# GENERAL NOTES 6. Gross Area of Site: 6.948 Acrest

- 1. Subject property zoned "R-ED" per 02/02/04 Comprehensive Zoning Plan. 2. The property is located within the Metropolitan District. 3. Public water and Public sewer (Constructed under Contr. # 34-4275-D) will be used
- 4. Public Sewer Shall be Extended from Trotter Road (Contract No. 30-3096-D, Middle Patuxent Drainage Area). Public Water shall be extended from Trotter Road near Summer Sunrise Drive. (Contract No. 34-3296-D, Middle Patuxent Drainage Area)
- 7. Net Area of Site: 4.881 Acres±(1.115 ac. Steep Slopes and 0.952 ac. Floodplain) 8. Open Space Tabulation
  - Open Space Required (25% of Gross): 1.737 Acres Open Space Provided: 3.926 Acres

9. Density Tabulation

- Gross Area of Tract: 6.948 Acres Existing Floodplain: 0.952 Acres Existing Steep Slopes (outside floodplain): 1,115 Acres Net Area of Tract: 4.881 Acres No. of Units Allowed (2 D.U. per net Acre): 9
- 10. Area of Proposed Buildable Lots: 2.800 Acres±

No. of Units Proposed: 9

- II. Area of Proposed Public Right-of-Way: 0.222 ac.± 12. The Contractor shall notify the following utility companies or agencies at least five(5)
- working days before starting work shown on these plans: State Highway Administration BGE(Contractor Services) 410 787 9068
- BGE (Underground Damage Control) Miss Utility Colonial Pipeline Company Howard County, Dept. of Public Works, Bureau of Utilities
- 410.313.4900 Howard County Health Department 13. The contractor shall notify the Department of Public Works/Bureau of Engineering Construction Inspection Division at (410) 313-1880 at least five (5) working days prior

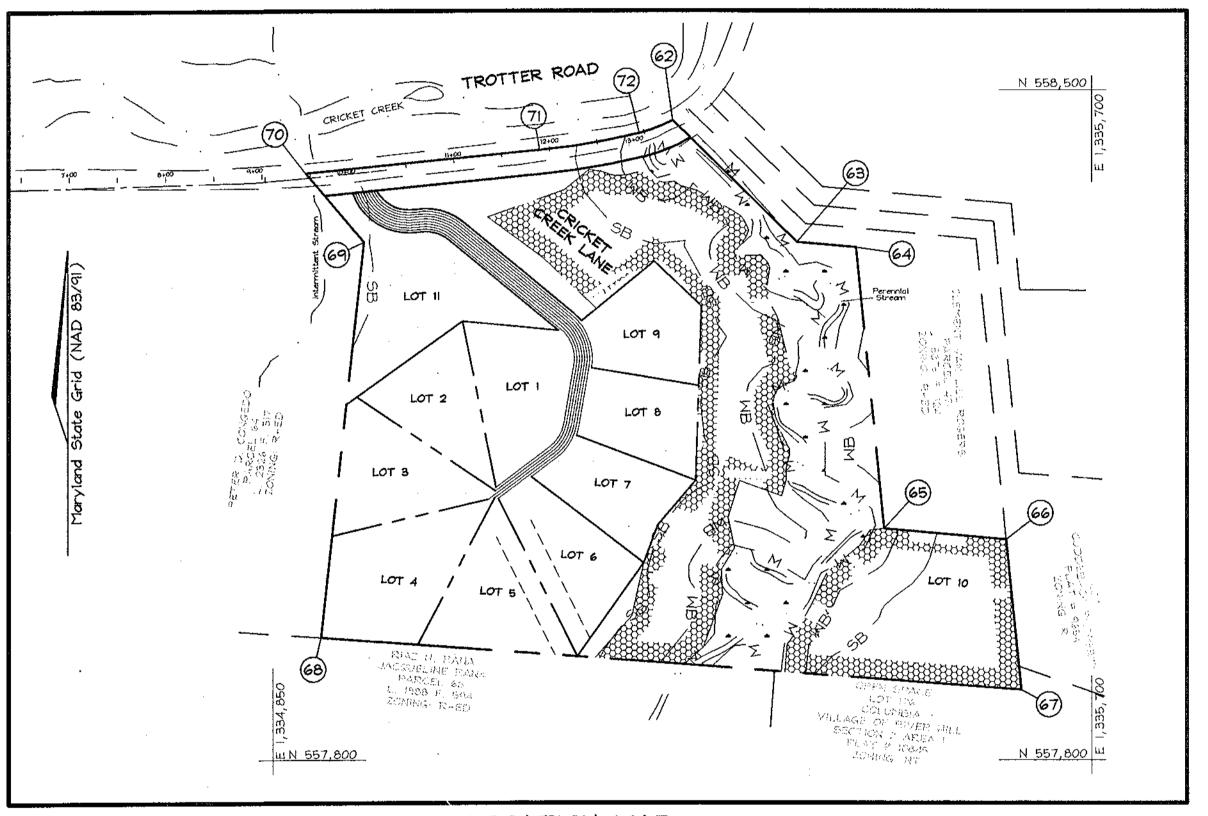
1.800.257.7777

- 14. The contractor shall notify Miss Utility at 1-800-257-7777 at least 48 hours prior to
- any excavation work being done. 15. The lots shown hereon comply with the minimum ownership, width and lot area as required by the Maryland State Department of the Environment.
- 16. The project is in conformance with the latest Howard County Standards unless waivers have been approved.
- 17. No clearing, grading or construction is permitted within the wetlands, streams or their required buffers, unless approved by Howard County.
- 18. Traffic control devices, markings and signs shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt. All sign posts used for traffic control signs installed in the County right-of-way shall be mounted on a 2" galvanized steel, perforated, square tube post (14 gauge) inserted into a 2-1/2" galvanized steel, perforated square tube sleeve (12 gauge)-3' long. A galvanized steel pole cap shall be mounted on top
- 19. All HDPE pipe specification and installation shall meet AASHTO M-252 Type S, M-294 Type S and ASTM D2321, respectively.
- 20. Soil compaction specifications, requirements, methods and materials are to be in accordance with the recommendations of the project Geotechnical Engineer. Geotechnical Engineer to confirm acceptability of proposed paving section, based on soil test, prior to construction.
- 21. The Geotechnical Report for this project was prepared by Hillis Carnes on January 16, 2001 and was approved on July 26, 2001.
- 22. For bearings and distances of Forest Conservation Easements and Wetland Limits see Record Plat recorded in the Land Records of Howard County for this project.
- 23. Previous Howard County file number WP-01-84 approved on March 8, 2001 and SP-01-04. 24. SWM will be achieved through the use of the proposed Sand Filter Facility for WQv and CPv. The Facility will be privately owned and maintained by H.O.A.
- 25. The coordinates shown hereon are based upon the Howard County Geodetic Control which is based on the Maryland State Plane Coordinate System. Howard County Monument Nos. 35DA and 35DB were used for this project.
- 26. There are no historical structures or cemeteries on site.
- 27. This plan is grandfathered to the Fourth Edition of the Subdivision and Land Development Regulations since the sketch plan was submitted prior to 11/15/01. Development or construction on these lots must comply with setback and buffer regulations in effect at the time of submission of the site development plan, waiver petition, or building and grading permits.
- 28. For flag or pipestern lots, refuse collection, snow removal and road maintenance are provided to the junction of the flag or pipestern and road right-of-way line.
- 29. Financial surety for the required landscaping must be posted as part of the Developer's Agreement in the amount of \$22,950.00 based on 26 shade trees @ \$300.00 each, 48 evergreen trees @ \$150.00 each, 26 Private Access Place street trees @ \$300.00 each and 5 trash pad shrubs @ \$30.00 each.
- Two Foot Interval Topographic Aerial Mapping by 3DI, LLC., In March, 1999.
- Boundary Survey and Control for Aerial Topography was provided by Design Tech Associates, Inc. Boundary confirmed by FSH Associates.
- 31. Wetland Delineation was completed by Campbell and Notan Associates, Inc. in July 8, 1999. 32. Forest Stand Delineation was completed by Campbell and Nolan Associates, Inc. In July, 1999.
- 33. The Floodplain study for this project was prepared by Kantzer & Associates on January 10, 2001 and was approved on July 26, 2001 under SP-01-04.
- 34. The Traffic study for this project was prepared by Lee Cunningham \$ Associates on March, 2000 and was approved by DPZ on May 8, 2001 under SP-01-04.
- 35. A determination was made by DPZ based on justification from the developer that the Private Access Place for this project is considered an essential disturbance to the 50' stream buffer and 25% steep slope area in accordance with Section 16.116(c) of the Subdivision Regulations.
- 36. Steep slope totals include contiguous off-site areas. 37. Street lights will be required in this development in accordance with the Design Manual.
- Street light placement and the type of fixture and pole selected shall be in accordance with the latest Howard County Design Manual, Volume III (1993) and as modified by "Guidelines for Street Lights in Residential Developments (June 1993)." The June 1993 policy includes guidelines for lateral and longitudinal placement. A minimum spacing of 20' shall be maintained between any street light and any tree.
- 38. Existing utilities are based on Field Run location and Howard County sewer contract plan 30-3096-D.
- 39. The 5'x15' concrete pad for for the refuse and recycle collection pad located within open space Lot II will be maintained by HOA pursuant to a Declaration of Right of access and maintenance obligation recorded among the Howard County Land Records Office. 40. The existing well and septic system will be removed/ abandoned prior to any mass grading
- and demolition. 41. This plan is subject to a waiver from Section 5.2.6.D.I of the Howard County Design Manual, Volume One to eliminate the required 12' level area around the stormwater management facility for maintenance. This waiver was approved on January 05, 2005.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

## FINAL ROAD CONSTRUCTION PLAN CRICKET CREEK

LOTS 1 THRU 9 \$ OPEN SPACE LOTS 10 \$ HOWARD COUNTY, MD



LOCATION MAP SCALE: 1"=100'

RESIDENTIAL DRIVEWAY ENTRANCE

## LEGEND -----382 Existing Contour Proposed Contour Direction of Flow -----Existing Spot Elevation +8253 Proposed Spot Elevation mmm. Existing Trees to Remain 15-24.99% Slopes 25-50% Slopes Wetlands Use-In-Common Access Easement

