LEGEND

- SILT FENCE — SF
- LIMIT OF DISTURBANCE — LOD
- EXISTING WELL
- EXISTING BUILDING
- PROPOSED BUILDING
- EX. TREELINE
- SOIL LINE
- STABILIZED CONSTRUCTION ENTRANCE — SCE
- EX. GRAVEL AREA
- PROP. GRAVEL AREA
- PROPERTY LINE
- 1930 HOUSE SITE OF ORIGINAL
- EX. SEPTIC AREA
- EX. TREE
- WELL BUFFER
- SWM DISCONNECTION — 75'@2.93%
- GRASS SHOULDER
- EX. EDGE OF PAVEMENT
- 5' CONC. SIDEWALK

SOIL LEGEND

MAP SYMBOL	MAPPING UNIT	HYDROLOGIC SOIL GROUP	HYDRIC? COMPONENTS	Kw	SLOPE
GgA	GLENELG LOAM	B	NO	0.24	0-3%
GgB	GLENELG LOAM	B	NO	0.24	3-8%

NOTE: SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE; WEB SOIL SURVEY.

SWM TREATMENT SUMMARY

PRACTICE	DRAINAGE AREA	IMPERVIOUS AREA TREATED	METHODOLOGY	VOLUME (ESDv) REQUIRED	VOLUME (ESDv) PROVIDED
N-1 ROOFTOP DISCONNECTION	2800 S.F.	2800 S.F.	ESDv=Pe * Rv * A/12 where Pe=1.0" & Rv=0.95	222 c.f.	222 c.f.
N-2 NON-ROOFTOP DISCONNECTION	561 S.F.	561 S.F.	ESDv=Pe * Rv * A/12 where Pe=1.0" & Rv=0.95	44 c.f.	44 c.f.
			TOTAL ESDv PROVIDED		266 c.f.
			ESDv REQUIRED	266 c.f.	

STORMWATER MANAGEMENT PRACTICE CHART

Parcel Number	ADDRESS	NON ROOFTOP DISCONNECTION	ROOFTOP DISCONNECTION
		N-2	N-1
		Y/N	Y/N
196	15947 FREDERICK ROAD	Y	Y

ADDRESS CHART

PARCEL #	STREET ADRESS
196	15947, FREDERICK ROAD, LISBON, MD. 21765

PERMIT INFORMATION CHART

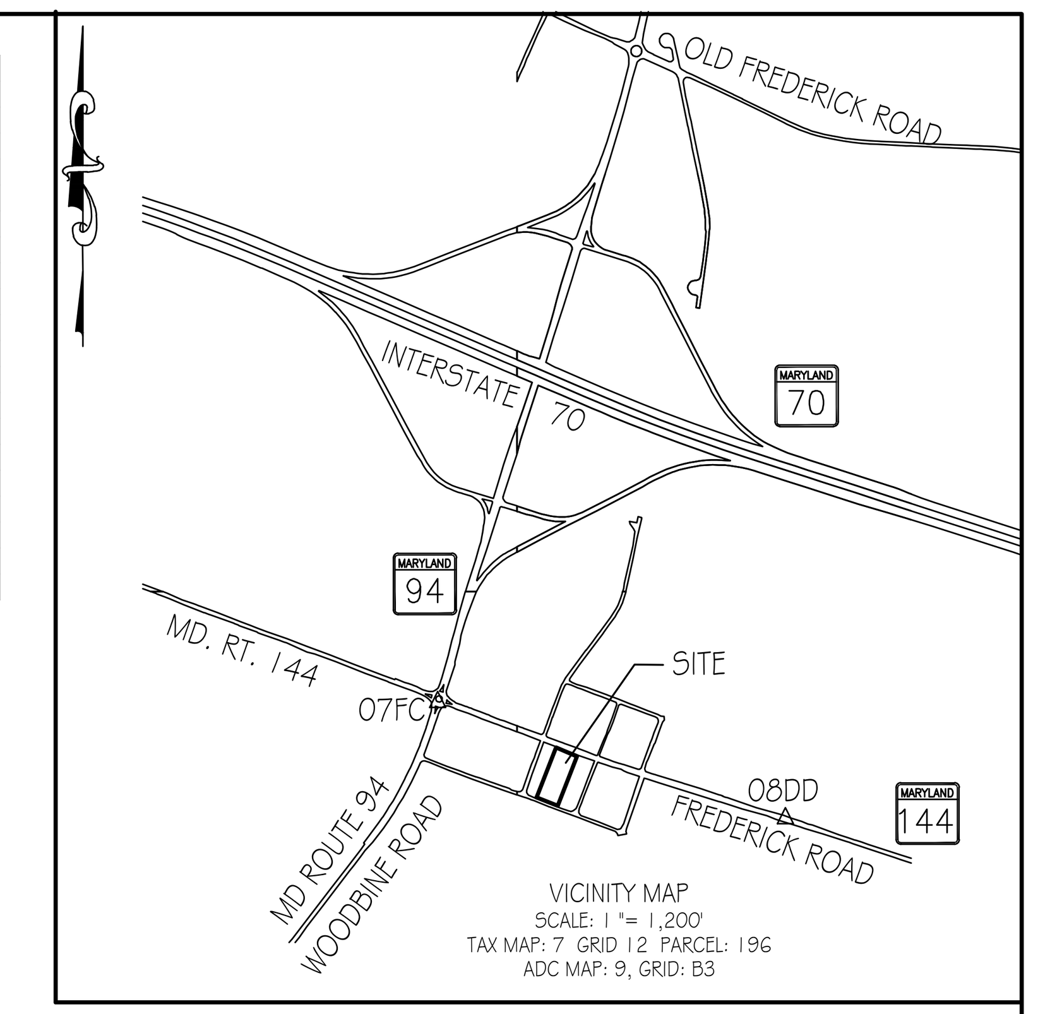
SUBDIVSION NAME VILLAGE OF LISBON		SECTION/AREA N/A		PARCEL No. P.196	
PLAT # PL#3 BK. 20	GRID # 12	ZONING B-2	TAX MAP# 07	ELECT. DISTRICT 04	CENSUS TRACT 604001
WATER CODE- N/A			SEWER CODE- N/A		

SITE ANALYSIS DATA SHEET	ACRES
EXISTING SITE USE- SERVICE AGENCY-REAL ESTATES OFFICE	
WETLANDS	0.00
WETLANDS BUFFER	0.00
FLOODPLAIN	0.00
FORESTS	0.00
STEEP SLOPES (15-24%)	0.00
STEEP SLOPES (25% OR GREATER)	0.00
TOTAL PROJECT AREA	1.00
LOD AREA	0.17
GREEN OPEN SPACE AREA	0.00
EX. IMPERVIOUS AREA	0.31
PROP. IMPERVIOUS AREA	0.07
HIGHLY ERODIBLE SOILS IN PROJECT AREA	0.00
ZONING	B-2
PARKING REQUIRED	2.0
PARKING PROVIDED	2.0
DPZ FILE REFERENCES	ECP-22-068
EX. BUILDING FLOOR AREA	1743 SF
PROPOSED POLE BARN FLOOR AREA	2800 SF

