

PERMANENT SEEDING NOTES

Scope: Planting permanent, long lived vegetative cover on graded and/or cleared areas and areas that have been in temporary vegetation for more than 6 months.

Standards: The following notes shall conform to Section B-4 of the "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" published jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service and the Maryland Association of Soil Conservation Districts.

The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See section B-4-2.

For sites over 5 ac. soil tests will be performed. Soil tests will be conducted by the University of Maryland or a recognized commercial laboratory. Minimum soil conditions shall meet the requirements of section B-4-2-A-2-a, otherwise soil amendments or topsoil will need to be applied. Topsoiling may occur when soil conditions meet the minimum requirements as stated in section B-4-2-B. Soil amendments must meet the requirements as set forth in section B-4-2-C and must be applied as indicated by the soil tests.

For sites of 5 ac. or less of disturbance, the following fertilizer and lime rates shall apply. Fertilizer shall consist of a mixture of 10-20-20 and be applied at the following rates:
 N = 45 lb. per acre (1 lb. per 1000 sq. ft.) P₂O₅ = 90 lb. per acre (2 lb. per 1000 sq. ft.)
 K₂O = 90 lb. per acre (2 lb. per 1000 sq. ft.)
 Lime shall be applied at a rate of 2 tons per acre (90 lb. per 1000 sq. ft.)

Seed type, turfgrass or sod application shall meet the requirements in section B-4-5. Seed tags shall be made available to the inspector to verify the type and application rate of seed used. Mulch type and its application will meet the requirements in section B-4-3 a, b and c and will be applied along with seed or immediately after seeding.

Seeding mixtures shall be selected from or will be equal to those on Table B-3. The seeding chart below will need to be placed on and filled in on the sediment control plan.

Hardiness Zone (from Figure B.3): 6b		Seed Mixture (from Table B.3): 8		Fertilizer Rate (10-20-20)		Lime Rate		
No.	Species	Application Rate (lb./ac)	Seeding Dates	Seeding Depths	N	P ₂ O ₅	K ₂ O	Lime Rate
8	Tall Fescue	100	3-1 to 5-15 8-1 to 10-15	1/8-1/2 in 1/4-1/2 in	45 pounds per acre (1 lb/1000sf)	90 lb/ac (2lb/1000sf)	90 lb/ac (90lb/1000sf)	2 tons/ac (90lb/1000sf)

TEMPORARY SEEDING NOTES

Scope: Planting short term (no more than 6 months) vegetation to temporarily stabilize any areas where soil disturbance has occurred, until the area can be permanently stabilized with vegetative or non-vegetative practices.

Standards: The following notes shall conform to Section B-4 of the "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" published jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service and the Maryland Association of Soil Conservation Districts.

The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See section B-4-2.

For temporary stabilization, fertilizer shall consist of a mixture of 10-20-20 and be applied at a rate of 436 lb. per acre (10 lb. per 1000 sq. ft.) and will meet the requirements in section B-4-2. Lime shall be applied at a rate of 2 tons per acre (90 lb. per sq. ft.) and shall meet the requirements in section B-4-2 and B-4-4.

Seed type and application shall meet the requirements in section B-4-3 Seed tags shall be made available to the inspector to verify the type and rate of seed used. Mulch type and its application will meet the requirements in section B-4-3 a, b and c and will be applied along with the seed or immediately after seeding.

Seeding mixtures shall be selected from or will be equal to those on Table B.1 (page B.20).

Temporary Seeding Summary

The seeding chart below will need to be placed on and filled in on the sediment control plan.

Hardiness Zone (from Figure B.3): 6b		Seed Mixture (from Table B.1): 6b		Fertilizer Rate (10-20-20)		Lime Rate		
No.	Species	Application Rate (lb./ac)	Seeding Dates	Seeding Depths	N	P ₂ O ₅	K ₂ O	Lime Rate
Annual Ryegrass	40	3-1 to 5-15 8-1 to 10-15	0.5"	436 lb/ac (10 lb/1000sf)	90 lb/ac (2lb/1000sf)	90 lb/ac (90lb/1000sf)	2 tons/ac (90lb/1000sf)	

