

		STRUCT	URE 5KI	HEDULE		
10	TYPE	LOCATION	III YUI	TUO VIII	TOP ELEV	DESCRIPTION
	KINLET WORATE	LILLE	-	37036	*3817	HOCO 5T D 5D 4 13
	12" BCCMP ES	SEE PLAN	3℃ ⁷ ℃	+		HO CO 5T'D 5056
	HEOAT OPENING		i	1	l —	<u> </u>

SEQUENCE OF CONSTRUCTION

OBTAIN GRADING PERMIT.

2. INSTALL SEDIMENT TRAP NO. 1 AND STABILIZE ALL SLOPES AS PER TEMPORARY SEEDING NOTES.

3. INSTALL SILT FENCE AND EARTH DIKE AS SHOWN IN PLAN AND STABILIZE EARTH DIKE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.

4. INSTALL STONE FILTER INLET PROTECTION AT ALL EXISTING INLETS AND STABILIZED CONSTRUCTION ENTRANCES. 5. ROUGH GRADE SITE AND INSTALL 12" STORM DRAIN AND DIVERT THE WATER

AT E-4 INTO SEDIMENT TRAP NO. 1. 6. COMPLETE CONSTRUCTION OF ALL DWELLING UNITS.

7. FINE GRADE ENTIRE SITE AND STABILIZE AS PER PERMANENT SEEDING

8. AFTER THE AREA UPSTREAM FROM E-4 HAS BEEN STABILIZED AND APPROVAL HAS BEEN GIVEN. THE CONTRACTOR SHALL DAYLIGHT THE OUTLET OF E-4 TO

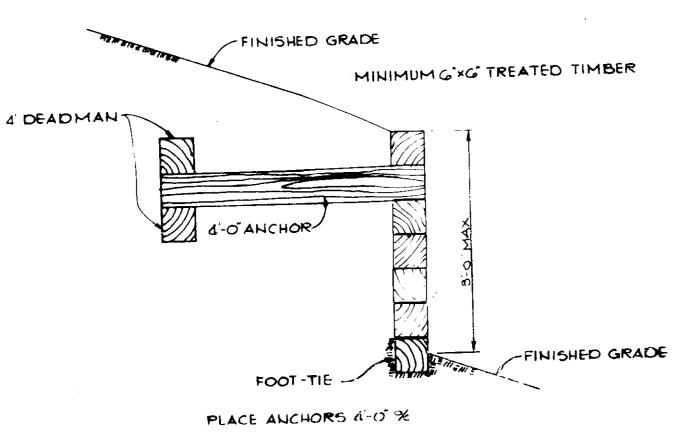
THE EXISTING STREAM. 9. UPON APPROVAL OF THE DEPARTMENT OF PUBLIC WORKS SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND CONVERT SEDIMENT BASIN TO STORM WATER MANAGEMENT FACILITY AS FOLLOWS:

A. PUMP OUT IMPOUNDED WATER. B. REMOVE SEDIMENT AND PLACE AS AS DIRECTED BY THE DEPARTMENT OF PUBLIC WORKS SEDIMENT CONTROL INSPECTOR.

C. REMOVE TEMPORARY RISER PIPE AND ADD AN END SECTION TO THE PIPE FOR PRINCIPAL SPILLWAY.

D. CUT EMERGENCY SPILLWAY. E. RESTORE BASIN TO ORIGINAL DIMENSIONS AS SHOWN ON THE SITE

F. PLACE RIP RAP AT E-2. G. STABILIZE ALL DISTURBED AREAS WITH THE PERMANENT OFFICEN



TIMBER RETAINING WALL

Construction Specifications

I. Materials

passage of water and removal of sediment.

A. Wooden frame is to be constructed of 2" x 4" construction grade

Wire such must be of sufficient strength to support filter fabric, and stone for curb inlets, with water fully impounded against it. C. Filter cloth must be of a type approved for this purpose; resistant to sumlight with sieve size, EOS, 40-85, to allow sufficient

4. Stone is to be 2" in size and clean, since fines would clog the II. Procedure

A. A swale, ditchline or yard inlet protection.

Excavate completely around inlet to a depth of 18" below potch

2. Drive 2 x 4 post 1' into ground at four corners of inlet. Place mail strips between posts on ends of inlet. Assemble top portion of 2 x 4 frame using overlap joint shown. Top of frame (wair) must be 6" below edge of roadway adjacent to

 Stretch wire mesh tightly around frame and fasten securel? Ends must neet at post.

4. Stretch filter cloth tightly over wire mesh, the cloth must extend from top of frame to 18" below inlet notch elev. Fasten securely to frame. Bnds must meet at post, be overlapped and folded, then fastened down.