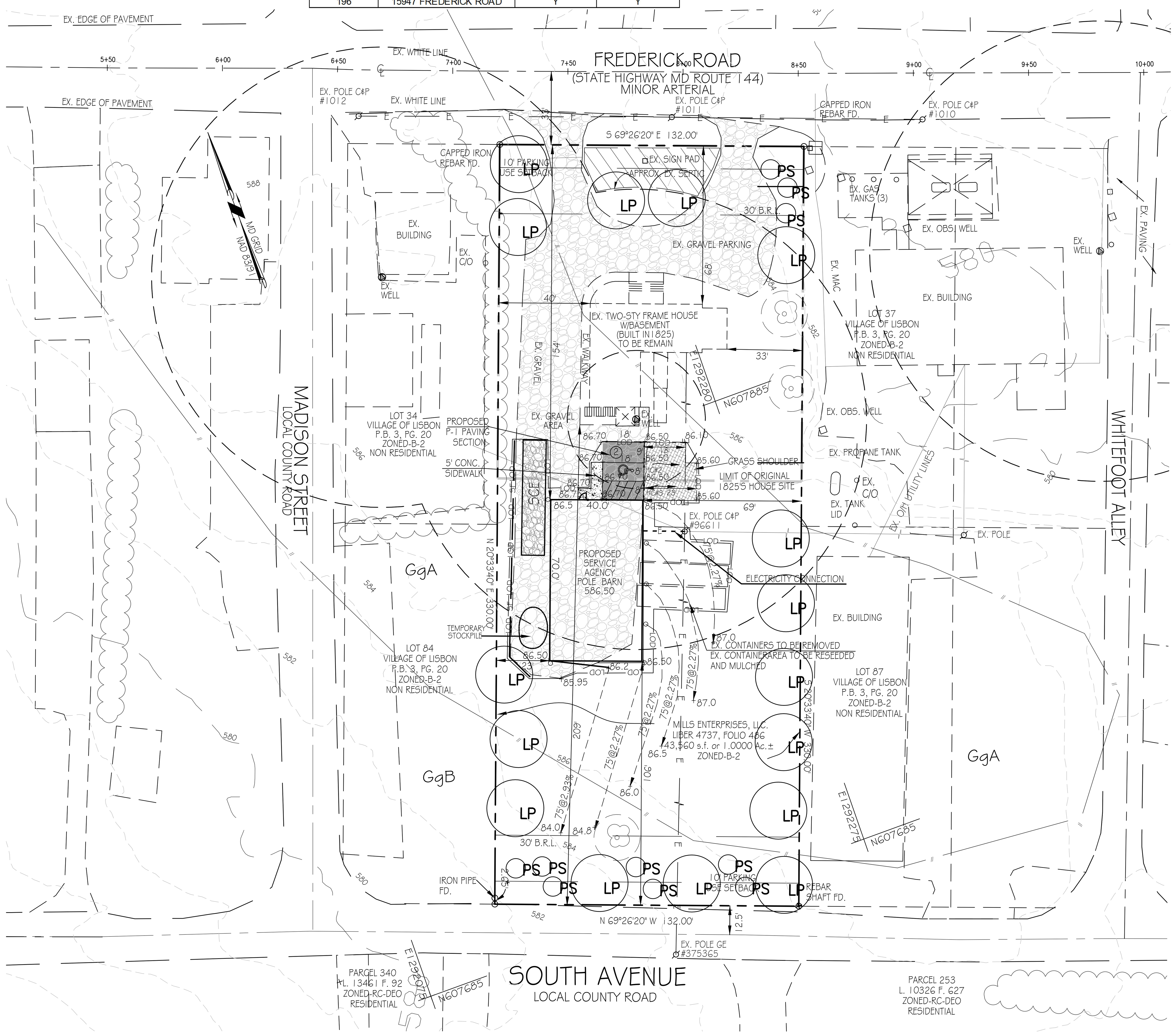
HOWARD COUNTY BENCH MARKS

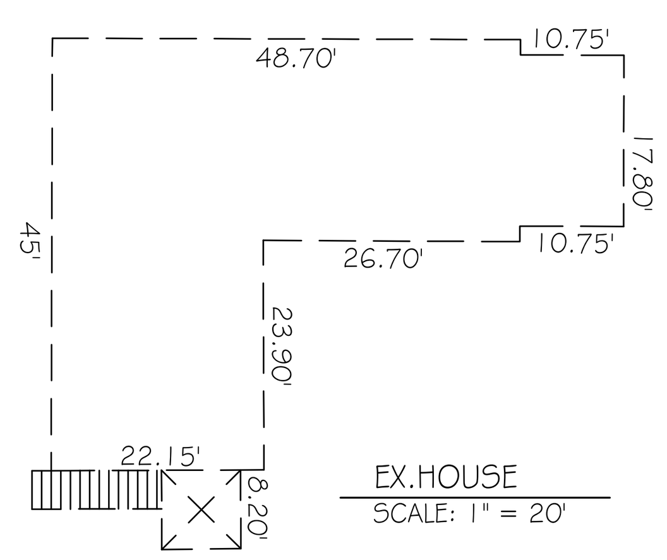
1 # 07FC NAIL ON TOP OF 10" CON. CURB
N 608315.535
E 1291225.340
EL = 591.37

2 #8DD SE SIDE OF ROUTE 144
N 617452.050
E 1293998.160
EL = 570.665



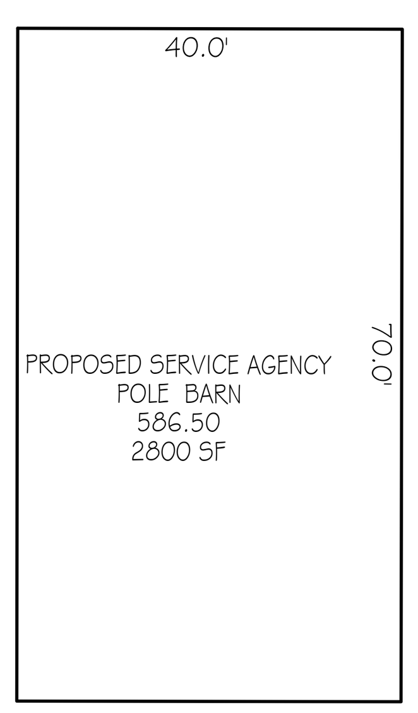
VICINITY MAP
SCALE: 1 "= 1,200'
TAX MAP: 7 GRID 12 PARCEL: 196
ADC MAP: 9, GRID: B3

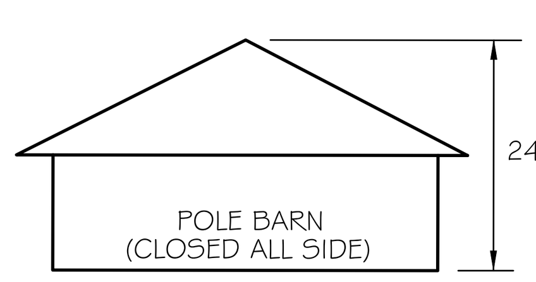




EX.HOUSE
SCALE: 1" = 20'

NOTE: THE PROPOSED POLE BARN WILL BE USED FOR STORAGE PURPOSE ONLY.





