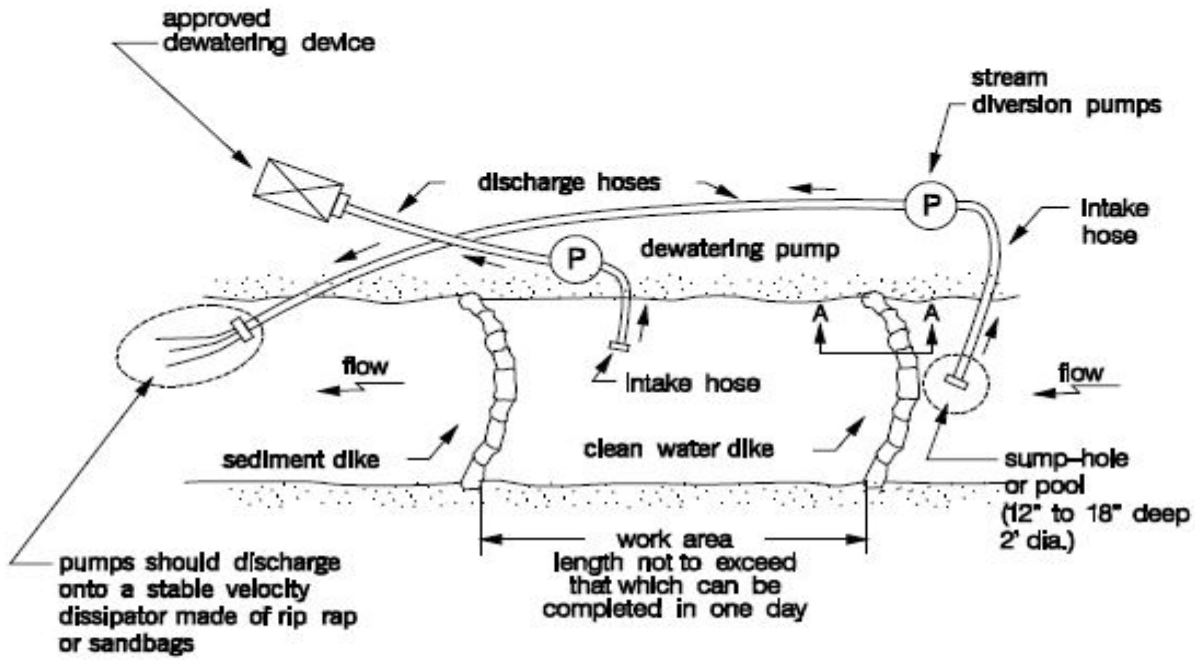
NOTE: For full stream crossings, separate cofferdams shall be constructed from each bank.

Notes:

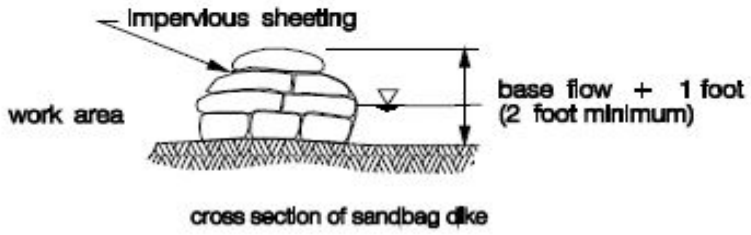
1) Construction shall be performed during low flow conditions
2) Cofferdam shall not impede the flow of the stream.
3) Large rocks, woody vegetation, or other material in the stream bed and/or banks which may preclude proper installation shall be removed.
4) Cofferdam shall be constructed of clean, non-erodible materials and shall be of an adequate height to keep stream flow from overtopping into the isolated work area.
5) Water from the isolated work area shall be pumped to a well vegetated area. Flow from the dewatering operation shall not be of a velocity which results in erosion of the receiving uplands.
6) Immediately following completion of in-stream work, the cofferdam shall be removed and the stream bed and banks shall be graded and stabilized in accordance with the approved plans.

