

PLAN VIEW

CONSTRUCTION SPECIFICATIONS:

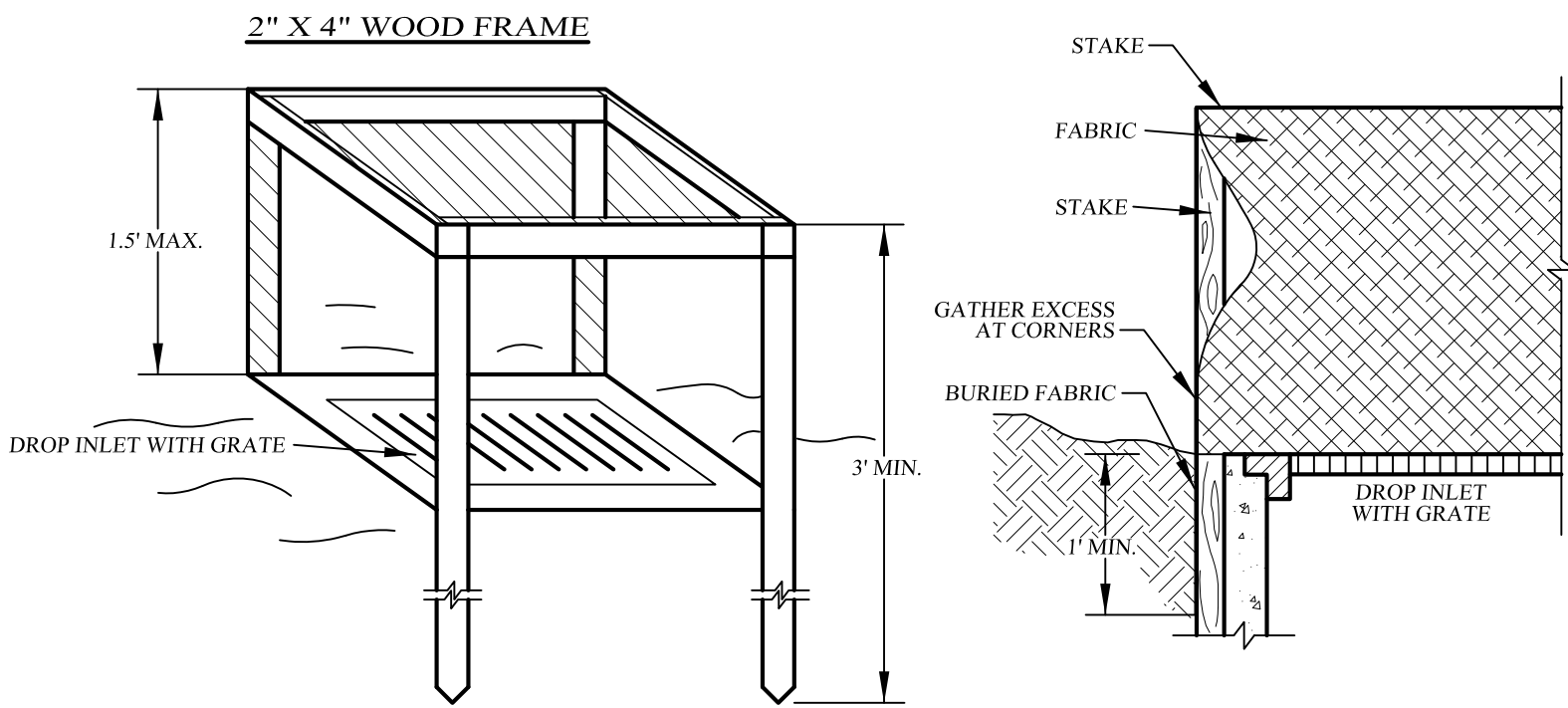
1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH IMPED E NORMAL FLOW.
6. ALL FILLS ARE TO BE MECHANICALLY COMPACTED.
7. ALL EARTH REMOVED AND NOT NEEDED SHALL BE PLACED AS NOT TO INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. REFER TO CHART FOR STABILIZATION OF FLOW CHANNEL.
9. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	A (5 AC OR LESS)	B (5 AC-10 AC)
1.	0.5-3.0 %	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2.	3.1-5.0 %	SEED AND STRAW MULCH	SEED USING JUTE OR EXCELSIOR
3.	5.1-8.0 %	SEED WITH JUTE OR EXCELSIOR SOD	LINED RIP-RAP 4-8"
4.	8.1-20 %	LINED 4-8" RIP-RAP	RECYCLED CONCRETE EQUIVALENT ENGINEERED DESIGN

