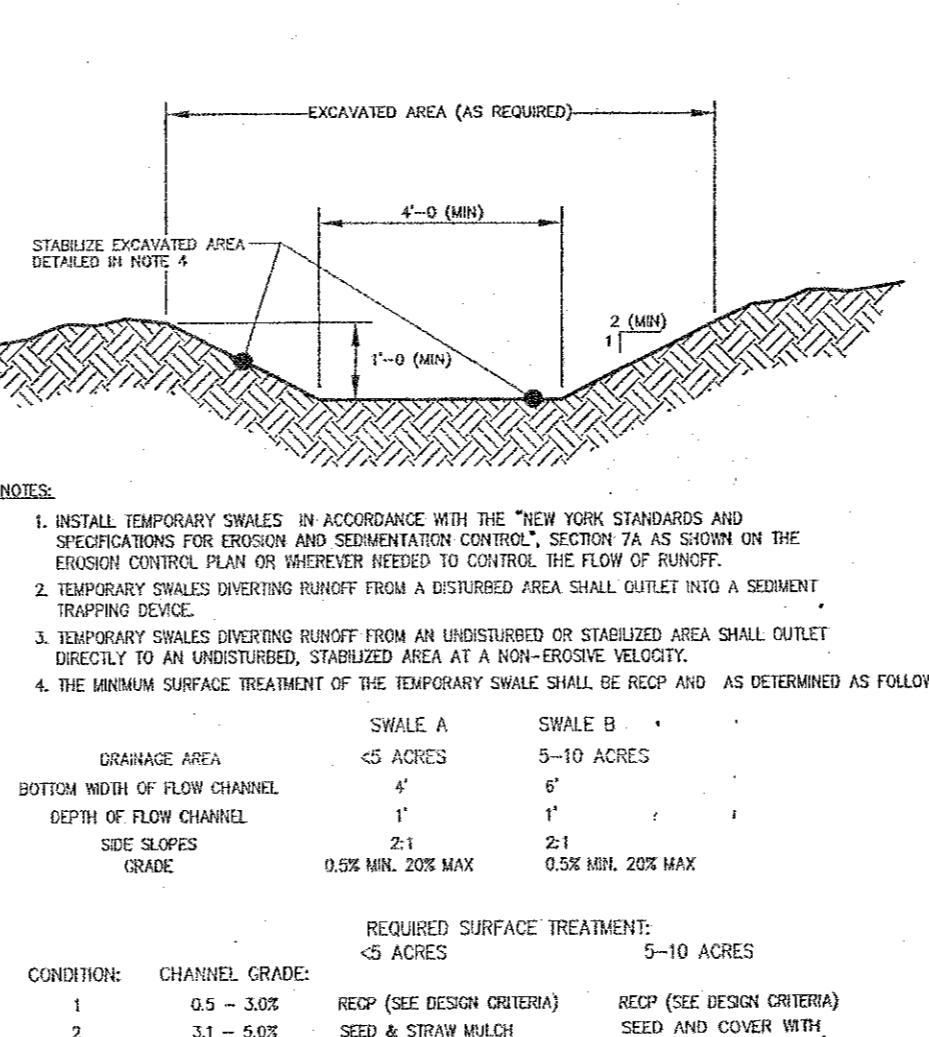


Design Criteria

1. Stabilization of the swale shall be completed within 7 days of installation in accordance with the appropriate standard specifications for vegetative stabilization or stabilization with mulch as determined by the time of year.
2. In highly erodible soils, as defined by the local approving agency, refer to the next higher slope grade for type of stabilization.
3. Recycled Concrete Equivalent shall be concrete broken into the required size, and shall contain no steel reinforcement. New York Standards and Specifications Page SA.4 August 2005 For Erosion and Sediment Control Outlet.
4. Swale shall have an outlet that functions with a minimum of erosion, and dissipates runoff velocity prior to discharge off the site.
5. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin until the drainage area above the swale is adequately stabilized.
6. The on-site location may need to be adjusted to a disturbed area, or utilize the most suitable outlet condition.
7. If a swale is used to divert clean water flows from entering a disturbed area, a sediment trapping device may not be needed.
8. RECP (ROLLED EROSION CONTROL MATTING) SHALL BE JUTE OR EXCELSIOR MATTING, PROVIDE 4" MIN TOPSOIL AND SEED WITH KENTUCKY BLUEGRASS, CREEPING FESCUE AND PERENNIAL RYEGRASS AT A RATE OF 25, 200 AND 10 LBS PER ACRE RESPECTIVELY.
9. AS AN ALTERNATE PRACTICE TO TEMPORARY SWALES, EARTH DIKES MAY BE USED. SEE DETAIL THIS SHEET.



CONCRETE TRUCK WASHOUT SECTION

NOT TO SCALE

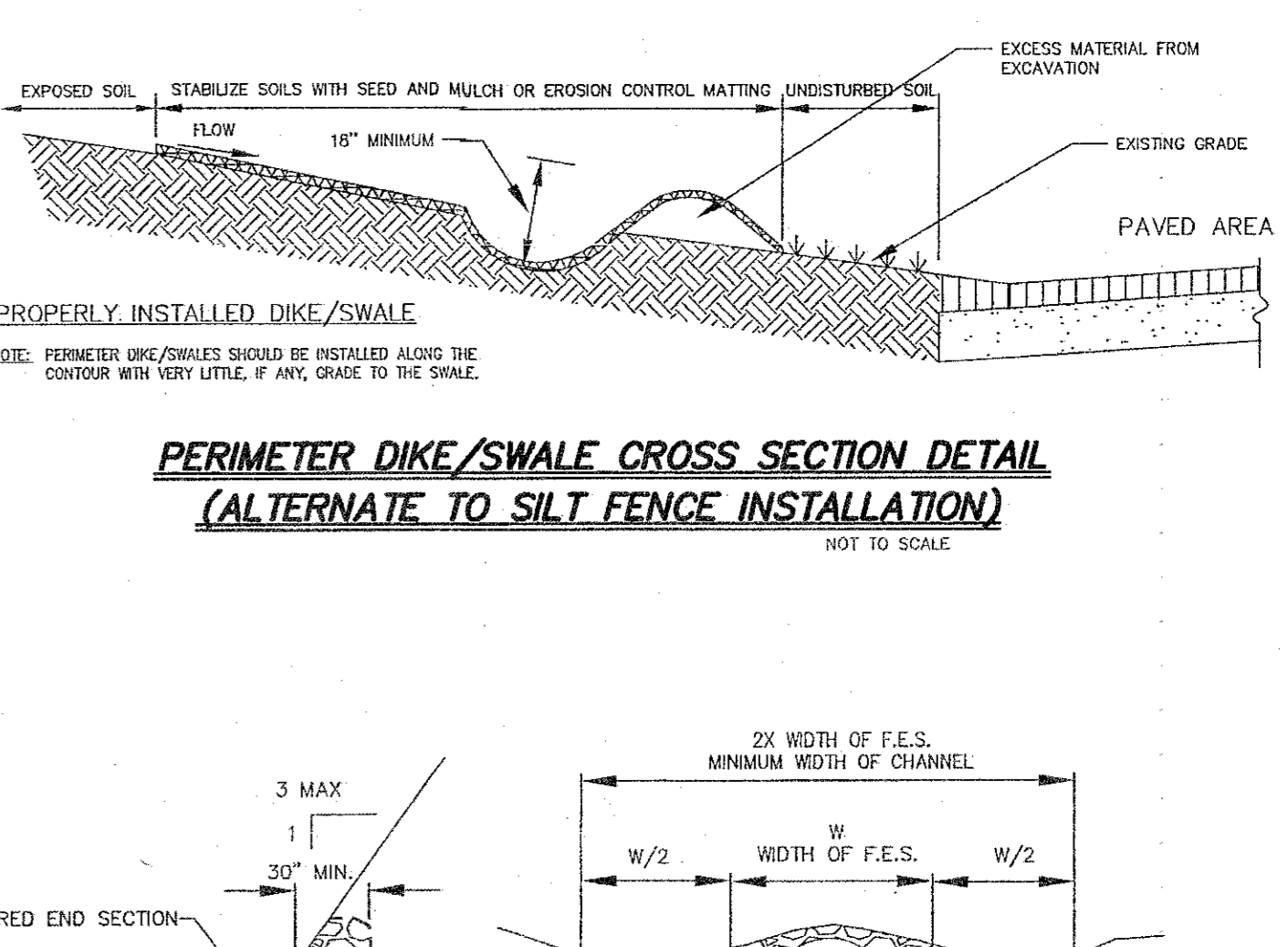
NOTES:

1. INSTALL TEMPORARY SWALES IN ACCORDANCE WITH THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", SECTION 7A AS SHOWN ON THE EROSION CONTROL PLAN OR THEREAFTER NEEDED TO CONTROL THE FLOW OF RUNOFF.
2. TEMPORARY SWALES DIVERTING RUNOFF FROM A DISTURBED AREA SHALL OUTLET INTO A SEDIMENT TRAPPING DEVICE.
3. TEMPORARY SWALES DIVERTING RUNOFF FROM AN UNDISTURBED OR STABILIZED AREA SHALL OUTLET DIRECTLY TO AN UNDISTURBED, STABILIZED AREA AT A NON-EROSIVE VELOCITY.
4. THE UNDER SURFACE TREATMENT OF THE TEMPORARY SWALE SHALL BE RECP AND AS DETERMINED AS FOLLOWS:

CHANNEL GRADE	CHANNEL WIDTH	REQUIRED SURFACE TREATMENT
1. 0.5 - 3.0%	< 5 ACRES	RECP (SEE DESIGN CRITERIA)
2. 3.1 - 5.0%	5 - 10 ACRES	RECP (SEE DESIGN CRITERIA)
3. 5.1 - 8.0%	> 10 ACRES	RECP (SEE DESIGN CRITERIA)
4. 8.1 - 20%	> 10 ACRES	RECP (SEE DESIGN CRITERIA)

5. ALL TREES, BRUSH, STRIPS AND OTHER OBSTRUCTIONS SHALL BE REMOVED AND DEPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTION OF THE SWALE.

6. THE SWALE SHALL BE EXCAVATED OR SHAPED TO MEET THE CROSS SECTION SHOWN ABOVE AND SHALL BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES THAT MAY IMPED FLOW.



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. INSTALL SILT FENCE IN ACCORDANCE WITH THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", SECTION 7A.
2. WOVEN WIRE FENCE SHALL BE 1/2" (4") GA. 6" MAX. MESH OPENING. FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
3. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH SPACED STAPLES 24" AT TOP AND MID SECTION.
4. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE WRAPPED TOGETHER PER DETAIL 4 ON THIS PAGE.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN ACCUMULATION REACHES 1/2 OF DESIGN CAPACITY OF FENCE (1/2 HEIGHT OF FILTER FABRIC) OR WHEN "MOUNDS" DEVELOP IN FENCING.

POSTS: STEEL EITHER "1" OR "2" TYPE OR 2" HARDWOOD

FENCE: WOVEN WIRE, 12 1/2" GA. 6" MAX. MESH OPENING

FILTER CLOTH: FILTER X, MIRAFT 100K, STABILINA THIN OR APPROVED EQUAL.

PREFABRICATED UNIT: GEOTEXT, ENVIROFENCE, OR APPROVED EQUAL.

Design Criteria

Drainage Area - The drainage area for storm drain inlets shall not exceed one acre. The crest elevations of these structures shall provide storage and minimize bypass flow.

