

- CONSTRUCTION SPECIFICATIONS**
- Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
 - Length - As required, but not less than 10 feet (except on a single residence lot where a 30 foot minimum length would apply).
 - Thickness - Not less than six (6) inches.
 - Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
 - Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
 - 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.
 - Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
 - Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
 - Periodic inspection and needed maintenance shall be provided after each rain event.

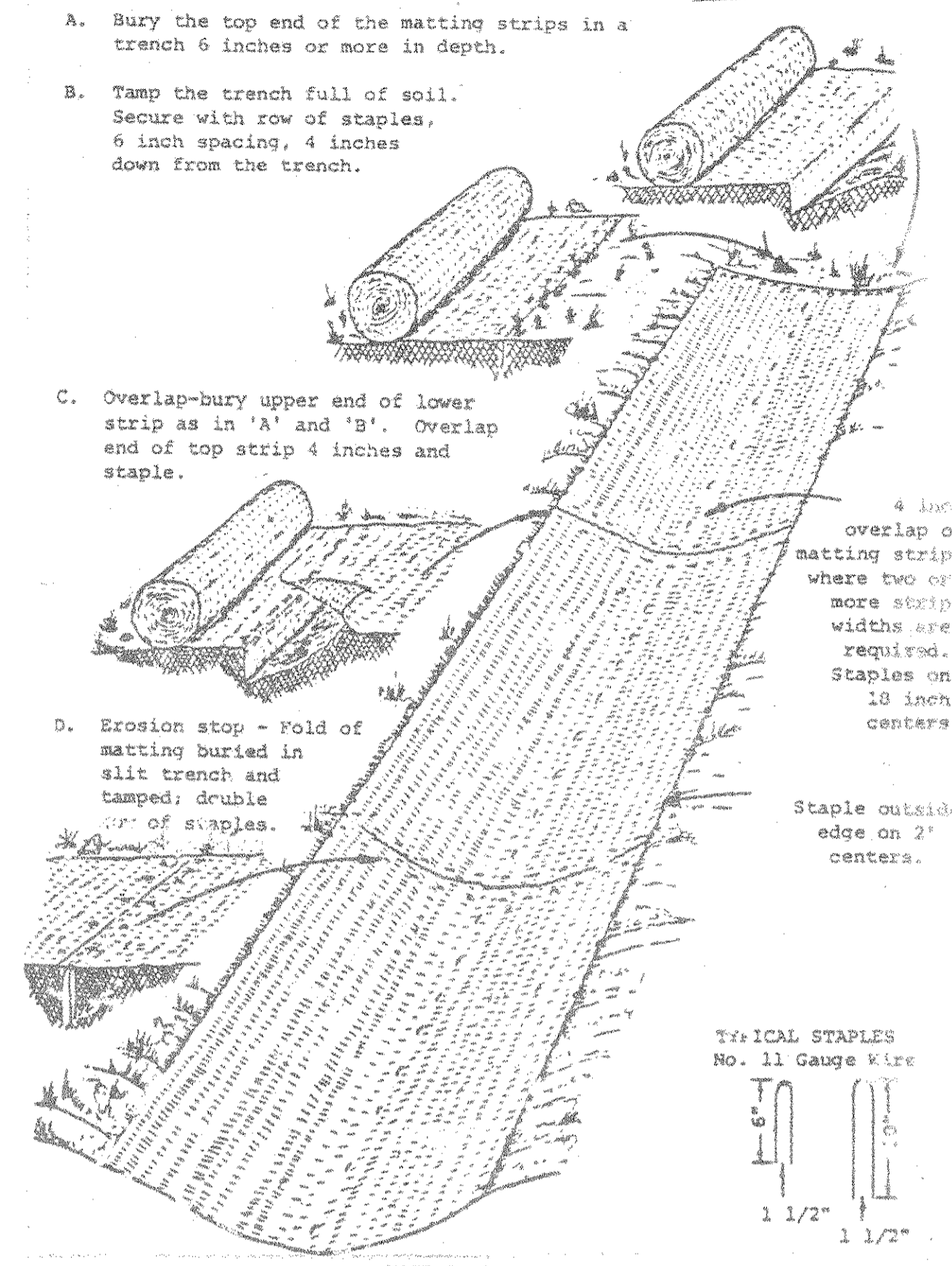
Criteria for Filter Cloth

The filter cloth shall be a woven or nonwoven fabric consisting only of continuous chain polymeric filaments or yarns of polyester. The fabric shall be inert to commonly encountered chemicals, hydrocarbons, mildew, rot resistant, and conform to the properties of the following table:

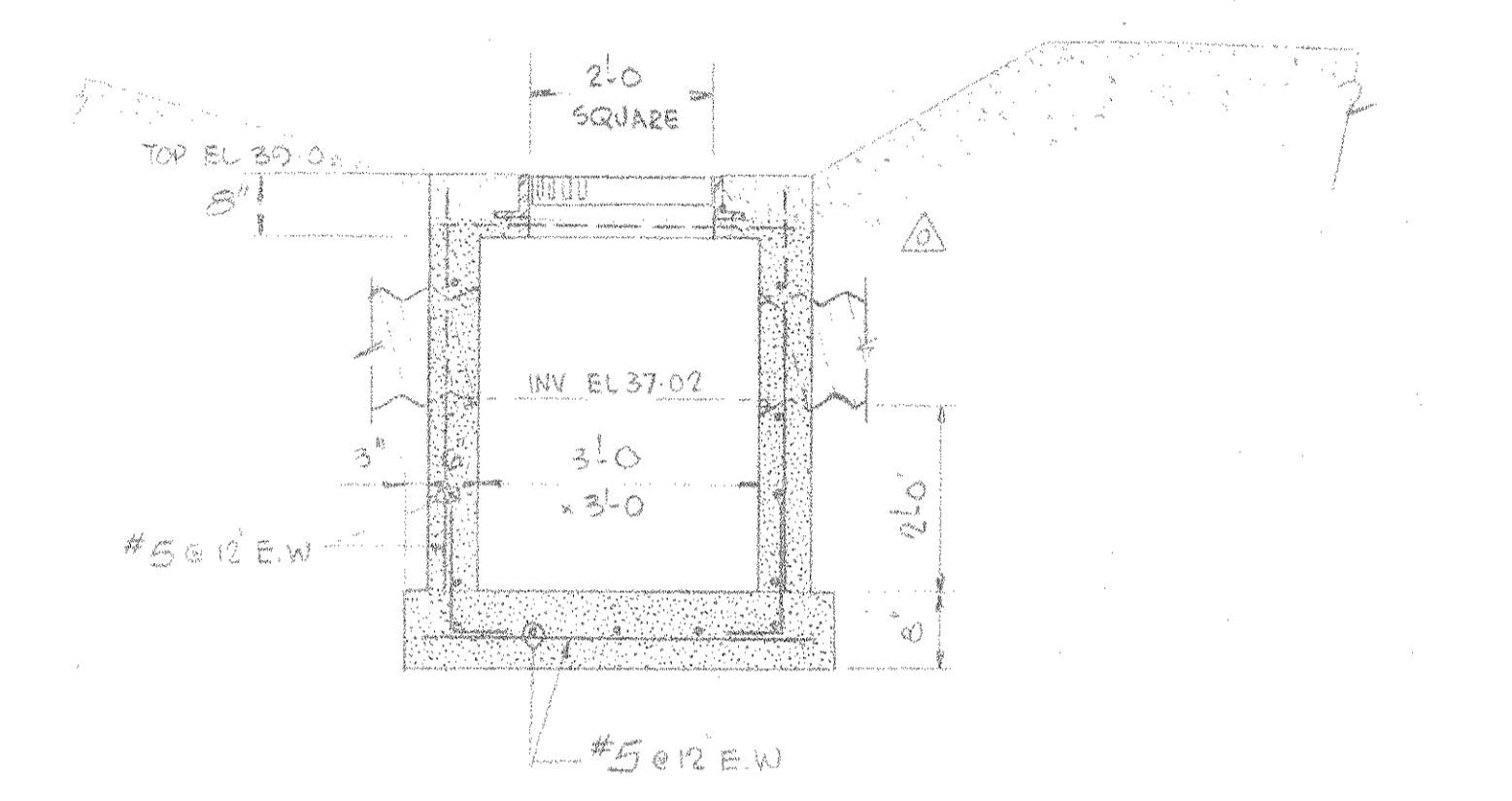
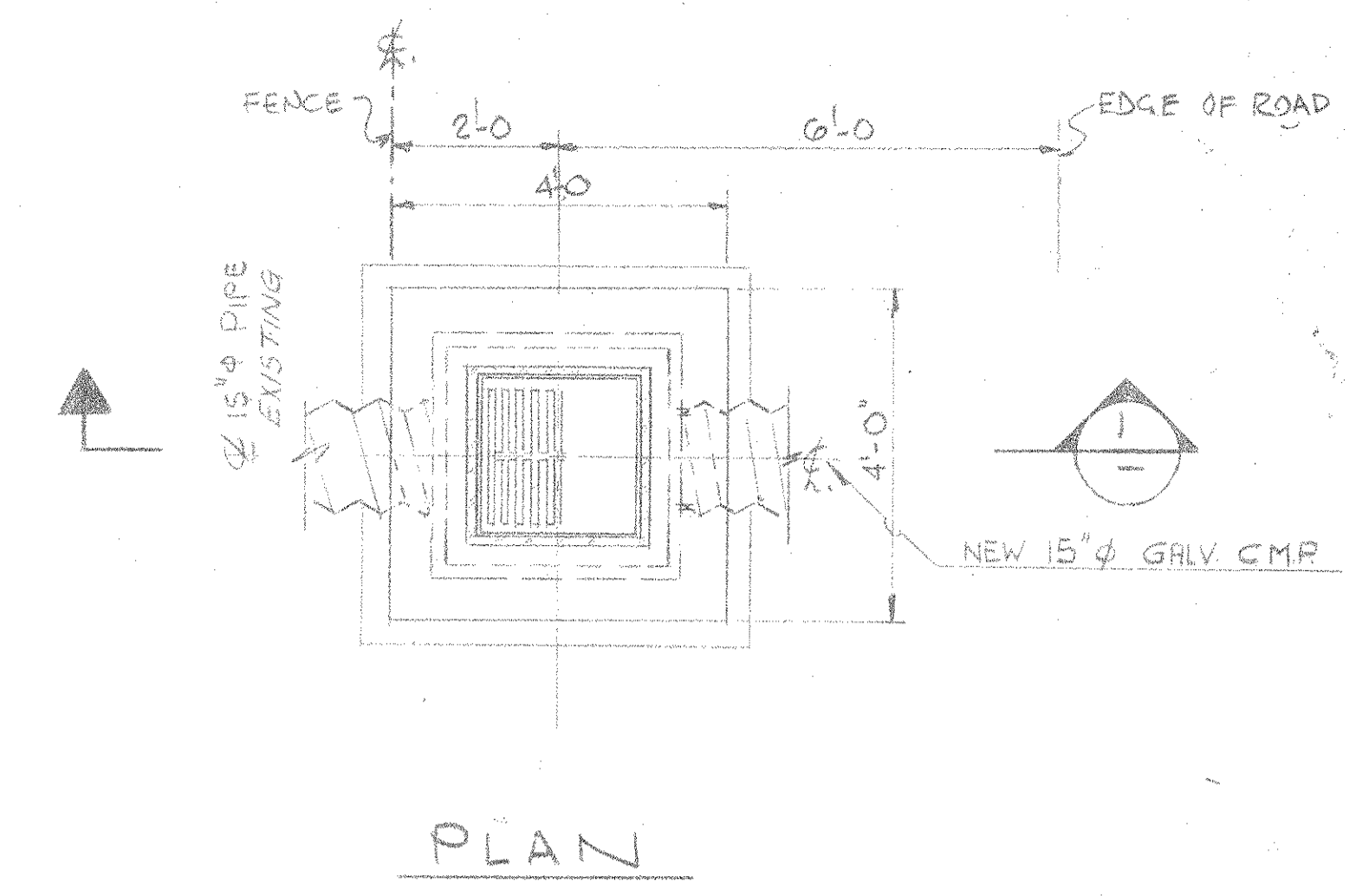
Fabric Properties /	Heavy Duty Sault Ste. Marie Rough Graded	Test Method
Grab Tensile Strength (lbs)	320	ASTM D1692
Elongation at Failure (%)	60	ASTM D1682
Hullen Burst Strength (lbs)	430	ASTM D3786
Tensile Strength (lbs)	125	ASTM D751 modified
Equivalent Opening Size	40 - 80	HE Std Sieve CW-02213
Aggregate Depth (in)	19	