POLE BARN DETAIL
SCALE: 1" = 20'

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HRS. PRIOR TO ANY EXCAVATION WORK BEING DONE.
4. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. THE EXISTING TOPOGRAPHY IS TAKEN FROM HOWARD COUNTY GIS DATA, SUPPLEMENTED BY FIELD-RUN ELEVATIONS BY VANMAR ASSOCIATES, INC. CONTOUR INTERVAL IS 2' VERTICAL DATUM IS NAVD 88.
6. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLAN COORDINATE SYSTEM. AS PROJECTED BY HOWARD COUNTY SURVEY CONTROL STATIONS:
   08DD N 607452.050 E 1293998.160
   07FC N 608315.535 E 1291525.340
7. WATER IS PRIVATE.
8. SEWER IS PRIVATE.
9. STORMWATER MANAGEMENT FOR THIS LOT WILL BE PROVIDED VIA A NON ROOFTOP DISCONNECTION (N-2) AND ROOFTOP DISCONNECTION (N-1) TO BE CONSTRUCTED BY THE DEVELOPER UNDER PLAN SDP-23-029.
10. THERE IS NO FLOODPLAIN ON SITE.
11. THERE IS NO WETLANDS ON THIS SITE.
12. NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT.
13. PROPERTY OWNER: NIVIA JACOBS PROPERTIES LLC.
    ADDRESS: 15947 FREDERICK ROAD, WOODBINE, MD 21797 PH. (443) 277-9780
14. PROPERTY INFORMATION: TAX MAP 7, GRID 12, PARCEL 196
    TAX ACCOUNT # 04-328310
    DEED REFERENCE L. 21110 F. 243
    TOTAL SITE AREA: 1.000 ACRES +/-
    ZONE: B-2
15. THE PROJECT IS IN CONFROMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAS BEEN APPROVED.
16. THE SOILS SHOWN HAVE BEEN TAKEN FROM THE US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY WEBSITE.
17. A NOISE STUDY IS NOT REQUIRED FOR THE SUBJECT PROPERTY BECAUSE THIS IS A NON RESIDENTIAL USE.
18. THE SUBJECT PROPERTY IS LOCATED WITHIN HISTORIC SITE AND KNOWN AS THE MISSES WARFIELD HOUSE AS PER HO.CO. 233
19. ANY CHANGE TO THE PROPERTY THAT WOULD GENERATE WASTE WATER FLOW WOULD FIRST REQUIRE A PERCOLATION CERTIFICATION PLAN APPROVED BY THE HEALTH DEPARTMENT.
20. ANY DISTURBED AREA THAT DOES NOT DRAINED TO A SEDIMENT CONTROL MEASURES SHALL BE STABILIZED SAME-DAY.
21. THE PROPERTY IS LISTED ON THE HISTORIC SITES INVENTORY AS HO-233, THE MISSES WARFIELD HOUSE. THE BUILDING IS ALSO LOCATED WITHIN HO-495, THE LISBON SURVEY DISTRICT. HISTORIC PRESERVATION COMMISSION (HPC) REVIEWED THIS PROJECT FOR ADVISORY COMMENTS ON APRIL 6, 2023.
22. HISTORIC PRESERVATION COMMISSION (HPC) RECOMMENDED THE BARN BE PAINTED MUTED COLORS, SO AS TO NOT CONFLICT WITH THE HISTORIC HOUSE.
23. THE PROPOSED BUILDING IS A PERMITTED USE, PER SECTION 119.0.B.13 OF THE ZONING REGULATIONS. ALL STORAGE SUPPLIES AND MATERIALS MIST BE STORED INSIDE THE BUILDING AT ALL TIMES.
24. THERE WILL NOT BE PERMANENT EMPLOYEES ON THE PREMISES OF THE PROPOSED STORAGE BUILDING. A TOTAL OF 2 PARKING SPACES SHALL SATISFY THE PARKING FOR THE PROPOSED BUILDING.THE DEVELOPER SHOULD PROVIDE ONE HANDICAP AND ONE REGULAR PARKING.
25. ANY CHANGE TO THE PROPERTY THAT WOULD GENERATE WASTE WATER FLOW WOULD FIRST REQUIRE A PERCOLATION CERTIFICATION PLAN APPROVED BY THE HEALTH DEPARTMENT.
26. PER THE HOWARD COUNTY FOREST CONSERVATION WORKSHEET, NO MITIGATION IS REQUIRED. THIS PROJECT USES THE LOD AS THE NET TRACT AREA. ALL FUTURE DEVELOPMENT AREA MUST BE CUMULATIVELY TRACKED ON THIS PLAN AND ONCE OVERALL DEVELOPMENT OF THIS SITE REACHES 40,000 SQUARE FEET OR GREATER, FOREST CONSERVATION WILL NEED TO BE ADDRESSED FOR THE ENTIRE SITE.
27. THE LANDSCAPE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF $6,300 FOR THE 16 SHADE TREES AND 10 EVERGREEN TREES HAS BEEN POSTED WITH THE GRADING PERMIT.
28. EROSION FROM THE EXISTING GRAVEL PAVEMENT OR ANY EVIDENCE THAT STONES FROM THE EXISTING GRAVEL SURFACE ARE SPREAD BEYOND THE EXISTING GRAVEL DRIVEWAY WILL BE MAINTAINED AND RETURNED TO ORIGINAL CONDITION.
29. THE DESIGN MANUAL WAIVER FROM DESIGN MANUAL, VOLUME III, SECTION 2.2.E.6 WAS APPROVED ON NOVEMBER 1, 2023. THIS ALLOWS TO RETAIN THE COMPACTED GRAVEL SURFACE FOR PARKING AND DRIVEWAY.

SHEET INDEX

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DocuSigned by: CHAD Edmondson 7063F754EF41499... 1/24/2024
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DocuSigned by: [illegible] 1EB75478A22B49A... 1/24/2024
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DocuSigned by: Lynda Eisenberg 4220B635863942E... 1/24/2024
DIRECTOR DATE

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

DocuSigned by: Alexander Bratchie 65648D5BA9B64C1... 1/22/2024
HOWARD SOIL CONSERVATION DISTRICT DATE

DESIGN CERTIFICATE:

"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS AND STANDARDS., THAT IT REPRESENT A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."