Type 1 - Excavated Drop Inlet Protection

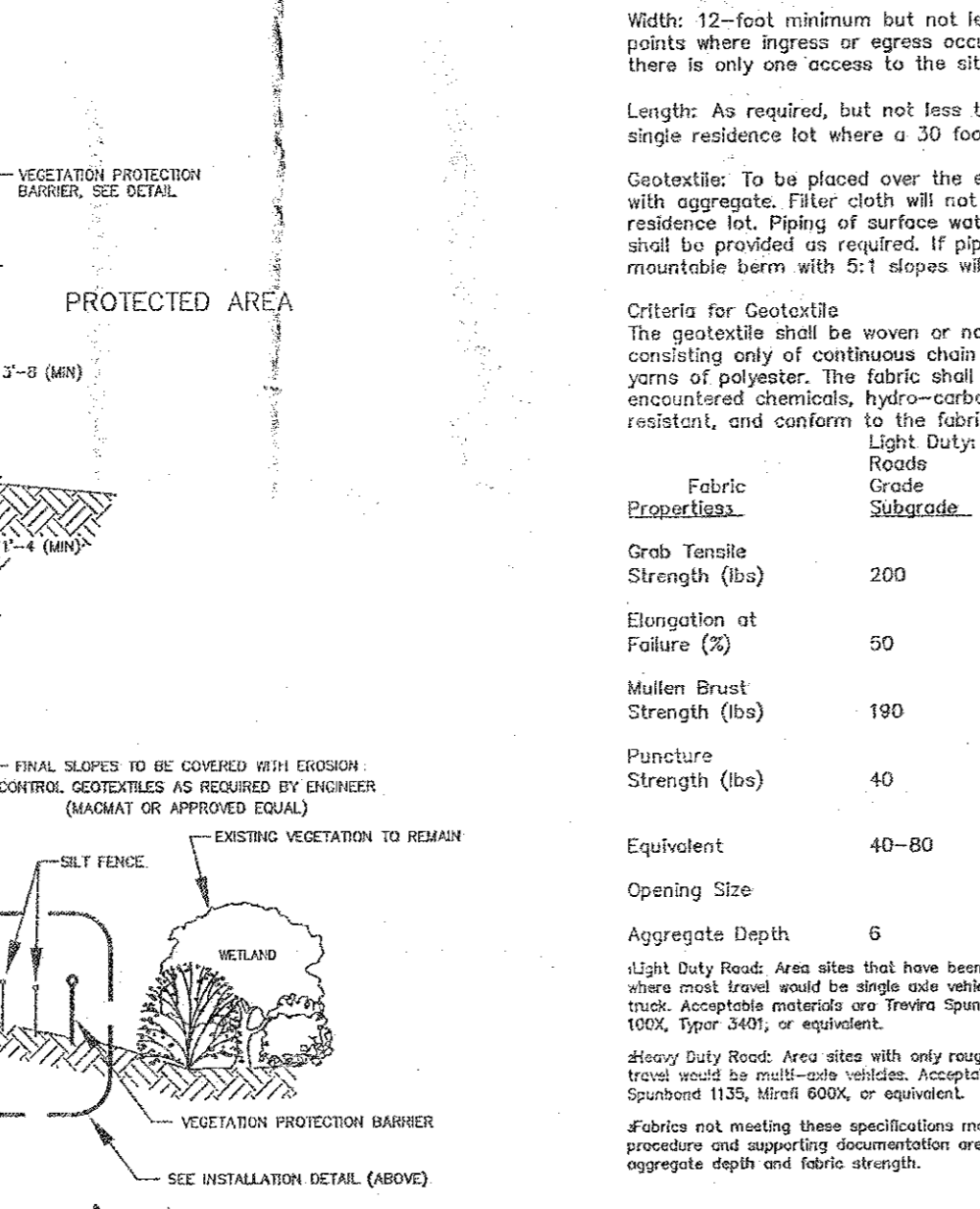
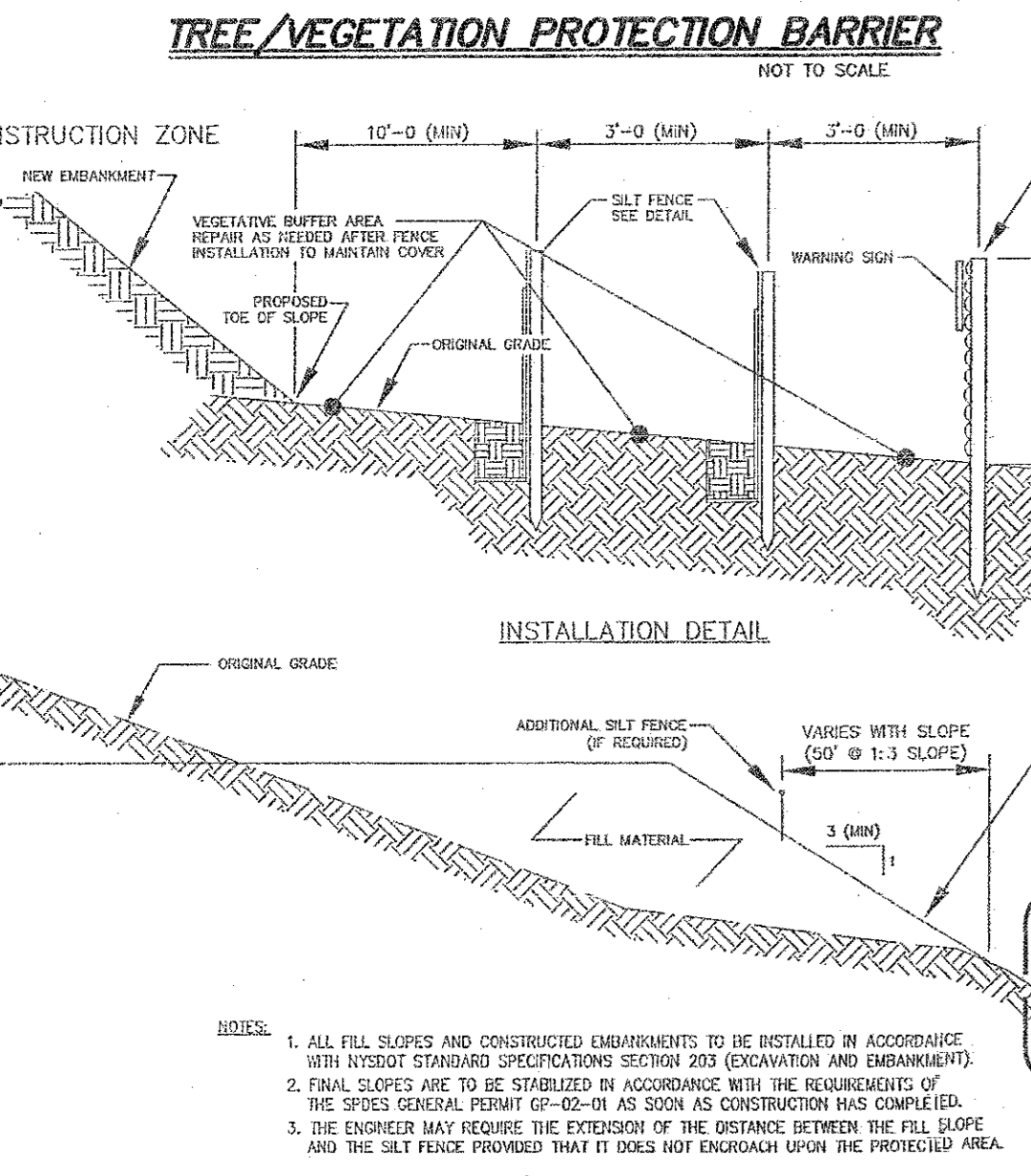
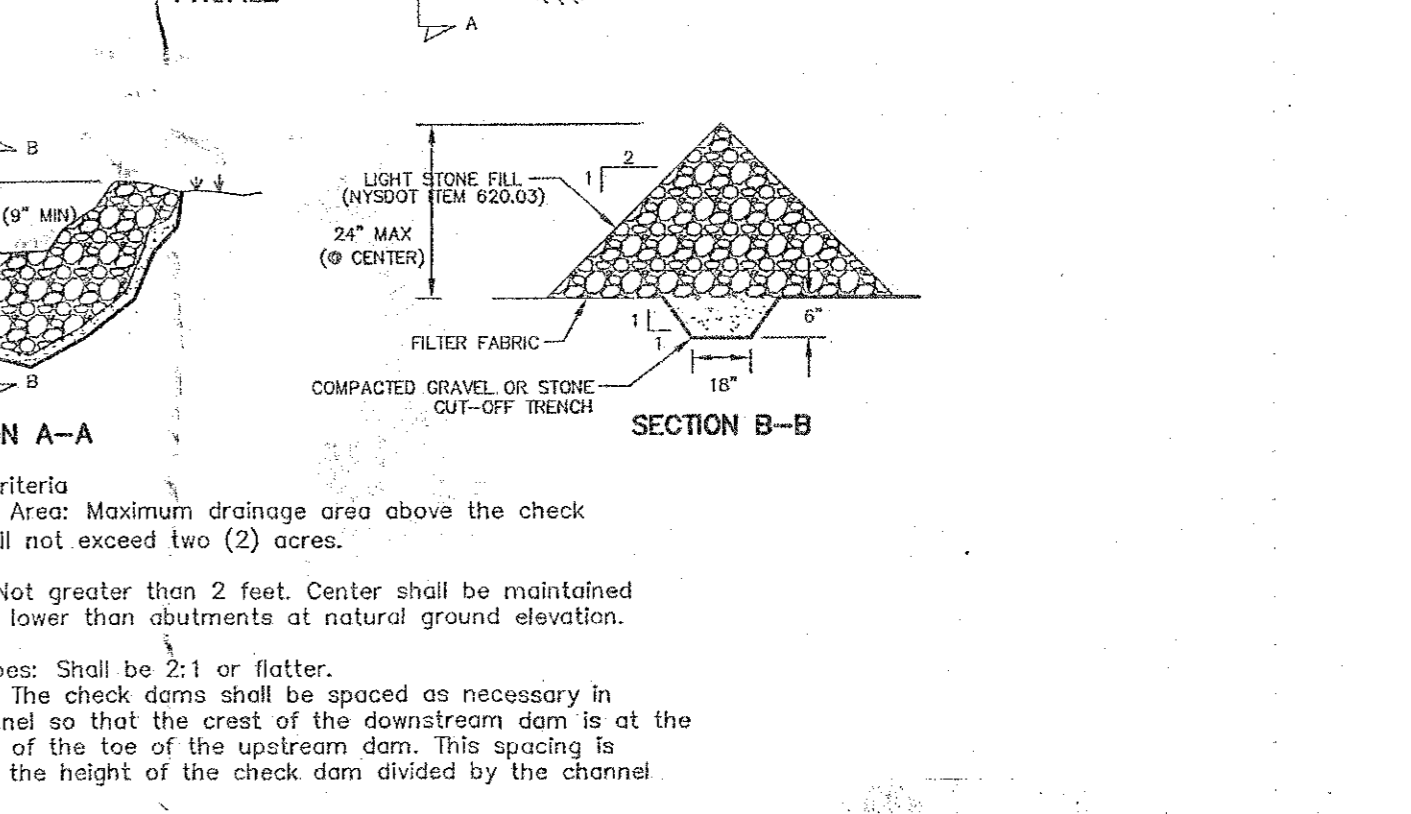
