

TOTAL PROJECT AREA 21,042 SF (0.48 AC)	AREA OF PLAN SUBMISSION 21,042 SF (0.48 AC)	LIMIT OF DISTURBED AREA 14,308 SF	PRESENT ZONING R-20
PROPOSED USE RESIDENTIAL	TYPE OF UNIT SINGLE FAMILY DETACHED	TOTAL UNITS ALLOWED 1	PROPOSED USE RESIDENTIAL
OPEN SPACE REQUIRED N/A	OPEN SPACE PROVIDED N/A	RECREATION OPEN SPACE REQUIRED N/A	RECREATION OPEN SPACE PROVIDED N/A
DPZ FILE REF:	DEED REF.: 4517/643		

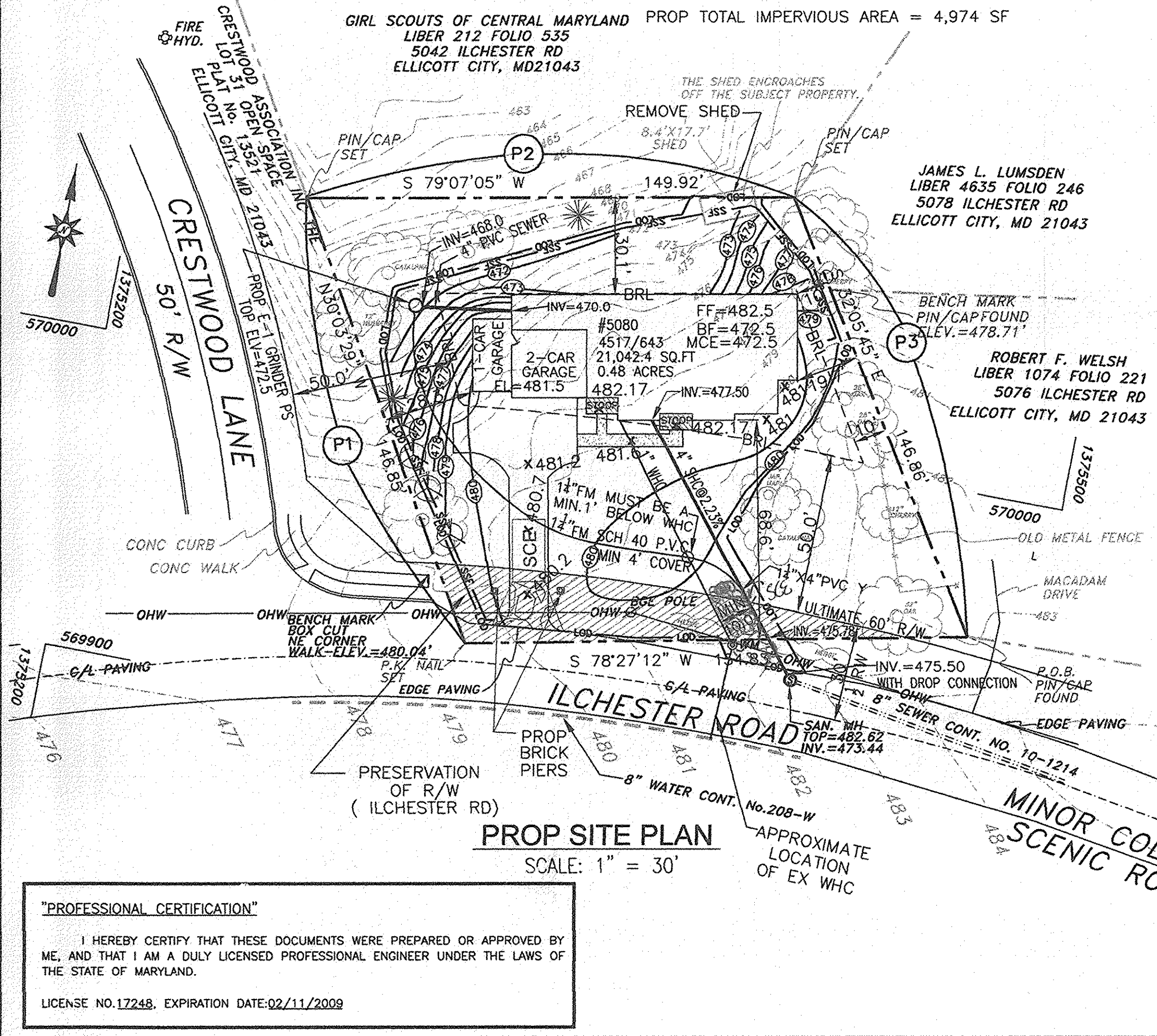
SUBDIVISION NAME	SECTION / AREA	PARCEL NUMBER
LIBER / FOLIO	TAX MAP	GRID NO.
4517/643	31	15
WATER CODE: D03	SEWER CODE: 1254549	CENSUS TR. 6011.01