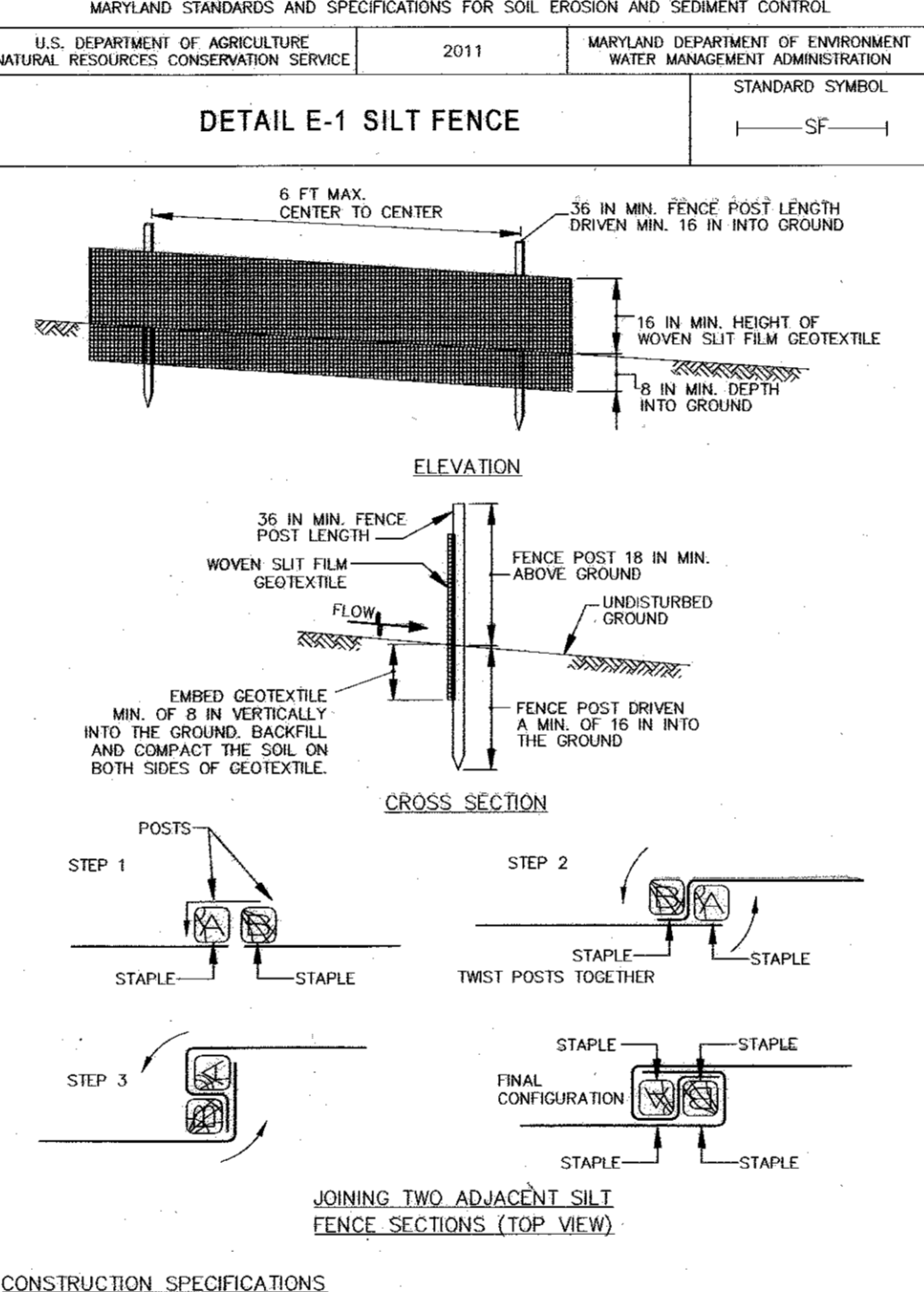
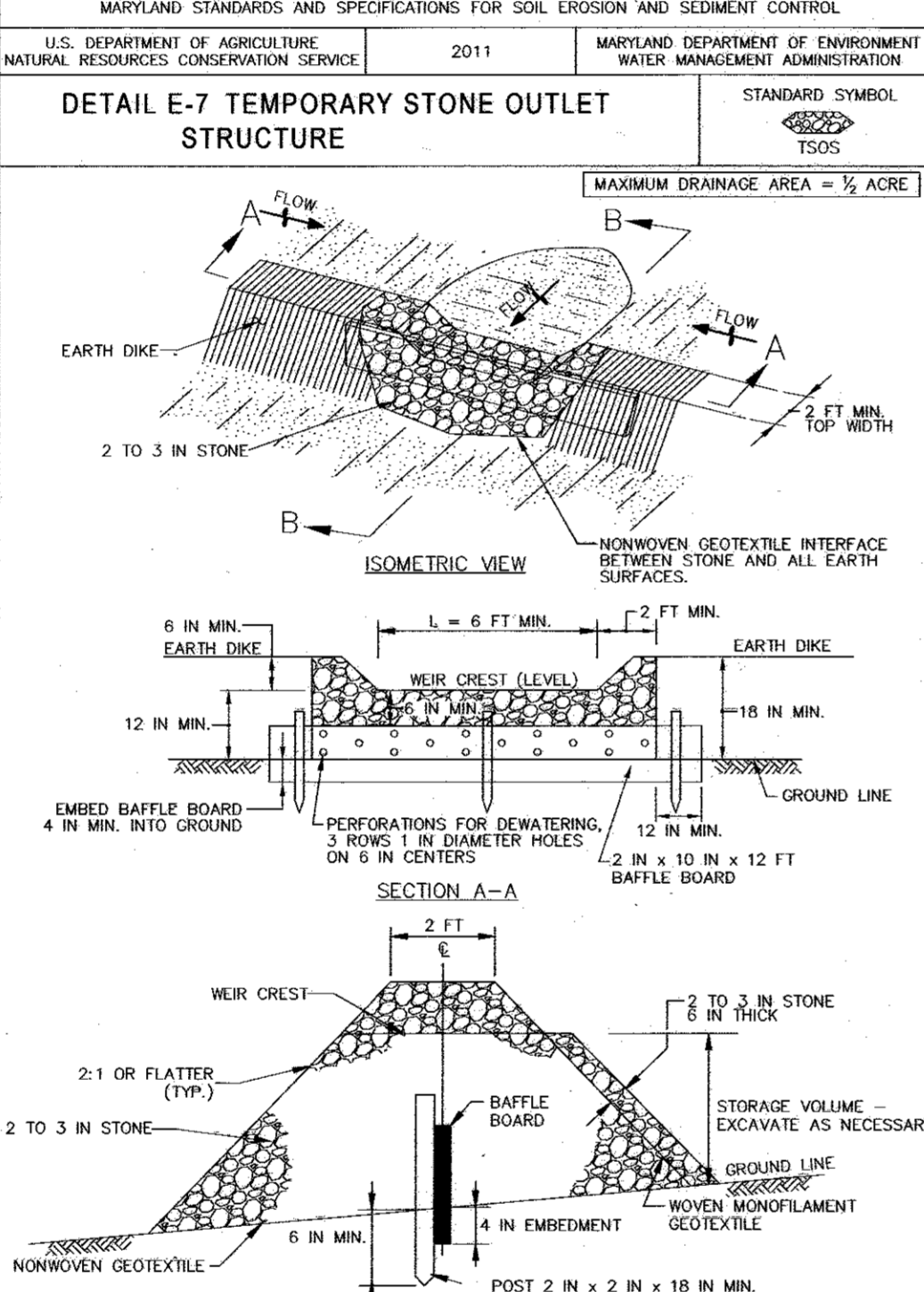
