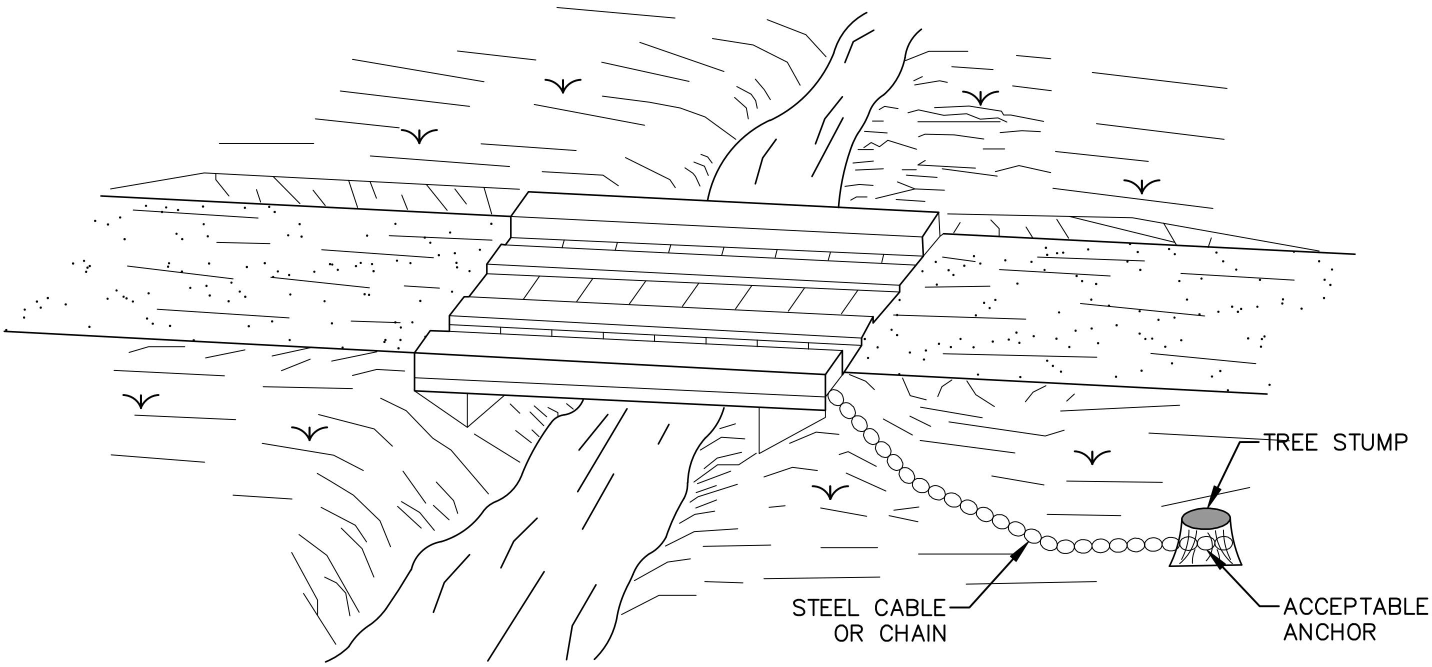
Appendix F: Best Management Practice Details

BMP 1 – TEMPORARY BRIDGE



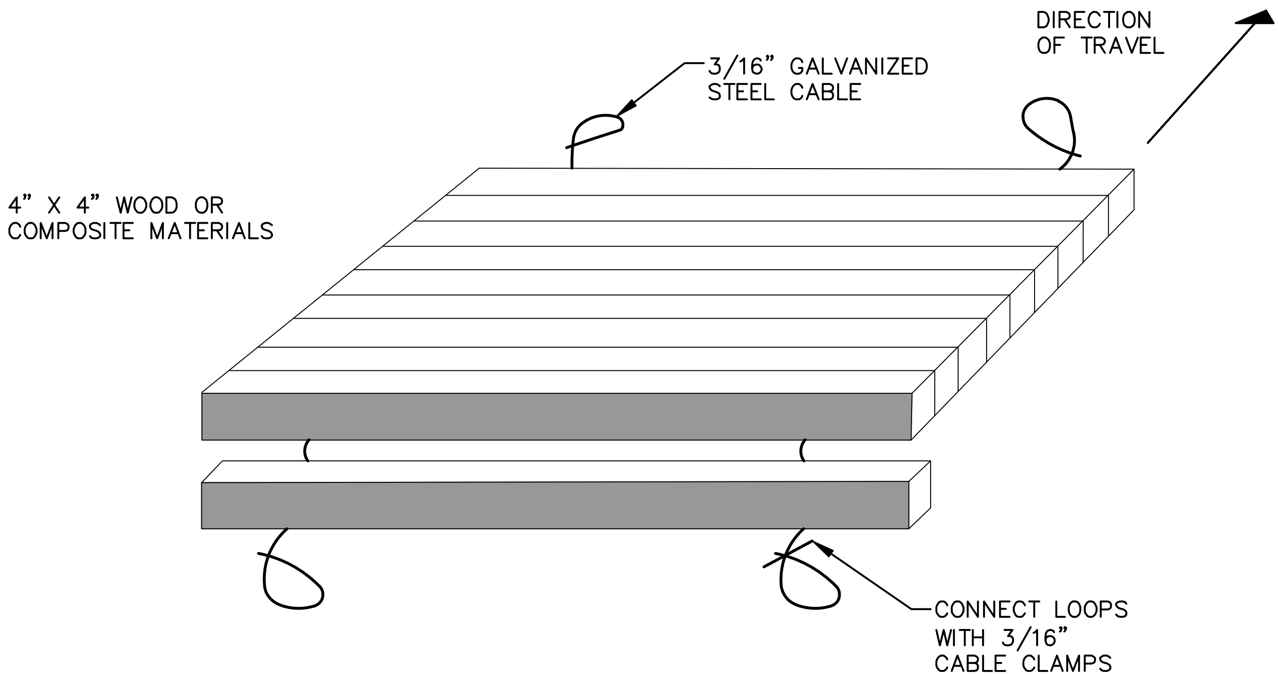
3-D VIEW
N.T.S.

REQUIREMENTS:

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 SHALL 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.