PARCEL	STREET ADDRESS
371	5080 ILCHESTER ROAD, ELLICOTT CITY, MD 21043

GEODETIC SURVEY CONTROL	COORDINATES
# 31 EA	N 569641.1294 E 1374816.0271
# 31 EC	N 570387.0042 E 1376436.7102
HORIZONTAL	MARYLAND NAD83
VERTICAL	NAVD88

SYMBOL	NAME / DESCRIPTION	GROUP
ChB	Chillum-Russet loams, 2 to 5 percent slopes	B

EXISTING PROPERTY LINE	---
EXISTING CONTOUR	~
SILT FENCE	SF - SF
SUPER SILT FENCE	SSF - SSF
STABILIZED CONSTRUCTION ENTRANCE	SCSE
SPOT ELEVATION	x 483.33
PROPOSED CONTOUR	480
LOD LIMITS OF DISTURBANCE	LOD - LOD
WATER METER	W/M
OVERHEAD WIRES	OH-W
ELECTRIC POLE	⊙
FIRE HYDRANT	⊙
SANITARY MH	⊙
TREE TO BE REMOVED	⊙
PRESERVATION OF R/W	▨



CATEGORY	PERIMETER P1	PERIMETER P2	PERIMETER P3
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LANDSCAPE TYPE	TYPE 'B'	TYPE 'A'	TYPE 'A'
LINEAR FEET OF PERIMETER	147'	150'	147'
CREDIT FOR EXISTING VEGETATION (YES, NUMBER OF TREE)	1	2	3
TREE TO REMAIN (DESCRIBE BELOW IF NEEDED)	12" MULBERRY	CATALPA	2-28" OAK
CREDIT FOR WALL, RENCE OR BERM (YES, NO, LINEAR FEET)	NO	NO	NO
NUMBER OF PLANTS REQUIRED			
SHADE TREES	1	1	0
EVERGREEN TREES	4	0	0
SHRUBS	0	0	0
NUMBER OF PLANTS PROVIDED			
SHADE TREES	1	1	0
EVERGREEN TREES	4	0	0
OTHER TREES (2:1 SUBSTITUTION)	0	0	0
SHRUBS (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	0	0	0

QTY.	KEY	NAME	SIZE
2	☼	PLATANUS x ACERIFOLIA 'BLOODGOOD'	2 1/2" - 3" CALIPER FULL CROWN, B&B
4	☼	PINUS STROBUS	6' - 8' HT
		EASTERN WHITE PINE	

\*THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.