5. Backfill around inlet in compacted 6" layers until layer of earth is even with notch elevation on ends and top elevation

6. If the inlet is not in a low moth, construct a compacted earth dike in the dischline below it . The top of this dike in to be at least 6" higher than the top of frame (weir).

7. This structure must be inspected frequently and the filter fabric replaced when clogged.

B. Curb Inlet Protection.

Attach a continuous piece of wire mesh (30" min. width by throat length plus 4') to the 2" m 4" wair (measuring throat length plus 2') as shown on the standard drawing.

2. Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" weir.

 Securely nail the 2" m 4" weir to 9" long wertical space(8 to be located between the weir and inlet face (max 6' spart).

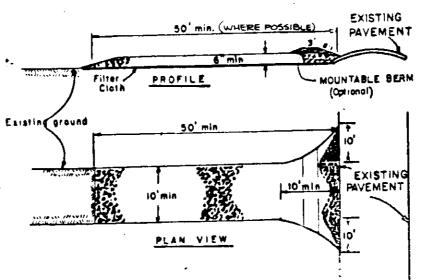
4. Place the assembly against the inlet ruroat and nail (wisimus 2' lengths of 2" = 4" to the top of the weir at spacer locations. These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate reight.

5. The assembly shall be placed so that the end spacers are minima 1' beyond both cais of the throat opening.

6. Form the wire mesh and filter clotic to the concrete gutter and against the face of curb on both sides of the inlet. Place clean 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.

7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.

Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow into inlet.



CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent. 2. Length - As required, but not less than 50 feet (except on a single resi-

dence lot where a 30 foot minimum length would apply). 3. Thickness - Not less than six (6) inches. 4. Width - Ten (10) foot minimum, but not less than the full width at

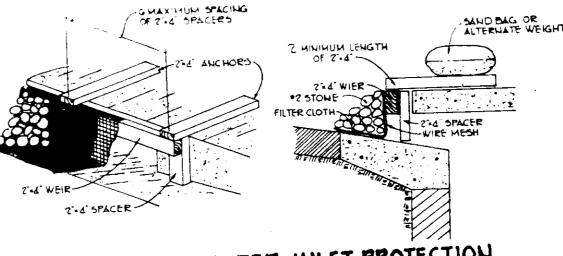
points where ingress or egress occurs. 5. Filter Cloth - Will be placed over the entire erea prior to placing of stone. Filter will not be required on a single family residence lot. 5. Surface Mater - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. 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. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap mediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way nutt

8. 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

9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE



CROSS SECTION A-A

place of the embedded falter cloth.

. The pool area shall be cleared.

3. All cut and full aloyes shall be 2:1 or flatter.

pollution is minimized.

OPTION: A one foot layer of 2" stone may be placed on the upstream side of the ripray in

CONSTRUCTION SPECIFICATIONS FOR ST-V

2. The fill material for the embankment shall be free of roots and other woody vagetation as well as over-sized stones, rocks, organic material or other objectionable material. The ambankment shall be compacted by traversing with equipment while it is being constructed.

A. The stone used in the outlet shall be small riprap A*-8* along with s 1' thickness of 2" aggregate placed on the up-grade side on the small riprap on embedded filter cloth in the

Sediment shall be removed and trap restored to its original dimensions when the sediment
has accumulated to h the design depth of the trap.

8. The structure shall be removed and the area stabilized when the drainage area has been

STONE OUTLET SEDIMENT TRAP

6. The structure shall be imapected after mach rain and repairs made as meeded. 7. Construction operations shall be carried out in such a manner than erosion and water

NO SCALE

STONE FILTER INLET PROTECTION

(Option 2) Use sod. (Option 3) Seed with 40-40-20 mix specified above and mulch with 2 tons/acre well-anchored straw. Mulching: Apply 13 to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons

per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal./1000 sq.ft.) Maintenance: Inspect all seeded areas and make needed repairs,

replacements and reseedings.

TEMPORARY SEEDING NOTES

SEDIMENT CONTROL NOTES

7. Site Analysis:

distrubance.

Total Area of Site

Area Disturbed

Total Cut

total Fill

construction (992-2437)

SOIL EROSION AND SEDIMENT CONTROL.

disturbed or graded areas on the project site.

germination and establishment of grasses.

Area to be roofed or paved

out elevation shown on the plans.

PERMANENT SEEDING NOTES

fertilizer per acre.

Area to be vegetatively stabilized

of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.

1. A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any

2. All vegetative and structural practices are to be installed

3. Following initial soil disturbance or redisturbance, permanent or

4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12,

5. All disturbed areas must be stabilized within the time period

specified above in accordance with the 1983 MARYLAND STANDARDS AND

SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent

seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and

mulching (Sec. 52). Temporary stabilization with mulch alone can

only be done when recommended seeding dates do not allow for proper

maintained in operative condition until permission for their removal

has been obtained from the Howard County Sediment Control Inspector.