SCALE: 1=20001

BENCHMARKS

Sta.	35DA	N 170,358.7421	E 406,341.0695	El.: 107.1628 (meters)
		N 558,918.639	E 1,333,137.325	El.: 351.583 (feet)
Sta.	35DB	N 169,986.1310	E 406,596.2654	El.: 122.4288 (meters)
		N 557,696.164	E 1,333,974.580	El.: 401.668 (feet)

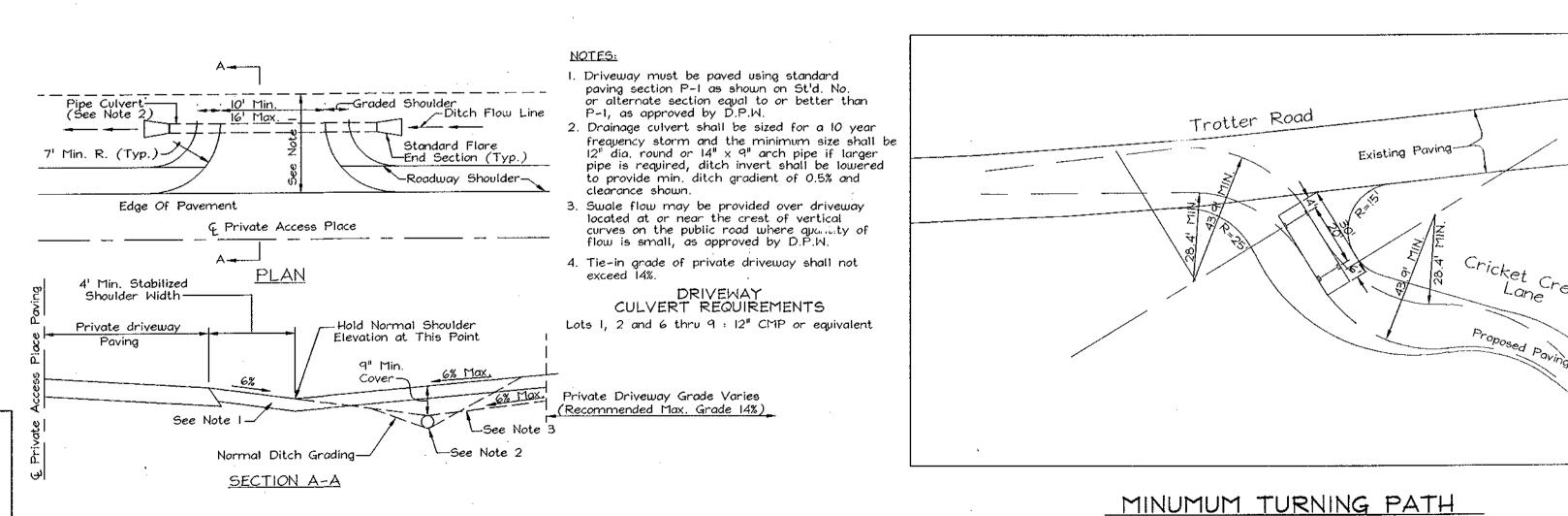
SHEET INDEX	
DESCRIPTION	SHEET No.
Cover Sheet	1 of 9
Road Plan and Profile	2 of 9
Sediment \$ Erosion Control \$ Grading Plan	3 of 9
Sediment & Erosion Control & Misc. Notes & Details	4 of 9
Traffic Control Plan, Storm Drain Drainage Area Map & Profile	5 of 9
Stormwater Management Plan & Details	6 of 9
Stormwater Management Profiles	7 of 9
Landscape Plan, Notes ≰ Details	8 of 9
Final Forest Conservation Plan	9 of 9

	CENTE	RLINE	ROAD	CURVE D	ATA
CURVE No.	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD LENGTH
C1	50.00	73.38'	84'05'13"	5 57°39'14" E	66,97
C2	50.00	43.13	49°25′28"	N 75°03'13" W	41.81'
C3	50.00'	52,36	60"00'00"	N 20°20'28" W	50.00'
C4	50,00°	37.8 <i>0</i> '	4318'53"	N 31°18'58" E	36,91

R	DAD CLASSIFICATION	
ROAD NAME	CLASSIFICATION .	R/W
Cricket Creek Lane	Private Access Place 0+00 - 5+10.10	*

STREET LIGHT TABLE				
ROAD NAME	STATION	OFFSET	FIXTURE	
Cricket Creek Lane	0+21.62	12,10¹ Right	100-watt HPS vopor "Premier" post top fixture mounted on a 14' black fibergloss pole	

MINIM	IUM LOT	SIZE C	HART
LOT NUMBER	GROSS AREA (sf)	PIPESTEM AREA (sf)	MINIMUM LOT SIZE
l	14,114.02±	713.35±	13,400.67±
2	12,461.15±	1,258.03±	II,203.12±
3	14,259.85±	1,272.44±	12,987.41±
4	17,989.88±	1,293.24±	16,696.64±
5	14,772.56±	1,292.20±	13,480.36±
6	13,787.74±	1,191.40±	12,596.34±
7	II,730.45±	1,027.22±	10,703.23±



OWNER/DEVELOPER WILLIAMSBURG BUILDERS

5485 HARPERS FARM RD #200 COLUMBIA, MARYLAND 21044-3834 Telephone: (410) 997-8800 Fax: (410) 997-4358

COVER SHEET

11,192.05± 836.11± 10,355.94± 11,648.23± 699.70± 10,948.53±

CRICKET CREEK LOTS 1 THRU 9 \$

OPEN SPACE LOTS 10 \$ 11 HOWARD COUNTY, MARYLAND 5TH ELECTION DISTRICT



FOR SU DESIGN VEHICLES

NOT TO SCALE

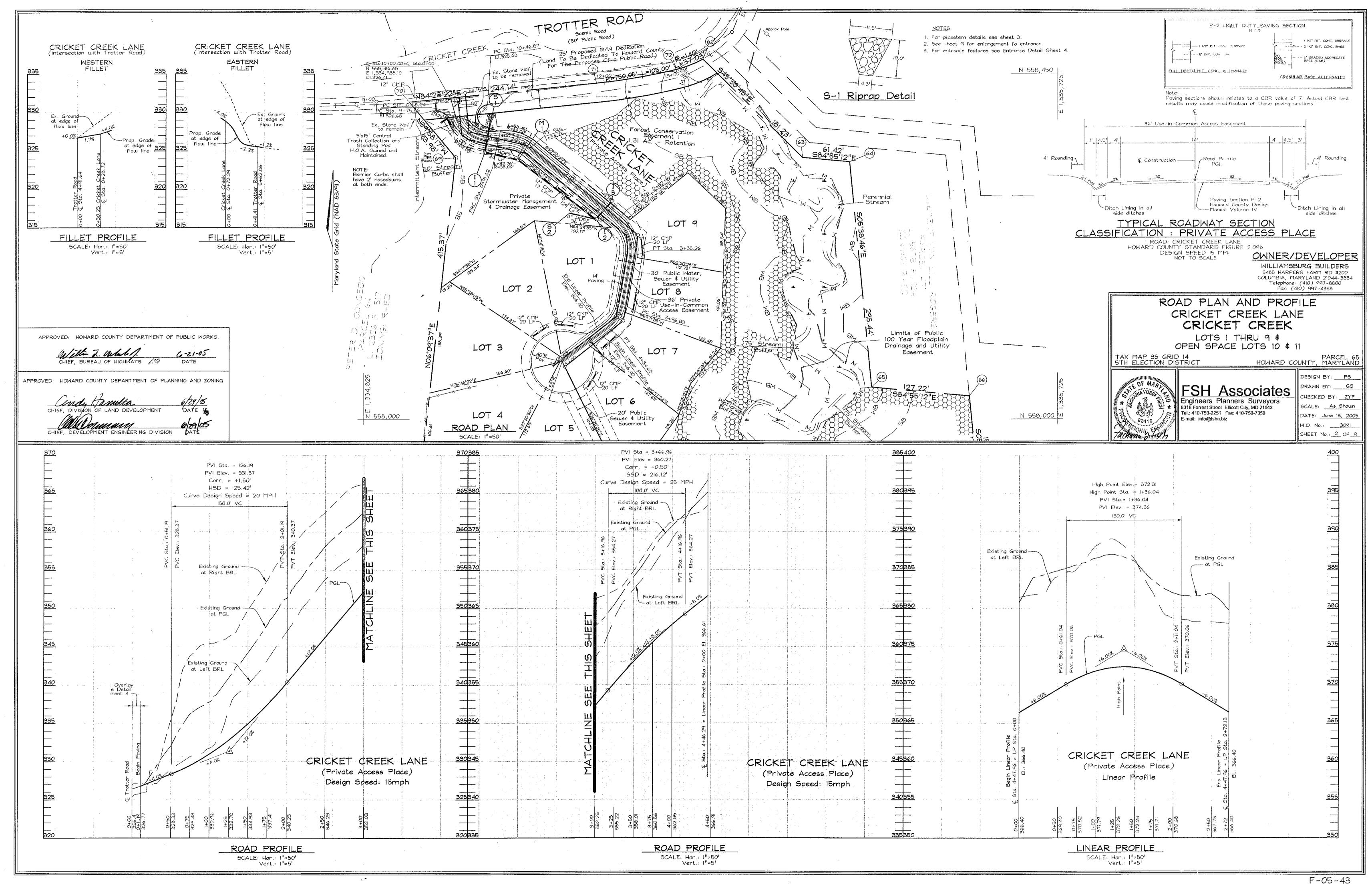
FSH Associates Engineers Planners Surveyors 8318 Forrest Street Ellicott City, MD 21043