NOTE: THIS IS A TYPICAL DETAIL FOR REFERENCE PURPOSES ONLY. IT IS THE PERMITTEE'S RESPONSIBILITY TO ENSURE THE STRUCTURE IS APPROPRIATELY DESIGNED AND CONSTRUCTED.

BMP 2 – EQUIPMENT MATS



3–D VIEW
N.T.S.

REQUIREMENTS:

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 WOOD OR COMPOSITE MATERIALS.
4) MATS SHALL BE PROPERLY SIZED TO AVOID UNNECESSARY IMPACT TO THE WETLAND. UNDERSIZED MATS CAN CREATE GROUND PRESSURE CONDITIONS THAT CAN COMPACT UNDERLYING SOILS.
5) IF TEMPORARY FILLS ARE NEEDED TO ACCESS MATS, THE FILL SHALL BE INSTALLED IN A MANNER THAT ALLOWS FOR COMPLETE REMOVAL (I.E., PLACING THE TEMPORARY FILLS ON FABRIC).
6) MAT ROADS SHALL BE INSPECTED DAILY TO MAKE SURE THAT THEY DON'T SHIFT OR SINK AND THAT THEY ARE PROPERLY DISTRIBUTING THE WEIGHT OF THE EQUIPMENT.
7) MATS ARE A TEMPORARY MEASURE TO BE USED WHEN EQUIPMENT IS ACTIVELY WORKING WITHIN A WETLAND; THEY SHALL BE REMOVED IMMEDIATELY FOLLOWING COMPLETION OF WORK.
8) CARE SHALL BE TAKEN WHEN REMOVING 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, AND SEEDED IF NECESSARY.

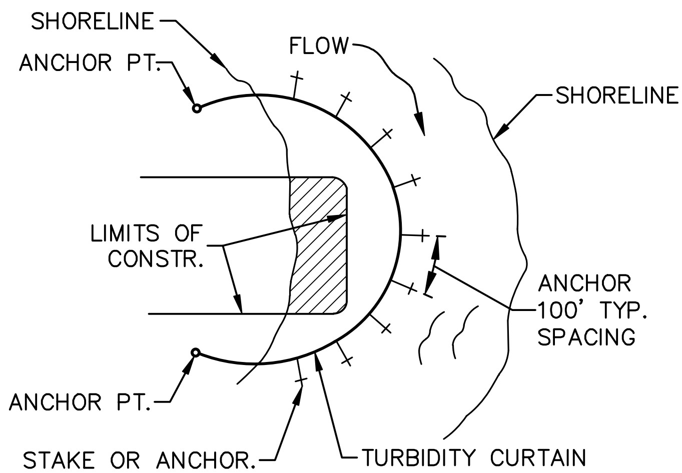
DATE: SEPTEMBER, 2023

NOTE: THIS IS A TYPICAL DETAIL FOR REFERENCE PURPOSES ONLY. IT IS THE PERMITTEE'S RESPONSIBILITY TO ENSURE THE STRUCTURE IS APPROPRIATELY DESIGNED AND CONSTRUCTED.

BMP 3 – TURBIDITY CURTAIN

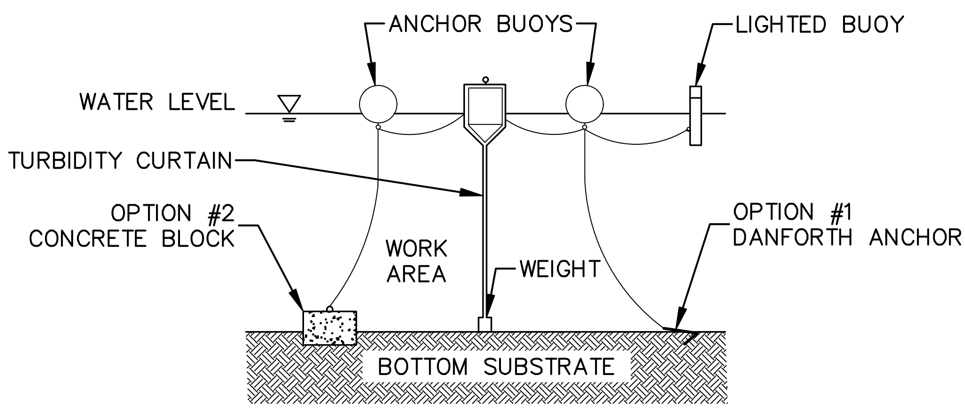
PLAN VIEW

N.T.S.



CROSS SECTION OF TURBIDITY CURTAIN

N.T.S.



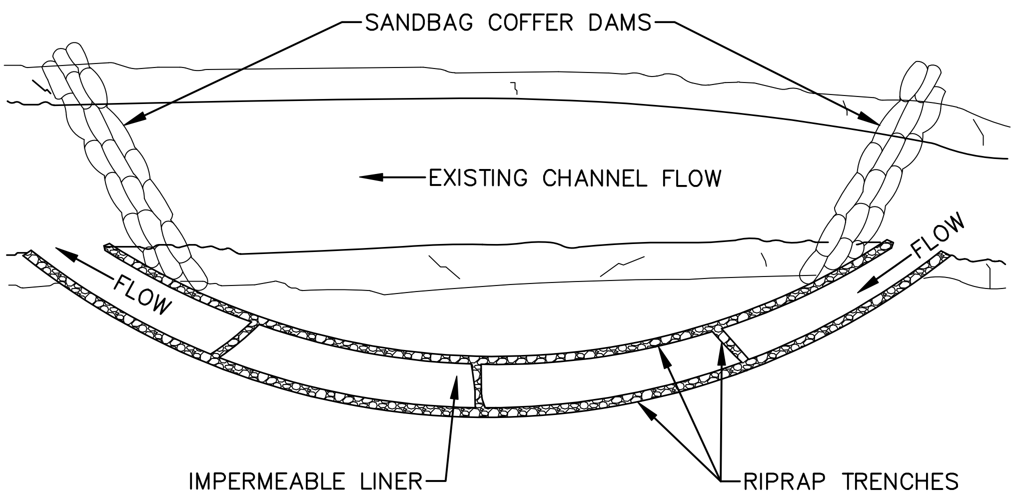
REQUIREMENTS:

1) A TURBIDITY CURTAIN OR SILT CURTAIN OF GEOTEXTILE FABRIC OR IMPERMEABLE MATERIAL 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 IN AREAS WITH STANDING WATER OR MINIMAL VELOCITY.
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.
9) UNLESS A WAIVER IS OBTAINED FROM THE AGENCIES, IN-STREAM WORK IS PROHIBITED 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.