TEMPORARY DIVERSION SWALE DETAIL

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS:

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM OF 18" DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVERFLOW STABILITY.

FILTER FABRIC DROP INLET PROTECTION

NOT TO SCALE

PERMANENT SEEDING MIXTURES

MODERATE TO STEEP SLOPES AND LOW MAINTENANCE AREAS	
SPECIES	APPLICATION RATE
EMPIRE BIRDFOOT TREFOIL	8 LBS/ACRE
TALL FESCUE	20 LBS/ACRE
RYEGRASS	5 LBS/ACRE
GENERAL RECREATION AREAS AND LAWNS	
SPECIES	APPLICATION RATE
SUNNY SITES (WELL, MODERATELY WELL, AND SOMEWHAT POORLY DRAINED SOILS)	
65% KENTUCKY BLUEGRASS BLEND	85-114 LBS/ACRE
20% PERENNIAL RYEGRASS	26-35 LBS/ACRE
15% FINE FESCUE	19-26 LBS/ACRE
SUNNY DROUGHTY SITES (SOMEWHAT TO EXCESSIVELY DRAINED SOILS)	
65% FINE FESCUE	114-143 LBS/ACRE
15% PERENNIAL RYEGRASS	26-33 LBS/ACRE
20% KENTUCKY BLUEGRASS BLEND	35-44 LBS/ACRE