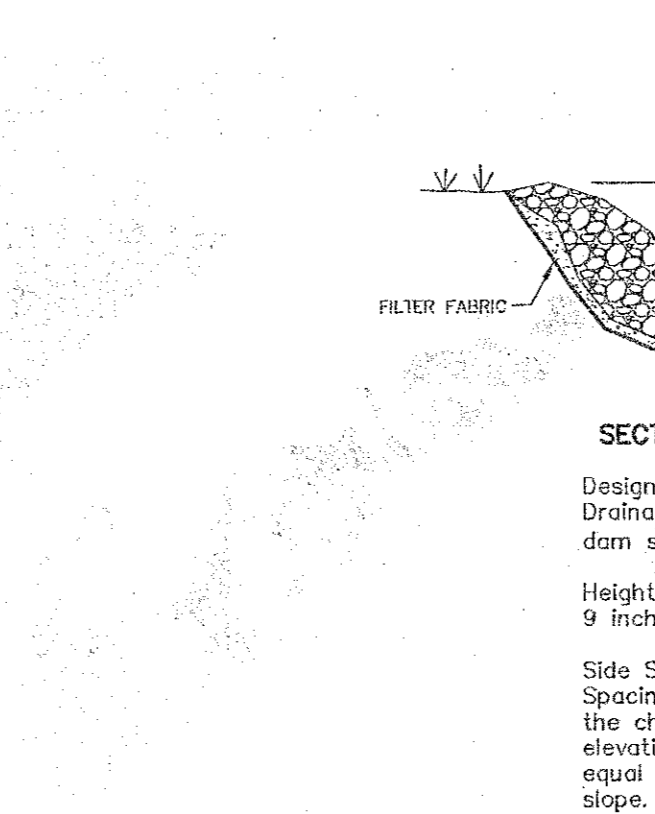
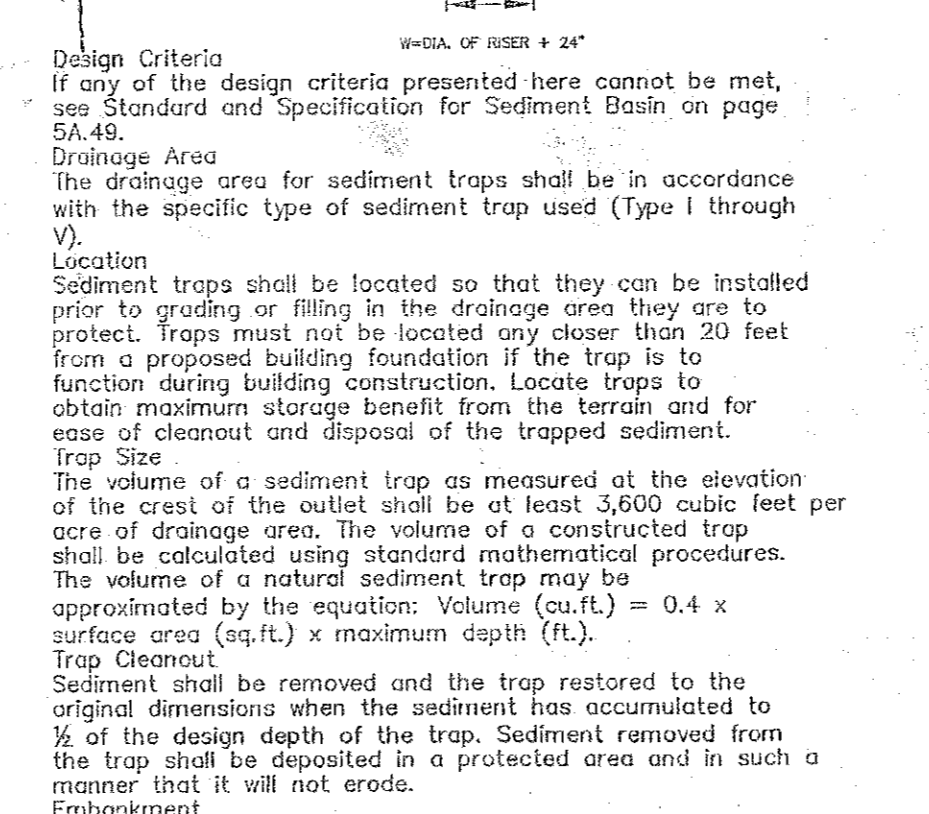
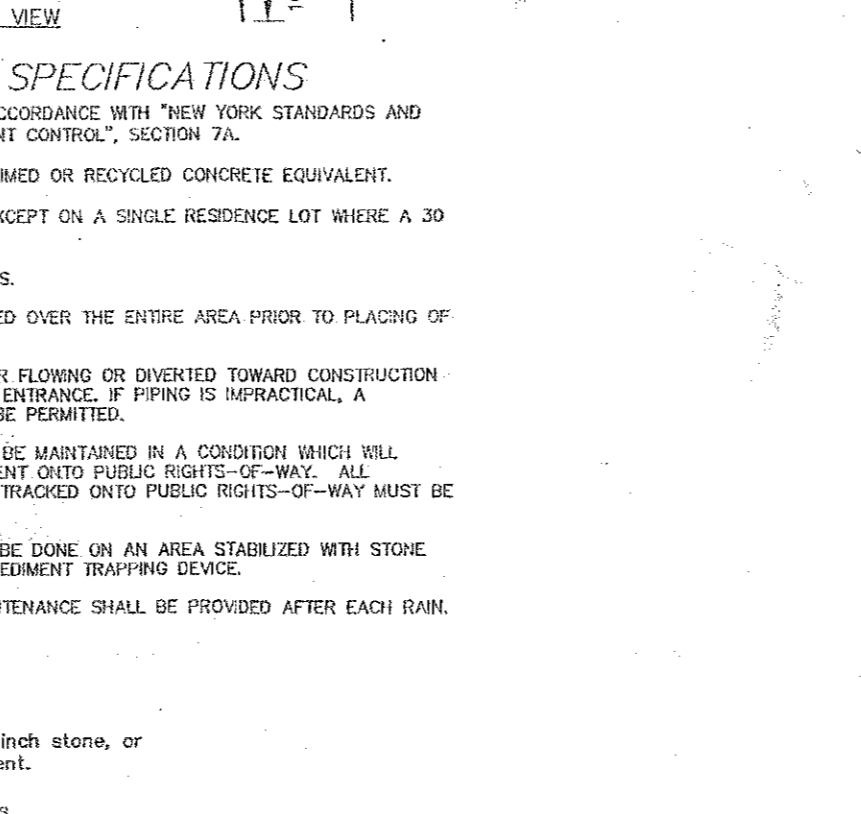
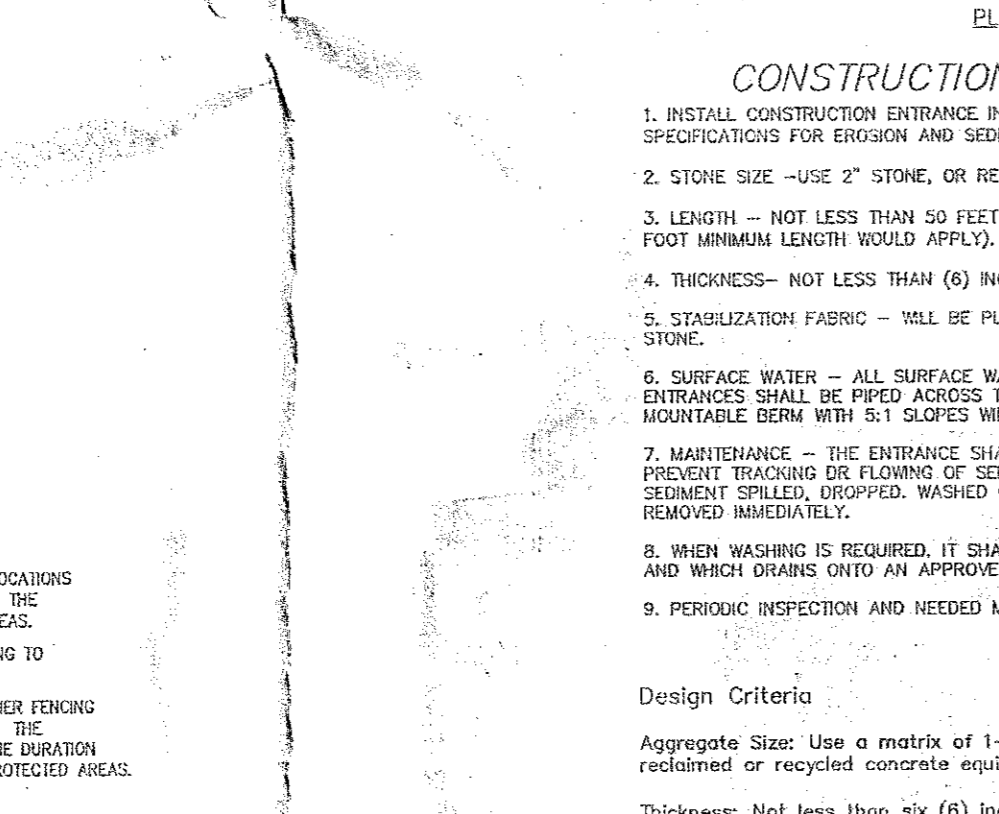