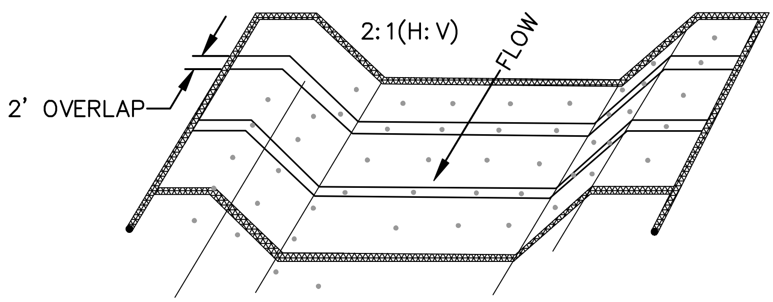
NOTE: THIS IS A TYPICAL DETAIL FOR REFERENCE PURPOSES ONLY. IT IS THE PERMITTEE'S RESPONSIBILITY TO ENSURE THE STRUCTURE IS APPROPRIATELY DESIGNED AND CONSTRUCTED.

BMP 4 – PASSIVE FLOW BYPASS

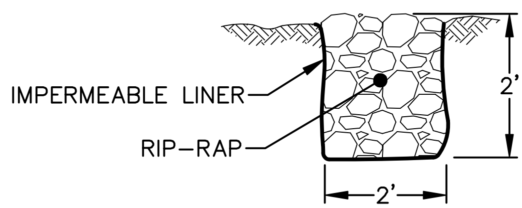
PLAN VIEW
N.T.S.



SECTION VIEW
N.T.S.



TRENCHING DETAIL
N.T.S.



REQUIREMENTS:

1) DIVERSION CHANNELS THROUGH SOIL (I.E., SILT OR CLAY) SHALL BE LINED WITH NON-ERODIBLE MATERIAL SUCH AS ROCK RIPRAP OR AN IMPERMEABLE LINER (I.E., PLASTIC) TO LIMIT EROSION AND REDUCE PARTICLE SUSPENSION. IF A DIVERSION CHANNEL THROUGH GRAVEL RESULTS IN CONTINUOUS TURBIDITY, THE USE OF CHANNEL LINING MATERIAL IS REQUIRED.
2) WORK SHALL NOT BE CONDUCTED DURING STORM EVENTS OR HIGH FLOWS, UNLESS OTHERWISE AUTHORIZED.
3) EXCAVATION OF THE DIVERSION CHANNEL SHALL BEGIN AT THE DOWNSTREAM END AND PROCEED UPSTREAM.
4) THE DIVERSION CHANNEL SHALL BE BUILT OF SUFFICIENT CAPACITY TO CONVEY EXPECTED FLOWS DURING THE PROJECT DURATION, WITH ADEQUATE FREEBOARD. SELECTED CHANNEL LINING MATERIALS SHALL WITHSTAND ANTICIPATED VELOCITIES AND SHEAR STRESS.
5) A DEWATERING SUMP PIT MAY BE USED TO REMOVE WATER FROM THE WORK AREA – REFER TO BMP 9 AND BMP 10.
6) MATERIAL EXCAVATED FROM THE DIVERSION CHANNEL SHALL BE TEMPORARILY STOCKPILED IN AREAS THAT WILL NOT INTERFERE WITH STREAM OR FLOODWATER CONVEYANCE DURING THE DURATION OF THE WORK.
7) IMPERMEABLE LINER SHALL BE INSTALLED FLUSH AGAINST THE CHANNEL AND INSTALLED WITH MINIMAL SEAMS. WHERE 2 SECTIONS OF LINER JOIN, UPSTREAM SECTIONS SHALL OVERLAP DOWNSTREAM SECTIONS AND THE OVERLAP WIDTH SHALL BE AT LEAST 2 FEET.
8) THE EDGES OF THE IMPERMEABLE LINER SHALL BE KEYED INTO 2 BY 2-FOOT TRENCHES OF ROCK RIP-RAP
9) IMMEDIATELY FOLLOWING THE COMPLETION OF WORK, THE IMPERMEABLE LINER AND/OR ROCK RIP-RAP SHALL BE REMOVED, EXCAVATED NATIVE STREAM BED MATERIALS REPLACED AND PRE-CONSTRUCTION CONTOURS RESTORED. ALL DISTURBED AREAS SHALL BE STABILIZED, REVEGETATED AND EXCESS MATERIALS SHALL BE DISPOSED OF PROPERLY.
10) UNLESS A WAIVER IS OBTAINED FROM THE AGENCIES, IN-STREAM WORK IS PROHIBITED 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.

DATE: SEPTEMBER, 2023	NOTE: THIS IS A TYPICAL DETAIL FOR REFERENCE PURPOSES ONLY. IT IS THE PERMITTEE'S RESPONSIBILITY TO ENSURE THE STRUCTURE IS APPROPRIATELY DESIGNED AND CONSTRUCTED.