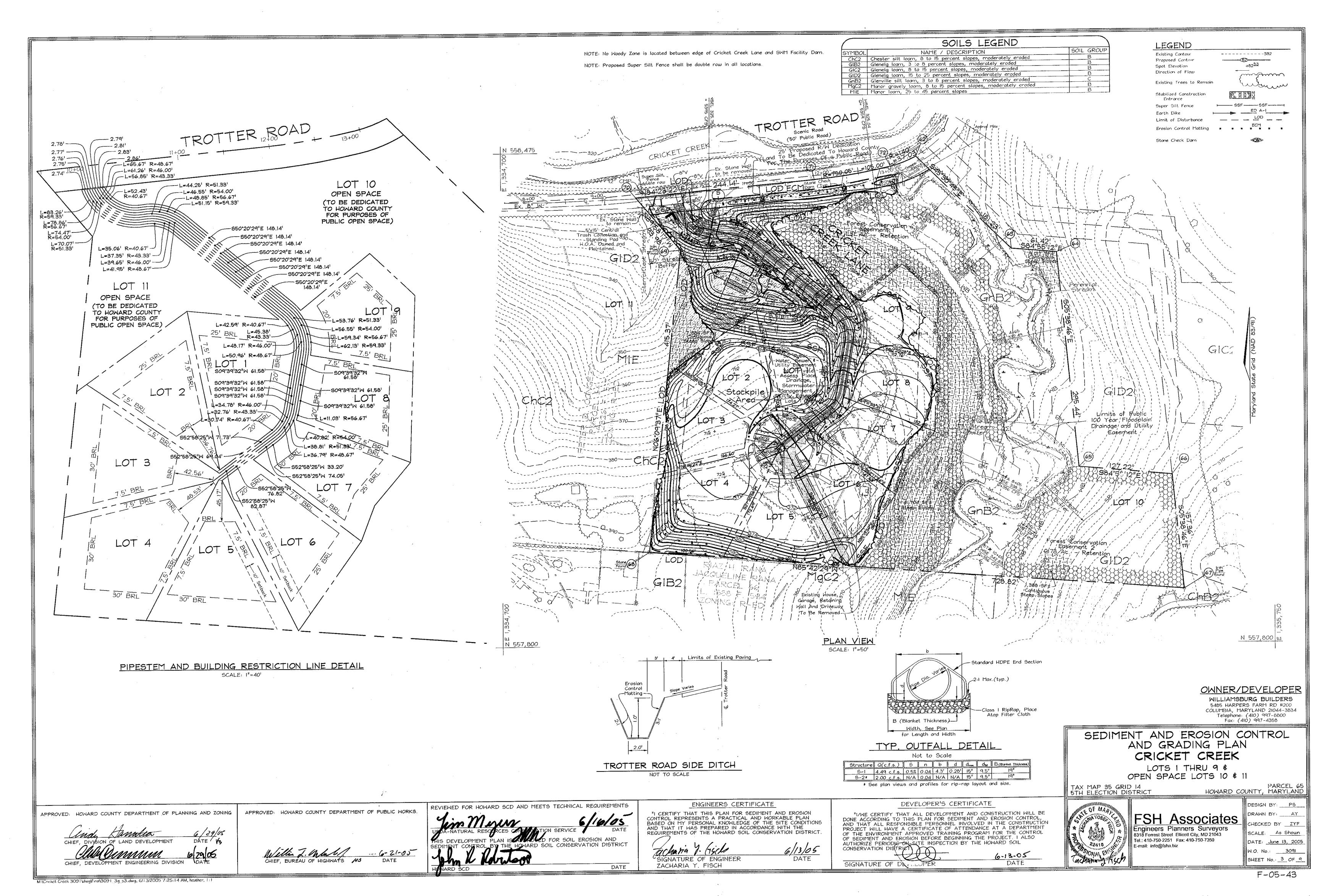
DESIGN BY: PS DRAWN BY: AY CHECKED BY: ZYF SCALE: As Shown Tel.: 410-750-2251 Fax: 410-750-7350 DATE: <u>June 13, 2005</u> W.O. No.: 3091 SHEET No.: \_\_\_ OF 9

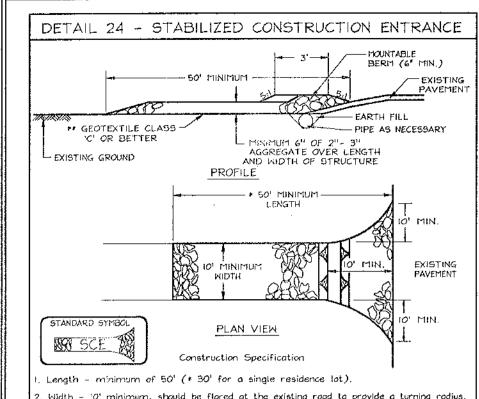
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION

PARCEL 65



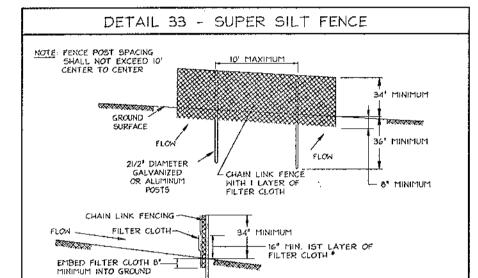




2. Width – 101 minimum, should be flored at the existing road to provide a turning radius 3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. \*\* The plan approval authority may not require single family residences to use geotextile.

4. Stone – cryshed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance. 5. Surface Water - all surface water flowing to or diverted toward construction\_ entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey, a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required. 6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

MARYLAND DEPARTMENT OF ENVIRONMENT



Construction Specifications

latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length

2. Chain link fence shall be fastened securely to the fence posts with wire ties.

The lower tension wire, brace and truss rads, drive anchors and post caps are not

3. Filter cloth shall be fastened securely to the chain link fence with ties spaced

5. When two sections of filter cloth adjoin each other, they shall be overlapped

6. Maintenance shall be performed as needed and silt buildups ramoved when "bulges"

0.3 gal/ft /minute (max.)

1. A minimum of 48 hours notice must be given to the Howard County Department

All vegetation and structural practices are to be installed according to the

3. Following initial soil disturbance or redisturbance, permanent or temporary

4. All sediment traps/bosins shown must be fenced and warning signs posted

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

stabilization shall be completed within: (a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slapes, and all slapes greater than 3:1, (b) 14 days as to all other disturbed or graded areas on the

around their perimeter in accordance with Voi. 1, Chapter 7, HOWARD COUNTY DESIGN MANUAL, Storm Droinage.

Test: MSMT 509

Test: MSMT 322

Test: MSMT 322

! Filter cloth shall be fastened securely to each fence post with wire ties of

stables at top and mid section and shall meet the following requirements for

20 lbs/in (min.)

. Fencing shall be 42" in height and constructed in accordance with the

4 Fitter cloth shall be embedded a minimum of 8" into the around.

\* IF MULTIPLE LAYERS ARE REQUIRED TO ATTAIN 42

Tensile Strength Tensile Modulus

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

and revisions thereto.

establishment of grasses.

Area to be roofed or paved

Area to be vegetatively stabilized

Offsite waste/borrow area location \_\_\_\_\_

all avantities prior to the start of construction.

with an approved and active grading permit

Site Analysis : Total Area \_\_\_

Total Fill

Area Disturbed

Filterina Efficiency 75% (min.)

SEDIMENT CONTROL NOTES

SEQUENCE OF CONSTRUCTION STANDARD SYMBOL

secured with 2 double rows of staples.

effected by the flow must be keyed-in.

CROSS-SECTION

STAPLE OUTSIDE -EDGE OF MATTING ON 2' CENTERS

 Obtain grading permit.
 Notify Howard County Department of Inspections, License and Permits at 410-313-1880 at least 24 hours before starting any work.

3. Install Stabilized Constructon Entrance and Super Silt Fence. (1 week) 4. Grade road side channel along Trotter Road and install seed, mulch, ECM and stone

Construction Specifications

. Key-in the matting by placing the top ends of the matting in a

narrow trench, 6" in depth. Backfill the trench and tamp firmly to

conform to the channel cross-section. Secure with a row of staples

about 4" down slope from the trench. Spacing between staples is 6".

2. Staple the 4" overlap in the channel center using an 18" spacing

3. Before stapling the outer edges of the matting, make sure the

4. Staples shall be placed 2' apart with 4 rows for each strip, 2

5. Where one roll of matting ends and another begins, the end of

6. The discharge end of the matting liner should be similarly

the top strip shall overlap the upper end of the lower strip by 4",

shiplap fashion. Reinforce the overlap with a double row of staples

Note: If flow will enter from the edge of the matting then the area

U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE G - 22 - 2 WATER MANAGEMENT ADMINISTRATION

matting is smooth and in firm contact with the soil.

outer rows, and 2 alternating rows down the center

spaced 6" apart in a staggered pattern on either side.

DETAIL 30 - EROSION CONTROL MATTING

4' OVERLAP OF MATTING

STRIPS WHERE TWO OR MORE STRIP WIDTHS ARE REQUIRED. ATTACH STAPLES ON 18" CENTERS

STAPLE OUTSIDE EDGE OF MATTING ON 2' CENTERS

TYPICAL STAPLES NO. IF

check dams where shown. (f week)

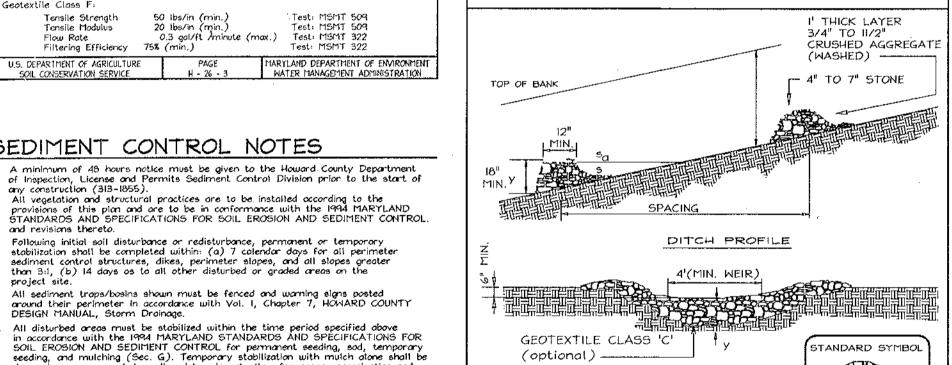
5. Begin rough grading.

6. Construct use-in-common driveway and stone check dams where shown. (2 weeks) . Construct sand filter and temporarily block runoff from entering from 1-2. (2 weeks) 8. Stabilize side slopes of sand filter facility and install super silt fence at top slope Lots I and 2.