DocuSigned by: Ronald E. Thompson A786C20B3A96490... 12/20/2023
DESIGNER'S SIGNATURE DATE
18417
PRINTED NAME (RONALD E. THOMPSON, P.E.) MD REGISTRATION NO. P.R., R.L.S, OR R.L.A.

OWNER'S/DEVELOPER'S CERTIFICATE:

"I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED SEDIMENT AND EROSION CONTROL PLAN INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRICTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND/OR MDE."

JAMIE JACOBS 12/20/2023
OWNER'S/DEVELOPER'S SIGNATURE DATE
PRINTED NAME & TITLE (NIVIA JACOBS PROPERTIES LLC)

OWNER:
NIVIA JACOBS PROPERTIES LLC
1319 MILITARY CUTOFF ROAD
WILMINGTON, NC 28405
443-277-9780

PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licenced professional engineer under the laws of the State of Maryland, License No. 18417, Expiration Date: 9-18-25.

DATE	REVISIONS

DocuSigned by: Ronald E. Thompson A786C20B3A96490...
STATE OF MARYLAND RONALD EDWARD THOMPSON 18417 PROFESSIONAL ENGINEER
12/20/2023

SITE DEVELOPMENT PLAN

GRADING, STORMWATER MANAGEMENT, SEDIMENT AND EROSION CONTROL PLAN
NIVIA JACOBS PROPERTIES LLC

15947 FREDERICK ROAD
LIBER 21110 AT FOLIO 243
VILLAGE OF LISBON
PLAT BOOK 3 AT PAGE 20

TAX MAP: 7 GRID NO: 12 PARCEL NO: 196
ELECTION DISTRICT: FOURTH HOWARD COUNTY, MARYLAND EX. ZONING: B-2
SCALE: 1"=30' DATE: NOVEMBER 2023 SHEET 1 OF 3

VANMAR ASSOCIATES, INC.
Engineers Surveyors Planners
310 South Main Street Mount Airy, Maryland 21771
(301) 829-2890 (301) 831-5015 (410) 549-2751
vanmar.com

SDP-23-029
VM#5680

B–4–2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

Definition:
The process of preparing the soils to sustain adequate vegetative stabilization.

Purpose:
To provide a suitable soil medium for vegetative growth.

Conditions Where Practice Applies:
Where vegetative stabilization is to be established.

Criteria:
A. Soil Preparation
1. Temporary Stabilization
a. Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches 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 must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.
b. Apply fertilizer and lime as prescribed on the plans.
c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.
2. Permanent Stabilization
a. A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
i. Soil pH between 6.0 and 7.0.
ii. Soluble salts less than 500 parts per million (ppm).
iii. Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if lovegrass will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.
iv. Soil contains 1.5 percent minimum organic matter by weight.
v. Soil contains sufficient pore space to permit adequate root penetration.
b. Application of amendments or topsoil is required if on–site soils do not meet the above conditions.
c. Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches. B.13
d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seedbed loosening may be unnecessary on newly disturbed areas.
B. Topsoiling
1. Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is 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.
2. Topsoil salvaged from an existing site may be used provided 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–NRCS.
3. Topsoiling 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 supplies of moisture and plant nutrients.
c. The original soil to be vegetated contains material toxic to plant growth.
d. The soil is so acidic that treatment with limestone is not feasible.
4. Areas having slopes steeper than 2:1 require special consideration and design.
5. Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:
a. Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1½ inches in diameter.
b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified.
c. 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.
6. Topsoil Application
a. Erosion and sediment control practices must be maintained when applying topsoil.
b. Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to 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 must be corrected in order to prevent the formation of depressions or water pockets.
c. Topsoil must not be placed if 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 B.14 and seedbed preparation.
C. Soil Amendments (Fertilizer and Lime Specifications)
1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and warranty of the producer.
3. Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydroseeding) which contains at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 98 to 100 percent will pass through a #20 mesh sieve.
4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means.
5. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/acre (200–400 pounds per 1,000 square feet) prior to the placement of topsoil.

DUST CONTROL

DUST CONTROL METHOD FOR THIS SITE TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES: CALCIUM CHLORIDE SHALL BE APPLIED TO EXPOSED SURFACES AT A RATE THAT WILL KEEP SURFACE MOIST UNTIL SOIL IS STABILIZED ACCORDING TO VEGETATIVE SPECS. FOR THIS SITE AND AREAS TO BE PAVED ARE COMPLETED.

STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR RE–DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND
B. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

B–4–3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

Definition:
The application of seed and mulch to establish vegetative cover.

Purpose:
To protect disturbed soils from erosion during and at the end of construction.

Conditions Where Practice Applies:
To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

Criteria:
A. Seeding
1. Specifications
a. All seed must meet the requirements of the Maryland State Seed Law. All seed must be subject to re–testing by a recognized seed laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed tags must be available upon request to the inspector to verify type of seed and seeding rate.
b. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen. The appropriate seeding mixture must be applied when the ground thaws.
c. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculants as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective.
d. Sod or seed must not be placed on 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.
2. Application
a. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
i. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site–specific seeding summaries.
ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with a weighted roller to provide good seed to soil contact. B.16
b. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.
i. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting.
ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
c. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer).
i. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P2 05 (phosphorous), 200 pounds per acre; K2 0 (potassium), 200 pounds per acre.
ii. 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 lime when hydroseeding.
iii. Mix seed and fertilizer on site and seed immediately and without interruption.
iv. When hydroseeding do not incorporate seed into the soil.
B. Mulching
1. Mulch Materials (in order of preference)
a. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty. Note: Use only sterile straw mulch in areas where one species of grass is desired.
b. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.
i. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
ii. WCFM, including dye, must contain no germination or growth inhibiting factors.
iii. WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter–like ground cover, on application, having moisture absorption and percolation properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
iv. WCFM material must not contain elements or compounds at concentration levels that will be phyto–toxic.
v. WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum. B.17
2. Application
a. Apply mulch to all seeded areas immediately after seeding.
b. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the application rate to 2.5 tons per acre.
c. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
3. Anchoring
a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard:
i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour.
ii. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
iii. Synthetic binders such as Acrylic DLR (Agro–Tack), DCA–70, Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is strictly prohibited.
iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4 to 15 feet wide and 300 to 3,000 feet long.

B–4–8 STANDARDS AND SPECIFICATIONS
FOR
STOCKPILE AREA

Definition
A mound or pile of soil protected by appropriately designed erosion and sediment control measures.

Purpose
To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns.