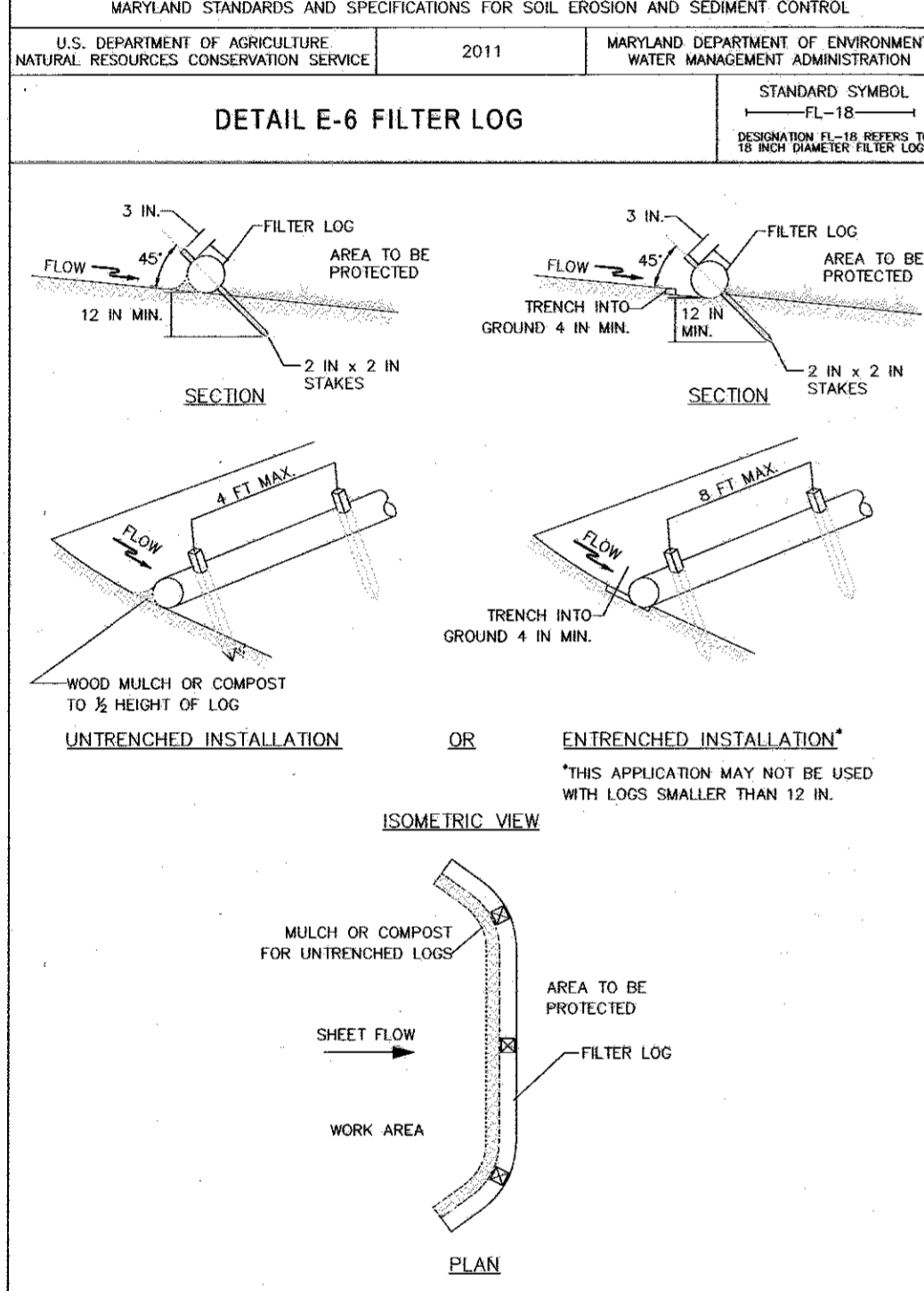
REQUIRED SEQUENCE OF CONSTRUCTION:

- Contact the Howard County Department of Public Works, Construction Inspection Division at 410-313-1855 at least three working days prior to commencing any work, to schedule a pre-construction meeting. Also at this time contact the office of Leon A. Podolak and Associates at 410-876-1226 (Engineer) to arrange for inspection of the construction of the storm water management facilities. Work with the Maryland State Highway Right-of-Way will require an access permit from the district office.
- Install stabilized construction entrance, silt fence and tree protection fence, if necessary, as depicted on the plan.
- Upon approval of the Sediment Control Inspector, strip topsoil, stockpile and stabilize in accordance with temporary seeding specifications. Install 15 inch HDPE culvert pipe at the location shown and provide cover and fill as depicted on the plan. Excess borrow material shall be hauled from the site and disposed of properly. All fill material shall be compacted in 8 inch layers and to a dry density of 95 percent, as measured by AASHTO Method T-99. The rip rap apron should be covered with filter cloth to prevent sediment from choking the interstices of the stone.
- Grade grass channel at the location shown on the plan and stabilize with 2 inches of topsoil and seed and mulch in accordance with permanent seeding specifications. Install temporary stone check dams at 100 foot intervals as depicted on the plan. Install temporary stone outlet structure near the intake of the culvert pipe.
- Grade driveway and provide wide shoulder disconnection as depicted on the plan. At this time, contact the office of Leon A. Podolak and Associates at 410-876-1226 [Engineer] to arrange for inspection of the construction and "As-Built" verification of grades. Provide stone base of driveway and super-elevate at 3 percent cross slope as shown on plan. See requirements and inspection chart on this sheet.
- Grade and construct house, making sure to provide flat grades for the discharge of all rain spouts. Contact the office of Leon A. Podolak and Associates at 410-876-1226 [Engineer] to arrange for "As-Built" verification of grades.
- Fine grade all pervious areas and stabilize with 2 inches of topsoil, and seed in accordance with permanent seeding specifications. Pave driveway.
- Upon approval of the Howard County Sediment Control Inspector, remove all temporary sediment control devices.