9. Fine grade site and install Erosion Control Matting. (2 weeks)
10. Upon stabilization of all disturbed areas and with the permission of the Sediment Control Inspector, remove all sediment control measures and stabilize any remaining disturbed area. (I week)

II. Unblock storm drain at 1-2 to allow flows into sand filter

## DETAIL 7 - STONE CHECK DAM



done when recommended seeding dates do not allow for proper germination and CROSS SECTION 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. STANDARD STONE CHECK DAM DESIGN SPACING 1.29 Acres 1.20 Acres 148,760 CY 4.1% to 7% 7.1% to 10% 8. Any sediment control practice which is disturbed by grading activity for use lined

(optional) \_\_\_\_\_

placement of utilities must be repaired on the same day of disturbance 9. Additional sediment controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector. 10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection

agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or specifications described in Section A-2, Standards and Specifications for grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made. Temporary Swale. II. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter

?. The check dam shall be constructed of 4"-7" stone. The stone shall be placed so that it completely covers the width of the channel and keyed \* Earthwork quantities are solely for the purpose of calculating fees. Contractor to verify \*\* To be determined by contractor, with pre-approval of the Sediment Control Inspector

3. The top of the check dam shall be constructed so the the center is approximately 6" lower than the outer edges, forming a weir that

4. The maximum height of the check dam at the center shall not exced 2 5. The upstream sideof the check dam shall be lined with approximately ! of 3/4" to 11/2" crushed aggregate.

Construction Specifications

. Swales and ditches shall be prepared in accordance with the construction

6. Accumulated sediment shall be removed when it has built up to 1/2 of the original height of the weir crest.

U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION

#### 21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

<u>Definition</u>

Placement of topsoil over a prepared subsoil prior to Purpose

To provide a suitable soil medium for vegetable growth. Soils of concern have law moisture content, law nutrient levels, low pH, materials toxic to plants, and/or unacceptable soll gradation.

Conditions Where Practice Applies This practice is limited to areas having 2:1 or flatter stopes where: a. The texture of the exposed subsoil/parent material

d. The soil is so acidic that treatment with

is not adequate to produce vegetative growth. b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients. The original soil to be vegetated contains material toxic to plant growth,

11. For the purpose of these Standards and Specifications areas having slopes steeper than 21 require special consideration and design for adequate stabilization. Areas having slopes steeper than 21 shall have the appropriate bilization shown on the plane.

Construction and Material Specifications 1. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in thes specifications. Typically, the depth of topsoil to be representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.

II. Topsoil Specifications - Soil to be used as topsoil must meet the following: i. Topsoil shall be a loarn, sandy loarn, clay loarn, silt toam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or a soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoits and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger that I and I/2 in

il. Topsoil must be free of plants or plant parts such

as Bermuda grass, quackgrass, Johnsongrass, nutsedge, polson lvy, thistle, or others as specified. iii. Where the subsoil is either highly acidic or composed of heavy clays, ground timestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square

feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described n the following procedures. 11. For sites having disturbed areas under 5 acres:

 Place topsoil (if required) and apply soil amendments as specified in 20,0 <u>Vegetative Stabilization</u> – Section I – <u>Vegetative Stabilization Methods and Materials</u>. iii. For sites having disturbed areas over 5 acres: i. On soil meeting topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:

a, pH for topsoil shall be between 6,0 and 7.5. If the tested soil demonstrates a pH of less than

6.0. sufficient time shall be prescribed to raise the pH to 6.5 or higher. Organic content of topsoil shall be not less than 1.5 percent by weight.
c. Topsoil having soluble sait content greater than 500 parts per million shall not be used.
d. No sod or seed shall be placed on soil soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elopsed (14 days min.) to permit dissipation of

phyto-toxic materials. NOTE: Topsoil substitutes or amendments, as recommended by a qualified agranomist or soil scientist and approved by appropriate approval authority, may be used in lieu of natural topsoil.

 Place topsoil (if required) and apply soil ammendments specified in 20.0 Vegetative Stabilization-Section I-Vegetative Stabilization Methods and Materials. V. Topsoil Application

 When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4° - 8° higher in elevation.

layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions

ly. Topsoil shall not be place while the topsoil or subsoil is in a frazen or muddy condition, when the subsoil is excessively uset or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

#### PERMANENT SEEDING NOTES APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO

IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED. SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously

loosened. SOIL AMENDMENTS: In tieu of soit test recommendations, use one of 1) Preferred-Apply 2 tons per ocre dolomitic limestone (92 lbs. 100 sq.ft.) and 600 lbs per ocre 10-10-10 fertilizer (14 lbs./

1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq.ft.) 2) Acceptable-Apply 2 tans per acre dolamatic limestone (92 lbs/ 1000 saft.) and apply 1000 lbs. per acre 10-10-10- fertilizer (23 lbs./1000 saft.) before seeding. Harrow or disc into upper three inches of soil.

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs/1000 eq.ft.) of Kentucky 31 Tall Fescue, For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1000 eq.ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tans/acre well anchored straw.

MULCHING: Apply 1 1/2 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.) for anchoring. MAINTENANCE: Inspect all seeded areas and make needed repairs,

TEMPORARY SEEDING NOTES SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENT'S: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft). SEEDING: For periods March I thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.) For the period May I thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs./1000 sq.ft.). For the period November I thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring or use and

MULCHING: Apply i 1/2 to 2 tons per acre (70 to 90 lbs./1000 saft.) of unrotted small grain straw immediately after seeding.

Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

MARYLAND 378 STORMWATER MANAGEMENT POND CONSTRUCTION SPECIFICATIONS

These specifications are appropriate to all pands within the scape of the Standard for practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsail. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1. All trees shall be cleared and grubbed within 15 feet of the tow of the

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush, and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 25-fact radius around the inlet

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the awner or his representative. When specified, a sufficient quantity of topsoil will be stockpilled in a suitable location for use on the embankment and other designated areas.

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stymps,

wood, rubbish, stones greater than 6°, frozen or other objectionable materials. Fill material for the center of the embankment, and cut off trench shall conform to Unified Soil Classification GC, 9C, CH, or CL and must have at least 30% passing the #200 sleve. Consideration may be given to the use of other materials in the embankment if designed by a geotechnical engineer. Such special designs must have construction supervised by a geotechnical engineer. Materials used in the outer shell of the embankment must have the capability to support vegetation of the appoint required to prevent erosion of the embankment.

Placement - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be

placed in maximum 8 inch thick (before compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portlans of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated into the embankment.

Compaction — The movement of the houling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of heavy equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble, yet not be so wet that water can be squeezed out.

When required by the reviewing agency the minimum required density shall not be less than 95% of maximum dry density with a moisture content within +1-2% of the optimum. Each tayer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer of the time of construction. All compaction is to be determined by AASHTO Method T-99 (Standard Proctor).

Cut Off Trench - The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with

Embankment Core - The core shall be parallel to the centerline of the embankment as shown on the plans. The top width of the core shall be a minimum of four feet. The height shall extend up to at least the 10 year water elevation or as shown on the plans. The side slopes shall be 1 to 1 or flatter. The core shall be compacted with construction

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill moterial. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operated closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fitt of 24° or greater over the structure or pipe.

Structure backfill may be flowable fill meeting the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 313 as modified. The mixture shall have a 100-200 psi; 28 day unconfined compressive strength. The flowable fill shall have a minimum pill of 4.0 and a minimum resistivity of 2,000 ohm-cm. Material shall be placed such that minimum of 6° (measured perpendicular to the outside of the pipe) of flowable fill shall be placed such that minimum of 6° (measured perpendicular to the outside of the pipe) of flowable fill shall be placed such that minimum of 6° (measured perpendicular to the outside of the pipe) of flowable fill shall be token (sand bags, etc.) to prevent floating the pipe. When using flowable fill, all metal pipe shall be bituminous coated. Any adjoining soil fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction expipment. The material shall completely fill all voids adjacent to the flowable fill zone. At no time during the backfilling operation shall driven expipment be allowed to operate closer than four feet, measured incrizantally, to any part of the structure. Under no circumstances shall expipment be driven over any part of a structure or pipe unless there is a compacted fill of 24° or greater over the structure or pipe. Backfill (flowable fill)zone shall be of the type and quality conforming to that specified for the core of the embankment or other embankment materials.

1. Materials - (Polymer Coated steel pipe)- Steel pipes with polymeric coating shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. This pipe and its appurtenances shall conform to the requirements of AASHTO Specifications M-245 & M-246 with watertight coupling bands on flanges.

Materials - (Aluminum Coated Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification in-274 with watertight coupling bands or flanges. Aluminum Coated Steel Pipe, when used with flowable fill or when soil and/or water conditions warrant the need for increased durability, shall be fully bituminous coated per requirements of AASHTO Specification M-190 Type A. Any aluminum coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound. Aluminum surfaces that are to be in contact with concrete shall be pointed with one coat of zinc chromate primer or two coats of asphalt.

Moterials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with water tight coupling bands or flanges. Aluminum Pipe, when used with flowable fill or when soil and/or water conditions warrant for increased durability, shall be fully bituminous coated per requirements of AASHTO Specification M-190 Type A. Aluminum surfaces that are to be in contact with the coates of an are to be in contact with the coates of a substitute of the coates of the coates of a substitute of the coates o

2. Coupling, bands, anti-seep collars, and sections, etc., must be composed of the same material and coatings as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at lease 24 mile in thickness.

3. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight.

All connections shall use a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be rerolled an adequate number of corrugations to accommodate the bandwidth. The following type connections are
acceptable for pipes less than 24 inches diameter: flanges on both ends of the pipe with a circular 3/8 inch thick
closed cell circular neoprene gasket; and a 12-inch wide hugger type band with o-ring gaskets having a minimum
diameter of 1/2 inch greater than the corrugation depth. Pipes 24 inches in diameter and larger shall be connected by
a 24 inch long annular corrugated band using a minimum of 4(four) rads and lugs, 2 on each connecting pipe end. A
24-inch wide by 3/8-inch thick closed cell circular neoprene gasket will be installed with 12 inches on the end of
each pipe. Flanged joints with 3/8'inch closed cell gaskets the full width of the flange is also acceptable.

Hetically corrugated pipe shall have either continuously welded seams or have lock seams with internal caulking or a neoprene bead.

4. Bedding – The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spangy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

Materials - Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed. ASTM C-361.