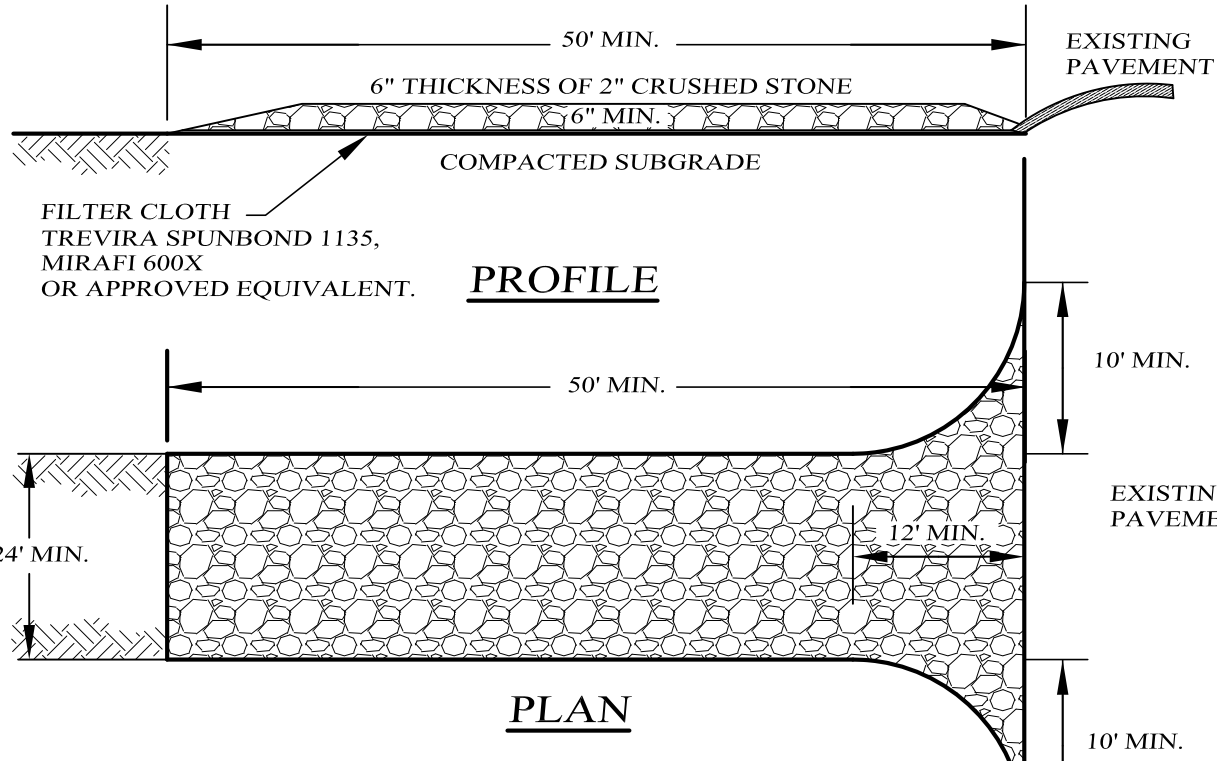
SITE PREPARATION

1. INSTALL NEEDED WATER AND EROSION CONTROL MEASURES AND BRING AREA TO BE SEEDED TO DESIRED GRADES USING A MINIMUM OF 4" OF TOPSOIL.
2. PREPARE SEED BED BY LOOSENING SOIL TO A DEPTH OF 4-6 INCHES
3. LIME TO A pH OF 6.5
4. FERTILIZE PER SOIL TESTS, OR, IF FERTILIZER IS TO BE APPLIED BEFORE SOIL TESTS, APPLY 850 POUNDS OF 5-10-10 OR EQUIVALENT PER ACRE (20 LBS. / 1000 SQ. FT.)
5. INCORPORATE LIME AND FERTILIZER IN TOP 2-4 INCHES OF SOIL.
6. SMOOTH. REMOVE ALL STONES OVER 1" IN DIAMETER, STICKS AND FOREIGN MATTER. FIRM SEED BED.
7. APPLY SEED PER PERMANENT SEEDING SCHEDULE.

SLOPE STABILIZATION, SEEDING METHOD & MULCHING

SLOPES OF 4:1 OR GREATER (HORIZONTAL:VERTICAL)
SLOPES SHALL BE HYDROSEEDED WITH THE MIXTURES AND RATES INDICATED IN THE PERMANENT SEEDING MIXTURE SCHEDULE. STRAW OR HAY MULCH SHALL BE APPLIED AT A RATE OF 2 TONS/ACRE WITH A WOOD FIBER MULCH APPLIED AT A RATE OF 300 LBS/ACRE. NETTING AS MANUFACTURED BY MIRAFI OR APPROVED EQUIVALENT. NETTING TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS.

GENTLE SLOPES AND FLAT AREAS
AREAS SHALL BE SEEDED BY HYDROSEEDING OR BROADCASTING WITH THE MIXTURES AND RATES INDICATED ON THE PERMANENT SEEDING MIXTURE SCHEDULE. HYDROSEEDED AREAS SHALL BE MULCHED WITH A WOOD FIBER MULCH APPLIED AT A RATE OF 300 LBS/ACRE. BROADCAST AREAS SHALL MULCHED WITH HAY OR STRAW AT A RATE OF 2 TONS/ACRE. AREAS SEEDED BY BROADCASTING SHALL BE LIGHTLY RAKED AND PACKED PRIOR TO PLACING MULCH.