NEW YORK STATE | Department of Environmental Conservation

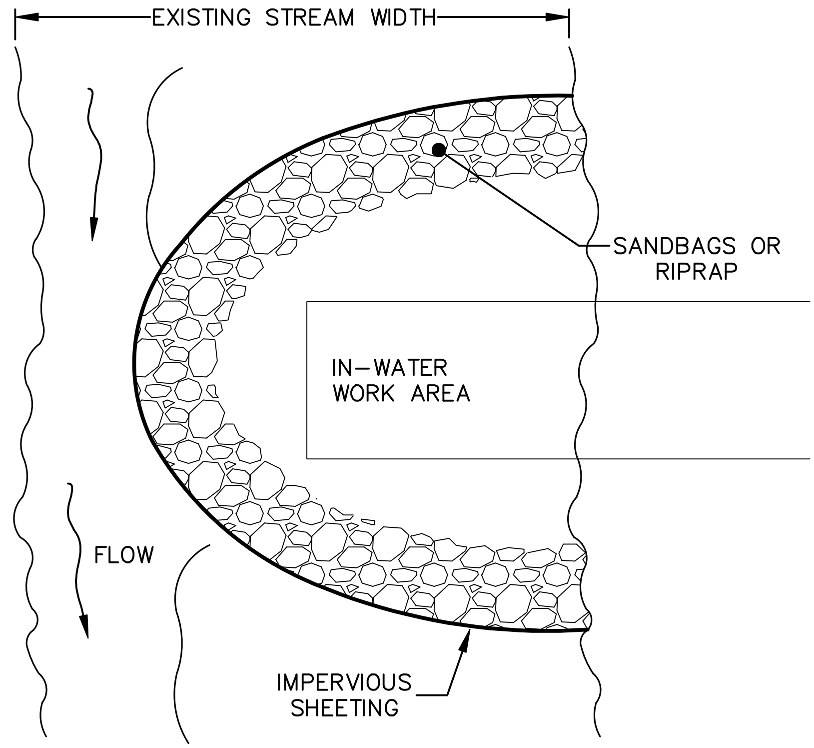
STATE PROGRAMMATIC GENERAL PERMIT (SPGP)–1
FOR EMERGENCY RESPONSE AND STORM RECOVERY ACTIVITIES IN
REGULATED WATERS IN NEW YORK STATE
EXCLUDING NYSDEC REGIONS 1, 2 AND PORTIONS OF REGION 3

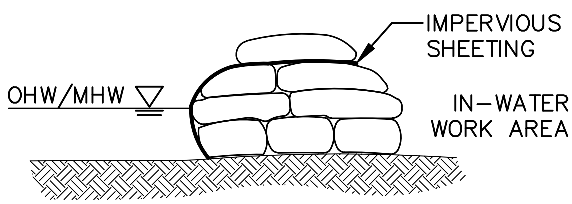
US Army Corps of Engineers

BMP 5 – COFFERDAM

PLAN VIEW

N.T.S.





CROSS SECTION

N.T.S.

REQUIREMENTS:

1) COFFERDAMS ARE UTILIZED IN STREAMS OR OPEN WATERBODIES TO FACILITATE WORK IN THE DRY.
2) WORK SHALL NOT BE CONDUCTED DURING STORM EVENTS OR HIGH FLOWS, UNLESS OTHERWISE AUTHORIZED.
3) COFFERDAMS SHALL NOT IMPEDE THE FLOW OF THE STREAM. IF NECESSARY, SEPARATE COFFERDAMS SHALL BE CONSTRUCTED FROM EACH STREAM BANK.
4) LARGE ROCKS, WOODY VEGETATION, OR OTHER MATERIAL WHICH MAY PRECLUDE PROPER INSTALLATION OF THE COFFERDAM SHALL BE REMOVED.
5) COFFERDAM SHALL BE CONSTRUCTED OF CLEAN, NON–ERODIBLE MATERIALS SUCH AS SANDBAGS OR RIPRAP AND SHALL BE OF AN ADEQUATE HEIGHT TO KEEP CLEAN WATER FROM OVERTOPPING INTO THE ISOLATED WORK AREA.
6) WATER FROM THE ISOLATED WORK AREA SHALL BE PUMPED TO A WELL VEGETATED AREA. REFER TO BMP 9 AND BMP 10. FLOW FROM THE DEWATERING OPERATION SHALL NOT BE OF A VELOCITY WHICH RESULTS IN EROSION OF THE RECEIVING UPLANDS.
7) IMMEDIATELY FOLLOWING COMPLETION OF WORK, THE COFFERDAM SHALL BE REMOVED AND THE AREA SHALL BE GRADED AND STABILIZED IN ACCORDANCE WITH THE APPROVED PLANS.
8) UNLESS A WAIVER IS OBTAINED FROM THE AGENCIES, IN–STREAM WORK IS PROHIBITED 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.

DATE: SEPTEMBER, 2023	NOTE: THIS IS A TYPICAL DETAIL FOR REFERENCE PURPOSES ONLY. IT IS THE PERMITTEE'S RESPONSIBILITY TO ENSURE THE STRUCTURE IS APPROPRIATELY DESIGNED AND CONSTRUCTED.

NEW YORK STATE | Department of Environmental Conservation

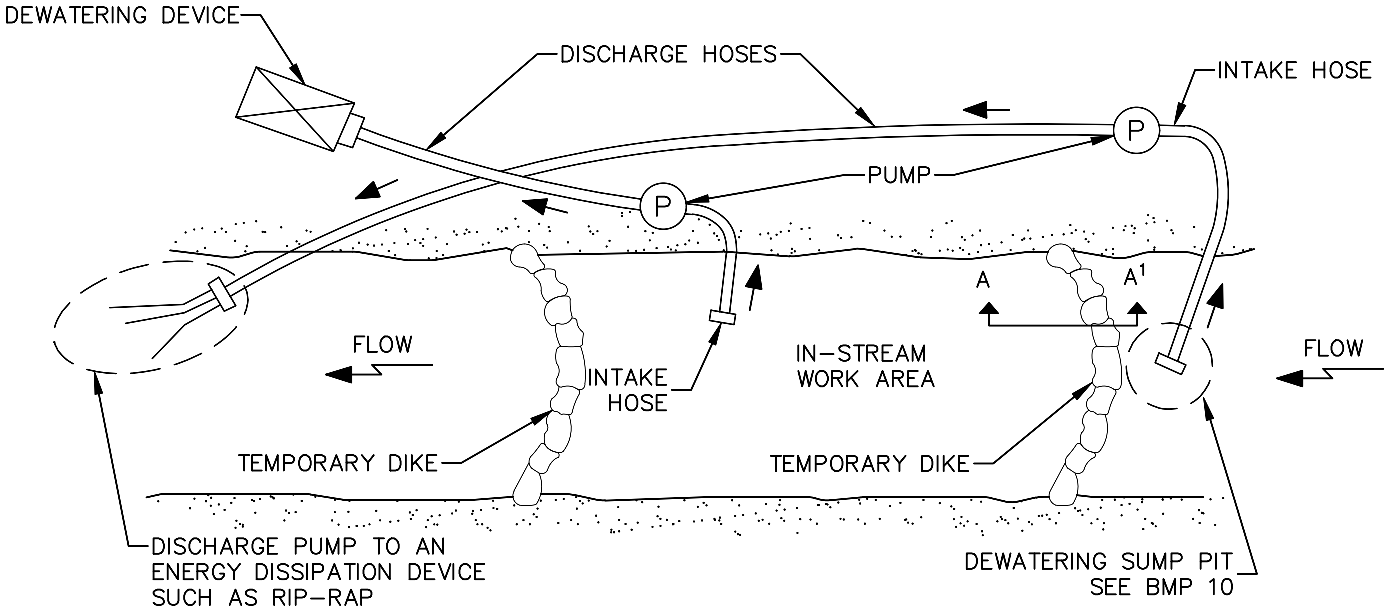
STATE PROGRAMMATIC GENERAL PERMIT (SPGP)-1
FOR EMERGENCY RESPONSE AND STORM RECOVERY ACTIVITIES IN
REGULATED WATERS IN NEW YORK STATE
EXCLUDING NYSDEC REGIONS 1, 2 AND PORTIONS OF REGION 3

