·								
	SHEET INDEX							
SHEET No.	DESCRIPTION							
1	TITLE SHEET							
2	STREAM VALLEY LANE PLAN AND PROFILE							
3	STREET TREE, GRADING & SEDIMENT CONTROL PLAN							
4	DRAINAGE AREA MAP & LANDSCAPE PLAN							
5	STORM DRAIN PROFILES							
6	SEDIMENT CONTROL NOTES AND DETAILS							
7	FOREST CONSERVATION PLAN							

FINAL ROAD CONSTRUCTION, GRADING AND SEDIMENT CONTROL PLAN

ROCKBURN VIEW

SECTION TWO

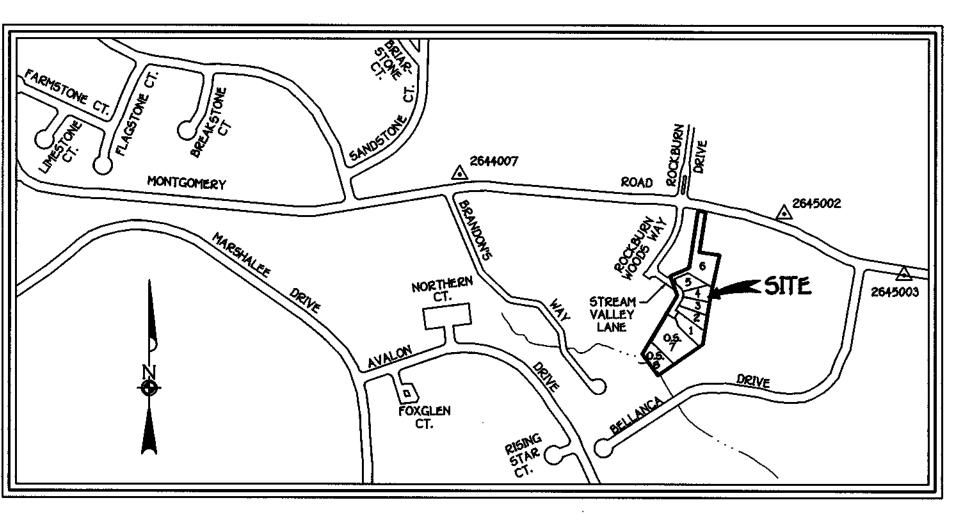
LOTS 1 THRU 8

ZONED R-20 TAX MAP NO. 37 PARCEL NO. 329 GRID NO. 4

ROAD	CLASSIFICATION	CHART
road name	CLASSIFICATION	R/W WIDTH
STREAM VALLEY LANE	PUBLIC ACCESS PLACE	40°

	STREET LIGHT CHART							
DWG. No.	STREET NAME	STATION	OFF- SET	FIXTURE/POLE TYPE				
2	STREAM VALLEY LANE	2+36	15°R	100-WATT COLONIAL H.P.S. VAPOR FIXTURE POST TOP FIXTURE MOUNTED ON A 14-FOOT BLACK FIBERGLASS POLE. LOCATED 2"-4" FROM BACK OF CURE				
2	STREAM VALLEY LANE	3+97	21'L	100-WATT COLONIAL H.P.S. VAPOR FIXTURE POST TOP FIXTURE MOUNTED ON A 14-FOOT BLACK FIBERGLASS POLE. LOCATED 2'-4' FROM BACK OF CURE				

NOTE: MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT



<u>VICINITY MAP</u>

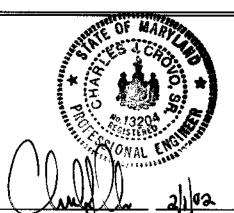
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

GENERAL NOTES

- 1. ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST
- HOWARD COUNTY STANDARDS, UNLESS WAIVERS ARE APPROVED. 2. LOCATION: THE SITE IS LOCATED SOUTH OF MONTGOMERY ROAD, ADJACENT TO ROCKBURN ELEMENTARY SCHOOL.
- TAX MAP: 37 PARCEL: 329 GRID: 4
- 3. ZONING: R-20 PER COMPREHENSIVE ZONING, EFFECTIVE OCTOBER 16, 1993.
- TOPOGRAPHY SHOWN HEREON IS BASED ON FIELD RUN TOPOGRAPHY BY FISHER, COLLINS AND CARTER, INC. DATED AUGUST, 1997 AND SUPPLEMENTED BY HOWARD COUNTY AERIAL TOPOGRAPHY DATED SEPTEMBER, 2000.
- BE EXTENDED FROM THE LIMITS OF EXISTING CONTRACT Nos. 34-W, 10-1602 AND 10-1215.
- STORMWATER MANAGEMENT FOR THIS DEVELOPMENT HAS BEEN PROVIDED UNDER F99-163, "ROCKBURN VIEW" SUBDIVISION, WATER QUALITY HAS BEEN PROVIDED UNDER F99-163, "ROCKBURN VIEW" SUBDIVISION.
- THIS HORIZONTAL AND VERTICAL DATUM SHOWN ARE BASED ON THE FOLLOWING NAD'27 HOWARD COUNTY CONTROL STATIONS:
 HOWARD COUNTY MONUMENT 2644007 N 503086.767

- 10. GROSS AREA OF TRACT: 4.840 Ac.+
- 11. A) TOTAL AREA OF PUBLIC ROADWAYS OR RIGHTS OF WAY: 0.276 Ac.+
- B) TOTAL AREA OF LOTS: 2.056 AC.
- C) TOTAL AREA OF OPEN SPACE: 1.737 AC.+ D) TOTAL NO. OF PROPOSED BUILDABLE LOTS = 6
- E) TOTAL NO. OPEN SPACE LOTS = 2
- F) NET AREA OF TRACT = 4.840 AC.4
- 12. FOREST STAND DELINEATION AND WAS PROVIDED BY ENVIRONMENTAL SYSTEMS ANALYSIS, INC. DATED NOV., 1996. FOREST CONSERVATION WAS PREPARED BY EXPLORATION RESEARCH, INC. DATED NOV., 1997. A TOTAL OF 0.48 AC. IS REQUIRED FOR AFFORESTATION. THIS AMOUNT OF AFFORESTATION WILL BE MET BY PLANTING 0.338 ACRES
- ONSITE. THE REMAINING 0.14 AC. (6,098.4 SQ. FT.) OF AFFORESTATION OBLIGATION WILL BE MET BY PROVIDING A FEE-IN-LIEU PAYMENT OF \$3,049.20 TO THE HOWARD COUNTY FOREST CONSERVATION FUND. * 13. THE 100 Yr. FLOODPLAIN AS SHOWN ON THESE PLANS IS BASED ON FLOODPLAIN STUDY PREPARED
- BY FISHER, COLLINS & CARTER, Inc. DATED JUNE 1998 (AREA = 0.189 AC.+).
- THE FLOODPLAIN AREA SHOWN IN SECTION TWO WAS DESIGNED FOR ROCKBURN VIEW (F99-163).
- * 14. THE WETHANDS STUDY WAS PREPARED BY AMERICAN LAND CONCEPTS DATED NOV. 12, 1996 AND EXPLORATION RESEARCH DATED JUNE, 1998. * 15. THE TRAFFIC STUDY WAS PROVIDED BY LEE CUNNINGHAM ASSOC., INC. DATED NOV. 12, 1996.
- * 16. THE SOILS INVESTIGATION REPORT WAS PREPARED BY HILLIG-CARNES ENGINEERING ASSOC., INC. DATED NOV., 1997 AND JUNE 1998. 17. STREET TREES AND PERIMETER LANDSCAPE TREES ARE SHOWN ON THESE ROAD PLANS.
- 10. MINIMUM LOT AREA = 14,000 SQ. FT.
- 19. OPEN SPACE REQUIRED: 30% x 4.87 AC. = 1.461 AC.+
- OPEN SPACE PROVIDED: 1.740 AC.+
- 20. RECREATIONAL OPEN SPACE IS NOT REQUIRED AS PER SECTION 16.121.A.4 OF THE HOWARD COUNTY SUBDIVISION & LAND DEVELOPMENT REGULATIONS.
- 21. RELATED DPZ FILES: 5-99-10, P-01-10 AND F-99-163 (ROCKBURN VIEW, SECTION ONE).
- 22. DRIVEWAY(5) SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE
- ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING (MINIMUM) REQUIREMENTS: A) WIDTH - 12 FEET (14 FEET SERVING MORE THAN ONE RESIDENCE)
- B) SURFACE SIX (6) INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP
- C) GEOMETRY MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45-FOOT TURNING RADIUS.
- D) STRUCTURES (CULVERT / BRIDGE) CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN I FOOT DEPTH OVER DRIVEWAY SURFACE.
- E) STRUCTURE CLEARANCES MINIMUM 12 FEET
- F) MAINTENANCE SUFFICIENT TO INSURE ALL WEATHER USE.
- 23. THE PROPOSED NOISE BARRIERS ALONG MONTGOMERY ROAD SHALL BE OWNED AND MAINTAINED BY H.O.A.
- 24. CURRENT DEED REFERENCE: L. 5096 F. 8 25. NO CEMETERIES EXIST ON THE SITE.
- 26. "STREET LIGHT 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) 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
- 27. IN ACCORDANCE WITH THE LETTER DATED NOVEMBER 5, 2001, LOTS 5 AND 6 WILL BE ALLOWED AS SHOWN ON THE PLANS SUBJECT TO THE FOLLOWING CONDITION:
 "LOT 5 AND RESUBDIVIDABLE LOT 6 IN THIS SUBDIVISION MUST BE RESUBDIVIDED WITH THE ADJACENT LOTS 30 AND 31 IN ROCKBURN VIEW IN ACCORDANCE WITH THE CONCEPT PLAN SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING, DIVISION OF LAND DEVELOPMENT ON NOVEMBER 5, 2001.