BMP DETAIL 17 – PUMP AROUND

PLAN VIEW



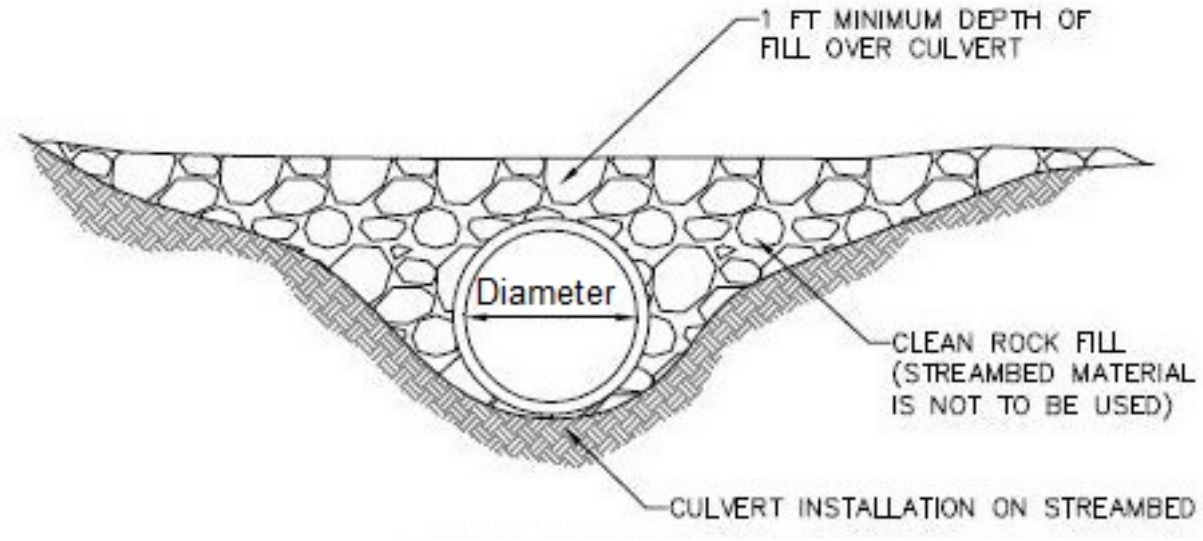
SECTION A–A



Notes:

1) Work within the stream should be limited to the area that can be completed within one day. At the end of each work day, the work area shall be stabilized and the pump removed from the channel.
2) Work shall not be conducted during storm events or high flows.
3) Water from the work area shall be pumped to a sediment filtering measures such as a dewatering basin which is located in a well vegetated upland area.
4) Stream flow shall be diverted around the work area and the pump should discharge onto a stable energy dissipater comprised of rock or sandbags located within the stream bed downstream of the sediment dike.
5) Immediately following completion of in-stream work, all sandbags and pump equipment shall be removed and disturbed areas shall be graded and stabilized in accordance with the approved plans.