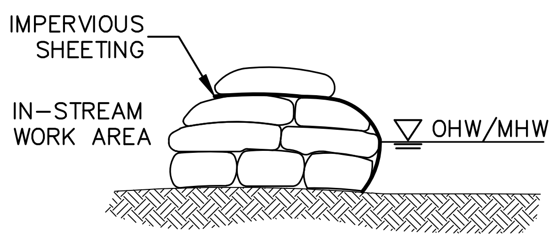
US Army Corps of Engineers

BMP 6 – PUMP AROUND

PLAN VIEW

N.T.S.





NOTE:
TEMPORARY DIKE TO BE CONSTRUCTED OF SANDBAGS OR RIP-RAP

CROSS SECTION A–A[1]

N.T.S.

REQUIREMENTS:

1) WORK SHALL NOT BE CONDUCTED DURING STORM EVENTS OR HIGH FLOWS, UNLESS OTHERWISE AUTHORIZED.
2) WATER FROM THE WORK AREA SHALL BE PUMPED TO A SEDIMENT FILTERING MEASURE SUCH AS A DEWATERING BASIN IN A WELL VEGETATED UPLAND AREA – REFER TO BMP 9 AND BMP 10.
3) 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.
4) 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.
5) UNLESS A WAIVER IS OBTAINED FROM THE AGENCIES, IN-STREAM WORK IS PROHIBITED 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.

DATE: SEPTEMBER, 2023	NOTE: THIS IS A TYPICAL DETAIL FOR REFERENCE PURPOSES ONLY. IT IS THE PERMITTEE'S RESPONSIBILITY TO ENSURE THE STRUCTURE IS APPROPRIATELY DESIGNED AND CONSTRUCTED.

NEW YORK STATE | Department of Environmental Conservation

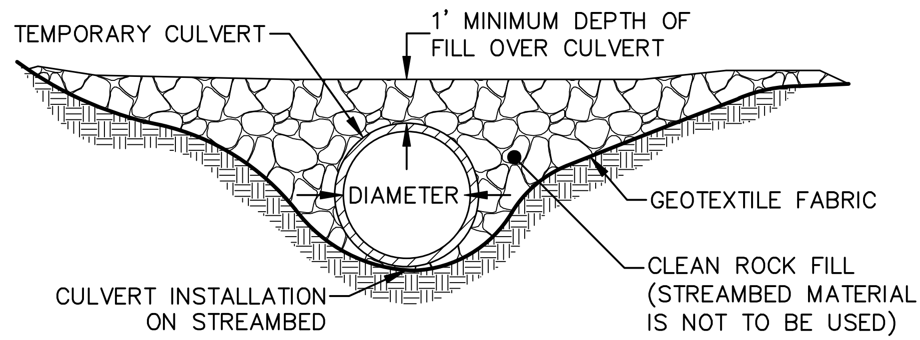
STATE PROGRAMMATIC GENERAL PERMIT (SPGP)-1
FOR EMERGENCY RESPONSE AND STORM RECOVERY ACTIVITIES IN
REGULATED WATERS IN NEW YORK STATE
EXCLUDING NYSDEC REGIONS 1, 2 AND PORTIONS OF REGION 3

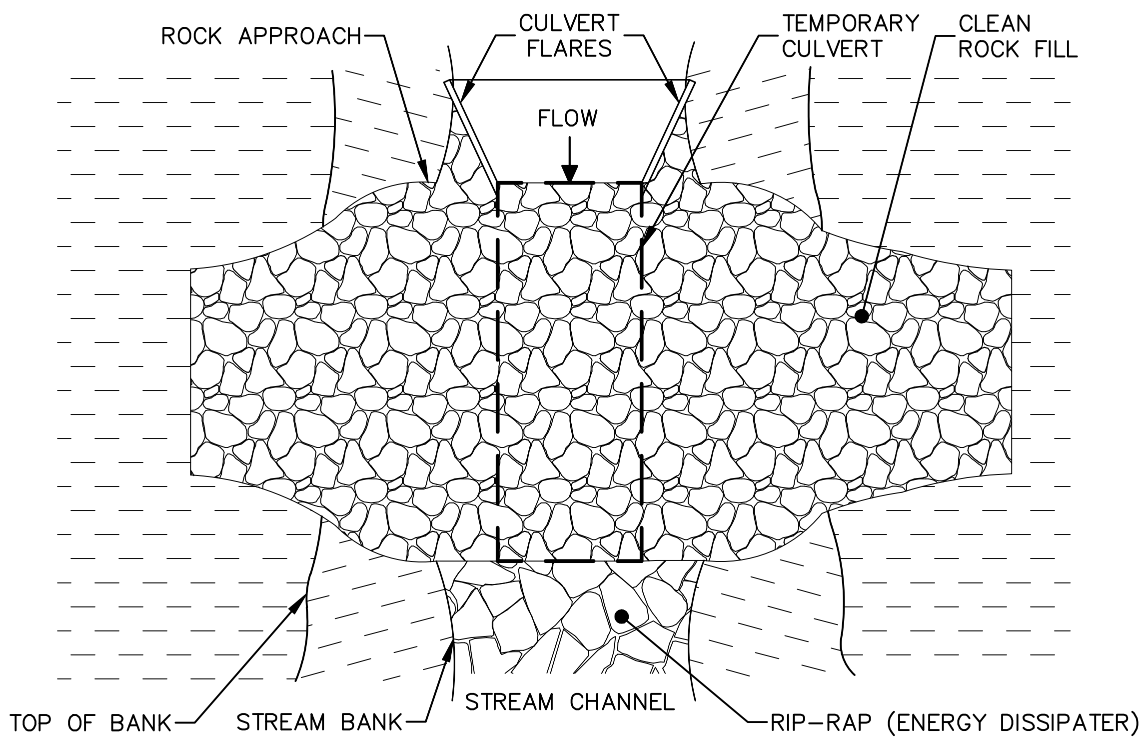
US Army Corps of Engineers

BMP 7 – TEMPORARY CULVERT IN STREAMS

CROSS SECTION VIEW

N.T.S.