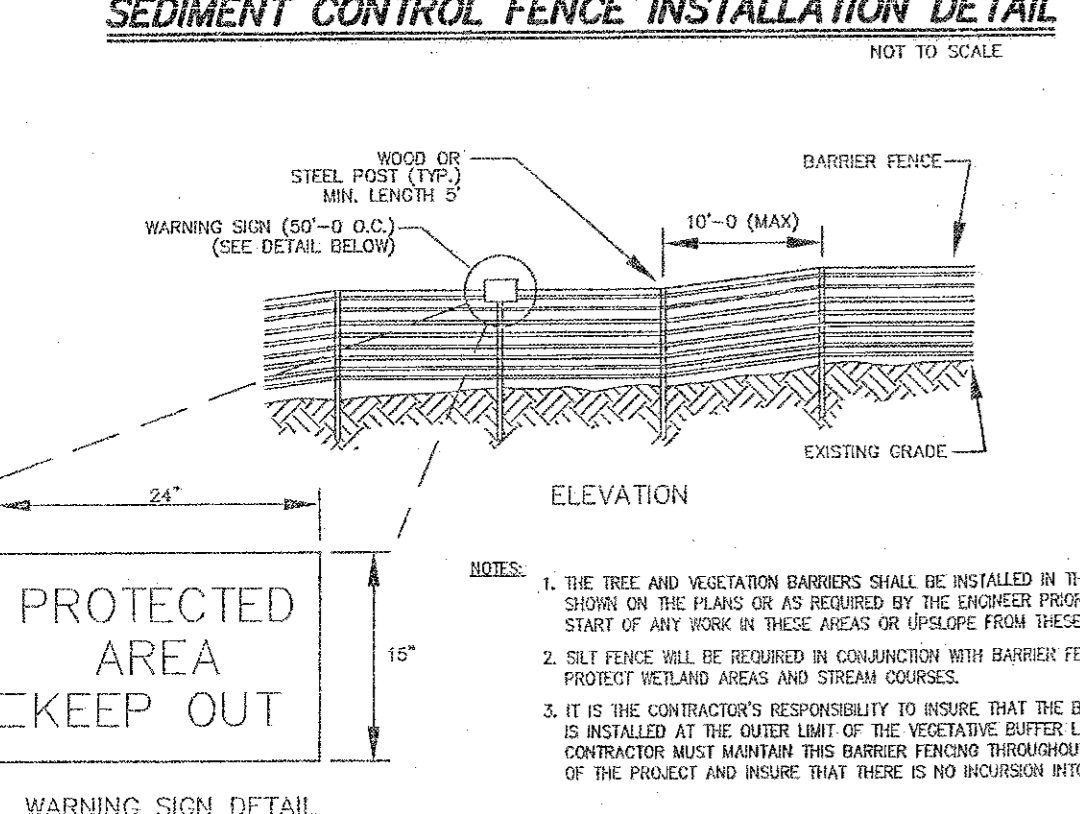
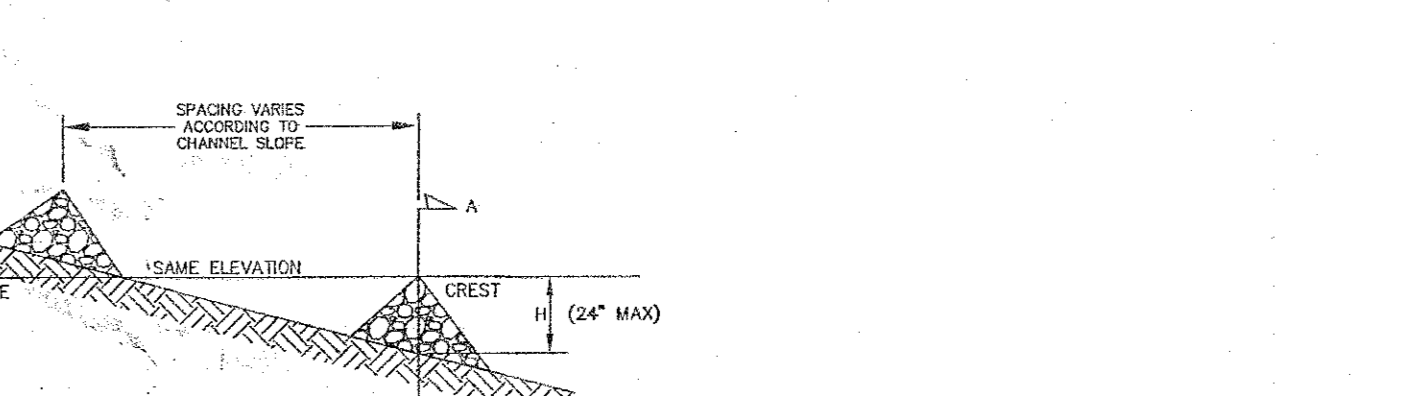
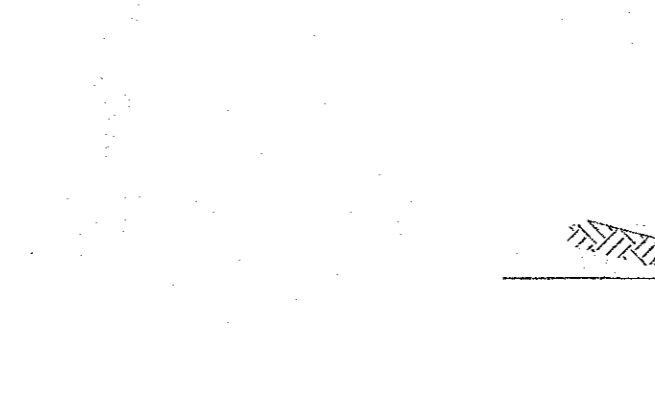
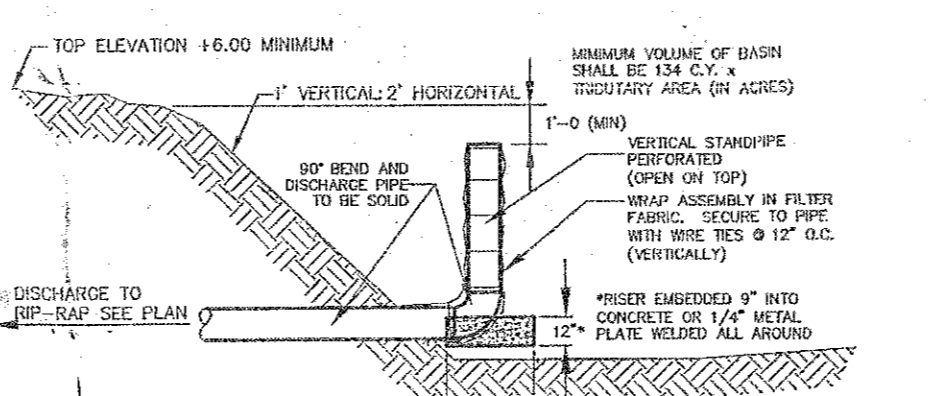