2. Bedding - Reinforced concrete pipe conduits shall be laid in a concrete bedding/cradie for their entire length. This bedding/cradie shall consist of high stump concrete placed under the pipe and up the sides of the pipe at least 50% of its outside diameter with a minimum thickness of 6 inches. Where a concrete cradie is not needed for structural reasons, flowable fill may be used as described in the "Structure Backfill" section of this standard. Gravel bedding is not permitted.

3. Laying pipe — Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in occordance with recommendations of the manufacturer of the material. After the joints are seated for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 4 feet from the riser.

1. Materials - PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241.

Corrugated High Density Polyethylene (HDPE) pipe, couplings and fittings shall conform to the following: 4°-10° inch pipe shall meet the requirements of AASHTO M252 Type 5, and 12° through 24° inch shall meet the requirements of AASHTO M294 Type 5.

Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

Drainage Diaphragms - When a drainage diaphragm is used, a registered professional engineer will supervise the

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 414, Mix No. 3.

Rock riprop shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction Materials. Section 311.

All work an permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage charnels, and stream diversions necessary to protect to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work free from water or required or directed by the engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the foll flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be occomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require droining the water sumps from which the water shall be pumped.

Alt borrow areas shall be graded to provide proper drainage and left in a sightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Natural Resources Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

Construction operations will be corried out in such a manner that erosion will be controlled and water and oir poliution minimized. State and local laws concerning poliution abatement will be followed. Construction plans shall detail erosion and sediment control measures.

Geotexile shall be placed under all riprap and shall meet requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 921.09, Class C.

Corrugated Metal Pipe All of the following criteria shall apply for corrugated metal piper

concrete shall be pointed with one cost of zinc chromate primer or two costs of aspholt. may be used for connections. The pH of the surrounding soils shall be between 4 and 9.

Backfilling shall conform to "Structure Backfill".
 Other details (anti-seep collars, valves, etc.) shall be as shown an the drawings.

5. Other details (anti-seep collars, valves, etc.) shall be shown on the drawings.

2. Joints and connections to anti-seep collars shall be completely watertight.

5. Other details (anti-seep collars, volves, etc.) shall be as shown on the drawings.

4. Backfilling shall conform to "Structure Backfill".

4. Backfilling shall conform to "Structure Backfill".

Care of Water during Construction

Stabilization

Plastic Pipe The following criteria shall apply for plastic pipe:

Reinforced Concrete Pipte of the following criteria shall apply for reinforced concrete pipe:

construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability.

Construction Specifications (for SWM Facility)

Site Preparation

Structure Backfill

Pipe Conduits

All pipes shall be circular in cross section.

ENGINEERS CERTIFICATE "I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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.

Tacharia

DEVELOPER'S CERTIFICATE

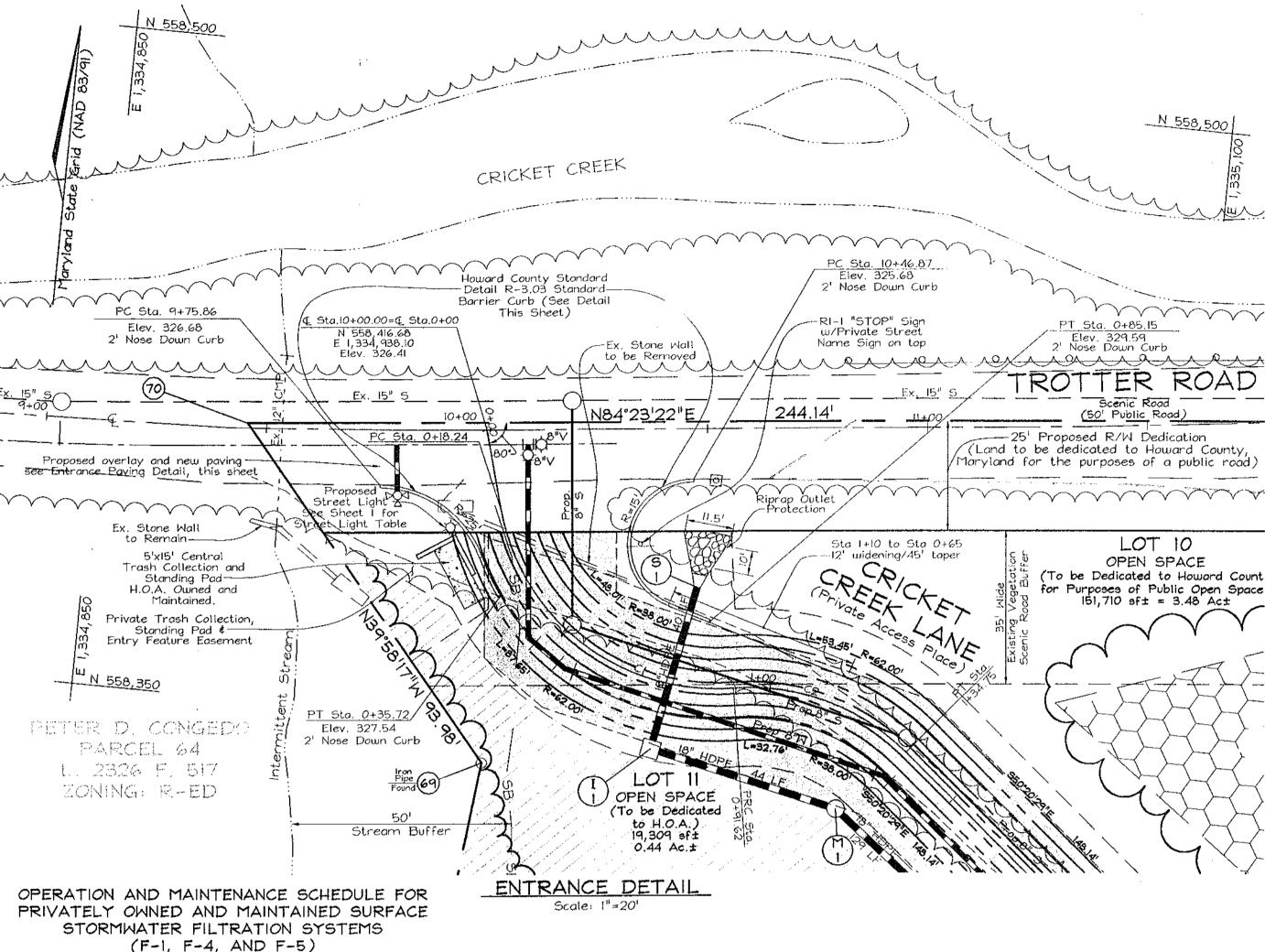
- PAVEMENT WIDTH INDICATED ON

TYPICAL STREET SECTIONS TO

BE MEASURED TO THIS POINT

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL. AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO

AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT. 6-13-05 DATE SIGNATURE



I. The stormwater facility shall be inspected annually and after major storm, Inspections shall be performed during wet weather to determine if the facility is functioning properly

2. The top and side slopes of the embankment shall be mowed a minimum of once per year, when vegetation reaches 18" in height or as needed. 3. Filters that have a grass cover shall be mowed a minimum of three (3) times growing season to maintain a maximum grass height of less than 12 inches. 4. Debris and litter shall be removed during regular mowing operations and as needed. 5. Visible signs of erosion in the facility shall be repaired as soon as it is noticed. 6. Remove silt when it exceeds four (4) inches deep in the foreboy. 7. When water ponds on the surface of the filter bed for more than 72 hours, the top few inches of discolored material shall be replaced with fresh material. Proper cleaning and disposal of the removed materials and liquid must be followed by the owner. 8. A log book shall be maintained to determine the rate at which the facility drains.

compliance with operation and maintenance criteria. 10. Once the performance characteristics of the infiltration system have been verified, the monitoring schedule can be reduced to an annual basis unless the performance data indicates that a more frequent schedule is required.

9. The maintenance log book shall be available to Howard County for inspection to insure

## Recharge Obligation (Total Site)

[Red Frov a. to Zoook]					
		E.D. SUMP	1ARY		
POND SUMMARY	IYEAR(CPV)	IO YEAR	100 YEAR	WATER QUALITY FOR AREA TO SAND FILTER	
Flow into Pond	2.25 cfs	8.24 cfs	13.84 cfs	WOV Reald: 0.036 ac.ft	
Flow Out of Pand	0.18 cfs	7.63 cfs	12.93 cfs	MQv Prov'd: 0.036 ac-ft	
				Total Provided: I.O ac-ft	
WS Elevation	339.51	339,91	340.20		
Storage Volume	0.073 ac-ft	0.027 ac-ft	0.030 tc-ft		

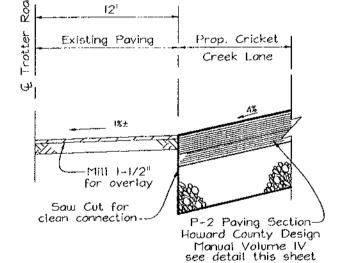
2 CONCRETE

STANDARD BARRIER CURB

HOWARD COUNTY STANDARD R-3,03 NOT TO SCALE

\* Recharge is met within the Grass Channels through the Percent Area Method. \*\* Assumes clogged Low Flow Orifices.

\*\* Additional WQv provided through credits for areas not entering ponds, see computations.



P-2 LIGHT DUTY PAVING SECTION - I 1/2" BIT, CONC. SURFACE 2 1/2' BIT. CONC. BASE ----- 5" BIT. CONC. BASE - 6' GRADED AGGREGATE BASE (GAB) FULL DEPTH BIT. CONC. ALTERNATE GRANULAR BASE ALTERNATES

Pavina sections shown relates to a CBR value of 7. Actual CBR test results may cause modification of these paving sections. All paying to be P-1 unless otherwise noted. See plan for limits.

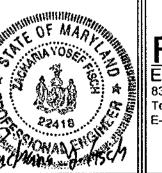
#### ENTRANCE PAVING DETAIL (NOT TO SCALE)

### OWNER/DEVELOPER WILLIAMSBURG BUILDERS

5485 HARPERS FARM RD #200 COLUMBIA, MARYLAND 21044-3834 Telephone: (410) 997-8800 Fax: (410) 997-4358

## CRICKET CREEK LOTS 1 THRU 9 \$

OPEN SPACE LOTS 10 \$ 11 TAX MAP 35 GRID 14 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND



FSH Associates **Engineers Planners Surveyors** 本 | 8318 Forrest Street Ellicott City, MD 21043 Tel.; 410-750-2251 Fax: 410-750-7350 E-mail: info@fsha.biz

SEDIMENT & EROSION CONTROL AND

MISCELLANEOUS NOTES & DETAILS

DESIGN BY: PS DRAWN BY: \_\_\_\_GS CHECKED BY: ZYF SCALE: \_\_As Shown DATE: June 13, 2005 W.O. No.: \_\_\_\_3091 SHEET No.: 4 OF 9

PARCEL 65

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT CHIEF, DEVELOPMENT ENGINEERING DIVISION APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

waterway design

n the spring, or use sod.