* NOTE: THESE ITEMS HAVE BEEN PREVIOUSLY SUBMITTED AND APPROVED UNDER HOWARD COUNTY FILE NUMBER F99-163 IN APRIL, 2000. IN ADDITION, STORMWATER MANAGEMENT FOR THIS SUBDIVISION HAS BEEN PROVIDED UNDER F99-163. "ROCKBURN VIEW" SUBDIVISION.



ROCKBURN VIEW

SECTION TWO LOTS 1 THRU 0

ZONED R-20 TAX MAP NO. 37 PARCEL NO. 329 GRID NO. 4 FIRST ELECTION DISTRICT

HOWARD COUNTY, MARYLAND DATE: JANUARY 11, 2002

FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS ELLICOTT CITY, MARYLAND 21042

OWNER

CORNERSTONE HOLDINGS, L.L.C. 9691 NORFOLK AVE. LAUREL, MARYLAND 20723

CORNERSTONE HOLDINGS, L.L.C. 9691 NORFOLK AVE. LAUREL, MARYLAND 20723

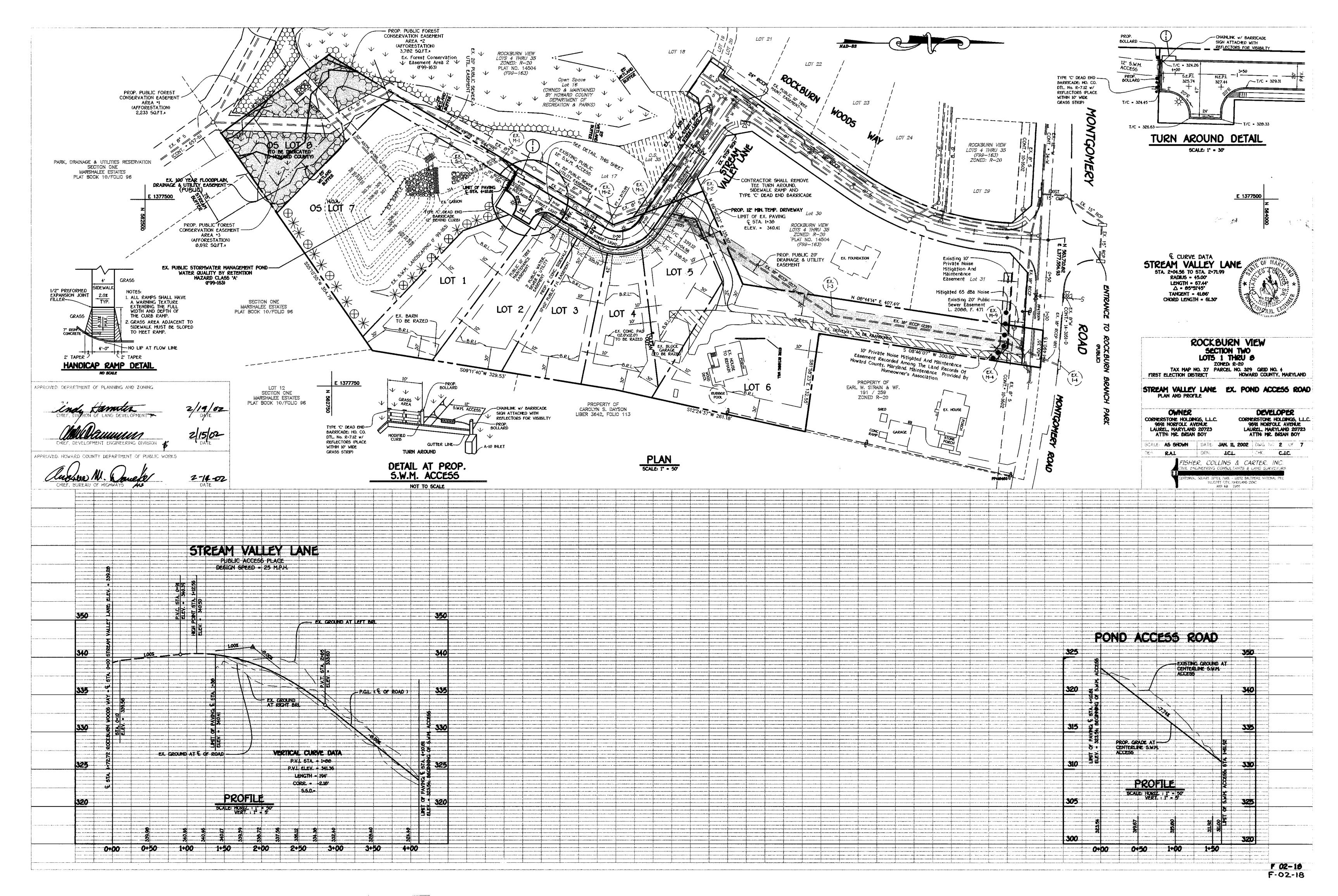
DEVELOPER

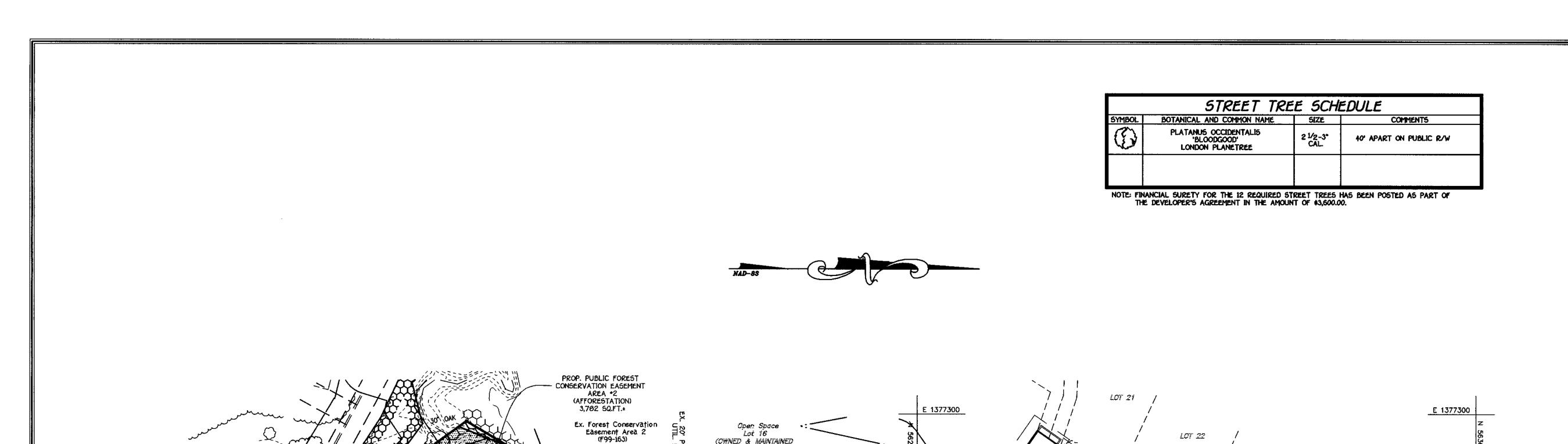
ATTN: MR. BRIAN BOY

F 02-18 F-02-18

2-14-02

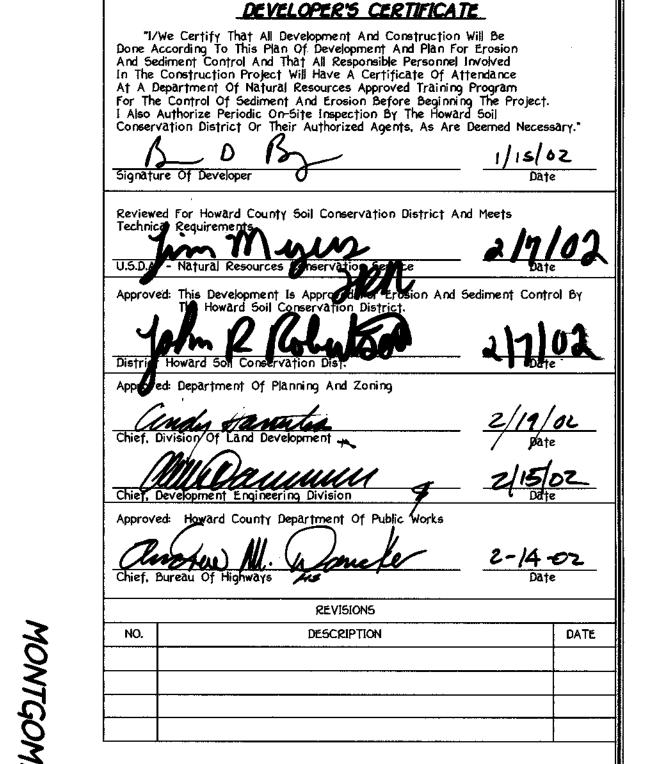
REVISIONS DESCRIPTION





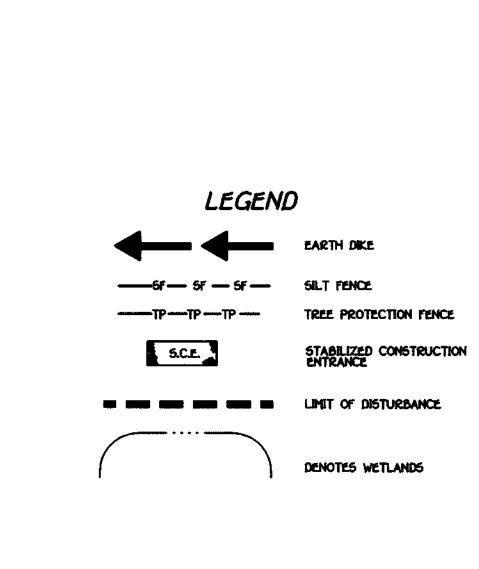
(OHNED & MAINTAINED BY HOWARD COUNTY DEPARIMENT OF RECREATION & PARKS)

TYPE 'A-2' CLEAN WATER DIVERSION



ENGINEER'S CERTIFICATE

I Hereby Certify That This Plan For Erosion And Sediment Control Represents A Practical And Workable Plan Based On My Personal Knowledge Of The Site Condition And That It Was Prepared In Accordance With The Requirements Of The Howard Soil Conservation District.





6

LOT 23

CONTRACTOR SHALL REMOVE TEE TURN AROUND, SIDEWALK RAMP AND

TYPE 'C' DEAD END BARRICADE

PROP. PUBLIC 20 DRAINAGE & UTILITY EASEMENT. 344

LOTS 4 THRU 35 ZONED: R-20 PLAT NO. 14504

,-(F98-463)_^-___

EX. FOUNDATION

LOT 24

Easement Recorded Among The Land Records Of Homeowner's Association

W. SIRAIN & WE!