CONSTRUCTION SPECIFICATIONS:

1. ENTRANCE SHALL BE MAINTAINED AS CONDITIONS DEMAND TO PREVENT TRACKING OF SEDIMENT ONTO PUBLIC R.O.W. SPILLED OR DROPPED SEDIMENT SHALL BE REMOVED IMMEDIATELY.
2. A CRUSHED STONE, VEHICLE WHEEL-CLEANING BLANKET WILL BE INSTALLED WHERE A CONSTRUCTION ACCESS ROAD INTERSECTS ANY PAVED ROADWAY. THE BLANKET SHALL BE COMPOSED OF 6" DEPTH OF 2" CRUSHED STONE. SHALL BE AT LEAST 24" WIDE x 50' LONG AND SHALL BE PLACED ON COMPACTED SUB-GRADE.
3. A FILTER CLOTH WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
4. ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTAINABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
5. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

FENCE PROPERTIES	MINIMUM VALUE	STANDARD
GRAB TENSILE STRENGTH (LBS)	90	ASTMD 1682
ELONGATION AT FAILURE (%)	50	ASTM D1682
MULEN BURST STRENGTH (PSI)	190	ASTM D3786
PUNCTURE STRENGTH	40	ASTM D751 (MODIFIED)
SLURRY FLOW RATE (GAL/MIN/SF)	0.3	US STD SIEVE CW-02215
EQUILIVENT OPENING	40-80	ASTM G-26
ULTRAVIOLET RADIATION STABILITY (%)	90	ASTM G-26

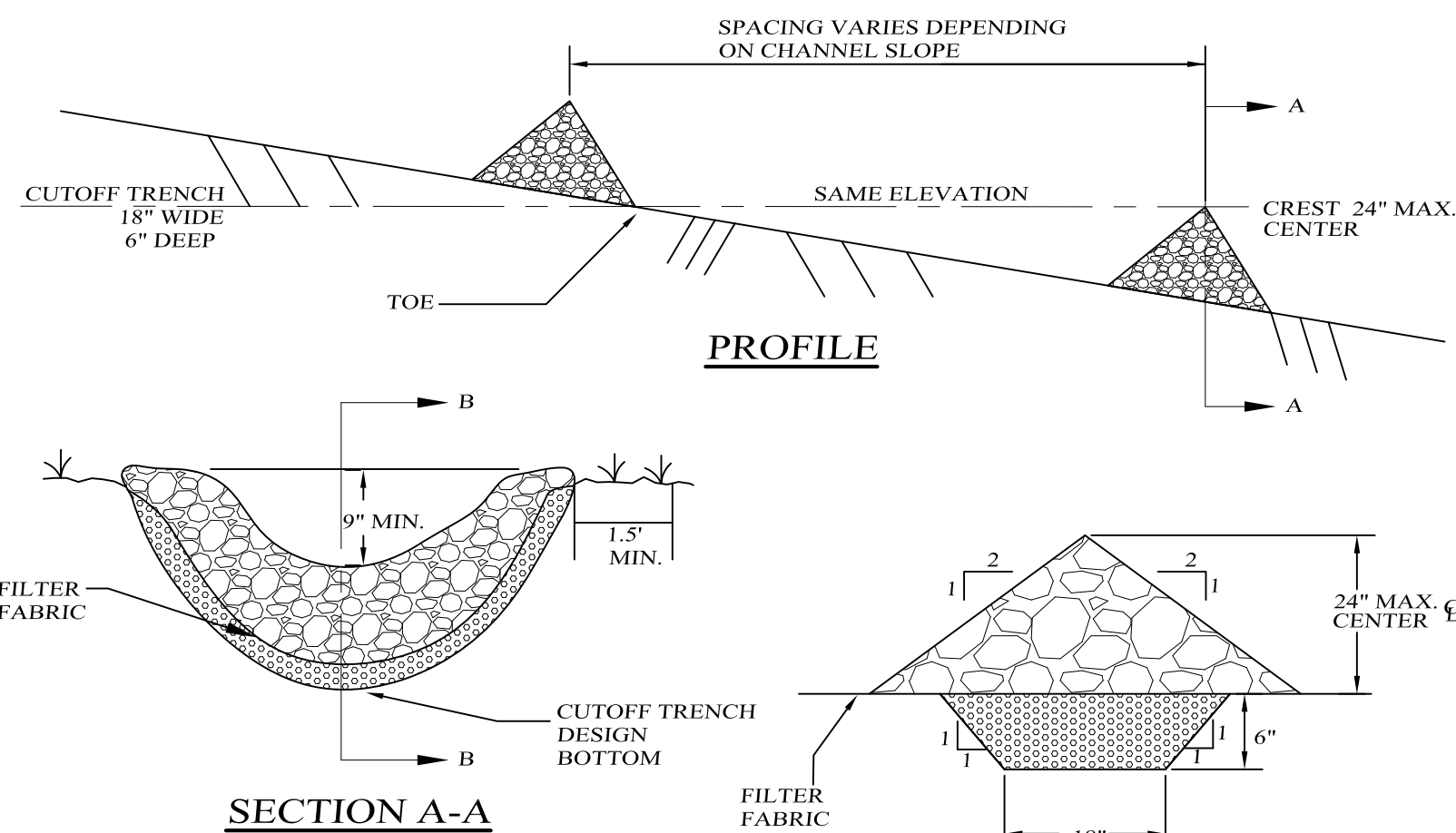
SLOPE STEEPNESS	MAXIMUM FENCE SPACING (FT)
2:1	25
3:1	50
4:1	75
5:1 OR FLATTER	100

