

#### PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE

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

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:

- 1) Preferred-Apply 2 tons per acre dolomitic limestone (92 lbs/ 100 sq.ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs./ 1000 sa.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 tons per acre dolomatic limestone (92 lbs/ 1000 sq.ft.) and apply 1000 lbs. per acre 10-10-10- fertilizer (23 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

SEEDING: For the periods March I thru April 30, and August I thru October 15, seed with 60 lbs. per acre (1.4 lbs/1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May I thru July 31, seed with 60 lbs. Kentucky 3! Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1000 sq.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 1bs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq, ft.) of unrotted small grain straw immediately after seedina. 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, replacements and reseedings.

#### 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 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 November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 1bs./1000 sq.ft.) For the period May 1 thru August 14, seed with 3 1bs. per acre of weeping lovegrass (.07 lbs./1000 sq.ft.). For the period November 1 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 sod.

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.

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

### DUST CONTROL

DEFINITION

Controlling dust blowing and movement on construction sites and roads. PURPOSE

To prevent blowing and movement of dust from exposed soil surfaces, reduce on and of-site damage, health hazards, and improve trafic: safety. Conditions Where Practice Aolies

This practice is applicable to areas subject to dust blowing and movement where on and off-site damage is likely without treatment

SPECIFICATIONS <u>emporary Methods</u>

Mulches - Se standards for vegetative stabilization with mulches only. Mulch should be crimped or tacked to prevent blowing. Vegetative Cover - See standards for temporary vegetative cover 3. Tilage - To roughen surface and bring clods to the surface. This is an emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12" apart, spring-toothed harows, and similar plows are examples of equipment which may produce the desired effect.

4. Irigation - 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 irigated to the point that runoff begins to flow. 5. Bariers - Solid board fences, silt fences, snow fences, burlap fences, straw bales, and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing curents at intervals of about 10 times their height are efective in controlling soil blowing . 6. Calcium Chloride - Aply at rates that will kep surface moist. May need

Permanent Methods . Permanent Vegetation - Se standards for permanent vegetative cover, and permanent stabilization with sod. Existing trees or large shrubs may aford valuable protection if left in place. 2. Topsoiling - Covering with les erosive soil materials. Se standards for

topsoiling.

3. Stone - Cover surface with crushed stone or coarse gravel. . Agriculture Handbok 346. Wind Erosion Forces in the United States and Their 2. Agriculture Information Buletin 354. How to Control Wind Erosion, USDA-ARS.~,

Inv. @ Main

1.0° HMA SUPERPAVE INTERMEDIATE SURFACE 9.5MM, PG 64-22, LEVEL I

SEWER HOUSE CONNECTION CHART

151.66±

P-2 PAVING SECTION

in modofications to the paving sections. For other CBR values go to

Paving sections shown are based on a California Bearing Ratio (CBR) of greater than or equal to 7. Actual CBR tests may result

the Howard County Volume IV Design Manual, standard detail R-2.01, for associated P-1 Paving Sections.

Inv. @ R/W

Basement

159.45

159,45

1.5" HMA SUPERPAVE FINAL SURFACE - 9.5MM PG 64-22, LEVEL 1 (ESAL) -1.0" HMA SUPERPAVE INTERMEDIATE SURFACE 9.5MM, PG 64-22, LEVEL 1 (ESAL)

- 2.0" HMA SUPERPAVE BASE 19.0MM,

#### SEDIMENT CONTROL NOTES

A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (410-313-1855).

2. All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL; and revisions thereto.

3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: (a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes, and all slopes greater than 3:1, (b) 14 days as to all other disturbed or graded areas on the project site.

4. All sediment traps/basins shown must be ferced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7 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, sod, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall be done when recommended seeding dates do not allow for proper germination and establishment of grasses.

6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control inspector.

#### 7. Site Analysis

Total Area Area Disturbed	0,207 Acre <b>0.215</b> Acres
Area to beroofed or paved	0.079 Acre
Area to be vegetatively stabilized	0.136 Acres
Total Cut	. 700 CY **
Total Fill	700 CY **
Offsite waste/borrow area location	*

8. Any sediment control practice which is disturbed by grading activity for 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 aradina. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.

11. 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.