ROCKBURN VIEW LOTS 4 THRU 35 (F99-163) ZONED: R-20

LOT 29

Noise Mitigation And Mayntenance Easement

STREET TREE, GRADING AND SEDIMENT CONTROL PLAN ROCKBURN VIEW SECTION TWO

LOTS 1 THRU 8

ZONED R-20 TAX MAP NO. 37 PARCEL NO. 329 GRID NO. 4 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DATE: JANUARY 11, 2002 SHEET 3 OF 7

PLAN SCALE: 1" - 50"

OWNER

CORNERSTONE HOLDINGS, L.L.C.

9691 NORFOLK AVE.

LAUREL, MARYLAND 20723 ATTN: MR. BRIAN BOY

PROPERTY OF CAROLYN S. DAYSON LIBER 3642, FOLIO 113

DEVELOPER

FISHER, COLLINS & CARTER, INC. SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE

PROP. PUBLIC FOREST CONSERVATION EASEMENT

> (AFFORESTATION) 2,233 SQ.FT.±

> > DRAINAGE & UTILITY EASEMENT (PUBLIC)

PROP. PUBLIC FOREST

CONSERVATION EASEMENT AREA •3 (AFFORESTATION)

0,692 5Q.FT.± SECTION ONE MARSHALEE ESTATES

EX. PUBLIC STORMWATER MANAGEMENT POND -WATER QUALITY BY RETENTION HAZARD CLASS 'A' (F99-163)

L.5277 F. 99

PLAT BOOK 10/FOLIO 96

EXISTING SEDIMENT BASIN —

DRAINAGE AREA = 20.26 AC.=
WET STORAGE REQUIRED = 20.26 AC. x 1800 CU.FT. = 36,468 CU.FT.
WET STORAGE ELEVATION = 312.60 (VOLUME PROVIDED = 36,588.37 CU.FT.)
DRY STORAGE REQUIRED = 20.26 AC. x 1800 CU.FT. = 36,468 CU.FT.

DRY STORAGE ELEVATION = 314.97 (VOLUME PROVIDED = 36,536.86 CU.FT.)

CLEANOUT ELEVATION = 311.13
PROVIDE 10" ORIFICE (INV. = 312.60) FOR TEMP. S.W.M. W/ TURNDOWN

(PER F99-163)

Q = CA \(\sqrt{2g}\) Hdd \(\mathbb{E}\) ELEV. = 313.02

H = 314.97 - 313.02 = 1.95', Hdd = 2/3 H = 1.31' $Q = 0.6 \times 0.545\sqrt{64.4 \times 1.31} = 3.00 \text{ CFS} > Qdd =$

36,460 CU.FT. 10 HR5. x 3600 SEC. = 1.01 CF5 : O.K.