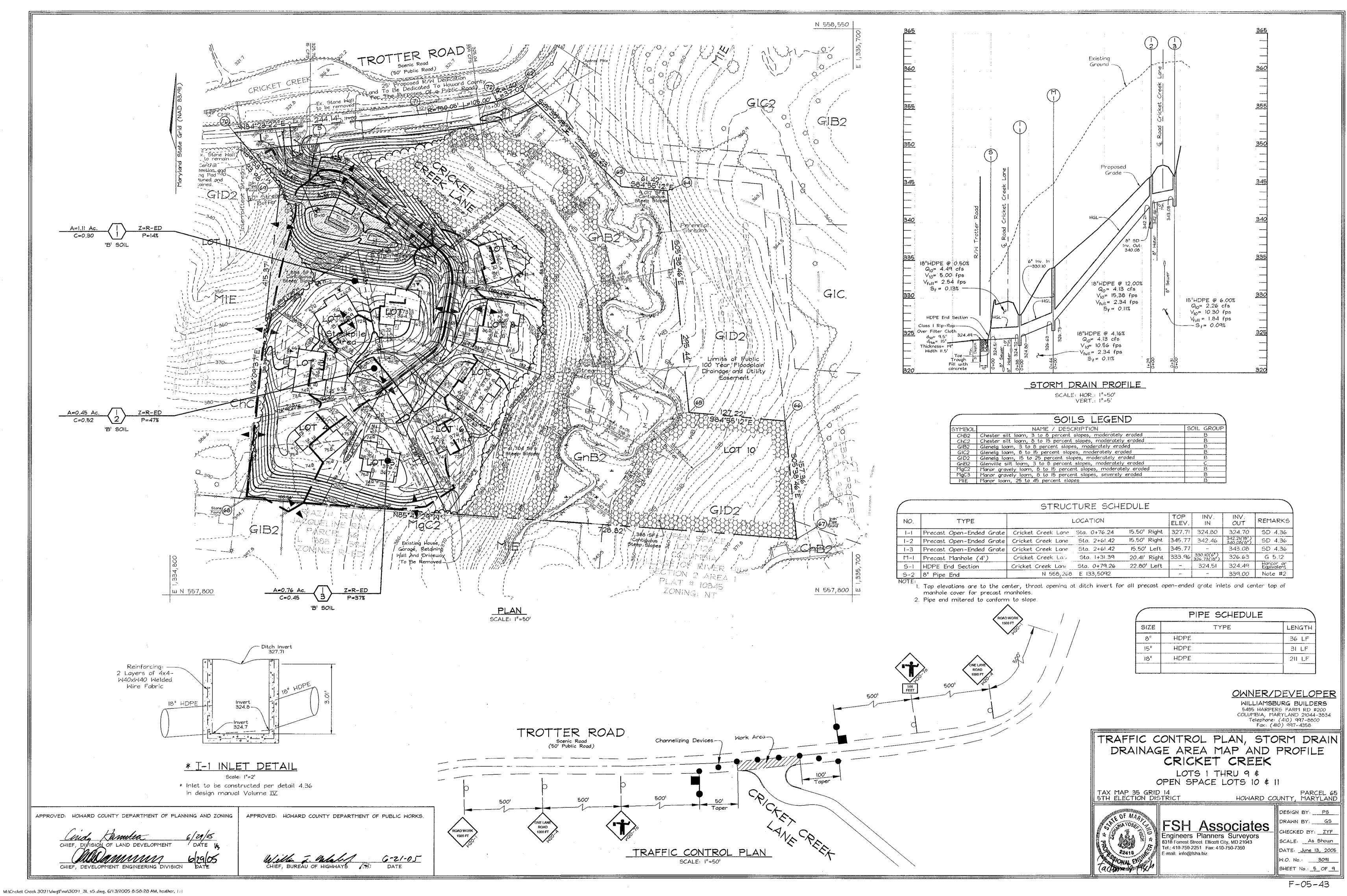
Jim Myen USDA-NATURAL RESOURCES CONSERVATION SERVICE THIS DEVELOPMENT PLAN IS A WAS FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

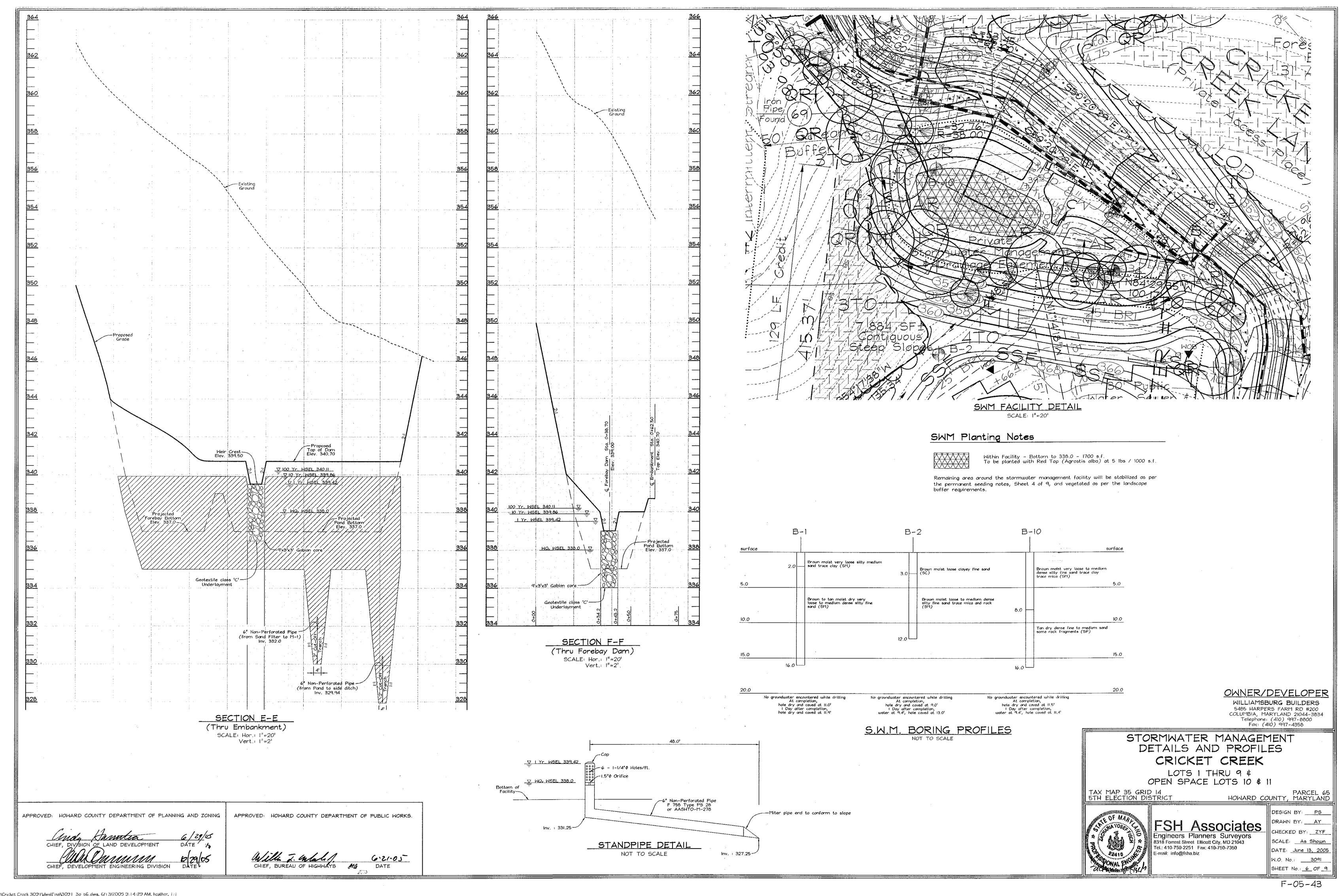
REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

