

The diagram illustrates the construction of a filter trench for erosion control. It consists of two main views: a perspective view at the top and a section view at the bottom.

PERSPECTIVE VIEW:

- Shows a trench with a woven wire fence (14 gauge, 6" mesh) installed along its length.
- The fence is driven 16" into the ground.
- The height of the filter is 16" min.
- The trench is 6" min. deep.
- The distance between fence posts is 10' max. c. to c.
- Arrows indicate the flow of water into the trench.

SECTION VIEW:

- Shows a cross-section of the trench.
- The trench is 20" min. deep.
- The bottom of the trench is compacted soil.
- The filter cloth is embedded 16" min. into the ground.
- The filter cloth is 4" min. wide.
- The fence post is 36" min. high.
- The woven wire fence (14 gauge, 6" mesh) is installed with a filter cloth.
- Arrows indicate the flow of water into the trench.

NOTES:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFIL 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. IMPROVED ERICATED UNIT SHALL BE GEOPAR, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

A cross-sectional diagram of a silt fence stockpile. The top surface is a mound with a slope indicated by a triangle with a vertical side of 2 and a horizontal side of 1, labeled "SLOPE OR LESS". The top surface is covered with a layer of "TOPSOIL STOCKPILE" and contains several small downward-pointing arrows. The base of the stockpile is a horizontal layer labeled "ENTRANCE 24' WIDE AND SHALE BE ON UPSLOPE". This base layer is supported by a series of vertical posts labeled "SILT FENCE OR STRAW BAILS". On either side of the stockpile, the ground slopes away from the pile, labeled "SLOPE GROUND AWAY FROM PILE". A "SILT FENCE (SURROUNDING ENTIRE PILE)" is shown as a line of small circles or dots surrounding the entire stockpile area.

- NOTES:**
1. SILT FENCE SHALL BE INSTALLED PER DETAIL.
 2. IF THE STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, IT SHALL BE STABILIZED WITH SEED AND MULCH IMMEDIATELY AFTER COMPLETION OF STOCKPILING.
 3. SILT FENCE SHALL BE INSPECTED WEEKLY AND SEDIMENT TRAPPED BY THE FENCING SHALL BE REMOVED OF AS NECESSARY.
 4. SILT FENCE SHALL REMAIN IN PLACE UNTIL THE ENTIRE PILE OF MATERIAL HAS BEEN ELIMINATED.
 5. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.

The image contains two technical drawings of a weir structure. The top drawing is a 'PROFILE' view showing the side elevation of the weir. It includes dimensions for the crest width (1' MIN. to 1' MAX.), the length of the weir (L = 4 x D, A.), and the maximum height (5' MAX.). It also shows the 'TOP OF EMBANKMENT' and 'EXISTING GROUND' lines. The bottom drawing is a 'CROSS SECTION A-A' showing the weir crest, weir crest, small riprap, earth embankment, and apron. It includes dimensions for the crest width (4' MIN.), the height of the embankment (2' APRON), and the width of the apron (2' APRON). It also shows the 'N.Y.S. DOT #2 STONE (OPTIONAL)' and 'SMALL RIPRAP' layers. The drawings are labeled with 'FLOW' direction and 'UNDISTURBED AREA'.

- NOTES:**
1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
 2. YARD CUTS, FILL SLOPES AND EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
 3. THE CUT AND FILL SLOPES SHALL BE 1:1 OR FLATTER.
 4. THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"-8" ALONG WITH A 1' THICKNESS OF 2" AGGREGATE PLACED ON THE UP-GRADE SIDE ON THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.
 5. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP.
 6. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
 7. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
 8. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
- MAXIMUM DRAINAGE AREA 5 ACRES

The technical drawing consists of two parts: a plan view and a cross-section view.

Plan View (Top): Shows a square structure with a central square area labeled "8'x8' MIN.". The four sides of this central area are sloped at a "3:1" ratio. The outer boundary is a square with a "BERM" around its perimeter. A "SIGN" is indicated at the top right corner. To the right of the structure is a "CRUSHED STONE VEHICLE TRACKING PAD".