PLAN VIEW

N.T.S.

REQUIREMENTS:

1) THE CULVERT SHALL BE OF A SUFFICIENT SIZE TO CONVEY ALL STREAM FLOWS WHILE INSTALLED. DIAMETER IS BASED ON THE TIMING, DURATION AND THE INTENDED USE OF THE CULVERT.
2) GEOTEXTILE FABRIC SHALL BE USED TO LINE THE STREAM BED TO FACILITATE REMOVAL OF TEMPORARY ROCK FILL.
3) CULVERT SHALL EXTEND BEYOND THE TOE OF THE ROADWAY.
4) 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.
5) TEMPORARY STREAM CROSSINGS SHALL BE INSPECTED ON A DAILY BASIS.
6) DAMAGED CROSSINGS SHALL BE REPAIRED WITHIN 24 HOURS OF THE INSPECTION AND BEFORE ANY SUBSEQUENT USE.
7) SEDIMENT DEPOSITS ON THE CROSSING OR ITS APPROACHES SHALL BE REMOVED WITHIN 24 HOURS OF THE INSPECTION.
8) AS SOON AS THE TEMPORARY CROSSING IS NO LONGER NEEDED, IT SHALL BE REMOVED.
9) ALL MATERIALS SHALL BE DISPOSED OF PROPERLY AND DISTURBED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH APPROVED PLANS.
10) UNLESS A WAIVER IS OBTAINED FROM THE AGENCIES, IN-STREAM WORK IS PROHIBITED 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.

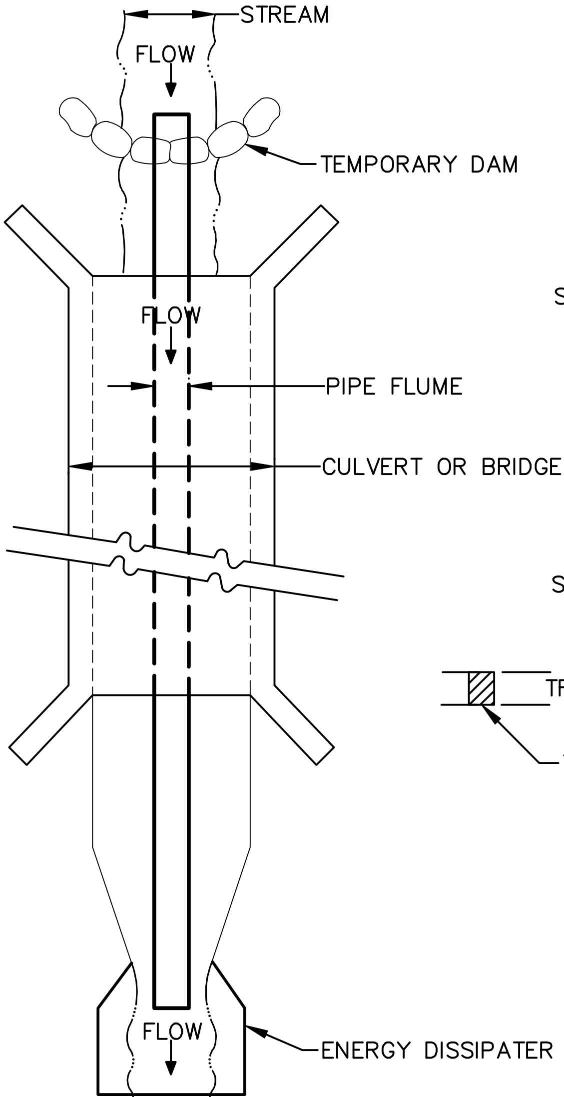
DATE: SEPTEMBER, 2023	NOTE: THIS IS A TYPICAL DETAIL FOR REFERENCE PURPOSES ONLY. IT IS THE PERMITTEE'S RESPONSIBILITY TO ENSURE THE STRUCTURE IS APPROPRIATELY DESIGNED AND CONSTRUCTED.

BMP 8 – FLUME

PLAN VIEW FOR CULVERT OR BRIDGE WORK

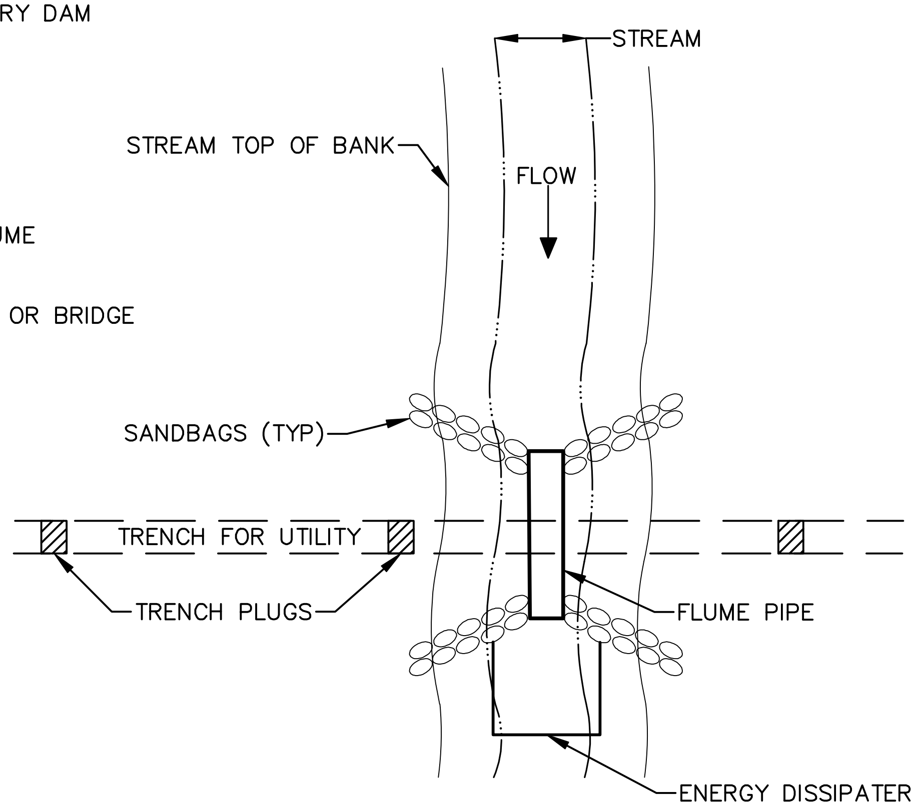
N.T.S.