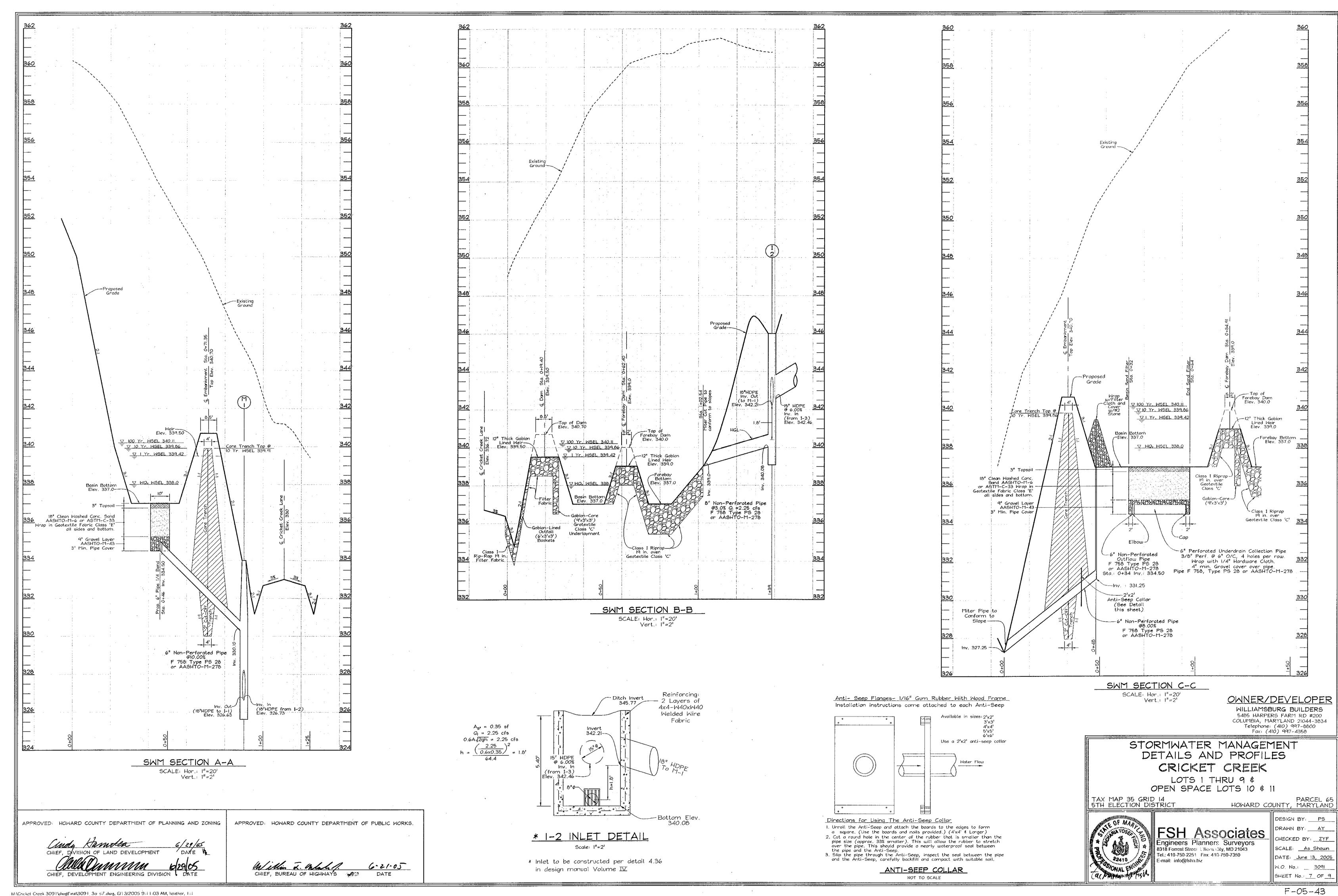
SIGNATURE OF ENGINEER ZACHARIA Y. FISCH

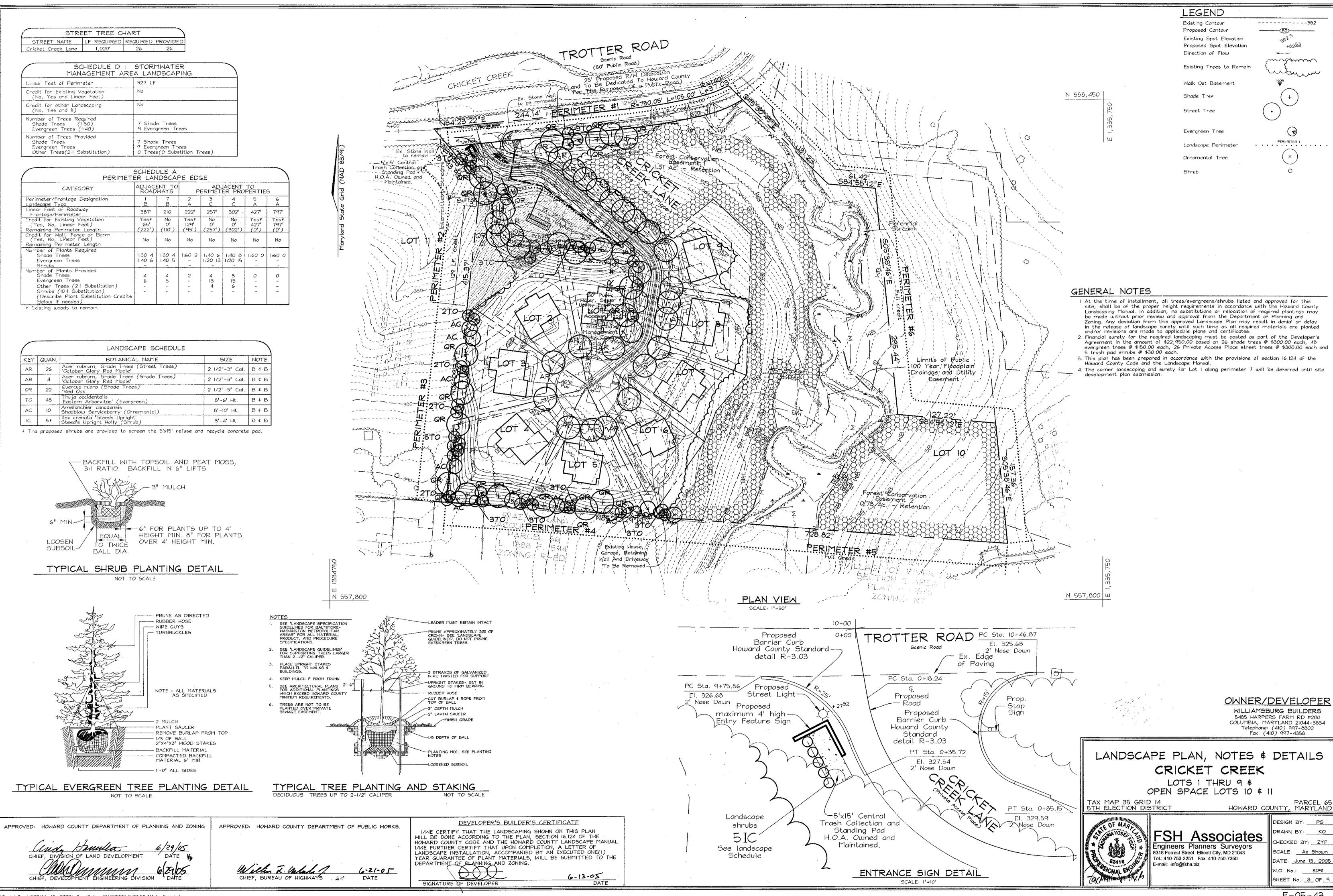
M:\Cricket Creek 309 \\dwg\Final\309 | 3n 54.dwg, 6/13/2005 7:28:46 AM, heather, 1:1

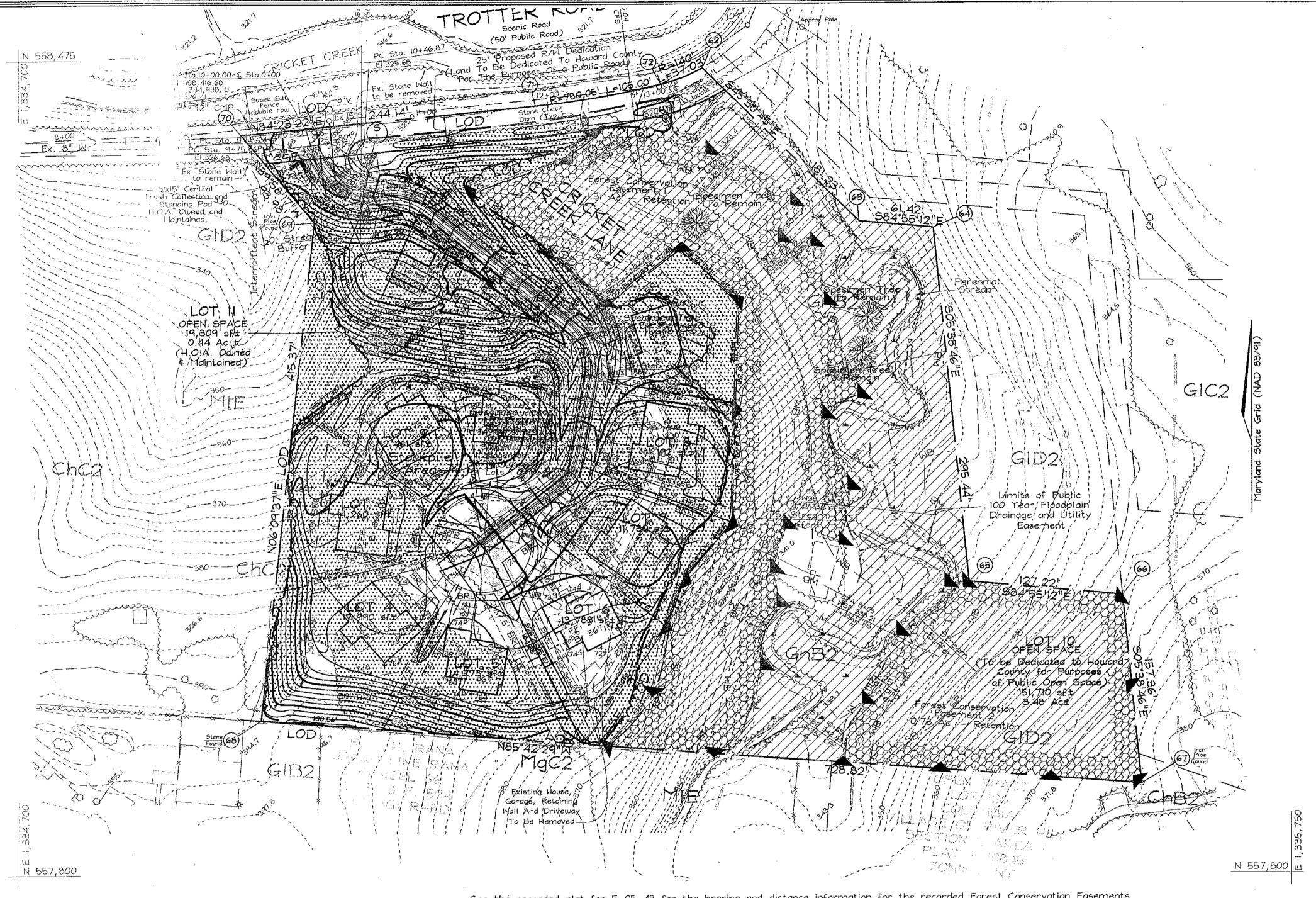
F-05-43











See the recorded plat for F-05-43 for the bearing and distance information for the recorded Forest Conservation Easements.

## Soil Protection Zone Notes

The Soil Protection Zone shall include all areas contained inside the Limit of Disturbance. 2. Where possible, the Soil Protection Zone shall extend to the drip line of specimen trees. For other groups of trees, the zone shall be the drip line or 40% of the height of the tree, whichever is greater. 3. No construction activity is permitted within the

Soil Protection Zone. 4. If soil has been compacted or grading has taken place in the vicinity of the Soil Protection Zone, root pruning shall be implemented per Root Pruning detail, shown on this plan.

