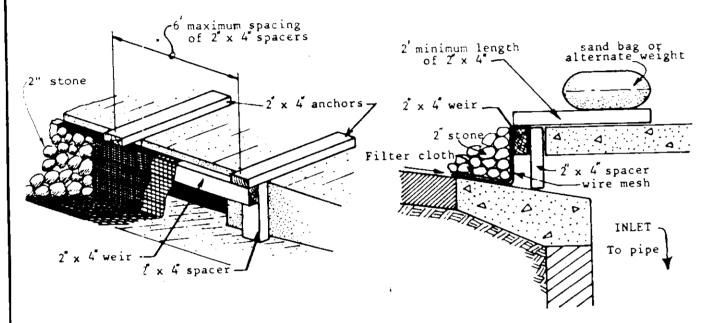


OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.

- CONSTRUCTION SPECIFICATIONS FOR ST-V 1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
- 2. The fill material for the 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. All cut and full slopes shall be 2:1 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
- 5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to a 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 than erosion and water pollution is minimized.
- 8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

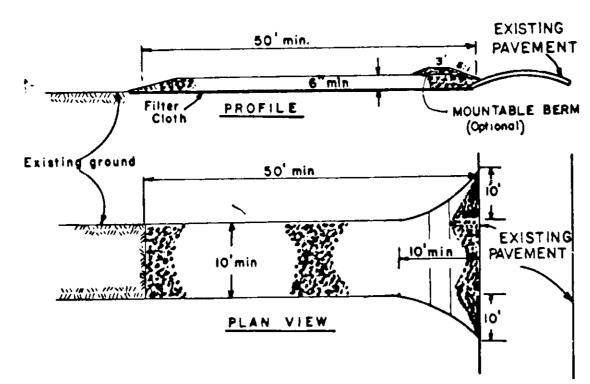
# STONE OUTLET SEDIMENT TOAT



### Curb Inlet Protection.

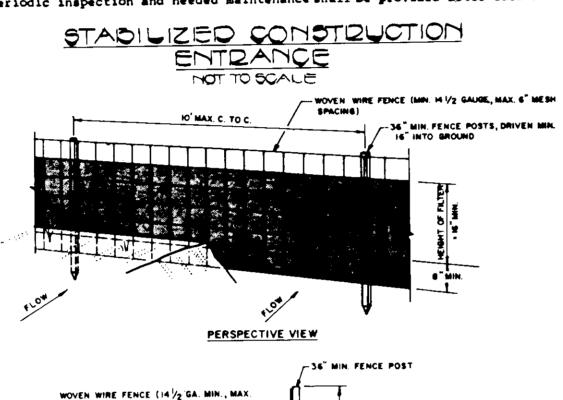
- 1. Attach a continuous piece of wire mesh (30" min. width by throat length plus 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard drawing.
- 2. Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" weir.
- 3. Securely nail the 2" x 4" weir to 9" long vertical spacers to he located between the weir and inlet face (max. 6' apart).
- 4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 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 weight.
- 5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
- 6. Form the wire mesh and filter cloth 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.
- 8. Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow into inlet.

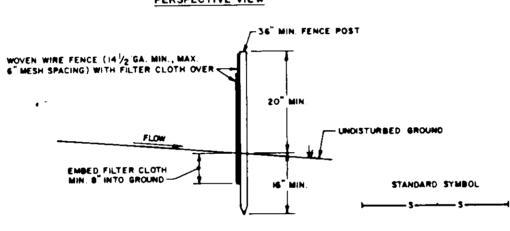
CURB INLET PROTECTION NOT TO SCALE



#### 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 area prior to placing of stone.
- Filter will not be required on a single family residence lot. 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. 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. 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.





# CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

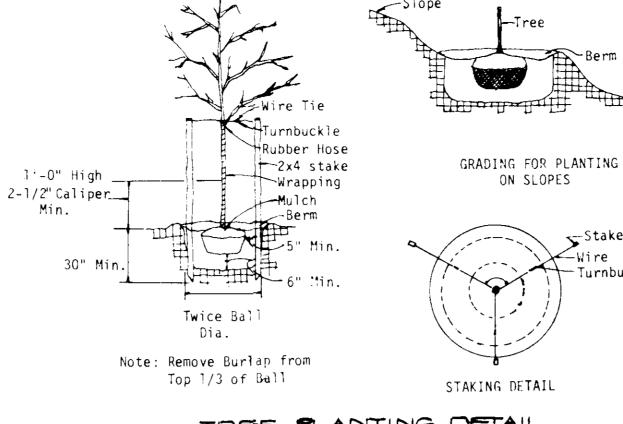
- 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- 2. FILTER CLOTH TO BE FASTENED SECURELY TO
- WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- 3. WHEN TWO SECTIONS OF FILTER CLOTH
- ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED.
- 4. Maintenance shall be performed as
- NEEDED AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE.
- FILTER CLOTH: FILTER X, MIRAFI 100X, STABI-LINKA T140N OR APPROVED PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED

POSTS: STEEL EITHER T OR U

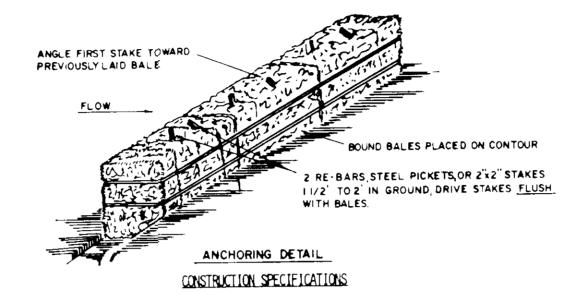
FENCE: WOVEN WIRE, 14: GA. 6 MAX, MESH OPENING

TYPE OR 2" HARDWOOD

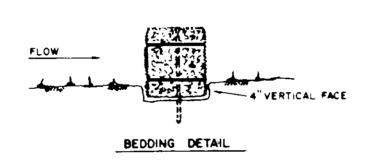
NOT TO SCALE



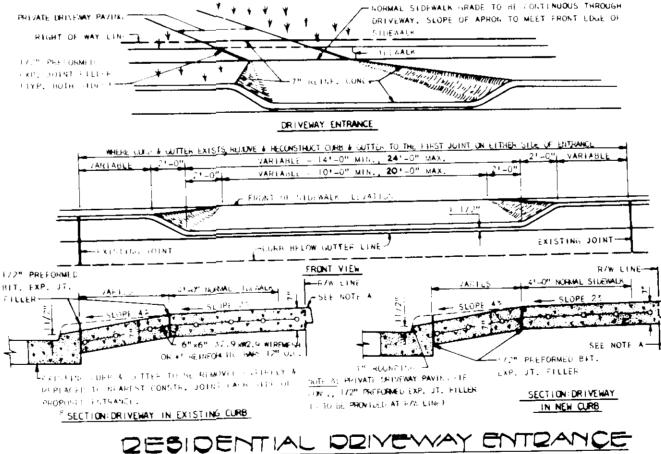
TREE PLANTING DETAIL HOT TO SCALE



- 1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- 2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
- 3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL PE DRIVEN FLUSH WITH THE BALE,
- 4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS
- 5. Bales shall be removed when they have served their usefulness so as not to block OR IMPEDE STORM FLOW OR DRAINAGE.



STRAW BALE DIKE NOT TO SCALE



NOT TO SCALE

STEEP SLOPES EXCAVATE TO PROVIDE REQUIRED FLOW WIDTH AT FLOW DEPTH GRADE LINE -DIKE A DIKE . CROSS SECTION (5 ac. or less.) (5-10 ac.) #- DIKE HEIGHT CUT OR FILL SLOPE B-DIKE WIDTH c-FLOW WIDTH POSITIVE DRAINAGE -GRADE SUFFICIENT TO DRAIN 4-FLOW DEPTH STANDARD SYMBOL A-2 B-3 

STABILIZATION AS REQUIRED. ON

2 I SLOPE OR -

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. EIELD 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. PUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT

CONSTRUCTION SPECIFICATIONS

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

BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT

## FLOW CHANNEL STABILIZATION

F NI	CHANNEL GRADE	DIKE A	DIKE B
	.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSION; STONE
	5,1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-8"
	8.1-207	LINED RIP-RAP 4-8"	Engineering Design

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 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.

APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS. 7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3

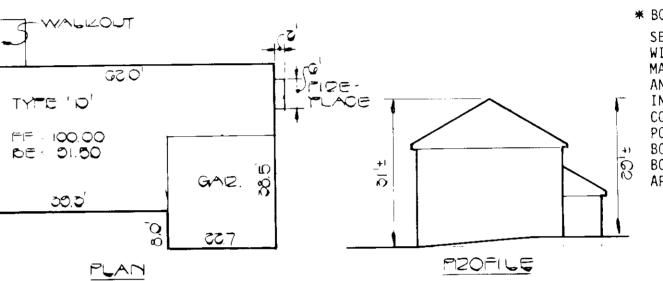
EAQTH DIVE NOT TO SCALE

SEDIMENT CONTROL NOTES:

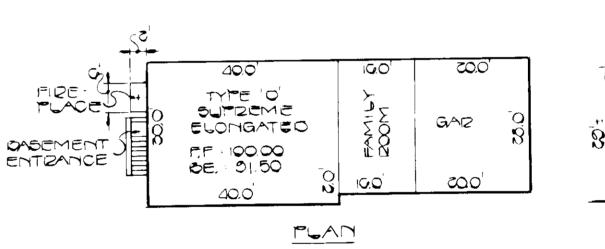
- 1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (992-2437) 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE
- INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. 3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR 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 DISTURBED OR GRADED AREAS ON THE PROJECT SITE. 4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY
- DESIGN MANUAL, STORM DRAINAGE. 5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SCIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) AND (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONG CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF
- 6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 7. SITE ANALYSIS: TOTAL AREA OF SITE (LIMIT OF SUBMISSION) 3.58 ACRES ACRES 2.55 AREA DISTURBED ACRES AREA TO BE ROOFED OR PAVED ACRES AREA TO BE VEGETATIVELY STABILIZED CU.YDS TOTAL CUT ─CU.YDS. TOTAL FILL
- ONSITE BORROW AREA LOCATION LOTS 18 & 19 \*

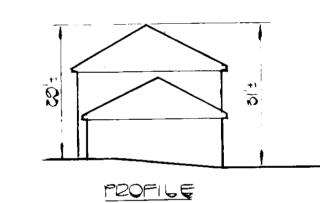
  8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE

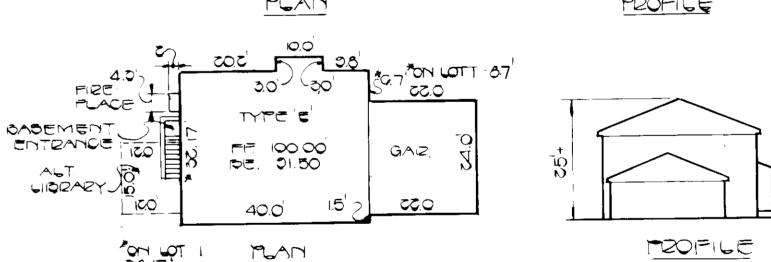
REPAIRED ON THE SAME DAY OF DISTURBANCE.



\* BORROW NOTE: SEDIMENT CONTROL FOR BORROW AREA (LOTS 18 & 19) WILL BE PROVIDED BY UTILIZING THE STORM WATER MANAGEMENT POND (NOW BEING TEMPORARILY USED AS AN EXISTING SEDIMENT BASIN) SEE PLANS F-84-94. IN THE EVENT THAT THE SEDIMENT BASIN IS CONVERTED INTO A PERMANENT STORM WATER MANAGEMENT POND BEFORE ALL DISTURBED AREAS INVOLVED WITH THE BORROW OPERATION, A SEDIMENT CONTROL PLAN FOR THE BORROW AREA (LOTS 18 AND 19) MUST BE SUBMITTED AND APPROVED BY THE HOWARD SOIL CONSERVATION DISTRICT.







TYPICAL HOUSE PLANS HOT TO SCALE

JANET W. PHELPS 10504 GORMAN ROAD LAUREL, MARYLAND 20707 OWNER'S REPRESENTATIVE: PHELPS ASSOCIATES 5570 STERRETT PLACE SUITE 201 COLUMBIA, MARYLAND 21044 DEVELOPER: F.G. MARKER, CO., INC. 5900 PRINCESS GARDEN PARKWAY SUITE 707

LANHAM, MARYLAND 20706

FISHER, COLLINS & CARTER, INC.

ENGINEER'S CERTIFICATE I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SED-IMENT 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 REQUIRE-MENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION

PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PRO-GRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DIS-TRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

SIGNATURE OF DEVELOPER

12-13 84

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

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

HOWARD SOIL CONSERVATION DISTRICT

APPROVED: OFFICE OF PLANNING AND ZONING AND ZONING ADMINISTRATION APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND SEWERAGE SYSTEMS.

APPROVED: DEPARTMENT OF PUBLIC WORKS. FOR PUBLIC WATER AND SEWER AND STORM DRAINAGE SYSTEM6 AND ROADS. 1.20.82 CHIEF. BUREAU OF ENGINEERING ECTION/AREA LOT / PARCEL NO 1-5.11,16,17,20,21 2/1 24 R-20 MAP 41 842 6TH 6062 5989 SEWER CODE 6360000

NOTES AND DETAILS WARFIELD'S RANGE SECTION TWO AREA ONE LOTS 1-5,11,16,17,20821 P/O PARCEL 80

6 TH ELECTION DISTRICT

SHEET 3 OF 3

CIVIL ENGINEERS & LAND SURVEYORS

8388 COURT AVE.

ELLICOTT CITY, MD. 21043 (301) 461 - 2855

DEVELOPER'S CERTIFICATE

APPROVED:

IGNATURE OF ENGINEE

SURDIVISION NAME WARFIELD'S RANGE PLAT No /L.F. | BLOCK No | ZONE | TAX / ZONE | ELEC. DIST | CENSUS TR. WATER CODE

TAX MAP 41 8 42

HOWARD COUNTY, MARYLAND DECEMBER 6,1984

S.D.P. 85-109