RIGID OR FLEXIBLE PIPE FLUME THROUGH A WORK AREA



PLAN VIEW FOR UTILITY WORK

N.T.S.



REQUIREMENTS:

1) A FLUME IS A RIGID OR FLEXIBLE PIPE USED TO TEMPORARILY CONVEY FLOW ACROSS UTILITY TRENCH OR WITHIN A LARGER CULVERT OR BRIDGE.
2) WORK SHALL NOT BE CONDUCTED DURING STORM EVENTS OR HIGH FLOWS, UNLESS OTHERWISE AUTHORIZED.
3) THE FLUME SHOULD BE OF SUFFICIENT SIZE TO CONVEY EXISTING STREAM FLOWS 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 – REFER TO BMP 9 AND BMP 10.
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.
8) UNLESS A WAIVER IS OBTAINED FROM THE AGENCIES, IN-STREAM WORK IS PROHIBITED 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.

DATE: SEPTEMBER, 2023	NOTE: THIS IS A TYPICAL DETAIL FOR REFERENCE PURPOSES ONLY. IT IS THE PERMITTEE'S RESPONSIBILITY TO ENSURE THE STRUCTURE IS APPROPRIATELY DESIGNED AND CONSTRUCTED.

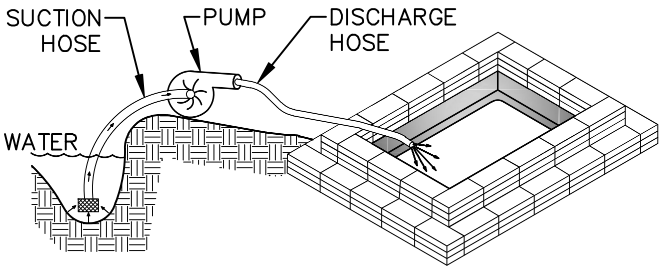
NEW YORK STATE | Department of Environmental Conservation

STATE PROGRAMMATIC GENERAL PERMIT (SPGP)–1
FOR EMERGENCY RESPONSE AND STORM RECOVERY ACTIVITIES IN
REGULATED WATERS IN NEW YORK STATE
EXCLUDING NYSDEC REGIONS 1, 2 AND PORTIONS OF REGION 3

US Army Corps of Engineers

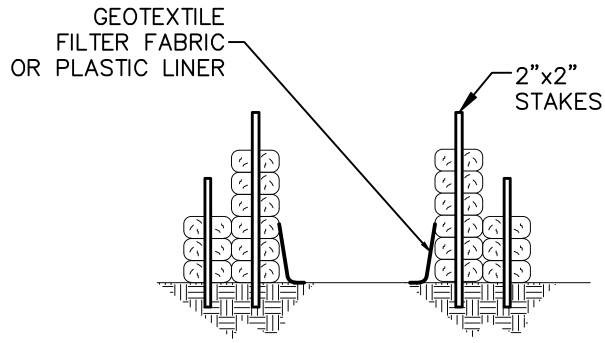
BMP 9 – UPLAND DEWATERING AREA WITH RETURN FLOW

SECTION VIEW OF STRAW BALE DEWATERING STRUCTURE
N.T.S.

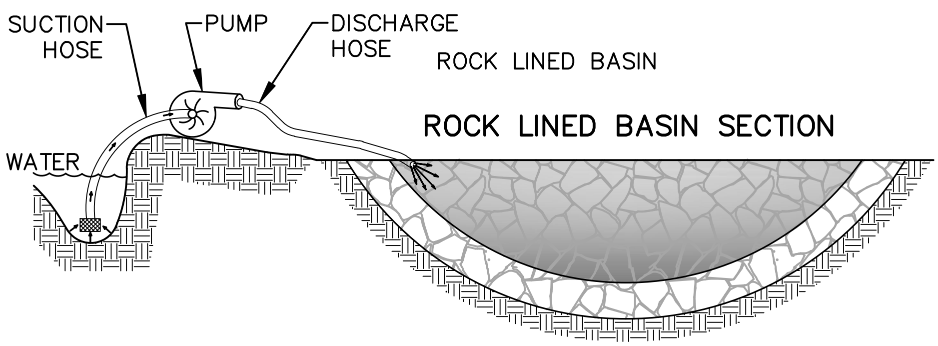


STRAW BALE DEWATERING STRUCTURE

SECTION VIEW OF STRAW BALE STRUCTURE
N.T.S.



SECTION VIEW OF ROCK LINED BASIN DEWATERING STRUCTURE
N.T.S.



REQUIREMENTS:

1) DEWATERING OF A WORK AREA IS TYPICALLY CONDUCTED USING A PUMP AND HOSE – REFER TO BMP 10 DEWATERING SUMP PIT.
2) 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.
3) DISCHARGE SITE SHALL BE A WELL VEGETATED UPLAND AREA AND SHALL BE SLOPED AWAY FROM THE ACTIVE WORK AREA.
4) STRAW BALE STRUCTURES SHALL BE LINED WITH GEOTEXTILE FABRIC, PLASTIC SHEETING OR STRAW TO MINIMIZE EROSION.
5) 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.
6) ACCUMULATED SEDIMENTS SHALL EITHER BE REMOVED ENTIRELY OR GRADED, SEEDED AND MULCHED IN PLACE.
7) DISCHARGE RATES SHALL BE CONTROLLED SO THAT THE STRUCTURE IS NOT OVERTOPPED AND SO THAT THE FLOWS ARE NON–EROSIVE.
8) 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.
9) RETURN FLOWS FROM THE DEWATERING STRUCTURE SHALL BE AS CLEAR AS THE RECEIVING REGULATED WATER.
10) 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.