 $A = \frac{\pi}{4} \times 0.83^2 = 0.545 \text{ SQ. FT.}$

OS LOT

EX. BARN TO BE RAZED ---

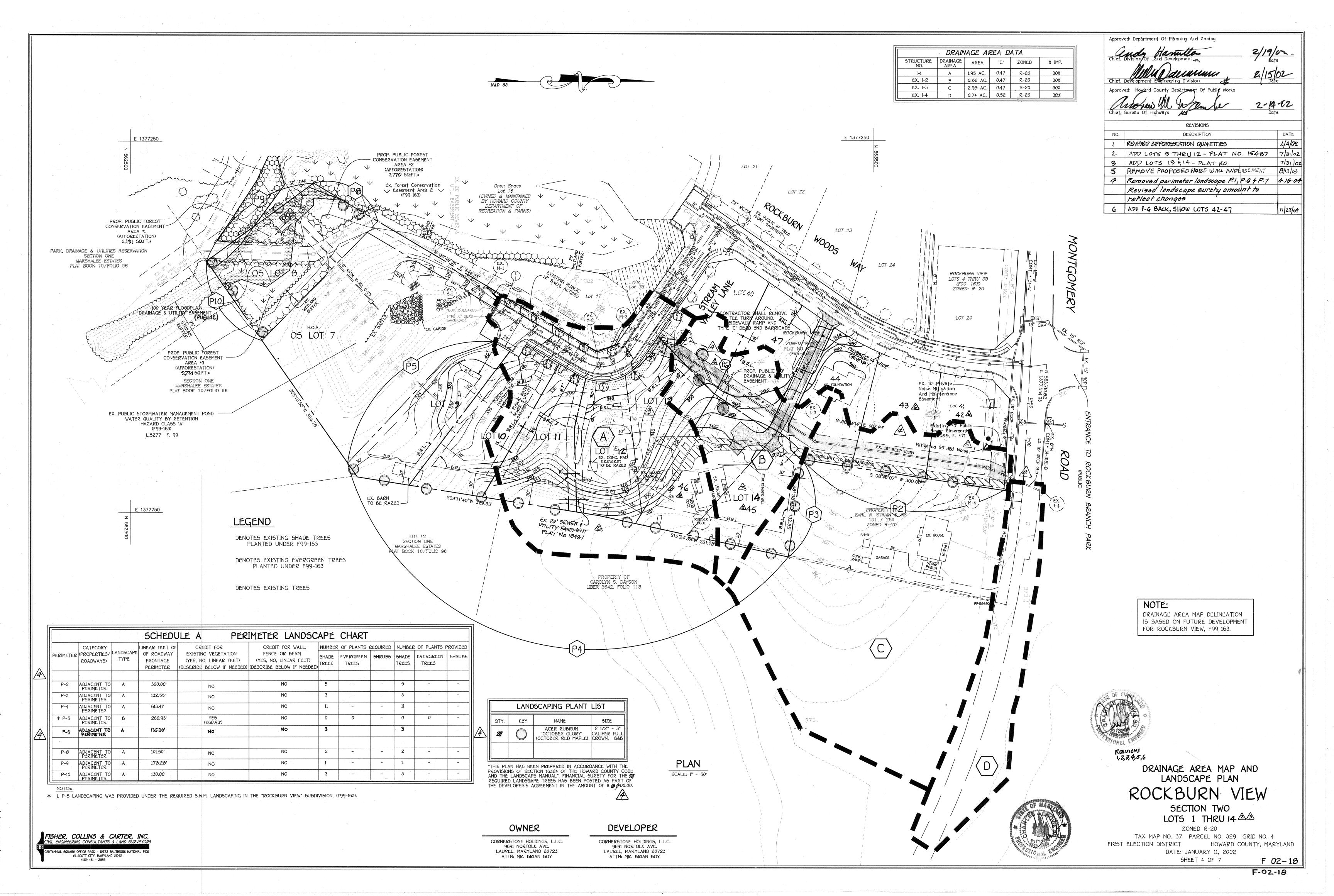
LOT 12 SECTION ONE MARSHALEE ESTATES PLAT BOOK 10/FOLIO 96

PARK, DRAINAGE & UTILITIES RESERVATION SECTION ONE MARSHALEE ESTATES PLAT BOOK 10/FOLIO 96

> CORNERSTONE HOLDINGS, L.L.C. 9691 NORFOLK AVE. LAUREL, MARYLAND 20723 ATTN: MR. BRIAN BOY

E 1377850

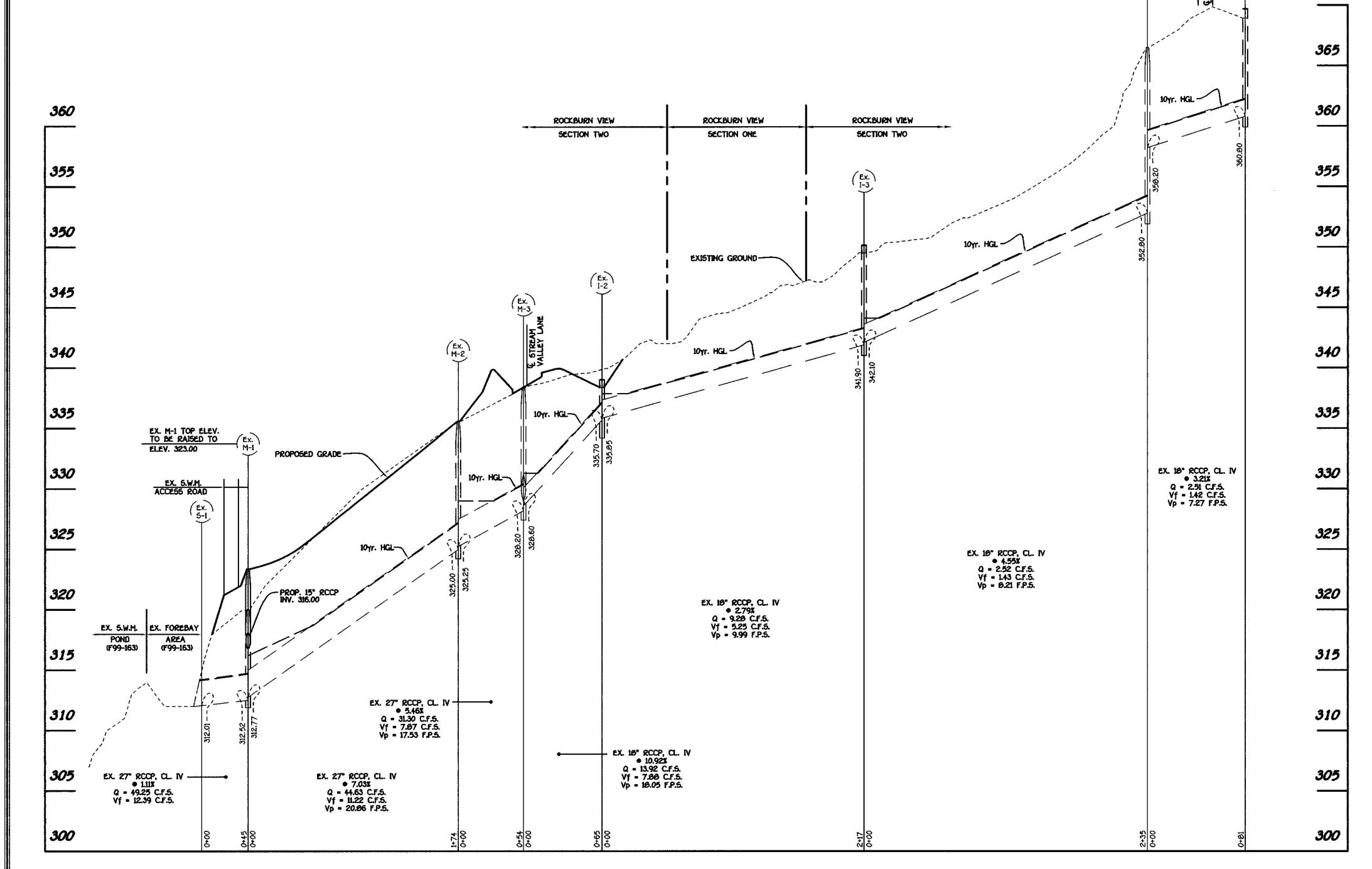
F 02-18 F-02-18



STRUCTURE SCHEDULE								
STRUCTURE NO.	TOP ELEVATION	INV.IN	TUO.VM	ROAD NAME	ROAD STA.	OFFSET	TYPE	REMARK5
I-1	324.26		316.80	STREAM VALLEY LANE	4+05.30	* 10.43'R	A-10	5.D. 4.41 WIDTH=4.62°
EX. I-2	339.05	335.05	335.70		N 563,240.201 E 1,377,536.486		YARD INLET	5.D. 4.14
EX. I-3	350.18	342.10	341.90		N 563,421.594 E 1,377,655.040		YARD INLET	5.D. 4.14
EX. I-4	369.73		360.90		N 563,725.529 E 1,377,722,939		A-10	5.D. 4.41
EX. M-1 (F99-163)	320.00	312.77 316.00	312.52		N 562,970.65 E 1,377,446.51		SHALLOW MANHOLE	G - 5.05
EX. M-2	335.58	325.25	325.00	****	N 563,127.710 E 1,377,535.634		STANDARD MANHOLE	G - 5.04
EX. M-3	338.40	326.60	328.20		N 563,170.403 E 1,377,516.966		STANDARD MANHOLE	G - 5.04
EX. M-4	366.50	350.20	352.80		N 563,653.441 E 1,377,691.400		STANDARD MANHOLE	G - 5.04
EX. 5-1 (F99-163)	314.26	312.01	312.01		N 562,936.11 E 1,377,467.11		CONC. END SECTION	5.D. 5.52



FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

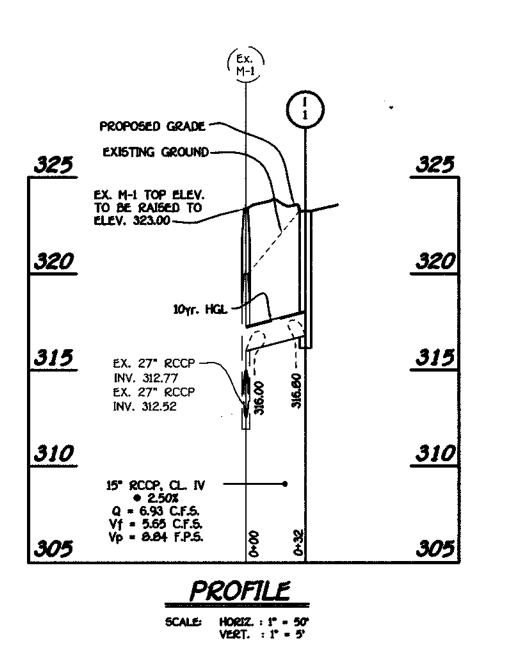


PROFILE SCALE: HORIZ.: 1" = 50" VERT. : 1" = 5"

OWNER CORNERSTONE HOLDINGS, L.L.C. 9691 NORFOLK AVE. LAUREL, MARYLAND 20723 ATTN: MR. BRIAN BOY

DEVELOPER CORNERSTONE HOLDINGS, L.L.C. 9691 NORFOLK AVE. LAUREL, MARYLAND 20723 ATTN: MR. BRIAN BOY

2-14-02 **REVISIONS** DESCRIPTION DATE





STORMDRAIN PROFILES

ROCKBURN VIEW

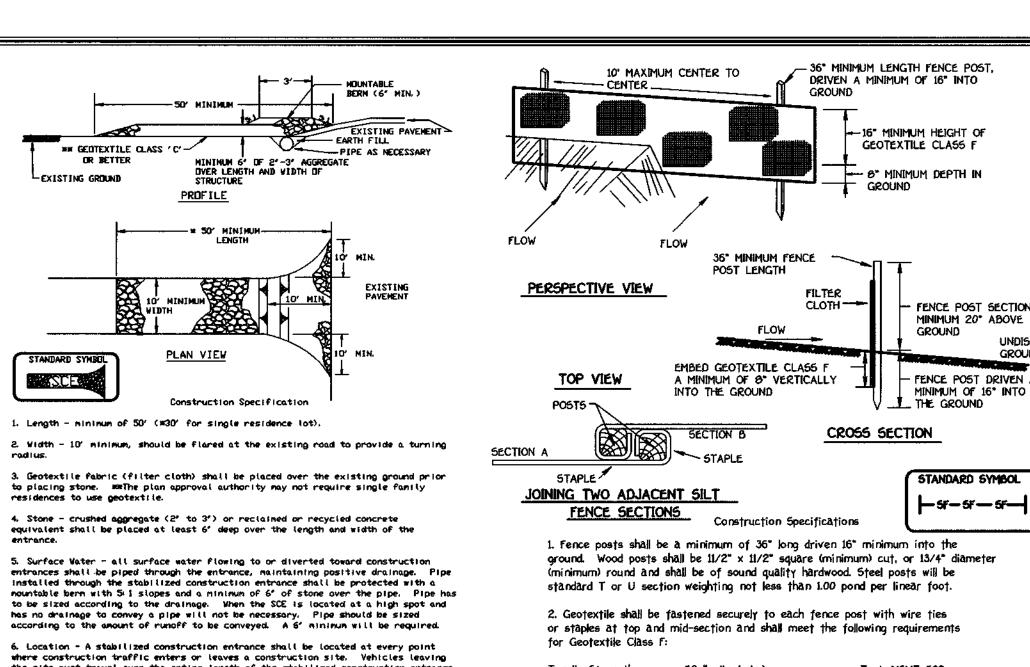
SECTION TWO LOTS 1 THRU 8

ZONED R-20 TAX MAP NO. 37 PARCEL NO. 329 GRID NO. 4 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DATE: JANUARY 11, 2002 SHEET 5 OF 7

F 02-18

F-02-18



Flow Rate

Filtering Efficiency

Test: MSMT 509 50 (bs/in (min.) Tensile Strenath Tensile Modulus 20 lbs/in (min.) Test: MSMT 509

0.3 gal ft / minute (max.)2

Test: MSMT 322

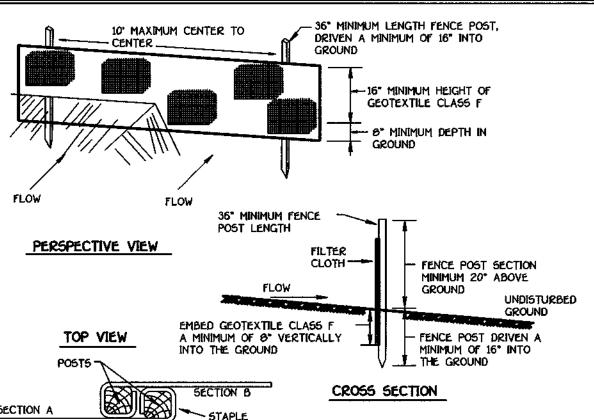
Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

75% (min.)

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

DETAIL 22 - SILT FENCE



REQUIRED FLOW WIDTH AT DESIGN FLOW DEPTH a-Dike Height

STANDARD SYMBOL

A-2 B-3

<u>Plan view</u>

FLOW CHANNEL STABILIZATION GRADE 0.5% MIN. 10% MAX. 1. Seed and cover with straw mulch. 2. Seed and cover with Erosion Control Matting or line with sod. 3. 4" - 7" stone or recycled concrete equivalent pressed into

the soil 7" minimum

Construction Specifications 1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1

Runoff diverted from a disturbed area shall be conveyed to a Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-crosive velocity.

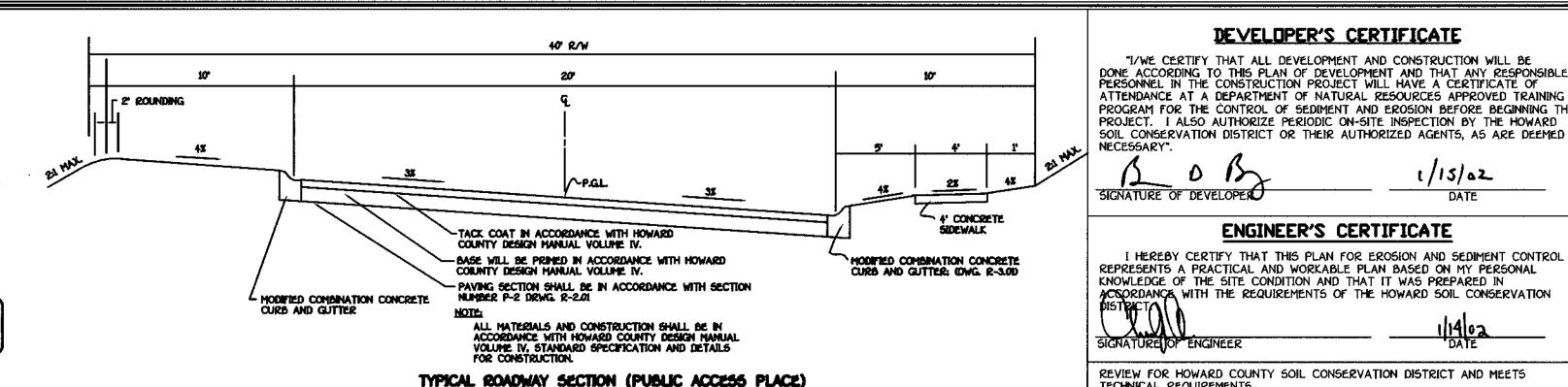
All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the dike. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede

Fill shall be compacted by earth moving equipment.

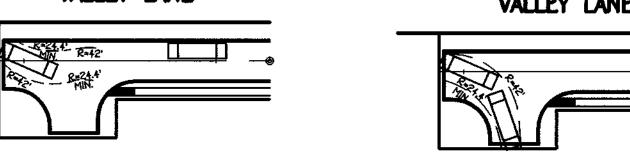
All earth removed and not needed for construction shall be placed 7. so that it will not interfere with the functioning of the dike. Inspection and maintenance must be provided periodically and after a each rain event.