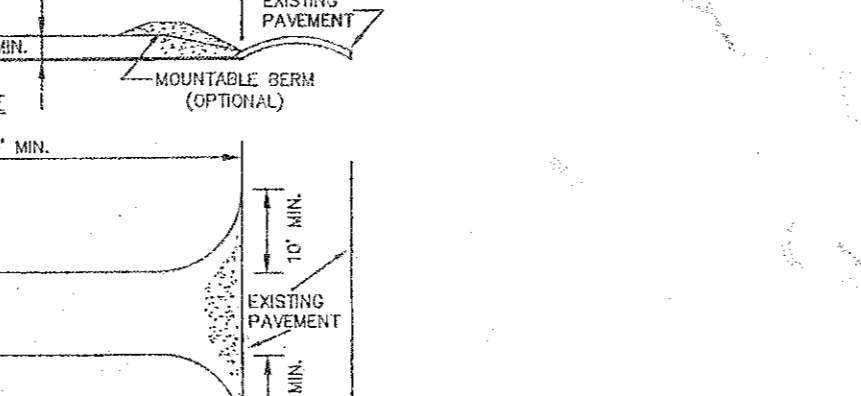
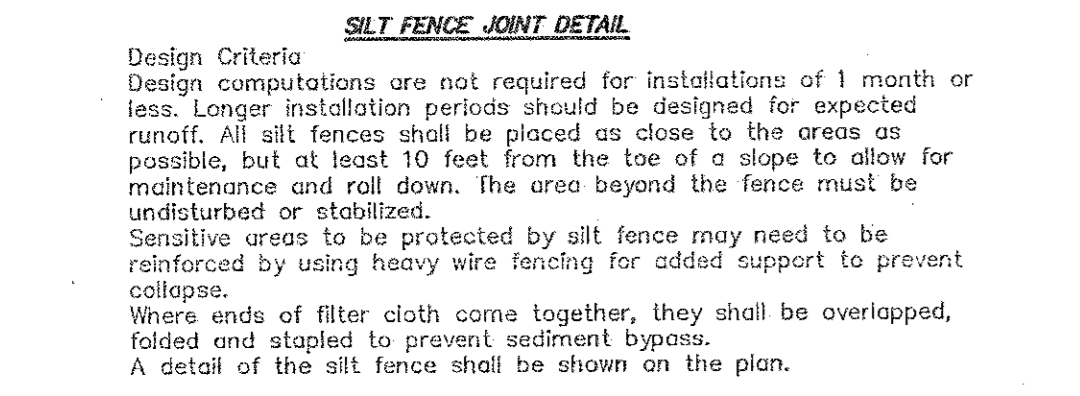
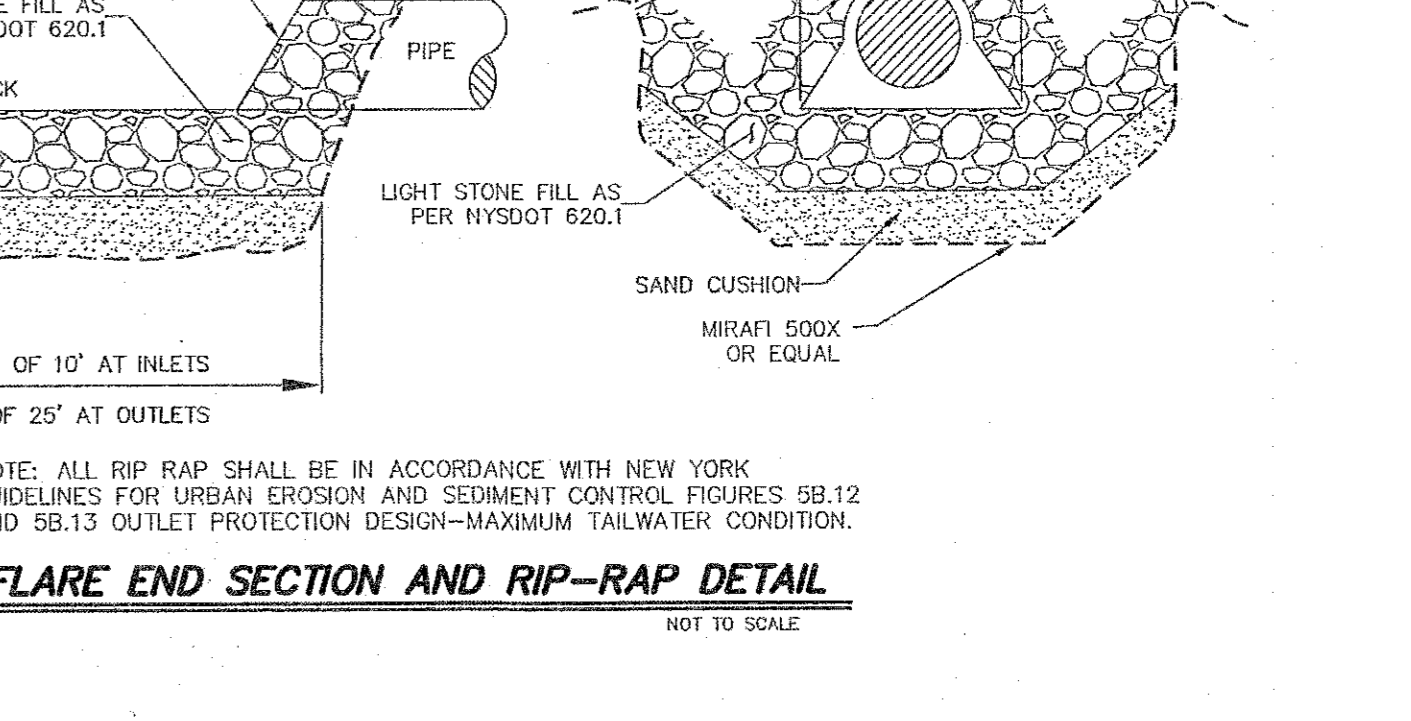