N-2 NON ROOFTOP DISCONNECT USING WIDE SHOULDER

REQUIRED SEQUENCE OF CONSTRUCTION:

- Contact the certifying Professional Engineer or Professional Land Surveyor 24 hours prior to start of construction of the driveway to Lot #2. Call Leon A. Podolak and Associates, LLC at 410-876-1226.
- Grade driveway and wide grass shoulder per plan.
- Install gravel filter diaphragm.
- Install graded aggregate base.
- Pave driveway per typical section on sheet 1.
- Fine grade topsoil, seed and mulch wide shoulder and supporting slopes. Finish wide shoulder elevation 2 inches below edge of driveway pavement.
- Within 30 days of the establishment of a 2 inch stand of dense grass over all disturbed areas, submit a signed and certified As-Built (including the inspection chart) to the Howard County Bureau of Storm Water Management.



HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division 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.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 3 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1; b) 7 days as to all other disturbed or graded areas on the project site.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. B-4-5), temporary seeding (Sec. B-4-4) and mulching (Sec. B-4-3). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- 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.
- Site Analysis:
 Total Area of Site: 7.739 Acres
 Area Disturbed: 64,960 sq. ft. (1.4913 Acres)
 Area to be roofed or paved: 9,255 sq. ft. (0.2125 Acres)
 Area to be vegetatively stabilized: 50,460 sq. ft. (1.1584 Acres)
 Total Cut: 1,187 Cu. Yds.
 Total Fill: 475 Cu. Yds.
 Offsite waste/borrow are location: N/A
- Any sediment control practice that is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- 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 by the inspection agency is made.
- Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized by the end of each workday, whichever is shorter.
- Any changes or revisions to the sequence of construction must be reviewed and approved by the plan approval authority prior to proceeding with construction.
- A project is to be sequenced so that grading activities begin on one grading unit (maximum acreage of 20 ac. per grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50 percent of the disturbed area in the preceding grading unit has been stabilized and approved by the enforcement authority. Unless otherwise specified and approved by the approval authority, no more than 30 acres cumulatively may be disturbed at a given time.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
 U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011
 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

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 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Edwards 10-31-16
 Chief, Development Engineering Division DATE

Kate Podolak 11-2-16
 Chief, Division of Land Development DATE

ENVIRONMENTAL SITE DESIGN TABULATION:

Storm Water Management Requirements for Lot #2:
 1) Water Quality Volume Required = 1,450 cubic feet
 2) Recharge Volume Required = 365 cubic feet
 3) Channel Protection Volume Required = 2680 cubic feet

ESD #1: Disconnection of Non Rooftop Runoff using a Wide Shoulder [N-2]
 This non-structural practice is to be owned and maintained by the owner and developer of the property, their heirs and assigns.
 Impervious Area Treated = 0.18 Acres

ESD #2: Disconnection of Rooftop Runoff using Grass Sheet Flow [N-1]
 This non-structural practice is to be owned and maintained by the owner and developer of the property, their heirs and assigns.
 Impervious Area Treated = 0.05 Acres

Storm Water Management Provided for Lot #2:
 1) Water Quality Volume Provided = 1,450 cubic feet
 2) Recharge Volume Provided = 365 cubic feet
 3) Channel Protection Volume Provided = 2680 cubic feet

Watershed Name: Middle Patuxent River [02131106]
 Stream Classification: Type IV-P
 Discharge Point: Middle Patuxent River

This development is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

Signature of Engineer (print name below signature) _____ Date 10/2/16

ENGINEER'S 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."

Signature of Engineer (print name below signature) _____ Date 10/2/16

DEVELOPER'S CERTIFICATE

"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."

Signature of Developer (print name below signature) _____ Date 10-12-2016

DAVID L. MAZZUCA

SUBDIVISION PLAN for #2106 MCKENDREE ROAD HOWARD CO. TAX MAP: 15 GRID: 1 PARCEL: 51 TAX ACCT. NO.: 04-322878

F-16-070

SHEET 2 OF 3

LEON A. PODOLAK and ASSOCIATES, L.L.C.