\* Earthwork quantities are solely for the purpose of calculating fees. Contractor to verify all quantities prior to the start of construction

\*\* To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and active grading permit

#### SEQUENCE OF CONSTRUCTION

1. Obtain grading permit. 2. Notify Howard County Department of Inspections, License and

Permits at (410) 313-1880 at least 24 hours before starting 3. Install Stabilized Construction Entrance and Silt Fence and

repair any damaged existing controls to remain. 4. Rough grade site and begin house construction. (I week)

o. Fine grade site, (I week

6. 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. (1 week)

-Following initial soil disturbance or any redisturbances, permanent or temporary stabilization shall be completed within: a. 7 calendar days for all perimeter sediment control structures, dikes, swales and all slopes greater than 3:1. b. 14 calendar days for all other disturbed areas.

-During grading and after each rainfall, contractor will inspect and provide necessary maintenance to the sediment control measures on this plan.

# PREPARED BY rite surveying, inc. 200 E JOPPA ROAD RM 101 TONSON, MD. 21286 PHONE: 410-828-9040 FAX. 410-828-9066

PROFESSIONAL CERTIFICATION thereby certify that these documents were prepared or approved by me and that I am a duly Licenset professional land Surveyor underlaws of the State of Maryland Licensed NO. 21175 Expiration Date 06/25/2017.

=	PERIMETER LANDSCAPE EDGE				
0 2	CATEGORY	ADJACENT TO ROADWAYS		ADJACENT TO PERIMETER PROPERTIES	
	Perimeter/Frontage Designation Landscape Type	I B	2 B	3 A	4 A
<b>a</b>	Linear Feet of Roadway Frontage/Perimeter	75.00'	120.371	75.00 <sup>1</sup>	120.37'
	Credit for Existing Vegetation (Yes, No, Linear Feet) Remaining Perimeter Length	No 0' (75.00')	No 0' (120.37')	No 0' (75.00')	No 0' (120.37')
	Credit for Wall, Fence or Berm (Yes, No, Linear Feet) Remaining Perimeter Length	No	No	No	No
	Number of Plants Required Shade Trees Evergreen Trees Shrubs	1:50   1:40	1:50 2 1:40 1	1:60 2	1:60 3
	Number of Plants Provided Shade Trees Evergreen Trees		2	2	3
	Other Trees (2:1 Substitution) Shrubs (10:1 Substitution) (Describe Plant Substitution Credits	-	Ş	· · · · <del>-</del>	

SCHEDULE A

#### 21.0 STANDARDS 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 vegetable 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

b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture

material is not adequate to produce vegetative

c. The original soil to be vegetated contains material toxic to plant growth.

d. The soil is so acidic that treatment with

and plant nutrients.

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

II. Topsoil Specifications - Soil to be used as topsoil must meet the following:

i. 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 a soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils 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 1/2" in diameter.

ii. Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as

iii. Where the subsoil is either highly acidic 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.

II. For sites having disturbed areas under 5 acres: . Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization

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:

Methods and Materials.

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 lime shall be prescribed to raise the pH to 6.5 or higher

b. Organic content of topsoil shall be not less than 1.5 percent by weight.

c. Topsoil having soluble salt 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 elapsed (14 days min.) to permit dissipation 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.

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

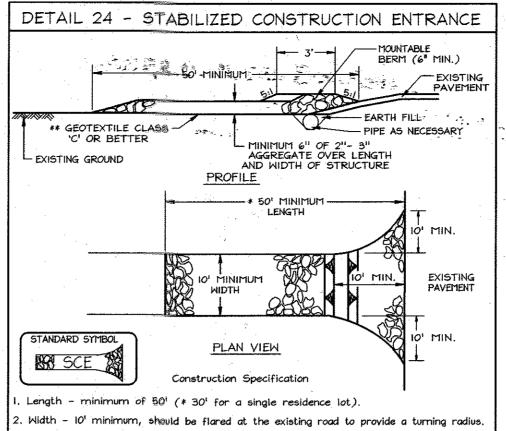
#### Topsoil Application

When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.

ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4"-8" higher in elevation.

iii. Topsoil shall be uniformly distributed in a 4"-8" 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 preven the formation of depressions or water pockets.