Heavy Duty Road: Are alike with only rough grading, and where most travel would be multi-axle vehicles. Trevira Spunbond 1135, Miraflex 600X, or equivalent.

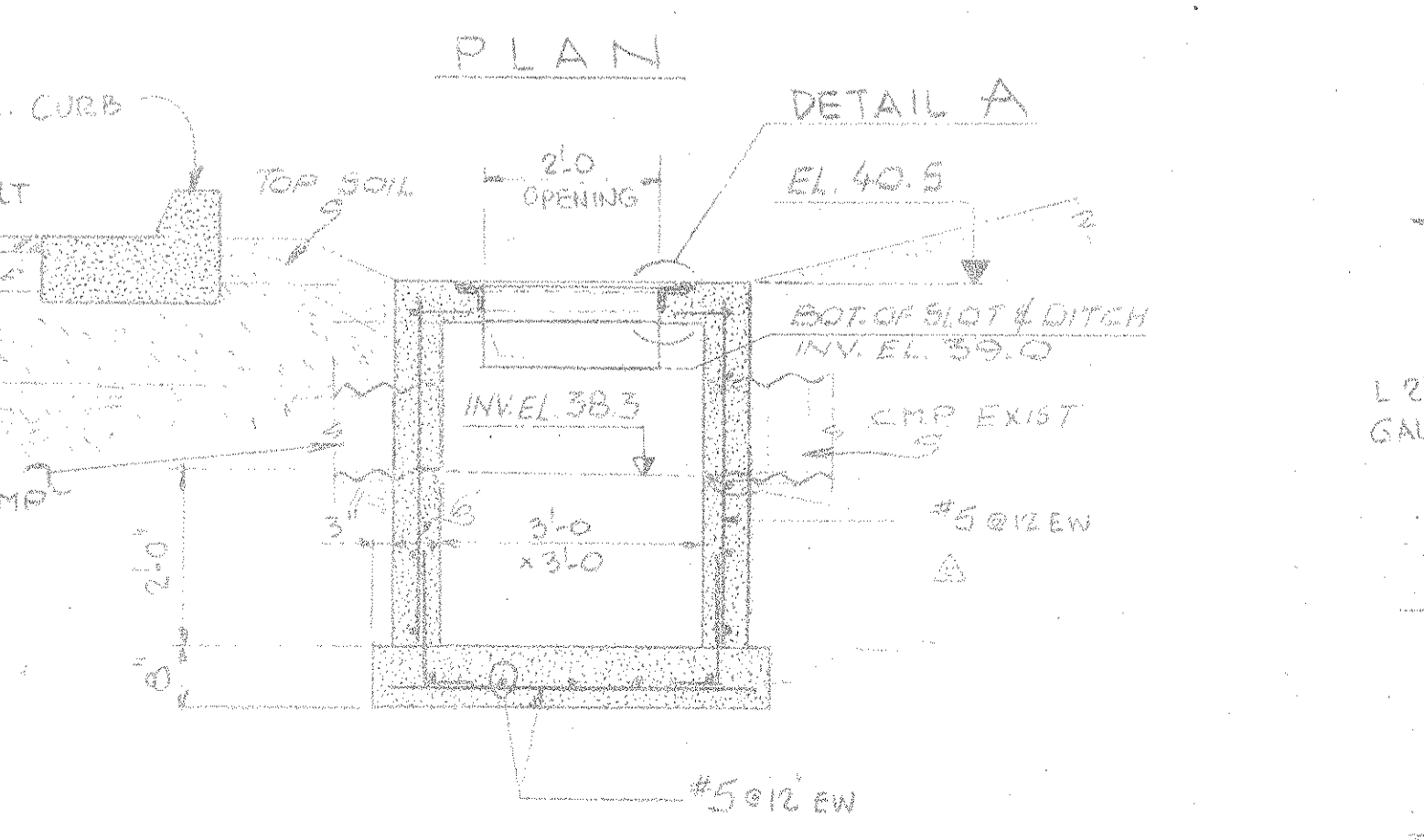
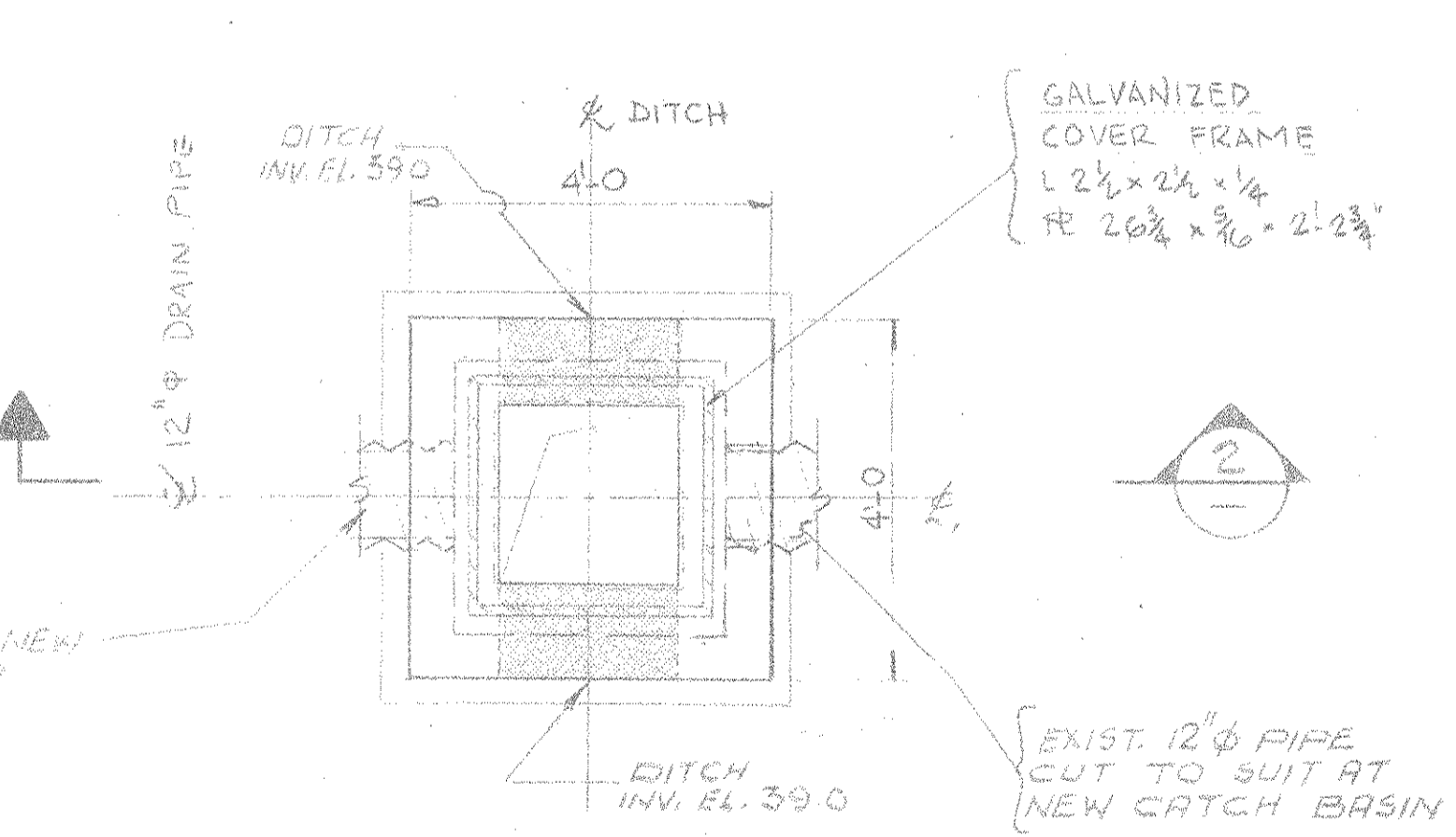
DETAIL FOR STABILIZING WATERWAYS WITH JUTE OR EXCELSION MATTINGS