Conditions Where Practice Applies
Stockpile areas are utilized when it is necessary to salvage and store soil for later use.

Criteria
1. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.
2. The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a side slope ratio no steeper than 2:1. Benching must be provided in accordance with Section B–3 Land Grading.
3. Runoff from the stockpile area must drain to a suitable sediment control practice.
4. Access the stockpile area from the upgrade side.
5. Clear water runoff into the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence. Provisions must be made for discharging concentrated flow in a non–erosive manner.
6. Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge.
7. Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as Standard B–4–1 Incremental Stabilization and Standard B–4–4 Temporary Stabilization.
8. If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup. Stockpiles containing contaminated material must be covered with impermeable sheeting.

Maintenance
The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section B–4 Vegetative Stabilization. Side slopes must be maintained at no steeper than a 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section B–3 Land Grading

1) A pre–construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID), 410–313–1855 after the future LOD and protected area marked clearly in the field. A minimum of 48 hour notice to CID must be given a the following stages:
   a. Prior to the start of earth disturbance,
   b. Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading,
   c. Prior to the start of another phase of construction or opening of another grading unit,
   d. Prior to the removal or modification of sediment control practices.
   Other building or grading inspection approvals may not be authorized until this initial approval by inspection agency is made. Other related state and federal permits shall be referenced, to ensure coordination and to avoid conflicts with this plan.
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 2011 "MARYLAND STANDARDS AND SPECIFICATIONS FOR THE SOIL EROSION AND SEDIMENT CONTROL", and revisions thereto.
3) Following initial soil disturbance or re–disturbance, permanent or temporary stabilization is required within three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active grading.
4) 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 TOPSOIL (Sec. B–4–2), permanent seeding (Sec. B–4–5), temporary seeding (Sec. B–4–4) and mulching (Sec. B–4–3). Temporary stabilization (Sec. B–4–8) in excess of 20 ft. must be benched with stable outlet. All concentrated flow, steep slope, and highly erodible areas shall receive soil stabilization matting (Sec. B–4–6).
5) 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 CID.
6) Site Analysis:

Total Area of Site	1.00 Acres.
Area Disturbed	0.15 Acres.
Area to be roofed or paved	0.07 Acres.
Area to be vegetatively stabilized	0.07 Acres.
Total Cut	00 Cu. Yds.
Total Fill	00 Cu. Yds.
Offsite waste/borrow area location	N/A

7) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
8) Additional sediment control must be provided, if deemed necessary by the CID. The site and all controls shall be inspected by the contractor weekly; and the next day after each rain event. A written report by the contractor, made available upon request, is part of every inspection and should include:
   * Inspection date
   * Inspection type (routine, pre–storm event, during rain event)
   * Name and title of inspector
   * Weather information (current conditions as well as time and amount of last recorded precipitation)
   * Brief description of project's status (e.g. percent complete) and/or current activities
   * Evidence of sediment discharges
   * Identification of plan deficiencies
   * Identification of sediment controls that require maintenance
   * Identification of missing or improperly installed sediment controls
   * Compliance status regarding the sequence of construction and stabilization requirements
   * Photographs
   * Monitoring/sampling
   * Maintenance and/or corrective action performed
   * Other inspection items as required by the General Permit for Stormwater Associated with Construction Activities (NPDES, MDE).
9) Trenches for the construction of utilities is limited to three pipe lengths or that which can and shall be back–filled and stabilized by the end of each workday, whichever is shorter.
10) Any major changes or revisions to the plan or sequence of construction must be reviewed and approved by the HSCD prior to proceeding with construction. Minor revisions may allowed by the CID per the list of HSCD–approved field changes.
11) Disturbance shall not occur outside the L.O.D. 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 HSCD. Unless otherwise specified and approved by the Howard Soil Conservation District, no more than 30 acres cumulatively may be disturbed at a given time.
12) Wash water from any equipment, vehicles, wheels, pavement, and other sources must be treated in a sediment basin or other approved washout structure.
13) Top soil shall be stockpiled and preserved on–site for redistribution onto final grade.
14) All Silt Fence and Super Silt Fence shall be placed on–the–contour, and be imbricated at 25' minimum interval, with lower ends curled uphill by 2' in elevation.
15) Stream channels must not be disturbed during the following restricted time periods (inclusive):
   * Use I and IP March 1 – June 15
   * Use III and IIIP October 1 – April 30
   * Use IV March 1 – May 31
16) A copy of this plan, the 2011 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL, and associated permits shall be on–site and available when the site is active.

B-4-5 STANDARDS AND SPECIFICATIONS
FOR
PERMANENT STABILIZATION

Definition
To stabilize disturbed soils with permanent vegetation.
Purpose
To use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils.
Conditions Where Practice Applies
Exposed soils where ground cover is needed for 6 months or more.
Criteria
A. Seed Mixtures
1. General Use
a. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.
b. Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guide, Section 342 - Critical Area Planting.
c. For sites having disturbed area over 5 acres, use and show the rates recommended by the soil testing agency.
d. For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 ½ pounds per 1000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary .
2. Turfgrass Mixtures
a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.
b. Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.
i. Kentucky Bluegrass: Full Sun Mixture: For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and Eastern Shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
ii. Kentucky Bluegrass/Perennial Rye: Full Sun Mixture: For use in full sun areas whererapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
iii. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes; Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended.
iv. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass
v. For establishment in high quality, intensively managed turf area. Mixture includes; Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1½ to 3 pounds per 1000 square feet.