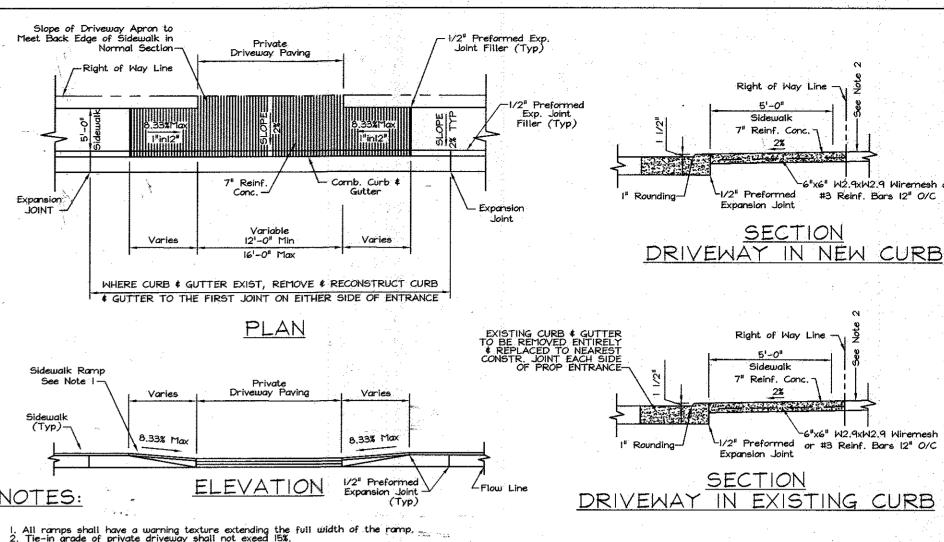
iv. Topsoil shall not be place while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.



. Geotextile fabric (filter cloth) shall be placed over the existing ground prior oplacing stone. \*\* The plan approval authority may not require single amily residences to use geotextile.

4. Stone - crushed 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. . 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. 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 WATER MANAGEMENT ADMINISTRATION



All ramps shall have a warning texture extending the full width of the ramp.

Tie-in grade of private driveway shall not exceed 15%.

Private driveway paving (If conc. 1/2" preformed exp JT is to be provided at R/W line.)

Grass area adjacent to sidewalk must be sloped to meet ramp.

Howard County, Maryland Department of Public Works Revised 5/7/2007 Chief, Bureau of Engineering

RESIDENTIAL DRIVEWAY ENTRANCE 7" Combination Curb and Gutter Sidewalk Abuttina Curb

PERSPECTIVE VIEW

JOINING TWO ADJACENT SILT

FENCE SECTIONS

Tensile Modulus Flow Rate

DETAIL 22 - SILT FENCE

36" MINIMUM FENCE-

Fence posts shall be a minimum of 36" long, driven 16" minimum into the

standard T or U section weighing not less than 1.00 pound per linear foot.

at top and mid-section and shall meet the following requirements

20 lbs/in (min.)

Filtering Efficiency 75% (min.)

3. Where ends of geotextile fabric come together,

ground. Wood posts shall be I  $1/2^{11} \times 1 \cdot 1/2^{11}$  square (minimum) cut, or 1 3/4<sup>11</sup> diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be

0.3 gal ft 2/minute (max.) Test: MSMT 322

4. Silt Fence shall be inspected after each rainfall event and maintained when buildes

securely to each fence post with wire ties

Detail R-6.02

- 8" MINIMUM DEPTH IN

CROSS SECTION

Test: MSMT 509

- MINIMUM 20" ABOVE GROUND

- FENCE POST DRIVE

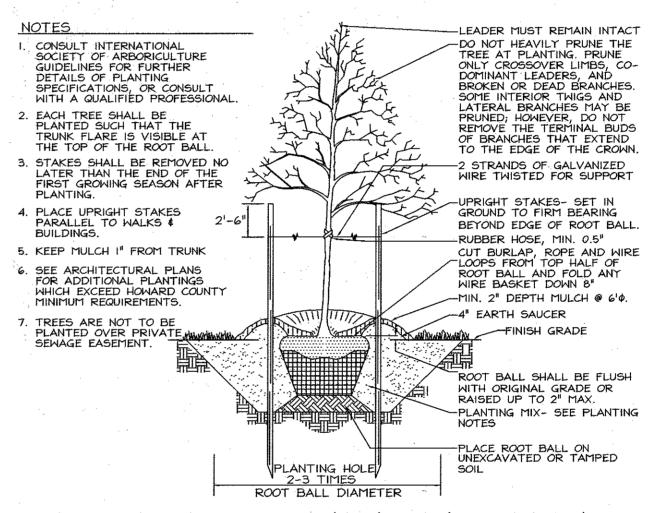
MINIMUM OF 16'