> EARTH DIKE NOT TO SCALE

> > T-O' HIGH 2-1/2" CALIPER---

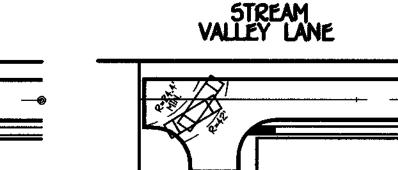


ROAD NAME STA. TO STA. **CLASSIFICATION** DESIGN SPEED R/W PUBLIC ACCESS PLACE 25 MPH STREAM VALLEY LANE 1+30 TO 4+10



TURNING MOVEMENT ANALYSIS FOR BUS VEHICLE MOVEMENT #1 SCALE: 1" = 50"

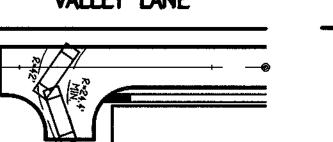
TURNING MOVEMENT ANALYSIS FOR BUS VEHICLE MOVEMENT #2 SCALE: 1" = 50"



TURNING MOVEMENT ANALYSIS FOR BUS VEHICLE MOVEMENT #4 SCALE: 1" = 50"

STREAM VALLEY LANE

TURNING MOVEMENT ANALYSIS FOR BUS VEHICLE MOVEMENT #5



TURNING MOVEMENT ANALYSIS

FOR BUS VEHICLE MOVEMENT #3

5CALE: 1" = 50"

SCALE: 1" = 50'

<u>SEDIMENT CONTROL NOTES</u>

---2 x 4 STAKE

NOTE: REMOVE BURLAP FROM TOP 1/3 OF BALL

TREE PLANTING

D A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LISCENSES AND PERMITS, SEDDIENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (3/3-1/25).

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 MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EXCELLED ASSOCIATIONS FOR THE PROSTOLAND SERVICE THEORY.

STAKING DETAIL

<u>GRADING FOR PLANTING</u>

ON SLOPES

- FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO. 3) FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. GRADING NECESSARY TO INSTALL STORM DRAINS, SEDIMENT TRAP AND EARTH DIKES TO BE PERFORMED FIRST. REMAINDER OF THE GRADING TO BE PERFORMED AFTER
- STORM DRAINS, SEDIMENT TRAP AND EARTH DIKES ARE INSTALLED.
- STORM DRAINS, SEDIMENT TRAP AND EARTH DIKES ARE INSTALLED.

 4) ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. I, 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 50), 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 GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDDIENT 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.
- TOTAL AREA OF SITE = 4.040 AC. *

 AREA DISTURBED = 2.470 AC. *

 AREA TO BE ROOFED OR PAVED = 0.150 AC. *

 AREA TO BE VEGETATIVELY STABILIZED = 0.292 AC. * TOTAL CUT = 0 CU. YDS. TOTAL FILL = 0 CU. YDS.
- OFFSITE WASTE/BORROW AREA O CULYDS, AND LOCATION N/A.

 8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

 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 GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL

1D TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGHTS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

BY THE INSPECTION AGENCY IS MADE.

SEQUENCE OF CONSTRUCTION

OBTAIN ALL REQUIRED GRADING PERMITS, APPROVALS AND LICENSES FROM APPROPRIATE AGENCIES.

DEVELOPER'S CERTIFICATE

ENGINEER'S CERTIFICATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL (

BLAZE ORANGE PLASTIC MESH

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.

<u>TREE PROTECTION DETAIL</u>

TO A DEPTH OF NO LESS THAN 1/3 OF THE TOTAL HEIGHT OF POST

USE 3' WIRE "U" TO SECURE FENCE BOTTOM

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL

1/15/02

2/19/02

- NOTIFY HOWARD COUNTY OFFICE OF CONSTRUCTION / INSPECTION DIVISION (410) 313-1870 AT LEAST FIVE (5) WORKING DAYS PRIOR TO STARTING WORK ON THESE PLANS. NOTIFY "MISS UTILITY" 46 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777.
- INSTALL ALL TREE PROTECTION FENCE FOR TREES TO BE UNDISTURBED AS INDICATED ON THE PLANS. (2 DAYS)
- CLEAR AND GRUB FOR SEDIMENT CONTROL MEASURES ONLY. INSTALL STABILIZED CONSTRUCTION ENTRANCE. Q DAY)
- INSTALL REMAINING SEDIMENT CONTROL MEASURES AND SILT FENCE AS INDICATED ON THE PLANS, OBTAIN PERMISSION FROM THE INSPECTOR TO PROCEED AFTER CONTROLS ARE INSTALLED. UTILIZE
- the existing sediment basin for sediment control. This basin was installed under f 99-163. (I day)
- GRADE ROADWAY TO THE PROPOSED SUB-GRADE AND INSTALL THE PROPOSED STORM DRAIN SYSTEM. STABILIZE ALL SLOPES IMMEDIATELY UPON COMPLETION OF GRADING, (I WEEK)
- THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON AFTER EACH RAINFALL AND ON A DAILY BASIS. REMOVE SEDIMENTS FROM EX. BASIN WHEN CLEANOUT ELEVATION HAS BEEN REACHED. ALL SEDIMENTS MUST BE PLACED UPSTREAM OF AN APPROVED TRAPPING DEVICE.
- CONSTRUCT CURB AND GUTTER AND ROAD BASE COARSE (5 DAYS)
- STABILIZE ALL DISTURBED AREAS AND OBTAIN PERMISSION FROM THE SEDIMENT CONTROL INSPECTORS TO
- WHEN ALL CONTRIBUTING AREAS TO THE SEDIMENT CONTROL DEVICES AND EX. BASIN HAVE BEEN STABILIZED AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, THE EXISTING SEDIMENT BASIN BAFFLE MAY BE REMOVED. STABILIZE AND UPGRADE THE SEDIMENT BASIN TO THE S.W.M. CRITERIA AS SHOWN ON F 99-163. THE REMAINING AREAS SHALL BE BROUGHT TO FINAL DESIGN GRADE. STABILIZE ALL REMAINING AREAS IN ACCORDANCE WITH PERMAINENT SEEDING NOTES. (8) DAYS)
- 12. NOTIFY HOWARD COUNTY OFFICE OF INSPECTIONS AND PERHITS FOR FINAL INSPECTION OF THE COMPLETED PROJECT.

SEDIMENT CONTROL NOTES AND DETAILS ROCKBURN VIEW

> SECTION TWO LOTS 1 THRU 8

> > Sheet 6 of 7

Zoning: R-20 Tax Map No. 37 Parcel No. 329, Grid No. 4 First Election District Howard County, Maryland Date: JANUARY 11, 2002

FISHER, COLLINS & CARTER, INC. <u>VIL ENGINEERING CONSULTANTS & LAND SURVEYOR</u> ial square office park - 10272 Baltimore National Pik (410) 461 - 2855

STABILIZED CONSTRUCTION ENTRANCE - 2

NOT TO SCALE

Using vegetation as cover for barren soil to protect it from forces that cause erosion

20.0 STANDARDS AND SPECIFICATIONS

VEGETATIVE STABILIZATION

Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to crode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources.

This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration Olup to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary Soil Stockpiles, cleared areas being left idle between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, dams, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc.

Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth.

Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone.

Sediment control devices must remain in place during grading, seedbed preparation, seeding, mulching and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

i. Install erosion and sediment control structures (either temporary of permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.

iii. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.

iii. Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed area over 5 acres.

Soil Amendments (Fertilizer and Lime Specifications)

Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.

Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warrantee

iii. Lime materials shall be ground limestone (hydrated or burnt lime may be substituted) which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a *100 mesh sieve and 90-100% will pass through a *20

mesh sieve. Incorporate lime and fertilizer into the top 3-5° of soil by disking or other suitable means.

iv. Incorporate lime and fertilizer into the top 3-5° of soil by disking or other suitable means.