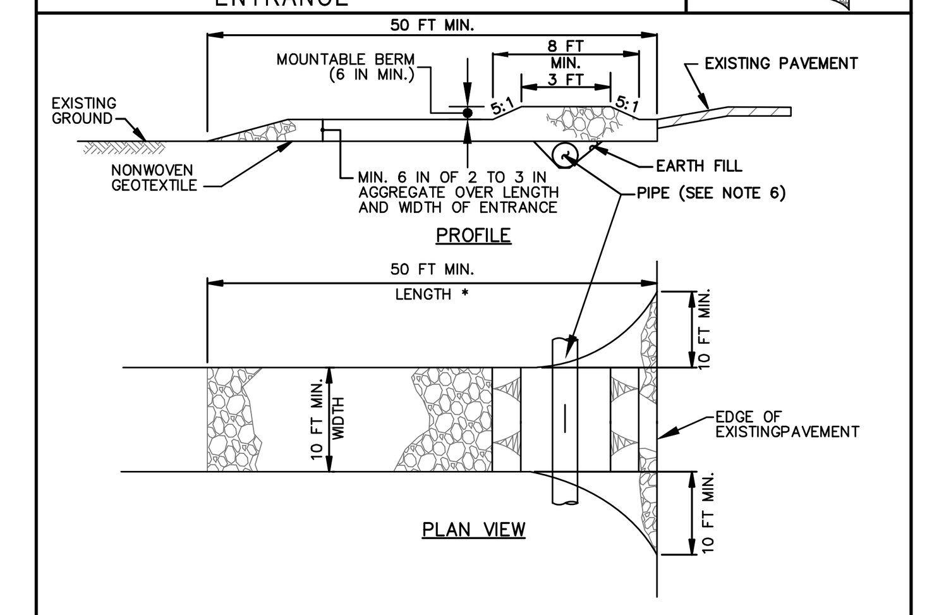
Notes:
Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendations for Maryland" Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line.
c. Ideal Times of Seeding for Turf Grass Mixtures
Western MD: March 15 to June 1, August 1 to October 1 (Hardiness Zones: 5b, 6a)
Central MD: March 1 to May 15, August 15 to October 15 (Hardiness Zone: 6b)
Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardiness Zones: 7a, 7b)
d. Till areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1½ inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose no difficulty.
e. If soil moisture is deficient, supply new seedings with adequate water for plant growth (½ to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.
B. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).
1. General Specifications
ii. Class of turfgrass sod must be Maryland State Certified. Sod labels must be made available to the job foreman and inspector.
ij. Sod must be machine cut at a uniform soil thickness of ¾ inch, plus or minus ¼ inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable.
ik. Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
il. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
im. Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period must be approved by an agronomist or soil scientist prior to its installation.
2. Sod Installation
a. During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.
b. Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
c. Wherever possible, lay sod with the long edges parallel to the contour and with staggering Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod roots and the underlying soil surface.
d. Water the sod immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any piece of sod within eight hours.

SEQUENCE OF CONSTRUCTION

1. OBTAIN ALL REQUIRED GRADING, MDE PERMITS, APPROVALS AND LICENSES FROM APPROPRIATE AGENCIES. (1 WEEK)
2. NOTIFY SEDIMENT CONTROL INSPECTOR AT LEAST THREE (3) WORKING DAYS PRIOR TO STARTING WORK. (1 WEEK)
3. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE AND OTHER SEDIMENT CONTROL DEVICES AS SHOWN IN THE SEDIMENT \CONTROL PLAN. (1 WEEK)
4. STABILIZE ALL THE GRADED AREAS UP TO 20' OUTSIDE OF THE LIMIT OF GRADING AS PER PERMANENT SEEDING NOTES. (1 WEEK)
5. CONSTRUCT POLE BARN. (3 WEEKS)
6. ANY AREAS THAT CAN BE TEMPORARILY SEEDED DURING CONSTRUCTION MUST BE TEMPORARILY STABILIZED PER SEEDING NOTES. (1 WEEK)
7. INSTALL PARKING PAVEMENT AND GRASS SHOULDER. (2 WEEKS)
8. STABILIZE DISTURBED AREAS PER PERMANENT SEEDING NOTES. (1 WEEK)
9. UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR; REMOVE ALL TEMPORARY SEDIMENT CONTROL DEVICES FOR POLE BARN AND PAVEMENT. (1 WEEK)
10. NOTIFY INSPECTOR FOR FINAL INSPECTION. (1 WEEK)

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL: SCE



CONSTRUCTION SPECIFICATIONS

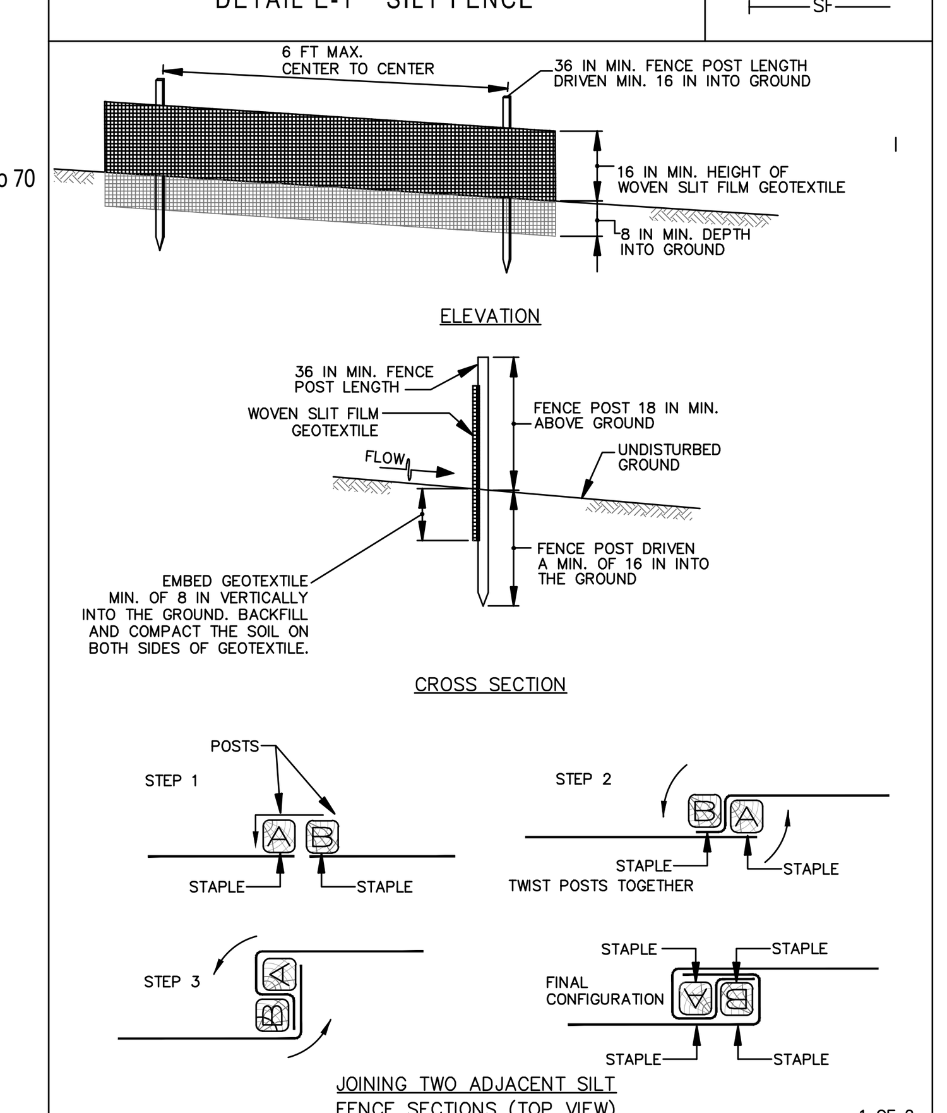
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H–1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