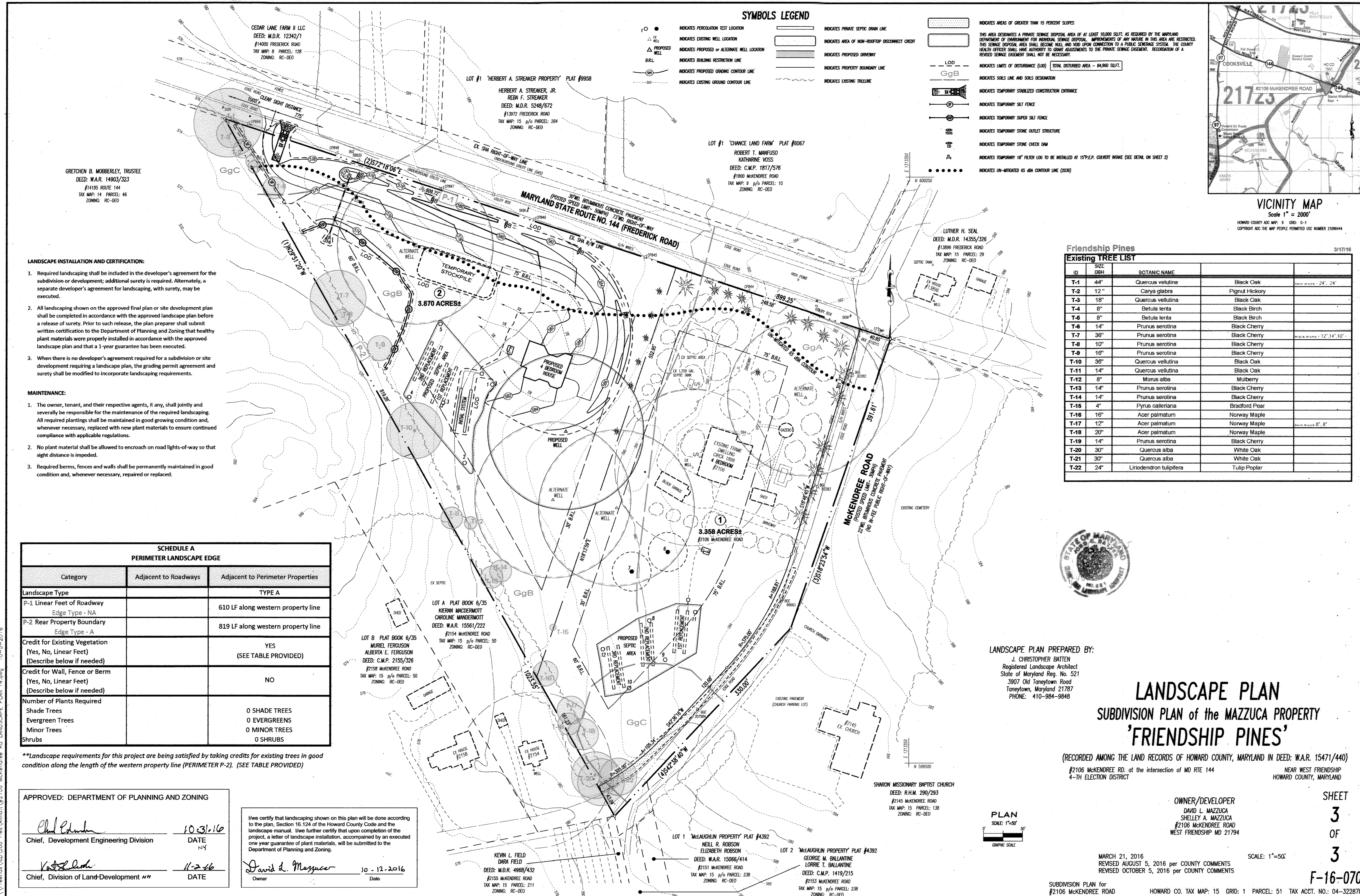
SURVEYING and CIVIL ENGINEERING
 147 East Main St. (P.O. Box 266) Westminster, Maryland 21157
 (410) 848-2229 - (410) 876-1226