NOTES:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 12" AT TOP AND MID SECTION
3. ALL SILT FENCES SHALL RUN PARALLEL TO THE CONTOUR OF THE LAND.
4. ALL SILT FENCES SHALL MEET THE MINIMUM REQUIREMENTS AS STATED UNLESS OTHERWISE NOTED AND APPROVED BY THE BUILDING INSPECTOR AND ENGINEER.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
6. THE MAXIMUM TRIBUTARY DRAINAGE AREA FOR OVERLAND FLOW TO A SILT FENCE SHALL NOT EXCEED 1/4 ACRE PER 100 L.F. OF FENCE.

FILTER FABRIC SILT FENCE DETAIL

NOT TO SCALE

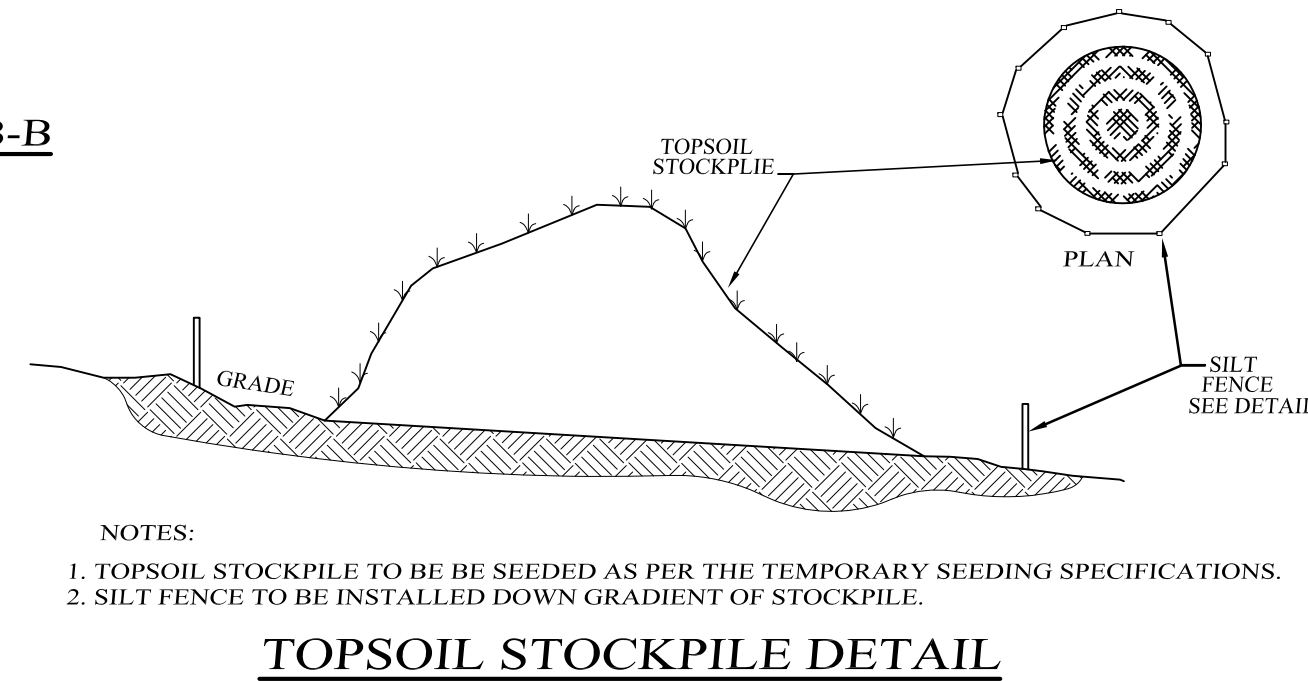


CONSTRUCTION SPECIFICATIONS:

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 ELEVATION OF THE CREST OF THE DOWN STREAM DAM IS AT THE SAME ELEVATION OF THE TOE 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 STONES.
6. MAXIMUM DRAINAGE AREA IS 2 ACRES ABOVE THE CHECK DAM.

TEMPORARY STONE CHECK DAM DETAIL

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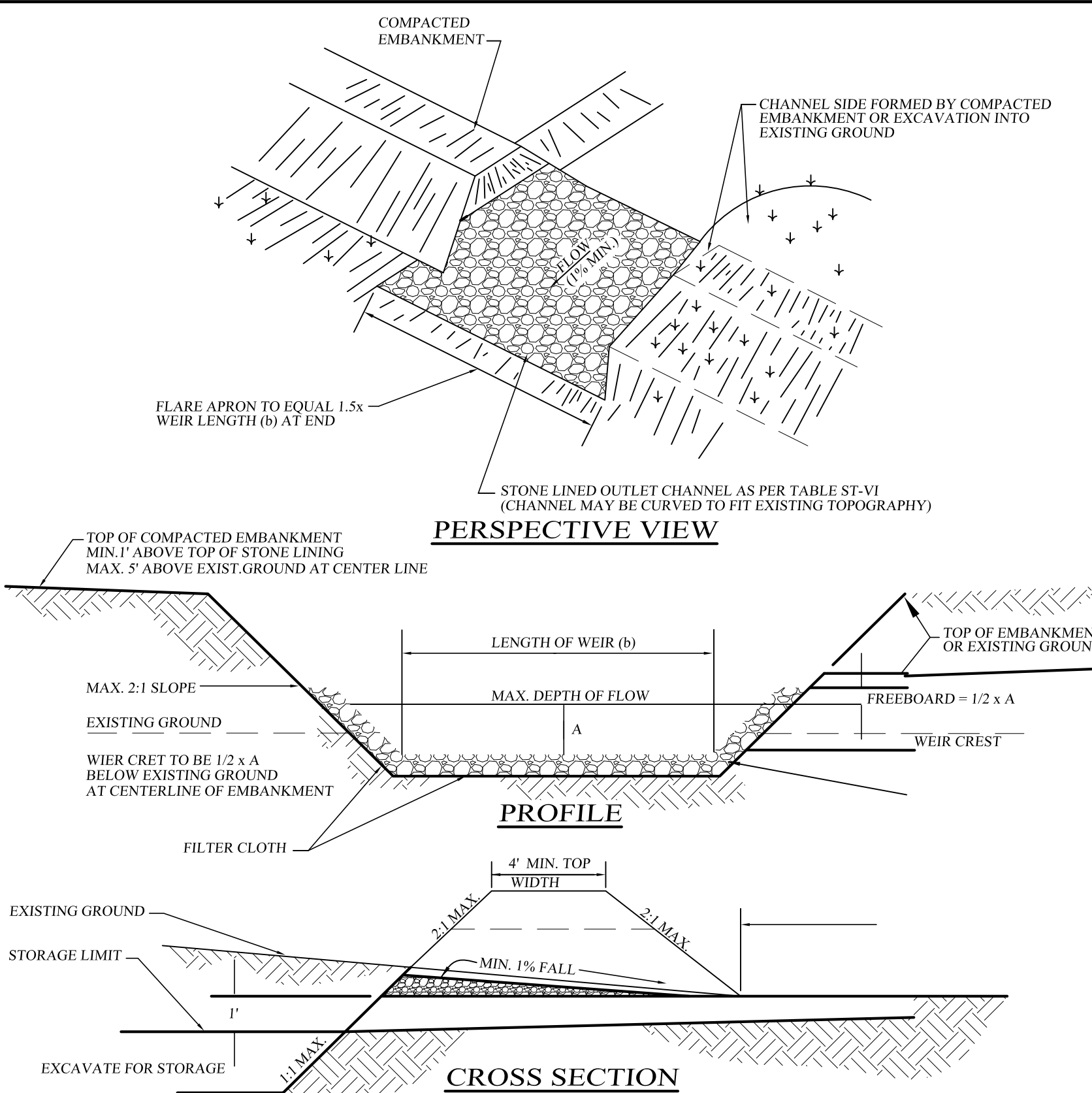