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

DETAIL E-1 SILT FENCE

STANDARD SYMBOL: —SF—



1 OF 2

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

TEMPORARY STABILIZATION SPECIFICATIONS TABLE

Hardiness Zone (from Figure B.3): __6b___ Seed Mixture (from Table B.1): ________					Fertilizer Rate (10–20–20)	Lime Rate
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths		
	ANNUAL RYEGRASS	40	MAR. 1 – MAY 15 AUG. 1 – OCT. 15	0.5 INCHES	436 lb/ac (10 lb/1000 sf)	2 tons/ac (90 lb/1000 sf)
	FOXTAIL MILLET	30	JUNE 1 – JULY 31	0.5 INCHES		

PERMANENT STABILIZATION SPECIFICATIONS TABLE

Hardiness Zone (from Figure B.3): __6b___ Seed Mixture (from Table B.3): ____11___					Fertilizer Rate (10–20–20)			Lime Rate
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P205	K20	
	kentucky bluegrass	20	Mar. 1–May 15 Aug. 1–Oct.15	1/4–1/2 in	45 pounds per acre (1.0 lb/ 1000 sf)	90 lb/ac (2lb/1000 sf)	90 lb/ac (90 lb/1000 sf)	2 tons/ac (90 lb/ 1000 sf)
				1/4–1/2 in				
				1/4–1/2 in				

APPROVED
HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DocuSigned by: CHAD Edmondson 7063F754EF41499... 1/24/2024
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE

DocuSigned by: [signature] 1EB75478A22B49A... 1/24/2024
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE

DocuSigned by: Lynda Eisenberg 4220B635863942E... 1/24/2024
DIRECTOR — DATE

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

DocuSigned by: Alexander Bratchie 65648D5BA9B64C1... 1/22/2024
HOWARD SOIL CONSERVATION DISTRICT — DATE

DESIGN CERTIFICATE:

"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS AND STANDARDS., THAT IT REPRESENT A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."

DocuSigned by: Ronald E. Thompson A786C20B3A96490... 12/20/2023
DESIGNER'S SIGNATURE — DATE
18417
PRINTED NAME (RONALD E. THOMPSON, P.E.) — MD REGISTRATION NO. P.R., R.L.S, OR R.L.A.

OWNER'S/DEVELOPER'S CERTIFICATE:

"I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED SEDIMENT AND EROSION CONTROL PLAN INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRICTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT OF ENTRY FOR PERIODIC ON–SITE EVALUATION BY HOWARD COUNTY, THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND/OR MDE."

JAMIE JACOBS 12/20/2023
OWNER'S/DEVELOPER'S SIGNATURE — DATE
PRINTED NAME & TITLE (NIVIA JACOBS PROPERTIES LLC)

OWNER:
NIVIA JACOBS PROPERTIES LLC
1319 MILITARY CUTOFF ROAD
WILMINGTON, NC 28405
443-277-9780

PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licenced professional engineer under the laws of the State of Maryland, License No. 18417, Expiration Date: 9–18–25.

DATE	REVISIONS

DocuSigned by: Ronald E. Thompson A786C20B3A96490... [Seal: STATE OF MARYLAND RONALD EDWARD THOMPSON 18417 PROFESSIONAL ENGINEER] 12/20/2023

SITE DEVELOPMENT PLAN
SEDIMENT AND EROSION CONTROL NOTES & DETAILS
NIVIA JACOBS PROPERTIES LLC
15947 FREDERICK ROAD
LIBER 21110 AT FOLIO 243
VILLAGE OF LISBON
PLAT BOOK 3 AT PAGE 20

TAX MAP: 7	ELECTION DISTRICT: FOURTH	SCALE: 1"=30'
GRID NO: 12	HOWARD COUNTY, MARYLAND	DATE: NOVEMBER 2023
PARCEL NO: 196	EX. ZONING: B–2	SHEET 2 OF 3

VANMAR ASSOCIATES, INC.
Engineers Surveyors Planners
310 South Main Street Mount Airy, Maryland 21771
(301) 829–2890 (301) 831–5015 (410) 549–2751
vanmar.com

SDP–23–029
VM#5680

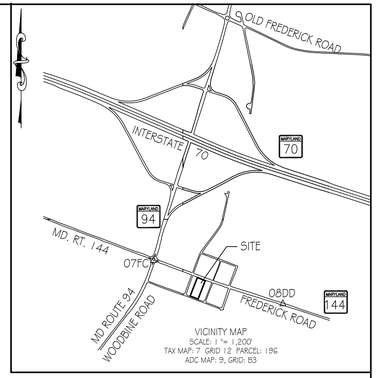
LEGEND

- SILT FENCE — SF
- LIMIT OF DISTURBANCE — LOD
- EXISTING WELL
- EXISTING BUILDING
- PROPOSED BUILDING
- EX. TREELINE
- SOIL LINE
- STABILIZED CONSTRUCTION ENTRANCE — SCE
- EX. GRAVEL AREA
- PROP. GRAVEL AREA
- PROPERTY LINE
- 1930 HOUSE SITE OF ORIGINAL
- EX. SEPTIC AREA
- EX. TREE
- WELL BUFFER
- SWM DISCONNECTION — 2%@33%
- GRASS SHOULDER
- EX. EDGE OF PAVEMENT
- 5' CONC. SIDEWALK
- LANDSCAPE TREE