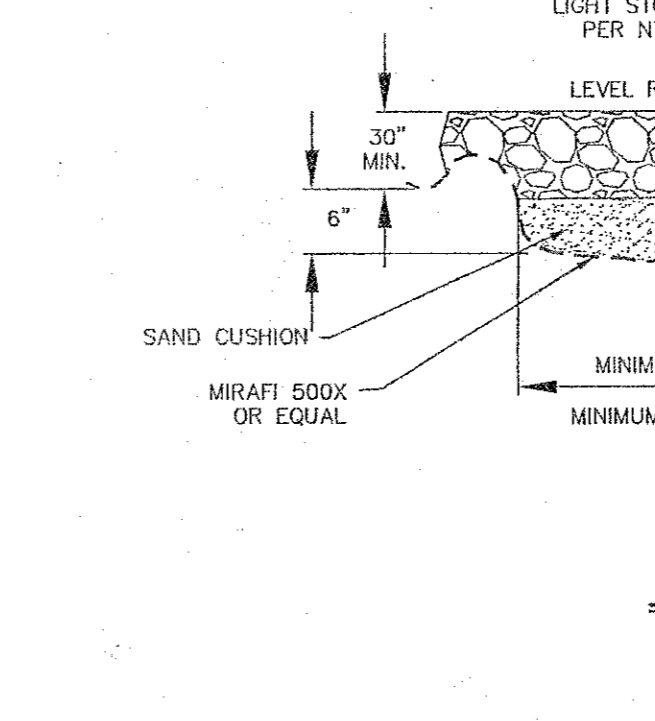
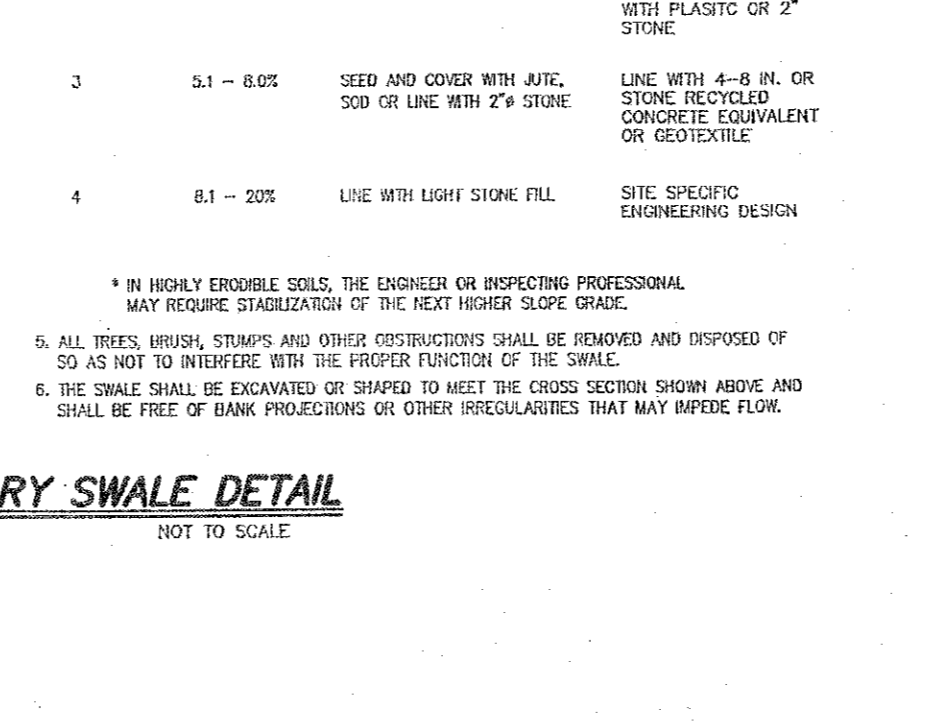
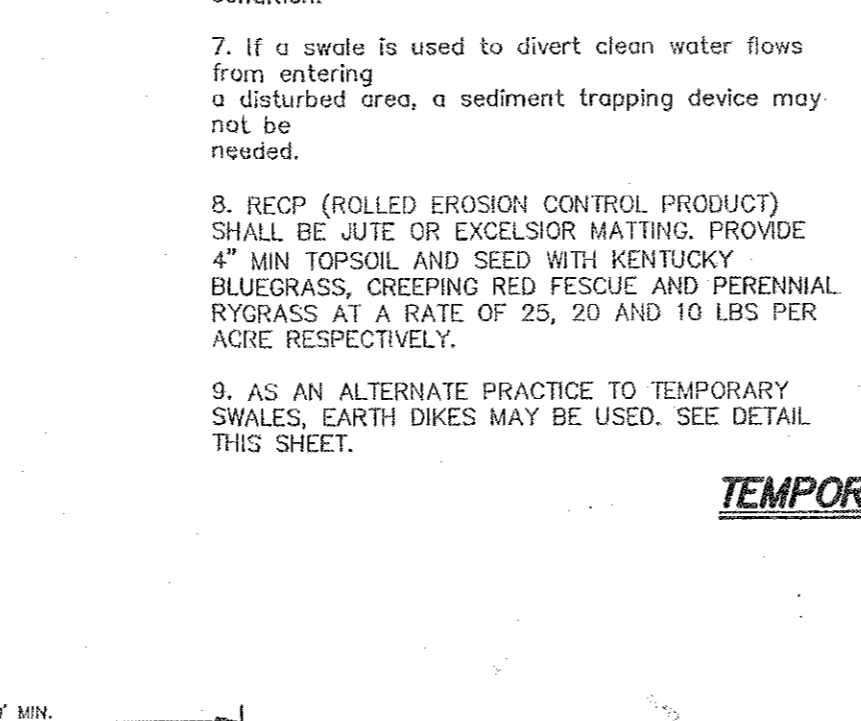
See details for Excavated Drop Inlet Protection.