NOTES:

1. TOPSOIL STOCKPILE TO BE SEEDED AS PER THE TEMPORARY SEEDING SPECIFICATIONS.
2. SILT FENCE TO BE INSTALLED DOWN GRADIENT OF STOCKPILE.

TOPSOIL STOCKPILE DETAIL

NOT TO SCALE



RIPRAP OUTLET SEDIMENT TRAP

NOT TO SCALE

MAX.DRAINAGE AREA = 15 ACRES

SEDIMENT TRAP CRITERIA

TRAP TYPE	RIP RAP OUTLET SEDIMENT TRAP
DRAINAGE AREA	5+ ACRES
STORAGE REQUIRED	18,000 cu. ft.
STORAGE PROVIDED	20,000 cu. ft.
DIMENSIONS AT "AVE." WATER HT.	30' x 80'
DEPTH BELOW BASE OF WEIR (AVG.)	4'
CHANNEL DEPTH	1.5'
WEIR LENGTH	5'
EMBANKMENT HEIGHT	5'

TOWN OF BLOOMING GROVE APPROVAL

NOT FOR OCHD REVIEW OR APPROVAL
THIS SHEET SHALL BE CONSIDERED INCOMPLETE AND INVALID UNLESS ACCOMPANIED BY SHEETS NUMBER 1 THRU 10 IN THE SET OF 10.

CHESTERDALE ESTATES

TOWN OF CHESTER, ORANGE COUNTY, NEW YORK

PROJECT TITLE

EROSION CONTROL DETAILS

DRAWING TITLE

KIRK ROTHER, P.E.
CONSULTING ENGINEER, PLLC

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DATE	REVISIONS
08-02-18	REV. PER BLOOMING GROVE WORKSHOP
11-18-09	REV. PER TOWN ENG. COMMENTS
03-03-08	GENERAL REV.
11-30-06	TOWN ENG. COMMENTS
06-14-06	INITIAL PREPARATION

DATE	REVISIONS	KIRK ROTHER, P.E.	N.Y.S. LIC. NO. 079053	DATE
D.O.T. SHEET #	D.E.C. SHEET #	O.C.H.D. SHEET #	SHEET #	
N.A.	N.A.	N.A.		
CAD #	PROJECT #	SCALE		
04182 SP	04182.0	AS SHOWN		