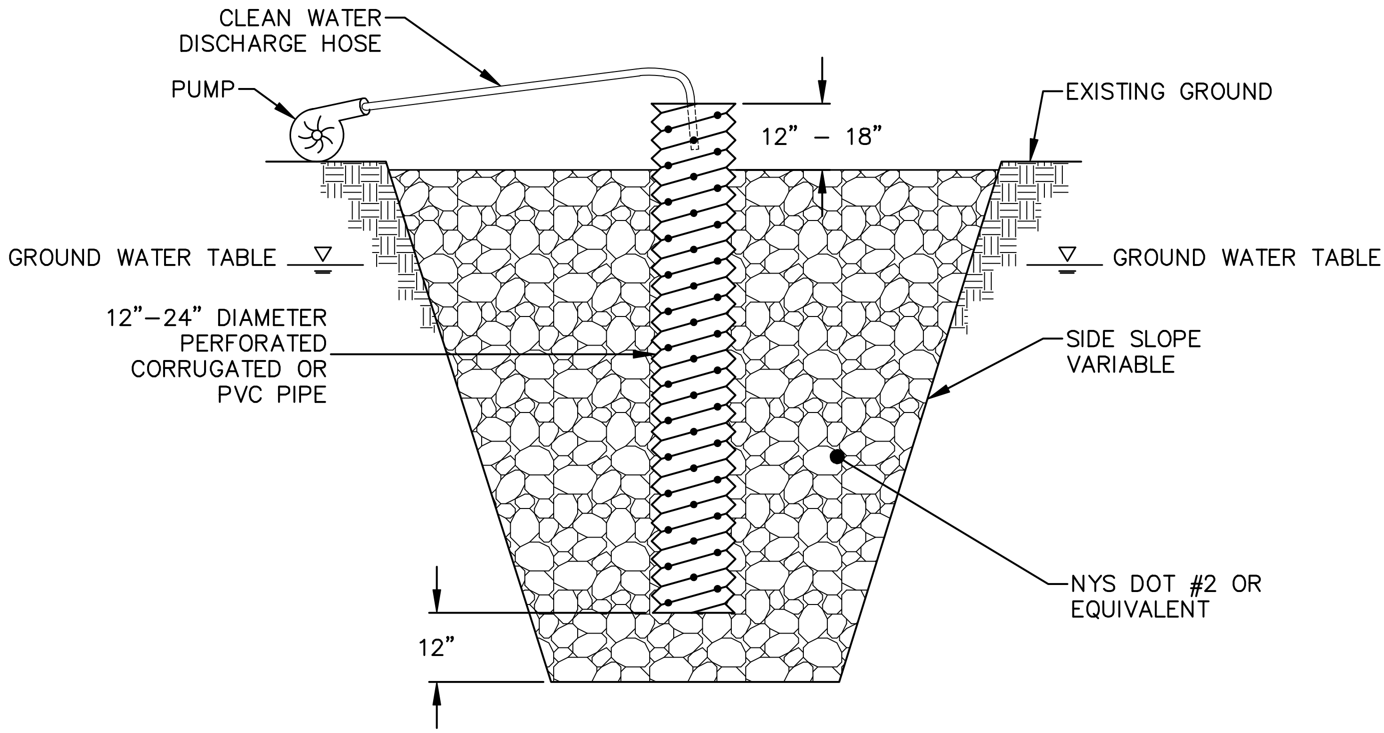
DATE: SEPTEMBER, 2023

NOTE: THIS IS A TYPICAL DETAIL FOR REFERENCE PURPOSES ONLY. IT IS THE PERMITTEE'S RESPONSIBILITY TO ENSURE THE STRUCTURE IS APPROPRIATELY DESIGNED AND CONSTRUCTED.

BMP 10 – DEWATERING SUMP PIT

CROSS SECTION

N.T.S.



REQUIREMENTS:

1) DEWATERING SUMP PITS ARE TEMPORARY PITS CONSTRUCTED USING PIPE AND STONE FOR PUMPING EXCESS WATER FROM EXCAVATIONS TO A SUITABLE DISCHARGE AREA (REFER TO BMP 9 UPLAND DEWATERING AREA WITH RETURN FLOW).
2) PIT DIMENSIONS ARE VARIABLE DEPENDING ON SITE CONDITIONS.
3) A PERFORATED VERTICAL STANDPIPE SHALL BE PLACED IN THE CENTER OF THE PIT AND SURROUNDED BY STONE SCREENING MATERIAL TO COLLECT FILTER WATER. THE STANDPIPE SHALL EXTEND 12 TO 18 INCHES ABOVE THE LIP OF THE PIT.
4) WATER SHALL BE PUMPED FROM THE CENTER OF THE PIPE TO A SUITABLE DISCHARGE AREA SUCH AS A SEDIMENT TRAP, FILTER BAG OR WELL VEGETATED UPLAND AREA.
5) IF WATER FROM THE SUMP PIT WILL BE PUMPED DIRECTLY TO A STORM DRAIN SYSTEM, FILTER CLOTH WITH AN EQUIVALENT SIEVE SIZE BETWEEN 40–80 SHALL BE WRAPPED AROUND THE STANDPIPE TO ENSURE CLEAN WATER DISCHARGE.
6) IT IS RECOMMENDED THAT ¼ TO ½ INCH HARDWARE CLOTH BE WRAPPED AROUND AND SECURED TO THE SANDPIPE PRIOR TO ATTACHING THE FILTER CLOTH. THIS WILL INCREASE THE RATE OF WATER SEEPAGE INTO THE STANDPIPE.
7) FOLLOWING COMPLETION OF WORK, FILL THE SUMP PIT WITH ORIGINAL MATERIAL, GRADE AND SEED THE AREA, AS NEEDED.

DATE: SEPTEMBER, 2023	NOTE: THIS IS A TYPICAL DETAIL FOR REFERENCE PURPOSES ONLY. IT IS THE PERMITTEE'S RESPONSIBILITY TO ENSURE THE STRUCTURE IS APPROPRIATELY DESIGNED AND CONSTRUCTED.