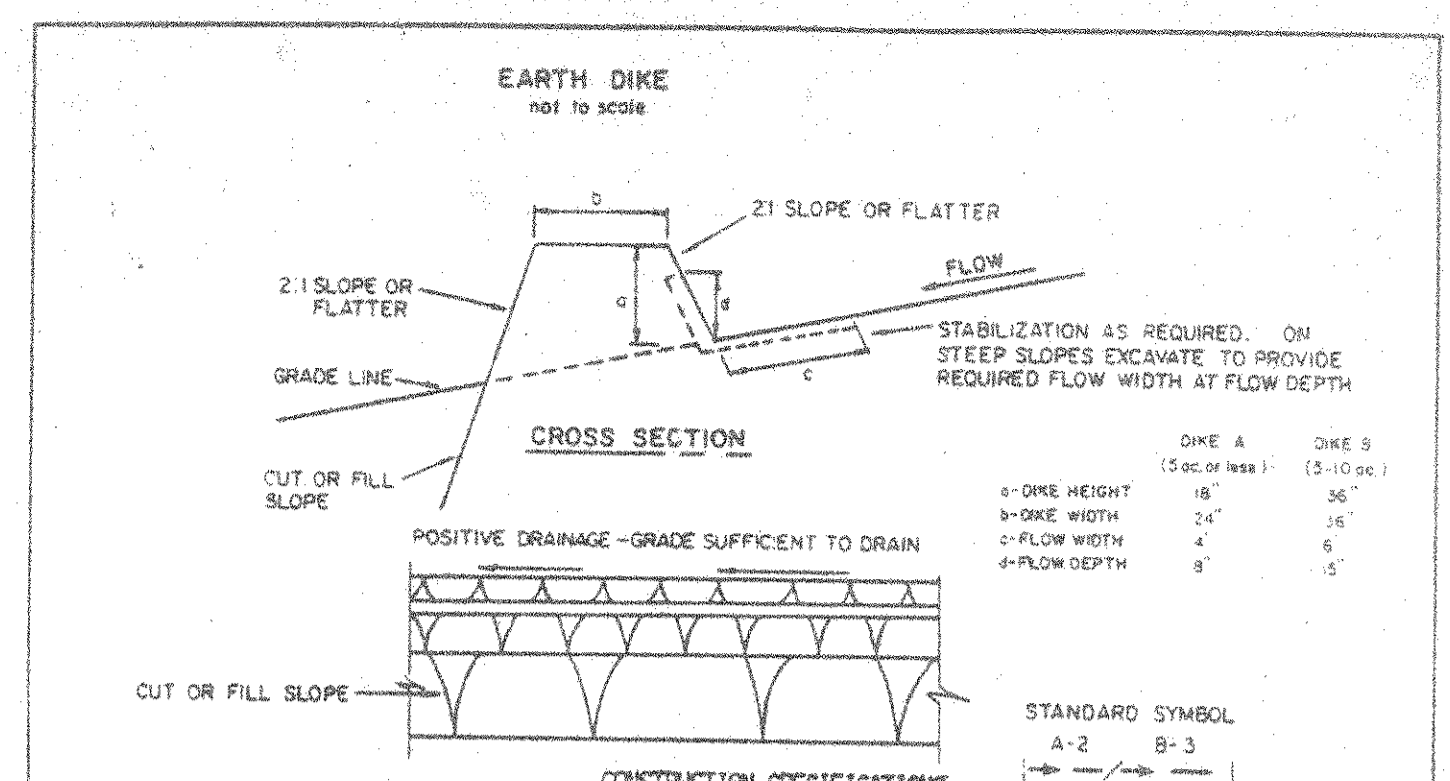
- MATERIALS**
- Jute mat** shall be cloth of a uniform plain weave of unbleached single jute yarn, 48 inches in width plus or minus 1 inch and weighing an average of 1.2 pounds per linear yard of cloth with a tolerance of plus or minus 5 percent, with approximately 78 warp ends per width of cloth and 91 weft ends per linear yard of cloth. The yarn shall be of a loosely twisted construction having an average twist of not less than 1.6 turns per inch and shall not vary in thickness by more than one-half its normal diameter.
 - Excelsion mat** shall be wood excelsior, 48 inches in width plus or minus 1 inch and weighing 0.8 pounds per square yard plus or minus 10 percent. The excelsior material shall be covered with a meeting to facilitate handling and to increase strength.
 - Glass fiber matting** of bonded textile glass fibers with an average fiber diameter of 8 to 12 microns, 2 to 4 inch strands of fiber bonded with phenol formaldehyde resin. Mat shall be roll type, water permeable, minimum thickness 1/4 inch, maximum thickness 1/2 inch, density not less than 3 pounds per cubic foot.
 - Staples** - staples for anchoring soil stabilizing materials shall be No. 11 gauge wire or heavier. Their length shall be 6 to 10 inches. Use the longer staples on loam, unstable soils.