Seedbed Preparation

i. Temporary Seeding

a. Seedbed preparation shall consist of loosening soil to a depth of 3° to 5° by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the roughened condition. Sloped areas (greater than 30) should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.

b. Apply fertilizer and lime as prescribed on the plans.

c. in corporate lime and fertilizer into the top 3-5° of soil by disking or other suitable means.

ii. Permanent Seeding

a. Minimum soil conditions required for permanent vegetative establishment:

1. Soil pit shall be between 6.0 and 7.0.

2. Soluble salts shall be less than 500 parts per million (ppm).

3. The soil shall contain less than 40% clay, but enough fine grained material 030% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if lovegrass or serecia lespedezas is to be planted, then a sandy soil (430% silt plus clay) would be acceptable.

serecia lespedezas is to be planted, then a sandy soil (30% silt plus clay) would be acceptable.

4. Soil shall contain 1.5% minimum organic matter by weight.

5. Soil must contain sufficient pore space to permit adequate root penetration.

6. If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.

Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5° to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.

Apply soil amendments as per soil test or as included on the plans.

Mix soil amendments into the top 3-5° of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1-3° of soil should be loose and friable. Seedbed loosening may not be necessary on newly disturbed areas.

SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS

CONDITIONS WHERE PRACTICE APPLIES

EFFECTS ON WATER QUALITY AND QUANTITY

r drop seteled, or a cultipacker seeder.

If fertilizer is being applied at the time of seeding, the application rates amounts will no exceed the following: nitrogens maximum of 100 lbs. per acre total of soluble nitrogens P205 (phosphorous): 200 lbs/ac. K20 (potassium): 200 lbs/ac.

Lime — use only ground agricultural limestone, (Up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated time when hydroseeding.

Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without intermediate.

nme. 100 not use purm or hydrated time when hydrosecting.

C. Geed and refilizer shall be mixed on site and seeding shall be done immediately and without interruption.

ii. Dry Seed ny this includes use of conventional drop or broadcast spreaders.

a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 255 oct. The seeded area shall then be rolled with a veighted roller to provide good seed to soil confact. Apply half the seeding rate in each direction.

iii. Drill or climpacter Seeding. Mechanised seeders that apply and cover seed with soil.

a. Cultipacting seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seeder must be firm after planting.

b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

F. Much Specifications (in order of preference)

f. Shraw shall consist of throughly threshed wheat, ne or oat straw, reasonable bright in color, and shall not be musty, molor, called, decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Marghan Seed Law.

ii. Wood Celluder Fiber Match (WCPP)

a. WCPM shall consist of specially prepared wood celludes processed into a uniform fibrous physical state.

b. WCPM shall be dved green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformity spead sturry.

c. WCPM, including dye, shall comfain no germination or growth inhibiting factors.

d. WCPM materials shall be manufactured and processed in such a manner that the wood celludes fiber much will remain in uniform suspension in water under apitation and will bend with seed, fertilizer and other additives to form a homoseneous sturry. The much material shall comfain no sements to confern a suppressional seed in confern to 150 makingman and water holding capacity of 90% minimum.

In confect with, the so

accordance with these specifications.

ii. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform loose depth of between 1° and 2°. Mulch applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.

iii. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall compain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.

Securing Straw Mulch Mulch Anchoring: Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard:

application to minimize loss by wind or water. This may be done by one of the following methods (i preference), depending upon size of area and erosion hazard:

i. A much anchoring tool is a tractor drawn implement designed to punch and anchor much into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safety. If used on sloping land, this practice should be used on the contour if possible.

ii. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber per 100 gallons of water.

of water.

iii. Application of liquid binders should be heavier at the edges where wind catches much, such as in valleys and crest of banks. The remainder of area should be appear uniform after binder application. Synthetic binders - such as Acrylic DLR (Agro-Tack), DCA-70 Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch.

iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.

Incremental Stabilization - Cut Slopes

i. All cuts slopes shall be dressed, prepared, seeded and mulched as the work progresses. Slopes shall be excavated and stabilized in equal increments not to exceed 15'.

ii. Construction sequence (Refer to Figure 3 below):

a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation.

b. Perform Phase 1 excavation, dress, and stabilize.

c. Perform Phase 2 excavation, dress and stabilize. Overseed Phase 1 areas as

necessary.
Perform final phase excavation, dress and stabilize. Overseed previously seeded areas as necessary. Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions int he operation of completing the operation out of the seeding season will necessitate the application of temporary stabilization.

J. Incremental Stabilization of Embankments - fill Slopes

J. Incremental Stabilization of Embarkments - fill Stopes

i. Embarkments shall be constructed in lifts as prescribed on the plans.

ii. Stopes shall be stabilized immediately when the vertical height of the multiple lifts reaches

15°, or when the grading operation ceases as prescribed in the plans.

iii. At the end of each day, temporary berms and pipe slope drains should be constructed along the top edge of the embarkment to intercept surface runoff and convey it down the slope in a non-erosive manner to a sediment trapping device.

iv. Construction sequence: Refer to Figure 4 (below).

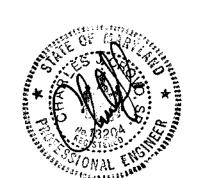
a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to divert runoff around the fill. Construct slope silt fence on low side of fill as shown in Figure 5, unless other methods shown on the plans address this area.

b. Place Phase 1 embarkment, dress and stabilize.

c. Place Phase 2 embarkment, dress and stabilize.

d. Place final phase embarkment, dress and stabilize.

Once the placement of fill has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.





OWNER

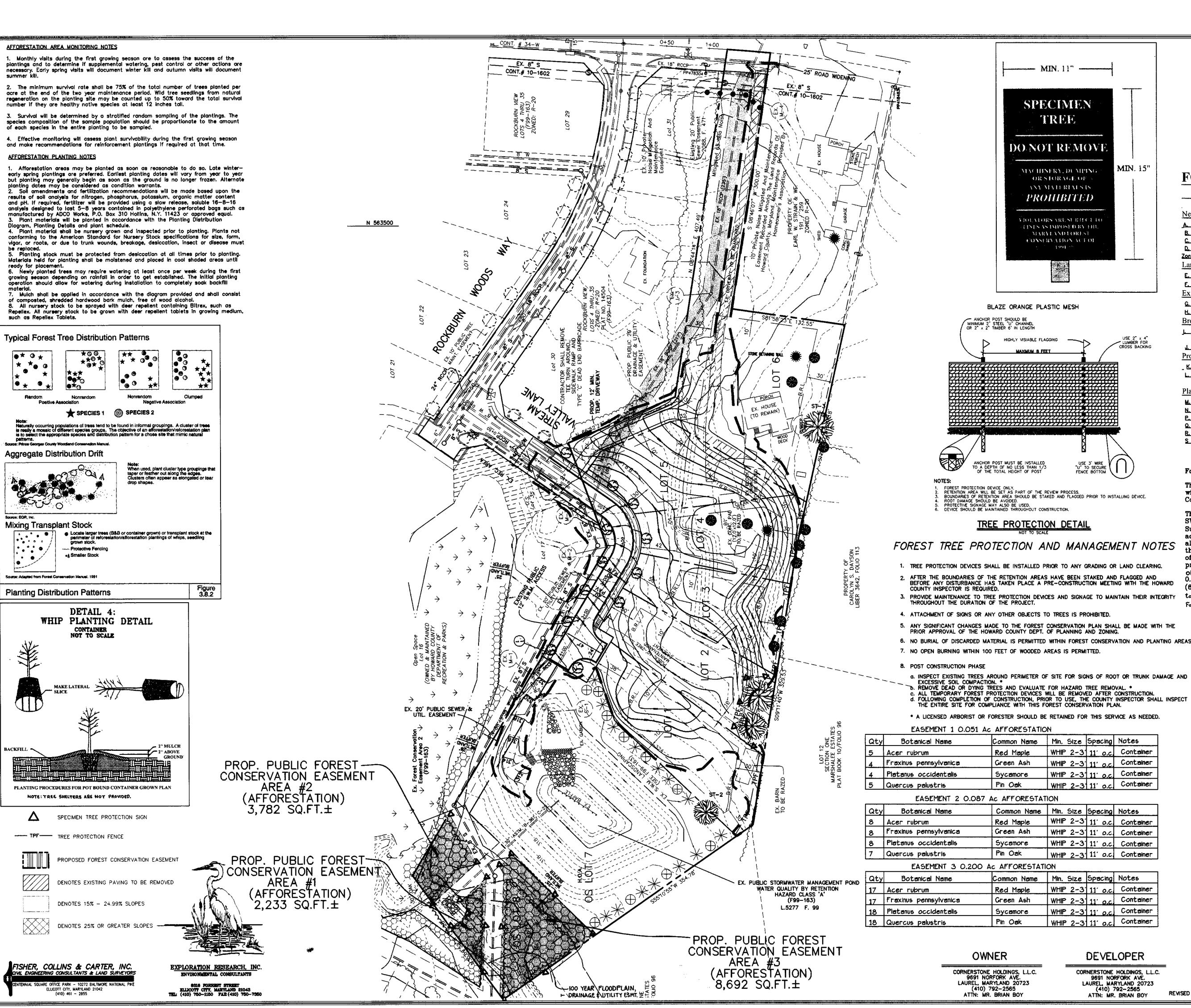
CORNERSTONE HOLDINGS, L.L.C. 9691 NORFOLK AVE. LAUREL, MARYLAND 20723 ATTN: MR. BRIAN BOY