Cross-Section View (Bottom): Shows a side profile of the structure. The top surface is the "GROUND SURFACE". The structure has a "BERM AROUND PERIMETER" with a height of "12\"". The base is "2'-0\" MIN." wide. The structure is filled with "COMPACTED EMBANKMENT MATERIAL, TYP." and lined with "POLYETHYLENE LINER MIN TO MIL THICK". The bottom width is "8'x8' MIN.". The side slopes are "3:1 OR FLATTER". A "SILT FENCE ALONG DOWNSLOPE PERIMETER AS NECESSARY" is indicated at the bottom right.

Section A

CONCRETE WASHOUT AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATIONS OF CONCRETE WASHOUT AREA
2. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
3. VEHICLE TRACKING CONTROL IS REQUIRED AT THE ACCESS POINT.
4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF CONCRETE WASHOUT AREA TO ALL OPERATORS OF CONCRETE TRUCKS AND MIXERS.
5. A POLYETHYLENE LINER MINIMUM 1/4" PLATE THICKNESS SHALL BE INSTALLED AND SECURED WITHIN THE WASHOUT AREA.
6. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.

CONCRETE WASHOUT AREA MAINTENANCE NOTES

1. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
2. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
3. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, COVER THE DISTURBED AREA WITH TOPSOIL, SEED AND MULCH OR OTHERWISE STABILIZE IN A MANNER APPROVED BY THE LOCAL JURISDICTION.
4. INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.

SPACING VARIES DEPENDING ON CHANNEL SLOPE

CUTOFF TRENCH
18" WIDE
6" DEEP

TOE

SLOPE

CREST
24" MAX
@ CENTER

PROFILE
NOT TO SCALE

GROUND LINE

1.5' MIN.

9" MIN.

FILTER FABRIC

DITCH BOTTOM
CUTOFF TRENCH
DESIGN BOTTOM

SECTION A-A
NOT TO SCALE

24" MAX
@ CENTER

18"

6"

SECTION B-B
NOT TO SCALE

FILTER FABRIC

$$X = \frac{H \text{ (Ft)}}{\text{SLOPE (FT/FT)}}$$

- NOTES:

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS THE SAME AS ELEVATION OF THE TOP OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
6. MAXIMUM DRAINAGE AREA 2 ACRES.

- NOTES

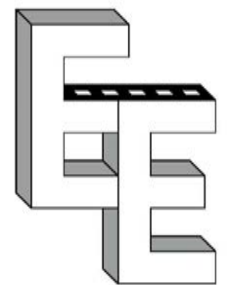
1. DISTURBED AREA SHALL BE PLANTED WITH ENVIRONMENTAL SEED MIX.
2. VEGETATION SHALL BE MAINTAINED AT 6" HEIGHT.
3. ALL TREES, BRUSH, STUMPS AND OTHER OBSTRUCTIONS SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTION OF THE SWALE.
4. THE SWALE SHALL BE EXCAVATED OR SHAPED TO MEET THE CROSS SECTION SHOWN ABOVE AND SHALL BE FREE OF BANK PROJECTIONS OR OTHER OBSTRUCTIONS THAT MAY IMPAIR THE FUNCTION OF THE SWALE.
5. NON-WOVEN GEOTEXTILE FABRIC SHALL BE INSTALLED ON THE BOTTOM AND SIDES OF THE TRENCH AS WELL AS BETWEEN THE STONE AND SAND LAYERS.

[illegible]

PRIOR TO ANY EARTH
DISTURBANCE THE CONTRACTOR
SHALL CALL IN A TICKET TO
DIG SAFE NY AND OBTAIN A
CLEAR TO DIG

IT IS A VIOLATION OF SECTION 7209 OF THE NYS EDUCATION LAW FOR ANY PERSON TO ALTER ANY ITEM ON THIS PLAN IN ANY WAY UNLESS HE/SHE IS ACTING UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER.

CHRISTOPHER D. LONGO, PE
N.Y.S. LIC. # 095840



EMPIRE ENGINEERING, PLLC
1900 DUANESBURG ROAD
DUANESBURG, NY 12056
PH: (518) 858-4117
EMAIL: CLONGO@EMPIREENG.NET

PROJECT
CAROGA LAKE ARTS
COLLECTIVE, INC.

1989 STATE HWY 10
CAROGA LAKE, NY

Title E&SC DETAILS	
Date 06/23/2021	Sheet
Scale N.T.S.	C501
Job# 21028	
Sheet 2 of 2	