SECTION 1
DETAILS CATCH BASIN 1
(SEE DWG. N° 41D2-004)



SECTION 2
DETAILS OF CATCH BASIN 2
(SEE DWG. N° 41D2-005)



- CONSTRUCTION SPECIFICATIONS**
- ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
 - ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
 - TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
 - FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
 - EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. FENCES SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
 - STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART BELOW.

TYPE OF TREATMENT	CHANNEL GRADE	FLOW CHANNEL STABILIZATION	
		DIKE A	DIKE B
1	1.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSIOR; 300; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR 300; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 3 INCHES THICKNESS AND PRESSED INTO THE SOIL.
C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
COLLEGE PARK, MARYLAND

EARTH DIKE

STANDARD DRAWING
ED-1

STANDARD RESPONSIBILITY NOTES:

- DEVELOPER'S CERTIFICATION:
I (WE) CERTIFY THAT:
A) All development and construction will be done in accordance with this Sediment and Erosion Control Plan, and further, authorize the right of entry for periodic on-site evaluation by the State of Maryland, Department of Natural Resources, Water Resources Administration Inspectors.
B) Any Responsible Personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project.

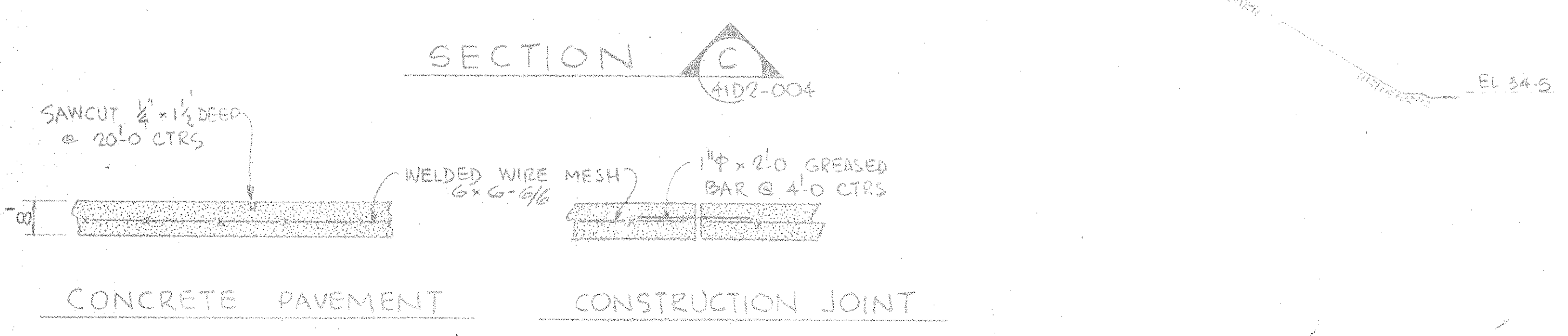
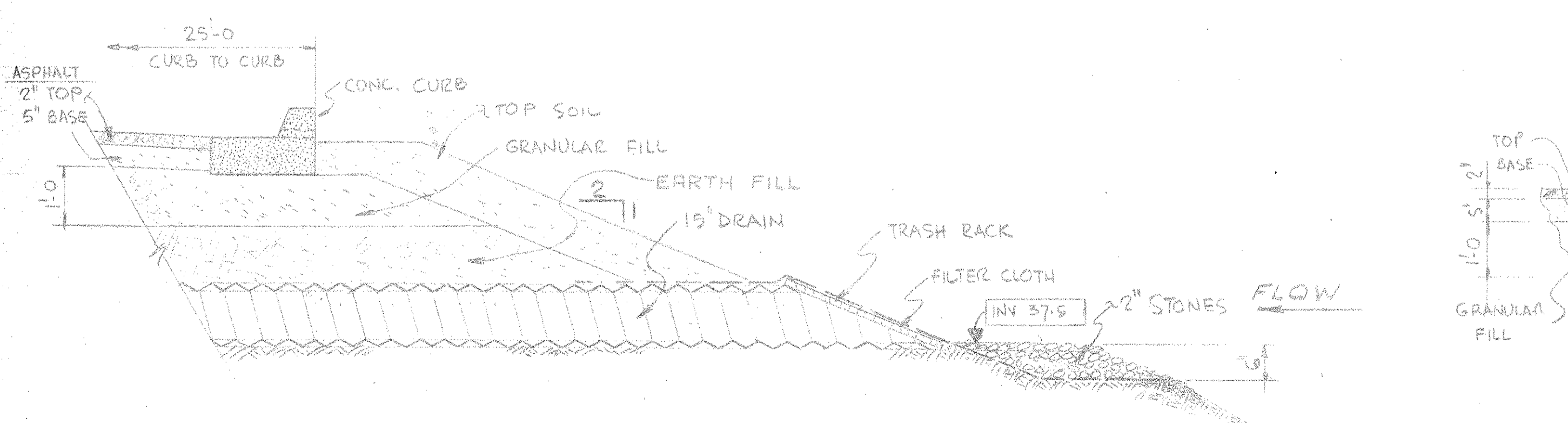
Date

STANDARD STABILIZATION NOTE:

"Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within seven calendar days as to the surface of all perimeter controls, dikes, mounds, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1); and fourteen days as to all other disturbed or graded areas on the project site."

NOTIFICATION:

The contractor shall notify the Enforcement Division of Maryland Department of Natural Resources Water Resource Administration 5 days prior to starting construction.



SECTION C
CONCRETE PAVEMENT CONSTRUCTION JOINT

NO.	REVISION	DATE	BY
2	AS BUILT REVISION - SUP. DATED & REVIEWED DRAWINGS	3/24/80	JL
1	ORIGINAL TRANSFERRED TO C.S.I.	NOV 19/80	KL
0	ISSUED FOR CONSTRUCTION	JULY 07/80	JL
P-3	ISSUED FOR APPROVAL & PRICING	JUNE 23/80	JL
P2	NOTE RE: NOTIFICATION ADDED	JUNE 5/80	ASK
1	REVISION	DATE	BY

W.P. LONDON AND ASSOCIATES LIMITED
CONSULTING ENGINEERS
NIAGARA FALLS

HARFORD COUNTY RESOURCE RECOVERY FACILITY - HARFORD COUNTY, MARYLAND

PAVING AND DRAINAGE DETAILS

Consumat Systems, Inc.
RICHMOND, VIRGINIA U.S.A.

SCALE 1/2" = 1'-0"
DATE: JULY 2/80
DRAWN: ASK
CHECK: [Signature]
APPROVED: [Signature]

DRAWING NO. [Blank]
SHEET [Blank]

TEMPORARY PERMIT NO. 771
TO PRACTICE ENGINEERING IN
THE STATE OF MARYLAND