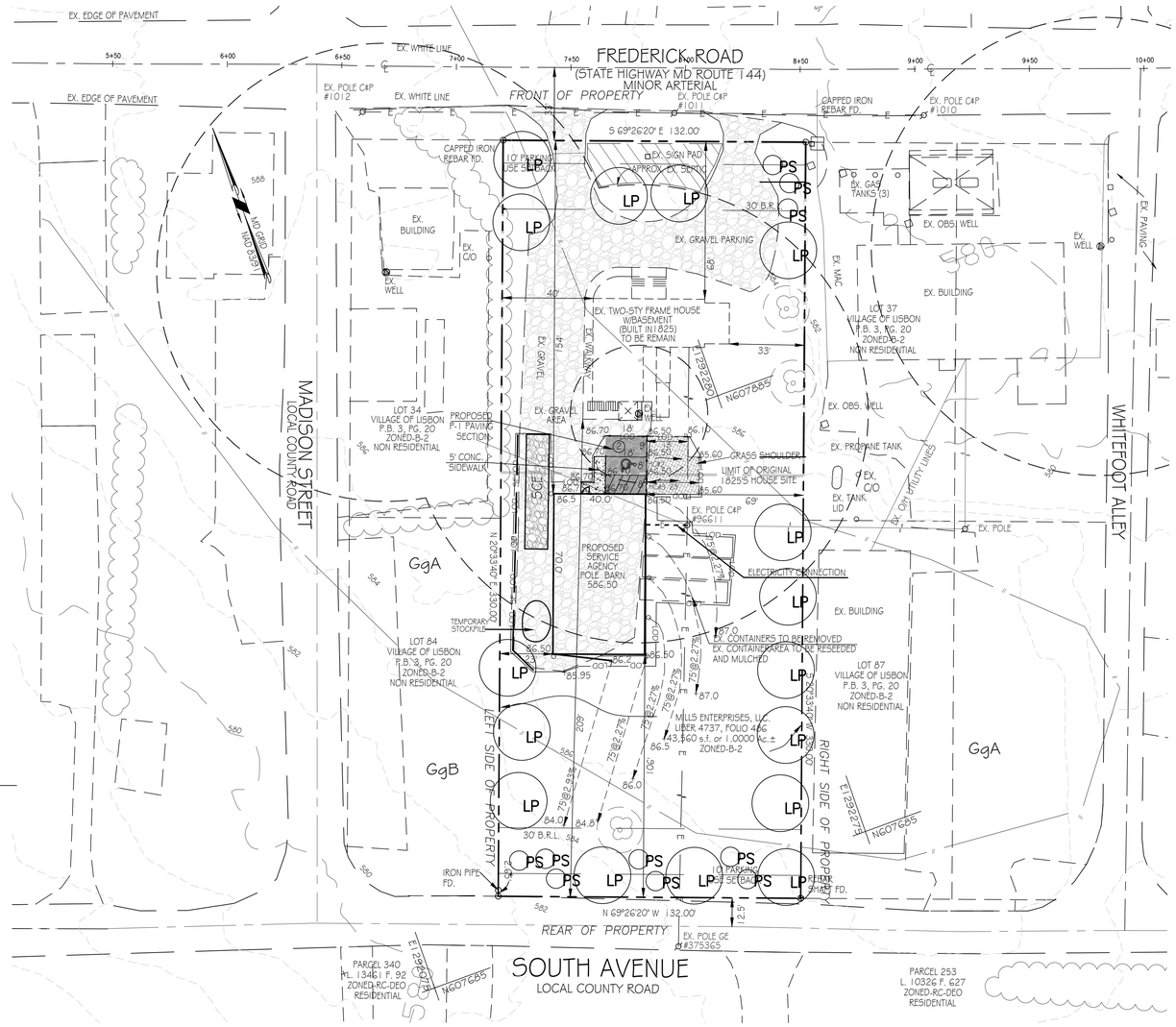
SOIL LEGEND

MAP SYMBOL	MAPPING UNIT	HYDROLOGIC SOIL GROUP	HYDRIC? COMPONENTS	Kw	SLOPE
GgA	GLENELG LOAM	B	NO	0.24	0-3%
GgB	GLENELG LOAM	B	NO	0.24	3-8%

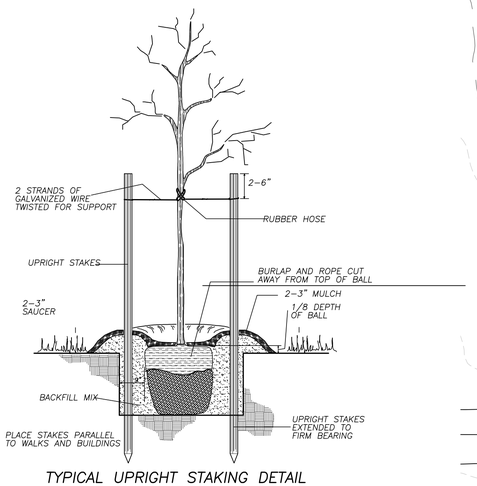
NOTE: SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE; WEB SOIL SURVEY.



VICINITY MAP
SCALE: 1" = 1,200
TAX MAP: 7 GRID 12 PARCEL: 196
ADC MAP: 9, GRID: B3



SCALE: 1" = 30'



TYPICAL UPRIGHT STAKING DETAIL
(N.T.S.)

REQUIREMENT TABLE

FRONT OF PROPERTY
SCHEDULE 'B'
REQ: 1 SHADE TREE PER 50 LF / 1 EVERGREEN PER 40LF
PROVIDED: 132LF = 3 SHADE AND 3 EVERGREEN TREES

RIGHT SIDE OF PROPERTY
SCHEDULE 'A'
REQ: 1 SHADE TREE PER 60LF
PROVIDED: 330LF = 6 SHADE TREES

REAR OF PROPERTY
SCHEDULE 'C'
REQ: 1 SHADE TREE PER 40LF AND 1 EVERGREEN PER 20LF
PROVIDED: 132LF = 3 SHADE AND 7 EVERGREEN

LEFT SIDE OF PROPERTY
SCHEDULE 'A'
REQ: 1 SHADE TREE PER 60LF
PROVIDED: 330LF - 120LF OF EX. VIEGITATION = 210;F = 4 SHADE

TOTAL REQ:	TOTAL PROVIDED
16 SHADE	16 SHADE
10 EVERGREEN	10 EVERGREEN

LANDSCAPE SCHEDULE

SYMBOL	QUANTITY	BOTANICAL /CULTIVAR NAME COMMON NAME	SIZE	COMMENTS
PS	10	PINUS SYLVESTRUS SCOTCH PINE	2-2.5"cal.	B & B
LP	16	PLANTUS X ACERFOLIA 'BLOODGOOD' BLOODGOOD LONDON PLANETREE	2-2.5"cal.	B & B

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DocuSigned by: Chad Edmondson 7063F764EF44400...	1/24/2024
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
DocuSigned by: 15B1347BA2268BA...	1/24/2024
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
DocuSigned by: Lynda Eisenberg 1209B838B38B426...	1/24/2024
DIRECTOR	DATE

OWNER:
NIVIA JACOBS PROPERTIES LLC
1319 MILITARY CUTOFF ROAD
WILMINGTON, NC 28405
443-277-9780

I CERTIFY TO THE BEST OF MY PROFESSIONAL ABILITY THAT THE FINAL LANDSCAPE PLAN SHOWN HEREON IS CONSISTANT WITH THE GOAL AND INTENT OF AND COMPLIES WITH THE MONTGOMERY COUNTY LANDSCAPE MANUAL AND MEETS ALL APPLICABLE POLICIES, GUIDELINES, AND ORDINANCES.

12/20/23
LANDSCAPE ARCHITECT OR LANDSCAPE DESIGNER — DATE

DATE	REVISIONS

SITE DEVELOPMENT PLAN
LANDSCAPE PLAN

NIVIA JACOBS PROPERTIES LLC

15947 FREDERICK ROAD
LIBER 21110 AT FOLIO 243
VILLAGE OF LISBON
PLAT BOOK 3 AT PAGE 20

TAX MAP: 7 GRID NO: 12 PARCEL NO: 196
ELECTION DISTRICT: FOURTH HOWARD COUNTY, MARYLAND EX. ZONING: B-2
SCALE: 1"=30' DATE: NOVEMBER 2023 SHEET 3 OF 3

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SDP-23-029
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