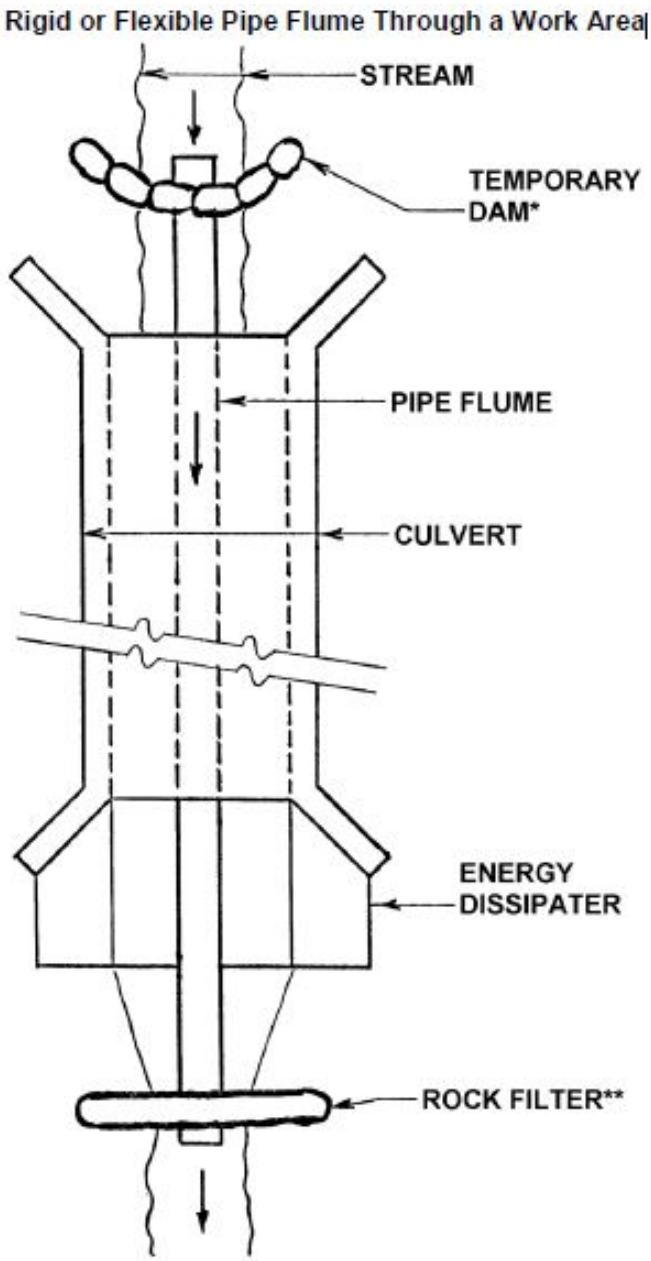
BMP DETAIL 18 – TEMPORARY CULVERT IN STREAMS



Notes:

1) Diameter of culvert shall be determined based on the 2 year design flow of the stream.
2) Culvert shall extend beyond the toe of the roadway.
3) Run-off from the roadway shall be diverted off the roadway and into a sediment removal BMP before it reaches the rock approach to the crossing.
4) Temporary stream crossings shall be inspected on a daily basis.
5) Damaged crossings shall be repaired within 24 hours of the inspection and before any subsequent use.
6) Sediment deposits on the crossing or its approaches shall be removed within 24 hours of the inspection.
7) As soon as the temporary crossing is no longer needed, it shall be removed. All materials shall be disposed of properly and disturbed areas shall be stabilized in accordance with approved plans.