STANDARD SYMBOL

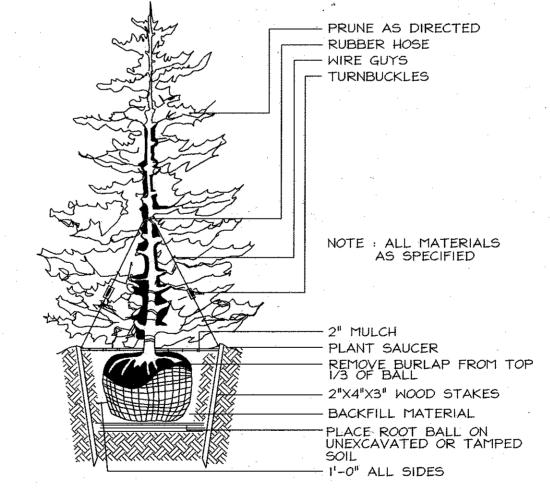
\_\_\_\_\_SF \_\_\_\_

UNDISTURB

-GRO'IND



TYPICAL TREE PLANTING AND STAKING DECIDUOUS TREES UP TO 2-1/2" CALIPER



LANDSCAPE NOTES

1. At the time of installment, all shrubs and other plantings herewith listed and approved for this site, shall be of the proper height requirements in accordance with the Howard County Landscaping Manual. In addition, no substitutions or relocation of required plantings may be made without prior review and approval from the Department of Planning and Zoning, Any deviation from this approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to applicable plans and certificates.

2. The owner, tenant, and/or their agents shall be responsible for maintenance of the required landscaping, including both plant materials and berms, fences and walls. All plant materials shall be maintained in good growing condition, and when necessary, replaced with new materials to ensure continued compliance with applicable regulations. All other required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.

3. Financial surety for the required landscaping will be posted as part of the Developer's Grading Permit in the amount of \$2,700.00 (8 shade trees @ \$300.00 and 2 evergreen trees @ \$150.00 each).

	Bevised Hse type from Columbia To YET Development. LLC. Revised Elev. Dim. from 31.07 to 22.0ft.	2-17-17
2	REVISED AREA DISTURBED AND AREA TO BE VEGATATIVELY STADILIZED MEASUREMENTS	12-22-08
Î	REVISED SITE ANALYSIS DATA	10/03/08
No.	REVISION	DATE

TYPICAL EVERGREEN TREE PLANTING DETAIL NOT TO SCALE

PROFESSIONAL CERTIFICATION

hereby certify that these documents were prepared or approved by me. and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. #22418, Expiration Date: 07/29/2009.

## OWNER LOT 1

YET DEVELOPMENT, LLC. % Charles Young 227 Oella Avenue, Catonsville, MD. 21228

OWNER/DEVELOPER Comfort Eagle LLC c/o Nick Liparini

#### LANDSCAPE AND SEDIMENT AND EROSION CONTROL NOTES AND DETAILS HARWOOD PARK LIBER 9849 FOLIO 272 TAX MAP 38 GRID 14 PARCEL 873 IST ELECTION DISTRICT HOWARD COUNTY, MARYLAND



FSH Associates 6339 Howard Lane, Elkridge, MD 21075 Tel:410-567-5200 Fax: 410-796-1562 E-mail: info@fsheri.com

DRAWN BY: CRH2/RL CHECKED BY: ZYF SCALE: As Shown DATE: Sep. 2, 2008 W.O. No.: 3469 SHEET No.: 3 OF 3

DESIGN BY: CRH2/RL

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

MUMUUM ENGINEERING DIVISION

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

Below if needed

"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

DEVELOPER'S CERTIFICATE

6'x8' Porch

Areaway -

44.01

YET Development, LLC.

LOT 1

FF: 171.28

YET Development, LLC.

"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 DATE ZACHARIA Y. FISCH

ENGINEERS CERTIFICATE

8835-P Columbia 100 Parkway Columbia, MD 21045 (410) /30-0810

SDP-08-093

M:\Loudon 3469\dwg\SDP\3469\_5n\_s3.dwg, 9/2/2008 11:20:18 AM, rice, 1