5. Root pruning shall occur prior to the beginning of construction. 6. Where the Soil Protection Zone must encroach inside the Critical Root Zone of a tree, soil disturbance shall be mitigated with vertical mulching, radial trenching, or another nethod

approved by the ERI Forest Conservation Professional. 7. Prior to contruction, the Lamits of Disturbance

shall be marked and the ERI Professional shall determine which trees will need preventative treatment or removal. 8. Tree maintenance and renk all shall be undertaken by a qualified MD Tree Expert to

ensure damage to surrounding trees is minimized. 9. Brush and limbs removed for construction shall be chipped and spread at the edge of the Soil Protection Zone to a depth to to exceed 6 inches. This shall occur outside the Soil Protection Zone where compaction could impact otherwise unprotected Critical Root Zone.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

ISION OF LAND DEVELOPMENT

## Forest Tree Protection and Management Notes

1. Tree protection devices shall be installed prior to any grading or land 2. After the boundaries of the retention areas have been staked and flagged and before any disturbance has taken place a pre-construction meeting with

the Howard County Inspector is required. 3. Provide maintenance to tree protection devices and signage to maintain their integrity throughout the duration of the project. 4. Attachment of signs to tree protection devices to maintain their integrity thoughout the duration of the project.

5. Any significant changes made to the Forest Conservation Plan shall be

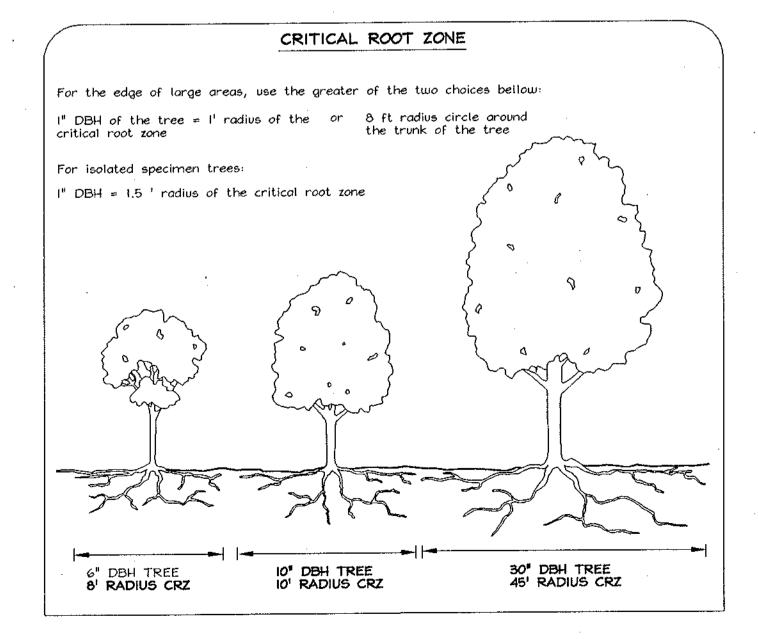
made with the prior approval of the Howard County Dept Of Planning and 6. No burial of discarded material is permitted within the Forest Conservation

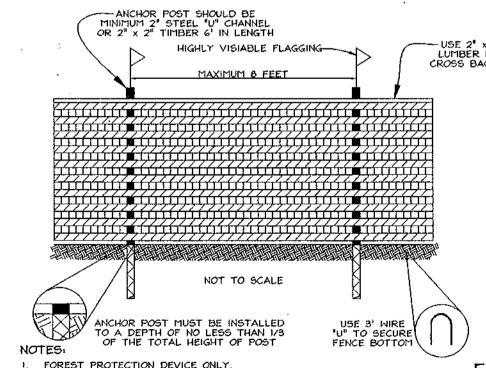
and Planting areas. 7. No open burning within 100 feet of wooded areas is permitted. 8. Post construction phase.

a. Inspect existing trees around the perimeter of the site for signs of root or trunk damage and excessive soil compaction. b. Remove dead or dying trees and evaluate for hazard tree removal.\* c. All temporary forest protection devices will be removed after construction. d. Following completion of construction, prior to use, the county inspector

\* A licenced Arborist or Forester should be retained for this service as needed.

shall inspect the entire site for compliance with this Forest Conservation





FOREST PROTECTION DEVICE ONLY.

RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.

BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.

ROOT DAMAGE SHOULD BE AVOIDED.

PROTECTIVE SIGNAGE MAY ALSO BE USED.

DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

TREE PROTECTION DETAIL BLAZE ORANGE PLASTIC MESH

#### LEGEND

Existing Contour -----382 Proposed Contour Existing Spot Elevation Proposed Spot Elevation Direction of Flow

Existing Trees to Remain

Retention area

Clearing area Forest conservation easement

Forest retention/ reforestation sign Specimen tree Wetland limit Existing stream Stream buffer Wetland buffer grants and company of the contracts Soils division line

or forest conservation calculation purposes

only; not actual cleaning limits.

Tree protection fence Silt Fence Super Silt Fence

Limit of Disturbance 100 Year Floodplain Limit

## FOREST CONSERVATION WORKSHEET

	Net Tract Area	Acres
	A. Total Tract Area	6.95
	B. Area Within 100 Year Floodplain	0.95
Ì	C. Other deductions	
	D. Net Tract Area	6.00
	Zoning Use Category: RESIDENTIAL-SUBURBAN	
	Land Use Category	
	E. Afforestation Minimum (15 $\% \times D$ )	0.90
	F. Conservation Threshold (20 % x D)	1.20
	Existing Forest Cover	
	G. Existing Forest on Net Tract Area	4.81
	H. Forest Area Above Conservation Threshold	3.61
	Breakeven Point	
	1. Forest Retention Above Threshold with no	1.92
	Mitigation	
	J. Clearing Permitted without Mitigation	2.89
	Proposed Forest Clearing	
	K. Forest Areas to be Cleared	2.77
	L. Forest Areas to be Retained	2.04
	Planting Requirements	
	M. Reforestation for Clearing Above Threshold	0.69
	N. Reforestation for Clearing Below the Threshold	0.00
	P. Credit for Retention Above Conservation Threshold	0.84
	Q. Total Reforestation Required	0.00
	R. Total Afforestation Required	0.00

## FOREST CONSERVATION NARRATIVE

S. Total Reforestation and Afforestation Requirement

This Forest Conservation Plan has been developed in accordance with the Howard County Forest Conservation Act of

The net tract area consists of 6.00 acres of land. The site contains 4.81 acres of forest cover on the net tract. The break even obligation is 1.92 acres. Several regions of forested area are not included in the forest cover total due to their being reduced below minimum size criteria by the floodplain. Though the area is considered "cleared", the forest will remain in all areas outside of the LOD. The existing barn will be removed, and the area allowed to naturally regenerate. This area is not part of the forest easements.

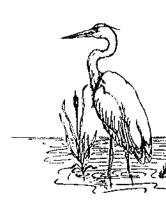
Forest retained in easements will total 2.04 acres, in two forest conservation easements. All easements contain wetlands, w streams and their buffers, and steep slopes. Three specimen trees will be retained, as well.

The Forest Conservation Easements established on this plan fulfill the requirements of Section 16.1200 of the Howard County Code and the Forest Conservation Manual. No clearing, grading or construction is permitted within the Forest Conservation Easements; however, Forest Management Practices as defined in the Deed of Forest Conservation Easement are allowed.

Forest conservation surety will be posted in the amount of \$17,772.48 (retention of 2.04 Ac./88,862.4 s.f. @ \$0.20/s.f)

## FOREST CONSERVATION EASEMENT TABLE

EASEMENT	TYPE	AREA (ACRES)
1	Retention	1.31
2	Retention	0.73
TOTAL		2.04



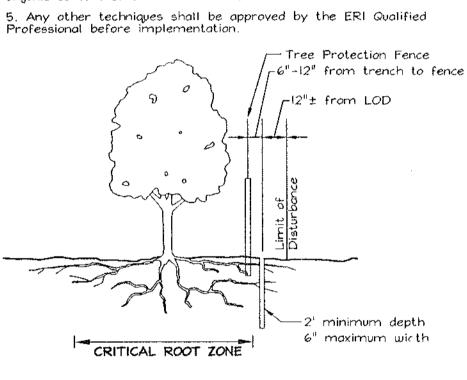
**EXPLORATION** RESEARCH, INC. ENVIRONMENTAL CONSULTANTS

## ROOT PRUNING

. Retention areas shall be set prior to construction 2. Boundaries of retention areas shall be flagged, and location of trench shall be specified by ERI Qualified Professional. 3. Roots shall be cut cleanly with root pruning equipment. Where roots XI" are found, trenching shall be done by air spade or hand tools. Roots II" shall be cut with a hand saw. 4. Trench shall be immediately backfilled with soil removed or high organic content soil.

VICINITY MAP

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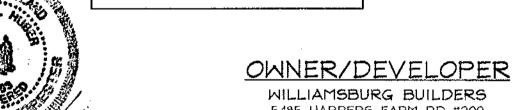


Forest Retention Area Protection Signage

FOREST RETENTION AREA

MACHINERY, DUMPING OR STORAGE OF ANY MATERIALS IS PROHIBITED

VIOLATORS ARE SUBJECT TO FINES AS IMPOSED BY THE MARYLAND FOREST CONSERVATION ACT OF 1991



#### WILLIAMSBURG BUILDERS 5485 HARPERS FARM RD #200

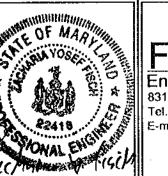
COLUMBIA, MARYLAND 21044-3834 Telephone: (410) 997-8800 Fax: (410) 997-4358

FINAL FOREST CONSERVATION PLAN

## CRICKET CREEK

LOTS | THRU 9 \$ OPEN SPACE LOTS 10 \$ 11

TAX MAP 35 GRID 14 5TH ELECTION DISTRICT PARCEL 65 HOWARD COUNTY, MARYLAND



FSH Associates Engineers Planners Surveyors 8318 Forrest Street Ellicott City, MD 21043 A Rel.: 410-750-2251 Fax: 410-750-7350 E-mail: info@fsha.biz

DESIGN BY: \_\_\_DSH\_\_\_ DRAWN BY: DSH CHECKED BY: ZYF SCALE: 1'=50' DATE: <u>June 13, 2005</u> W.O. No.: 3091 SHEET No.: 9 OF 9