Limit the drainage area to the inlet device to 1 acre.

Excavated side slopes shall be no steeper than 2:1. The minimum depth shall be 1 foot and the maximum depth 2 feet as measured from the crest of the inlet structure. Slope the excavated basin to fit conditions with the longest dimension oriented toward the longer inflow area to provide maximum trap efficiency. The capacity of this excavated basin shall be determined to contain 100 cubic feet per acre of disturbed area. Weep holes, protected by fabric and stone, should be provided for draining the temporary pool.

Inspect and clean the excavated basin after every storm.

Sediment should be removed when 50 percent of the average volume is achieved. This material should be incorporated into the site in a stabilized manner.



CONSTRUCTION SPECIFICATIONS

1. INSTALL CONSTRUCTION ENTRANCE IN ACCORDANCE WITH "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", SECTION 7A.
2. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
3. LENGTH - NOT LESS THAN 30 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
4. THICKNESS - NOT LESS THAN (8) INCHES.
5. STABILIZATION FABRIC - SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT ACCUMULATED, UNDEPOSITED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINAGE ONTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHOULD BE PROVIDED AFTER EACH RAIN.

Design Criteria

Aggregate Size: Use a matrix of 1-4 inch stone, or reclaimed or recycled concrete equivalent.

Thickness: Not less than six (6) inches.

Width: 12-foot minimum but not less than the full width of points where ingress or egress occurs. 24-foot minimum if there is only one access to the site.

Length: As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum would apply).

Geotextile: To be placed over the entire area to be covered with aggregate. Filter cloth will not be required on a single-family residence lot. Piping of surface water under entrance shall be provided as required. If piping is impracticable, a mounatable berm with 5:1 slopes will be permitted.

Criteria for Geotextile

The geotextile shall be woven or nonwoven fabric consisting only of continuous chain polymeric filaments or yarns of polyester. The fabric shall be inert to commonly encountered chemicals, hydro-carbons, mildew, mildew resistant, and conform to the fabric properties as shown:

Properties	Roads	Haul Roads	Test Method
Grab Tensile Strength (lbs)	200	220	ASTM D1682
Elongation at Failure (%)	50	60	ASTM D1682
Mullen Burst Strength (lbs)	190	430	ASTM D3786
Puncture Strength (lbs)	40	125	ASTM D751 modified
Equivalent	40-80	40-80	US Std Sieve
Opening Size	CW-02215	CW-02215	
Aggregate Depth	6	10	

Light Duty Road: Area sites that have been graded to subgrade and where most travel would be single axle vehicles and an occasional multiple truck. Acceptable materials are Treva Spunbond 1115, Miraft Spunbond 100, Miraft 100K, or equivalent.

Heavy Duty Road: Area sites with only rough grading, and where most travel would be multi-axle vehicles. Acceptable materials are Treva Spunbond 1115, Miraft 100K, or equivalent.

Fabric roll marking these specifications may be used only when design procedure and supporting documentation are supplied to determine aggregate depth and fabric strength.

