

**LEGEND**

EXISTING	DESCRIPTION	PROPOSED
---	PROPERTY LINE	---
---	RIGHT OF WAY LINE	---
---	CENTER LINE	---
---	EASEMENT LINE	---
---	BLDG. RESTRICTION LINE	---
---	STORM DRAIN & MH	---
---	SEWER LINE & MH	---
---	WATER LINE & MH	---
---	PIPE/GUTTER FLOW DIRECTION	---
---	FIRE HYDRANT	---
---	GAS LINE	---
---	OVERHEAD LINE	---
---	UTILITY POLE	---
---	SURF SUPER FINCE	---
---	LIMIT OF DISTURBANCE	---
---	SOILS CLASSIFICATION/BOUNDARY	---
---	STABILIZED CONSTRUCTION ENTRANCE	---
---	CURB & GUTTER	---
---	CONTOUR LINE	---
---	SPOT ELEVATION	---
---	STREET LIGHTING	---
---	10' PRIVATE SIGN EASEMENT	---
---	10' PUBLIC TREE MAINTENANCE EASEMENT	---
---	LANDSCAPING APPROVED UNDER F-05-104	---

**OWNERS/DEVELOPERS CERTIFICATION**

I/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE OFFICE OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINS OF THE PROJECT AND WILL BE PERIODIC ON-SITE INSPECTION BY THE NATURAL SERVICE CONSERVATION SERVICE.

**DESIGN CERTIFICATE**

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

**APPROVED DEPARTMENT OF PLANNING AND ZONING**

**APPROVED DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES CONSERVATION SERVICE**

**APPROVED DEPARTMENT OF SOIL CONSERVATION DISTRICT**

**HOWARD SOIL CONSERVATION DISTRICT**

**PERMANENT SEEDING NOTES**

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LIVE-PLANTED VEGETATIVE COVER IS NEEDED.

**SEEDING PREPARATION:** LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

**SOL AMENDMENTS:** IN LIEU OF SOL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.) BEFORE SEEDING.

2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ.FT.) BEFORE SEEDING.

**SEEDING -** FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE 14 LB. ANNUAL RYE (3.2 LBS./1000 SQ.FT.) FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (0.5 LBS./1000 SQ.FT.) OF KEFING LOVEGRASS.

**MULCHING -** APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNWROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING.

**TEMPORARY SEEDING NOTES**

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE RESTORED WITH A SHORT-TERM VEGETATIVE COVER IS NEEDED.

**SEEDING PREPARATION:** LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

**SOL AMENDMENTS:** APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.)

**SEEDING -** FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 1/2 BUSHEL PER ACRE ANNUAL RYE (3.2 LBS./1000 SQ.FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF KEEPING LOVEGRASS (0.7 LBS./1000 SQ.FT.) FOR THE PERIOD NOVEMBER 16 THRU NOVEMBER 30.

**MULCHING -** APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNWROTTED WEED FREE SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING.

**STANDARD SEDIMENT CONTROL NOTES**

A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF PERMITS, DESIGN AND INSPECTION PRIOR TO THE START OF ANY CONSTRUCTION, (313-1855).

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 EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.

3) FOLLOWING INITIAL SOIL DISTURBANCE OR RESTORATION, FURNISH OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERMITS, SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

4) ALL SEDIMENT TRAPS/BASINS SHALL BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.

5) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, PERMANENT SEEDING (SEC.5), 500 (SEC. 4), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC.52).

6) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

7) SITE ANALYSIS:

TOTAL AREA OF SITE:	0.32 ACRES
AREA DISTURBED:	0.21 ACRES
AREA TO BE ROOFED OR PAVED:	0.10 ACRES
AREA TO BE VEGETATIVELY STABILIZED:	0.11 ACRES
TOTAL CUT:	110 CU. YDS.
TOTAL FILL:	110 CU. YDS.
TOTAL WASTE/BORROW AREA LOCATION:	N/A

**STANDARD AND SPECIFICATIONS FOR TOPSOIL**

**DEFINITION**

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

**PURPOSE**

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW pH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

**CONDITIONS WHERE PRACTICE APPLIES**

I. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:

a. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL 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 SUPPLY OF MOISTURE AND PLANT NUTRIENT.

c. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.

d. THE SOIL IS SO AODIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

II. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

**CONSTRUCTION AND MATERIAL SPECIFICATIONS**

I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE 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:

1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRACTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 3% BY VOLUME OF CHOKERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN DIAMETER.

2. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSON GRASS, NUTBUSH, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.

3. WHERE THE SUBSOIL IS EITHER HIGHLY AODIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE 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 IN THE FOLLOWING PROCEDURES.

III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:

1. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOL AMENDMENTS AS SPECIFIED IN 2.0.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:

1. 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 TOPSOILS SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A pH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PERFORMED TO RAISE THE pH TO 6.5 OR HIGHER.

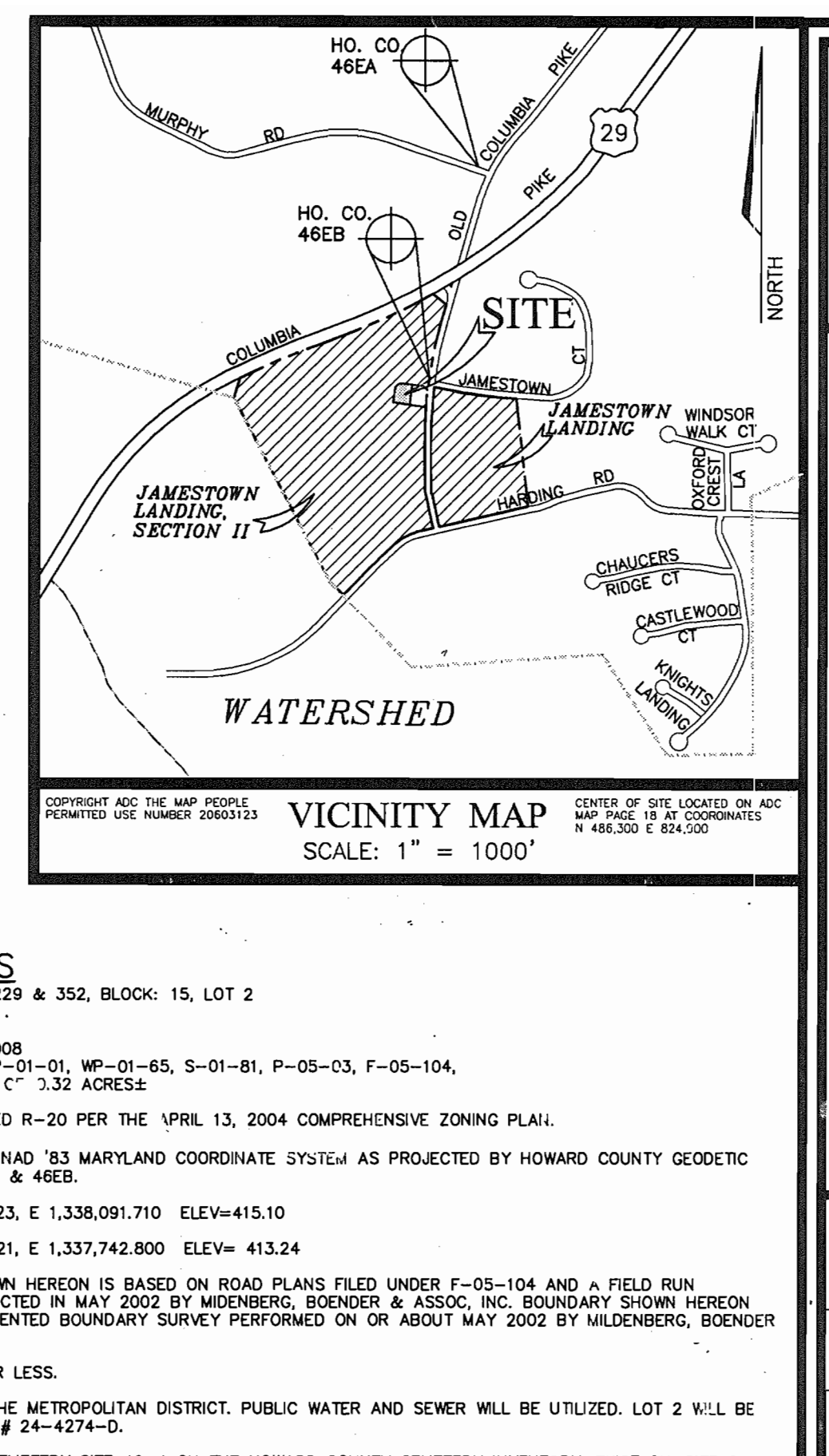
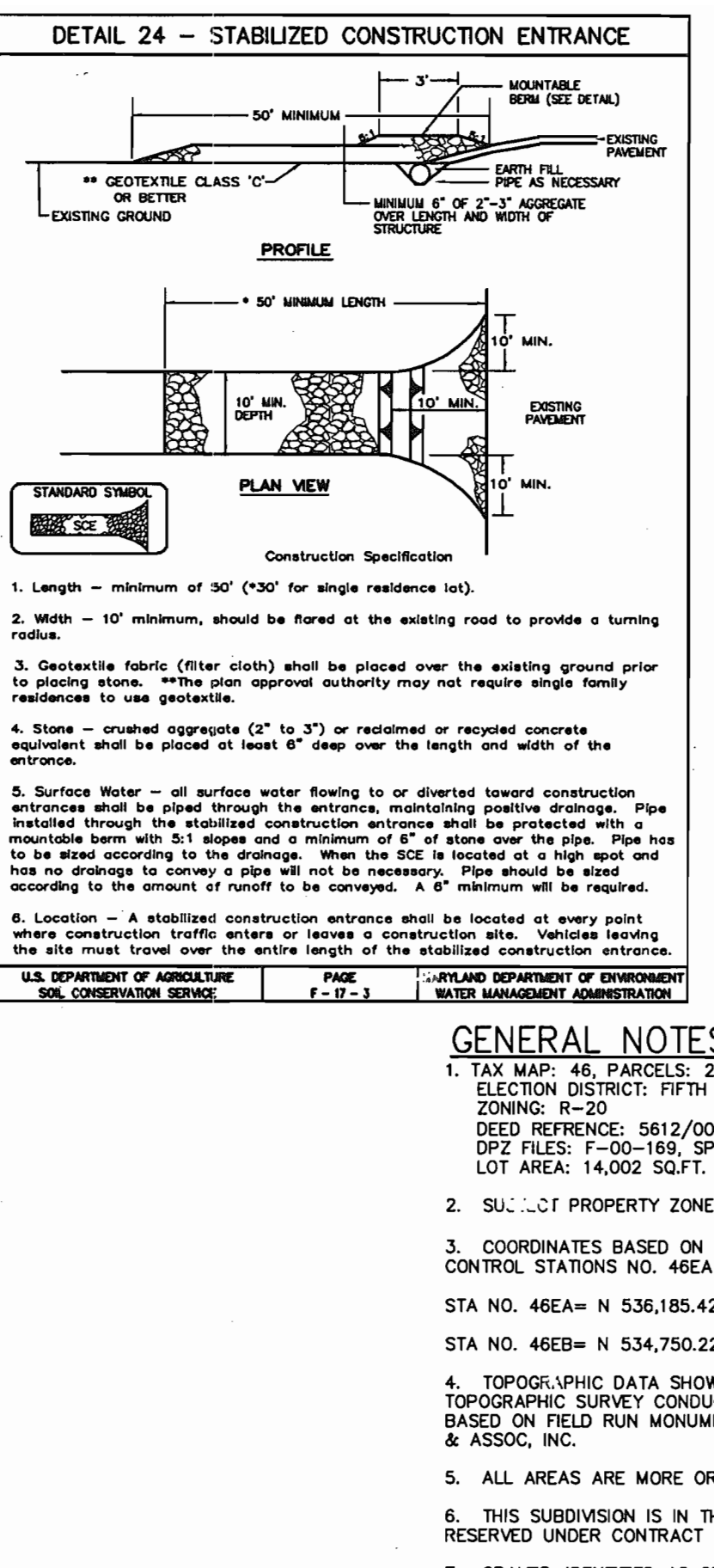
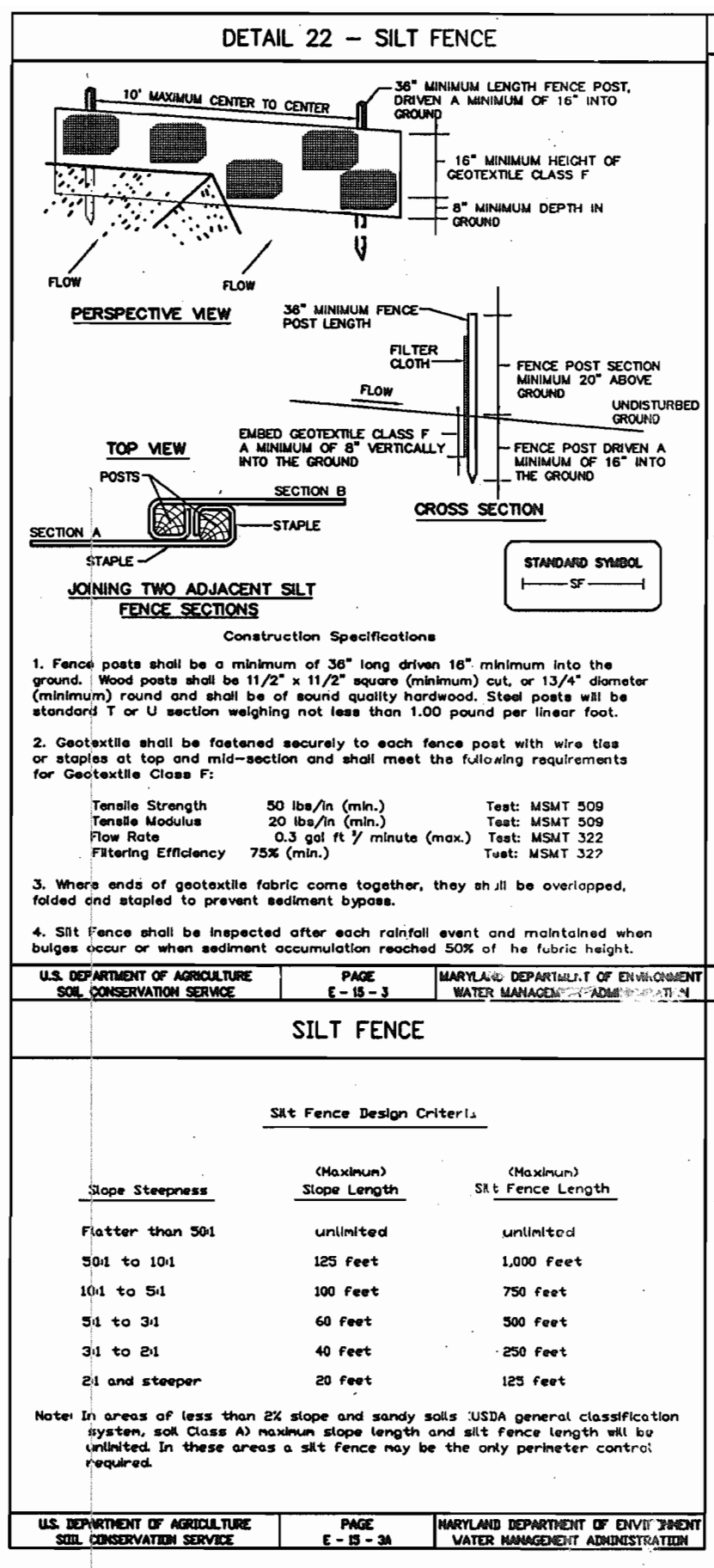
b. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5% BY WEIGHT.

c. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.

d. NO 500 OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISPERSION OF PHYTO-TOXIC MATERIALS.

NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.

1. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOL AMENDMENTS AS SPECIFIED IN 2.0.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS.



**DEVELOPER**

CRAFTMARK HOMES  
6820 ELM STREET, SUITE 102  
MCLEAN, VIRGINIA 22101  
(703)-938-6940

**OWNER**

JAMESTOWN LANDING, LLC  
6820 ELM STREET, SUITE 200  
MCLEAN, VIRGINIA 22101  
(703)-734-9730

**TEMPORARY DUST CONTROL MEASURES**

- MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
- VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.
- TILLAGE - TO ROUGHEN SURFACE AND BRING CLOUDS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHARGE-TYPE PLOWS APPLICABLE TO 12" APART. SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE ALLOWED FOR USE WHEN THEY MAY PRODUCE THE DESIRED EFFECT.
- IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THAT RUNOFF BEGINS TO FLOW.
- BARNIERS - SOLID BOARD FENCES, SILT FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIALS CAN BE USED TO CONTROL AIR CURRENTS AND SOIL REMAINING IN DISTURBED AREAS. (7 DAY) RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVAL OF ABOUT TO TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL BLOWING.
- CALCIUM CHLORIDE - APPLY AT RATES THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

**SEQUENCE OF CONSTRUCTION**

- OBSTACLE GRADING PERMIT
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES AT LOCATIONS SHOWN AND CONSTRUCT SILT FENCE IF REQUIRED BY SEDIMENT CONTROL INSPECTOR. (1 DAY)
- COMPLETE CONSTRUCTION AS SHOWN. (120 DAYS)
- COMPLETE FINE GRADING OF SITE TO GRADES INDICATED. (1 DAY)
- SEED AND MULCH ALL REMAINING DISTURBED AREAS. (1 DAY)
- UPON STABILIZATION OF THE SITE AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS. (7 DAY)

NOTE: EXISTING SEDIMENT CONTROLS INSTALLED UNDER F-05-104 ARE TO REMAIN IN PLACE FOR THE CONSTRUCTION ON LOT 2. AS PER PERMISSION LETTER DATED JUNE 22, 2008 FROM JAMESTOWN LANDING, LLC TO CRAFTMARK HOMES.

**SOILS DESCRIPTION**

SYMBOL	DESCRIPTION
EB2	EULOKI SILT LOAM, 3% TO 8% SLOPES, MODERATELY ERODED--TYPE C
GIC3	GLENELG SILT LOAM, 2% TO 15% SLOPES, SEVERELY ERODED--TYPE B

**PERMIT INFORMATION CHART**

SUBDIVISION NAME:	SECTION/AREA SECTION II	LOT/PARCEL NO. LOT 2
JAMESTOWN LANDING		
PLAT NO. OR L/F BLOCK NO.	ZONE	TAX MAP
18399-18405	15	R-20
		ELEC. DIST.
		46
		CENSUS TRACT
		605102
WATER CODE:	E-18	SEWER CODE:
		7601000

PROPOSED IMPROVEMENTS:  
CONSTRUCT WATER, ASSOCIATED GRADING AND SEDIMENT CONTROL

**ADDRESS CHART**

LOT/PARCEL NO.	STREET ADDRESS
LOT 2	11607 ARDEN COURT

**HARMS**

ENGINEERS • PLANNERS • SURVEYORS

41 EAST ALL SAINTS STREET, SUITE 210, FREDERICK, MARYLAND 21701  
OFF. C: 301/661-2027 FAX: 301/661-1028

2005 JOHN E. HARMS, JR. & ASSOCIATES, INC.

**SITE DEVELOPMENT PLAN**

**JAMESTOWN LANDING**

**SECTION II - LOT 2**

TAX MAP: 46 - PARCEL: 229 & 352  
FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

DESIGNED BY: SJD  
DRAWN BY: CIN  
CHECKED BY: SJD  
DATE: JULY, 2006  
W.O. NO. 08-06-014A

1 OF 1

**SDP-06-157**