Date: 10-2-16

Revision: COUNTY COMMENTS

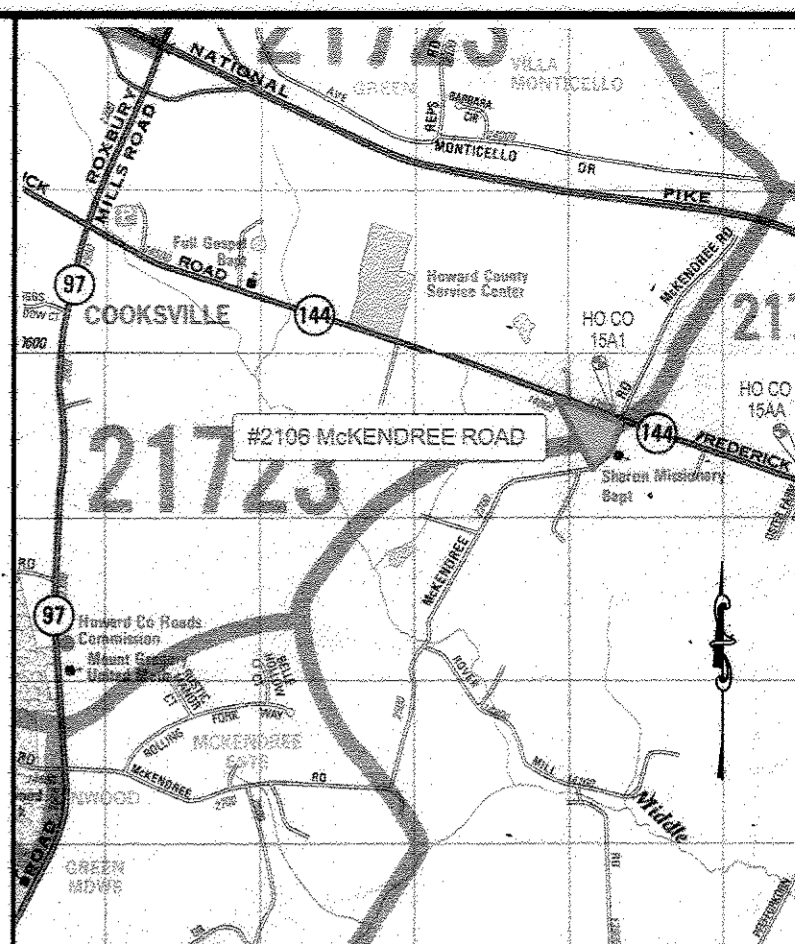
Date: April 29, 2016
 Scale: 1"=50'
 Drawing No.:

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SYMBOLS LEGEND

- INDICATES PERCOLATION TEST LOCATION
- △ EX. WELL
- △ PROPOSED WELL
- B.R.L. INDICATES BUILDING RESTRICTION LINE
- INDICATES PROPOSED GRADING CONTOUR LINE
- INDICATES EXISTING GROUND CONTOUR LINE
- INDICATES PRIVATE SEPTIC DRAIN LINE
- INDICATES AREA OF NON-ROOFTOP DISCONNECT CREDIT
- INDICATES PROPOSED DRAINWAY
- INDICATES PROPERTY BOUNDARY LINE
- INDICATES EXISTING TREELINE
- LOD INDICATES LIMITS OF DISTURBANCE (LOD) TOTAL DISTURBED AREA - 64,960 SQ.FT.
- GgB INDICATES SOILS LINE AND SOILS DESIGNATION
- INDICATES TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
- INDICATES TEMPORARY SILT FENCE
- INDICATES TEMPORARY SUPER SILT FENCE
- INDICATES TEMPORARY STONE OUTLET STRUCTURE
- INDICATES TEMPORARY STONE CHECK DAM
- INDICATES TEMPORARY 18" FILTER LOG TO BE INSTALLED AT 15° P.E.P. CONVEYOR INLET (SEE DETAIL ON SHEET 2)
- INDICATES UN-ANTICIPATED 65' B.M. CONTOUR LINE (2036)



VICINITY MAP
Scale 1" = 2000'
HOWARD COUNTY ADC MAP: 9 GRID: C-1
COPYRIGHT AND THE MAP PEOPLE PERMITTED USE NUMBER 21056444

LANDSCAPE INSTALLATION AND CERTIFICATION:

- Required landscaping shall be included in the developer's agreement for the subdivision or development; additional surety is required. Alternately, a separate developer's agreement for landscaping, with surety, may be executed.
- All landscaping shown on the approved final plan or site development plan shall be completed in accordance with the approved landscape plan before a release of surety. Prior to such release, the plan preparer shall submit written certification to the Department of Planning and Zoning that healthy plant materials were properly installed in accordance with the approved landscape plan and that a 1-year guarantee has been executed.
- When there is no developer's agreement required for a subdivision or site development requiring a landscape plan, the grading permit agreement and surety shall be modified to incorporate landscaping requirements.