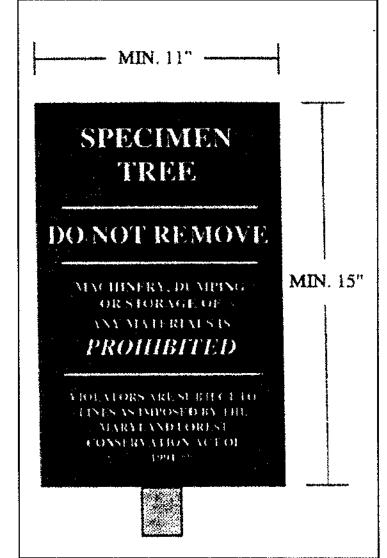
CORNERSTONE HOLDINGS, LLC. 9691 NORFOLK AVE. LAUREL, MARYLAND 20723 ATTN: MR. BRIAN BOY

DEVELOPER

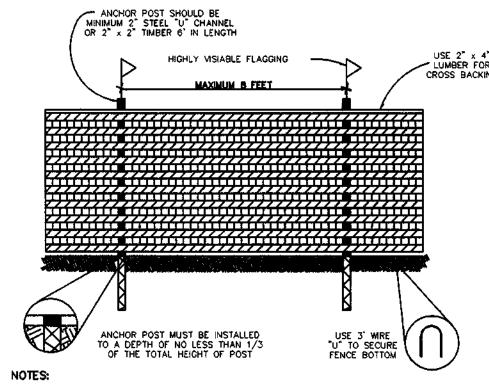
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BLAZE ORANGE PLASTIC MESH



- 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.

TREE PROTECTION DETAIL

FOREST TREE PROTECTION AND MANAGEMENT NOTES

- 1. TREE PROTECTION DEVICES SHALL BE INSTALLED PRIOR TO ANY GRADING OR LAND CLEARING.
- 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 OR ANY OTHER OBJECTS TO TREES IS PROHIBITED.
- 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 ZONING.
- 6. NO BURIAL OF DISCARDED MATERIAL IS PERMITTED WITHIN FOREST CONSERVATION AND PLANTING AREAS.
- 7. NO OPEN BURNING WITHIN 100 FEET OF WOODED AREAS IS PERMITTED.

- * A LICENSED ARBORIST OR FORESTER SHOULD BE RETAINED FOR THIS SERVICE AS NEEDED.

Qty	Botanical Name	Common Name	Min. Size Spacing	Notes
5	Acer rubrum	Red Maple	WHIP 2-3' 11' o.c.	Container
4	Fraxinus pennsylvanica	Green Ash	WHIP 2-3' 11' o.c.	Container
4	Platanus occidentalis	Sycamore	WHIP 2-3' 11' o.c.	Container
5	Quercus palustris	Pin Oak	WHIP 2-3 11 o.c.	Container

Qty	Botanical Name	Common Name	Min. Size Sp	acing	Notes		
8	Acer rubrum	Red Maple	WHIP 2-3' 11	· o.c.	Container		
8	Fraxinus pennsylvanica		WHIP 2-3' 11				
8	Platanus occidentalis	Sycamore	WHIP 2-3' 11	· o.c.	Container		
7	Quercus palustris	Pin Ozik	WHIP 2-3: 11	· o.c.	Container		

Qty	Botanical Name	Common Name	Min. Size	Sp a cing	Notes		
17	Acer rubrum	Red Maple	WHIP 2-3	11' o.c.	Container		
17	Fraxinus pennsylvanica	Green Ash	WHIP 2-3	11' o.c.	Container		
18	Platanus occidentalis	Sycamore	WHIP 2-3	11' o.c.	Container		
18	Quercus palustris	Pin Oak	WHIP 2-3	I I			

LAUREL, MARYLAND 20723 (410) 792-2565

DEVELOPER CORNERSTONE HOLDINGS, L.L.C. 9691 NORFORK AVE.

2.14.02 Approved: Department Of Planning And Zoning 2/19/02 Janula Chief, Division Of Land Development

FOREST CONSERVATION WORKSHEET

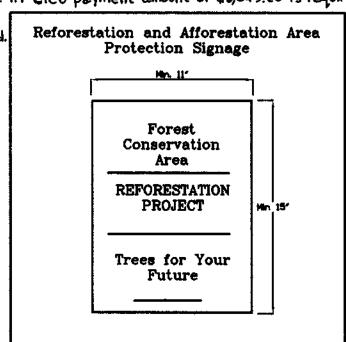
	(1/10 sc.)
Net Tract Area	
A. Total Tract Area	4.87
B. Area Within 100 Year Floodplain	0.19
C. Other deductions	<u>1.45</u>
D. Net Troct Area	3.23
Zoning Use Category: High Density Residential	
Land Use Category	
E. Afforestation Minimum (15% x D)	0.48
F. Conservation Threshold (20% x D)	0.65
Existing Forest Cover	
G. Existing Forest on Net Tract Area	<u>o</u>
H. Forest Area Above Conservation Threshold	_0
Breakeven Point	
J. Forest Retention Above Threshold with no	
Mitigation	NA
J. Clearing Permitted without Mitigation	_NA
Proposed Forest Clearing	
K. Forest Areas to be Cleared	_0
L. Forest Areas to be Retained	_0
Planting Requirements	
M. Reforestation for Clearing Above Threshold	<u> </u>
N. Reforestation for Clearing Below the Threshold	<u> </u>
P. Credit for Retention Above Conservation Threshold	_0
Q. Total Reforestation Required	Ωــ
R. Total Afforestation Required	0.48
S Total Reforestation and Afforestation Requirement	0.48

Forest Conservation Narrative

This Forest Conservation Plan has been developed in accordance with the Howard County Forest Conservation Manual and the Forest Conservation Act of 1991.

The site consists of 4.87 Ac of non-forested land. As a result of SWM and utility construction for the adjacent Rockburn View Subdivision (F99-163), 1.45 Ac of impact has already been accounted for. A small area of floodplain at the end of Lot 8 has also been taken out, for a net tract area of 3.226 Ac. There are three specimen trees, all of which will be protected. There are offsite trees along the eastern property line which will be protected. The afforestation requirement is 0.48 Ac. The afforestation obligation will be met with on-site afforestation planting of 0.338 Ac. and a Fee-in-Lieu payment for the remaining 0.14 Ac (6098.4 sf). The Fee-in-Lieu payment amount of \$3,049.20 is required to be paid

to the Howard County Forest Conservation Fund.



FOREST	CONSE	RVATION	EASEMENT	TABLE
	··			
EASEME	NT 1	0.051	AC	
AL	L AFFO	RESTATIO)NN	
EASEME	· · · · 			
		RESTATIO		
EASEME			· · •	
		RESTATIC		
TOTAL			-	
AL	L AFFO	RESTATIC	N	



FOREST CONSERVATION PLAN ROCKBURN VIEW SECTION TWO LOTS 1 THRU 8

(WERTZ PROPERTY) Zoning: R-20 Tax Map No. 37 Parcel No. 329, Grid No. 4 First Election District Howard County, Maryland

Scale: 1" = 50"Date: JANUARY 11, 2002 Sheet 7 OF 7

REVISED PER COUNTY COMMENTS 10/26/01 DH

F-02-18