13.0 acres
7.6 acres

1 Co acres

G. O acres

24 73 5 Cu. yds.

22 15 6 Cu. yds.

6. All sediment control structures are to remain in place and are to be

8. Any sediment control practice which is disturbed by grading activity

9. Additional sediment controls must be provided, if deemed necessary

measures have been installed and are in a functioning condition.

11. Sediment will be removed from traps when its depth reaches the clean

by the Howard County DPW sediment control inspector.

discing or other acceptable means before seeding.

for placement of utilities must be repaired on the same day of

. Site grading will begin only after all perimeter sediment control

Apply to graded or cleared areas not subject to immediate further

Seedbed Preparation: Loosen upper three inches of soil by raking,

Soil Amendments: Apply 0-20-20 fertilizer at the rate of 600 lbs. per

acre. Harrow or disc lime and 0-26-20 fertilizer into the soil to a

minimum depth of 3". Lawns or high maintenance areas will be dragged

and leveled with a York rake. At the time of seeding, apply 400 lbs. of

30-0-0 ureaform fertilizer and 500 lbs. of 10-20-20 or equivalent

Seeding: For the periods March 1 thru April 30, and August 1 thru

ectober 15, seed with 40 lbs. per acre (1 lb/1000 sq.ft.) of a mixture

of certified 'Merion' Kentucky bluegrass; common Ketucky bluegrass @ 40

lbs. per acre (1 lb./1000 sq.ft.) and Red Fescue, Pennlawn or Jamestown

© 20 lbs. per acre (0.5 lb./1000 sq.ft.) for the period May 1 thru July

31. seed with 40-40-20 mix as specified above and 2 lbs. per acre (0.05

lbs./1000 sq.ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: (Option 1) 2 tons per acre of

well-anchored straw mulch and seed as soon as possible in the spring.

disturbance where a permanent long-lived vegetative cover is needed.

temporary stabilization shall be completed within: a) 7 calendar

days for all perimeter sediment control structures, dikes, perimeter

slopes and all slopes greater than 3:1, b) 14 days as to all other

according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR

apply to graded or cleared areas likely to be redisturbed where a short-rerm vegerative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding. Apply 600 lbs. per acre 10-10-10 fertilizer 114

Soil Amendments. Apply 600 lbs. per acre 10-10-10 ferrilizer 114 lbs. 1000 sq.fr.) Where soil is highly acidic, apply dolomitic limestone at the rate of 1 ton per acre. Seeding: For periods March 1 thru April 30 and from Agust 15 thru November 15, seed with 140 lbs, per acre of annual rye (3.2 lbs. 1000 sq.fr.). For the period May 10thru August 14, seed with 3 lbs. per acre of weeping lovegrasm (.07 lbs. 1000 sq.tt.). For the period November 1b

anchored straw mulch and seed as soon as possible in the spring, or use Mulching: Apply 15 to 2 tons per acre (70 to 90 lbs. 1000 sq.ft., of unrotted small grain straw immediately after seeding. Anchor mulch introcted small grain scham immediately after seeding. Anchor match immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. 1000 sq.ft.) of explained asphalt on flat areas. On slopes, 8 ft. or higher, use 348 gal. per acre (8 gal./1000 sq.ft.) for

MARYLAND STANDARDS AND SPECIFICATIONS FOR SALE EROSION AND SEDIMENT CONTROL for rate and methods not covered.

BY THE DEVELOPER:

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT 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 ERUSION BEFORE BEGINNING THE PROJECT."

DATE RICHARD AZRAEL

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

3.5.86

S.C.D

ARTHUR E MUEGGE

REVIEWED FOR

AND MEETS TECHNICAL REQUIREMENTS

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.

APPROVED: HOWARD CQUNTY OFFICE OF PLANNING AND ZONING.

DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

thru February 28, protect side by applying 2 tuns per acre of well

OWNER / DEVELOPER

TITLE

3-10-16 CHIEF, BUREAU OF ENGINEERI REVISION DATE NO

CHATEAU BUILDERS, INC 8100 WOODED GLEN COURT ELLICOTT CITY, MARYLAND 21043

THE WILLOWS SECTION I AREA I LOT I THRU 22

AREA TAN MAE HE 24+30 24PELECTION DISTRICT HOWARD COUNTY, MARYLAND

DETAIL SHEET

APPROVED DIVISION OF LAND BUTT

12-10-85

The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm 3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-2690

3.5.86 DATE

DESIGNED BY LJD DRAWN BY DAM PROJECT NO 15803 DATE JANUARY 6,1986 SCALE AS SHOWN DRAWING NO. 3 OF 3

5DP-8G-113