MAINTENANCE:

- The owner, tenant, and their respective agents, if any, shall jointly and severally be responsible for the maintenance of the required landscaping. All required plantings shall be maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable regulations.
- No plant material shall be allowed to encroach on road rights-of-way so that sight distance is impeded.
- Required berms, fences and walls shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.

Friendship Pines

Existing TREE LIST

ID	SIZE DBH	BOTANIC NAME	COMMON NAME	TRUNK HEIGHT
T-1	44"	Quercus velutina	Black Oak	main trunk - 24', 24"
T-2	12"	Carya glabra	Pignut Hickory	
T-3	18"	Quercus velutina	Black Oak	
T-4	8"	Betula lenta	Black Birch	
T-5	8"	Betula lenta	Black Birch	
T-6	14"	Prunus serotina	Black Cherry	
T-7	36"	Prunus serotina	Black Cherry	main trunk - 12', 14', 10'
T-8	10"	Prunus serotina	Black Cherry	
T-9	16"	Prunus serotina	Black Cherry	
T-10	36"	Quercus velutina	Black Oak	
T-11	14"	Quercus velutina	Black Oak	
T-12	8"	Morus alba	Mulberry	
T-13	14"	Prunus serotina	Black Cherry	
T-14	14"	Prunus serotina	Black Cherry	
T-15	4"	Pyrus callianena	Bradford Pear	
T-16	16"	Acer palmatum	Norway Maple	
T-17	12"	Acer palmatum	Norway Maple	main trunk 8', 8"
T-18	20"	Acer palmatum	Norway Maple	
T-19	14"	Prunus serotina	Black Cherry	
T-20	30"	Quercus alba	White Oak	
T-21	30"	Quercus alba	White Oak	
T-22	24"	Liriodendron tulipifera	Tulip Poplar	

SCHEDULE A PERIMETER LANDSCAPE EDGE		
Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Landscape Type		
TYPE A		
P-1 Linear Feet of Roadway Edge Type - NA		610 LF along western property line
P-2 Rear Property Boundary Edge Type - A		819 LF along western property line
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)		YES (SEE TABLE PROVIDED)
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)		NO
Number of Plants Required		0 SHADE TREES 0 EVERGREENS 0 MINOR TREES 0 SHRUBS

**Landscape requirements for this project are being satisfied by taking credits for existing trees in good condition along the length of the western property line (PERIMETER P-2). (SEE TABLE PROVIDED)

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Edwards 10-31-16
Chief, Development Engineering Division DATE NY

Victor Clark 11-2-16
Chief, Division of Land-Development DATE

I/we certify that landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the landscape manual. I/we further certify that upon completion of the project, a letter of landscape installation, accompanied by an executed one year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

David L. Mazzuca 10-12-2016
Owner Date

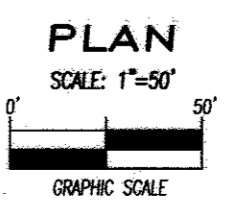
LANDSCAPE PLAN PREPARED BY:
J. CHRISTOPHER BATTEN
Registered Landscape Architect
State of Maryland Reg. No. 521
3907 Old Taneytown Road
Taneytown, Maryland 21787
PHONE: 410-984-9848



LANDSCAPE PLAN
SUBDIVISION PLAN of the MAZZUCA PROPERTY
'FRIENDSHIP PINES'

(RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND IN DEED: W.A.R. 15471/440)
#2106 MCKENDREE RD. at the intersection of MD RTE 144
4-TH ELECTION DISTRICT

OWNER/DEVELOPER
DAVID L. MAZZUCA
SHELLEY A. MAZZUCA
#2106 MCKENDREE ROAD
WEST FRIENDSHIP MD 21794



MARCH 21, 2016
REVISED AUGUST 5, 2016 per COUNTY COMMENTS
REVISED OCTOBER 5, 2016 per COUNTY COMMENTS

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