BMP DETAIL 19 – FLUME

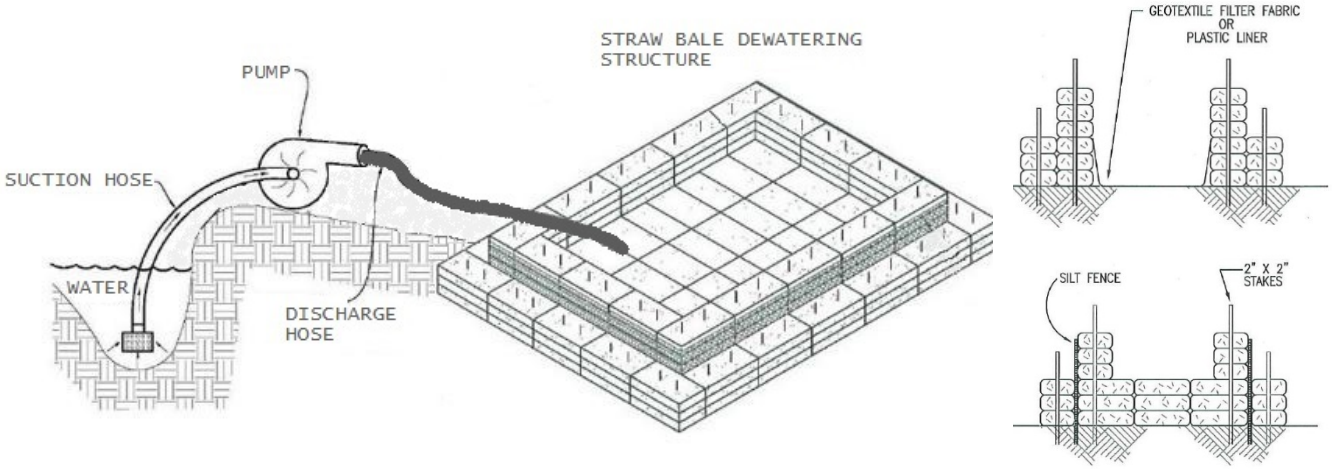


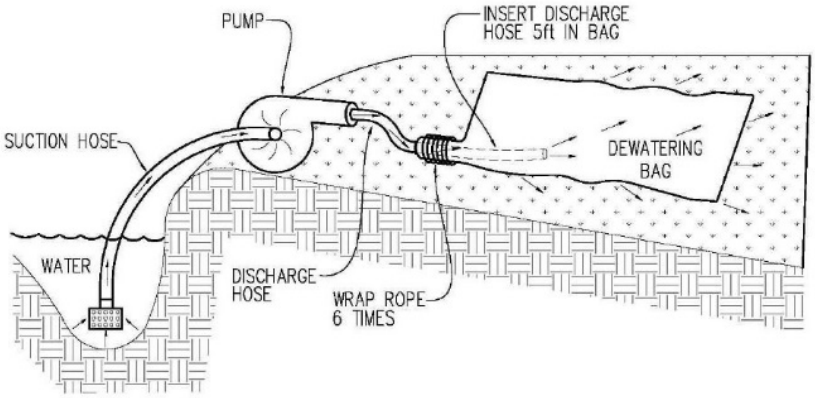
Notes:

1) A flume is a pipe or section of pipe used to convey flow across trench or disturbed area.
2) In-stream construction shall be performed during low flow conditions
3) The flume should be of sufficient size to convey normal stream flow through the work area.
4) Sandbags may be used to direct flow into the flume.
5) Energy dissipation measures such as rock or a splash guard shall be used at the downstream end of the flume to prevent erosion in the stream bed.
6) Water from the isolated work area shall be pumped to a well vegetated area. Flow from the dewatering operation shall not be of a velocity which results in erosion of the receiving uplands.
7) Immediately following completion of in-stream work, all flumes, sandbags and rock filters shall be removed and disturbed areas shall be graded and stabilized in accordance with the approved plans.

Adapted from Pennsylvania DEP Erosion and Sediment Control Program Manual (Technical Guidance Number 363-2134-008), March 2012.

BMP DETAIL 20 – UPLAND DEWATERING AREA WITH RETURN FLOW





Notes:

1) Dewatering of a work area is typically conducted using a pump and hose. Excess water from the work area is discharged from the hose into a temporary dewatering structures such as a straw bale dewatering structure, geotextile dewatering bag or rock lined basin.
2) Discharge site shall be a well vegetated upland area and shall be sloped away from the active work area.
3) Straw bale structures shall be lined with geotextile fabric, plastic sheeting or straw to minimize erosion.
4) Filter bags shall only be used if they can be removed without discharging sediment into regulated waters. They shall not be overfilled (no more than 75%) and shall be monitored during use to prevent plugging and rupture.
5) Accumulated sediments shall either be removed entirely or graded, seeded and mulched in place.
6) Discharge rates shall be controlled so that the structure is not overtopped and so that the flows are non-erosive.
7) Dewatering shall be localized and not drain extensive areas of a regulated water or reduce the water level such that fish and other aquatic organisms are killed, or their eggs and nests are exposed to desiccation, freezing or depredation in areas outside of the immediate work area.
8) Return flows from the dewatering structure shall be as clear as the receiving regulated water.
9) Immediately following completion of work, all dewatering structures shall be removed and disturbed areas shall be graded and stabilized in accordance with the approved plans.

Drawings modified from:
http://sedcatch.com/standard-drawings/.