**GENERAL NOTES**

- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
  - MISS UTILITY: 1-800-257-7777
  - BELL ATLANTIC TELEPHONE CO.: 410-725-8976
  - HOWARD COUNTY BUREAU OF UTILITIES: 410-513-2366
  - VERIZON CABLE LOCATION DIVISION: 410-393-3553
  - B.G.&E. CO. CONTRACTOR SERVICES: 410-850-4620
  - B.G.&E. CO. UNDERGROUND DAMAGE CONTROL: 410-787-4620
  - STATE HIGHWAY ADMINISTRATION: 410-531-5533
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING INSPECTION DIVISION AT 410-313-1880 (24) HOURS PRIOR TO START WORK.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAY, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK. DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
  - A) WIDTH - 12 FEET (16 FEET IF SERVING MORE THAN ONE RESIDENCE)
  - B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH
  - C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE, AND MINIMUM 45 FOOT TURNING RADIUS
  - D) STRUCTURES (CULVERTS/BRIDGES) - MUST SUPPORT 25 GROSS TON LOADING (H25 LOADING)
  - E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD EVENTS WITH NO MORE THAN 1" FOOT DEPTH OVER DRIVEWAY SURFACE
  - F) STRUCTURE CLEARANCES - MINIMUM 12 FEET
  - G) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE
- THIS PROPERTY IS ZONED R-20 PER THE FEBRUARY 2, 2004 COMPREHENSIVE ZONING PLAN AND THE "COMP-LITE" ZONING AMENDMENTS EFFECTIVE JULY 28, 2006.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 31EA AND 31EC WERE USED FOR THIS PROJECT.
- THE PROJECT BOUNDARY IS BASED ON A BOUNDARY SURVEY PERFORMED BY NIT ASSOCIATES, INC. ON OR ABOUT OCTOBER 15, 2007.
- THE TOPOGRAPHY SHOW HEREON IS BASED ON A TOPOGRAPHICAL SURVEY PERFORMED BY NIT ASSOCIATES, INC. ON OR ABOUT OCTOBER 15, 2007.
- THE SITE WILL BE SERVED BY PUBLIC WATER AND PUBLIC SEWER.
- NO BURIAL GROUNDS OR CEMETERIES ARE LOCATED ON THIS PROPERTY.
- NO STREAMS OR WETLANDS EXIST ON THIS SITE. THE ENVIRONMENTAL ANALYSIS WAS PERFORMED BY MOSTAFA IZADI, PE ON OCTOBER 25, 2007.
- NO 100 YEAR FLOODPLAINS EXIST ON SITE.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.06 (OPEN SECTION)
- THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1202(b)(1)(X) OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL SINCE THE PROPERTY IS LESS THAN 40,000 SF.
- STORMWATER MANAGEMENT IS NOT REQUIRED SINCE TOTAL IMPERVIOUS AREA IS LESS THAN 5,000 SF.
- PERIMETER LANDSCAPING SHALL BE IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. SURETY IN THE AMOUNT OF \$1,200 FOR 2 SHADE TREES, 4 EVERGREEN TREES WILL BE PROVIDED WITH THE GRADING PERMIT.
- THIS SDP IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS EFFECTIVE OCTOBER 2, 2003.
- THIS SITE IS LOCATED IN THE METROPOLITAN DISTRICT.
- STOCKPILING WILL NOT BE ALLOWED ON SITE.
- THE PURPOSE OF THIS PLAN IS TO DEMOLISH THE EXISTING HOUSE AND CONSTRUCT A NEW HOUSE WITH ASSOCIATED DRIVE WAY.
- THE EXISTING SEPTIC TANK AND ASSOCIATED DRAIN FIELD SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH HOWARD COUNTY REQUIREMENT.
- FIRST FLOOR GRAVITY SEWER SERVICE ONLY. BASEMENT SEWER SERVICE TO BE PROVIDED BY PRIVATE ON-SITE PUMP (E ONE, MODEL NO. CP2010, MANUFACTURED BY ENVIRONMENT ONE CORPORATION, NISKAYUNA, NEW YORK, 12309. SEE LETTER DATED JANUARY 29, 2008 FROM HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BY RONALD G. LEPSON, CHIEF BUREAU OF ENGINEERING)

CONTINUED:

- THE EXISTING HOUSE WILL BE DEMOLISHED PRIOR TO CONSTRUCTION OF THE NEW HOUSE.
- ADMINISTRATIVE ADJUSTMENT NO. AA-07-026 HAS BEEN DENIED ON JANUARY 03, 2008.
- VEHICULAR INGRESS AND EGRESS IS RESTRICTED ALONG THE FRONT PROPERTY EXCEPT THE DRIVE WAY ENTRANCE.

**"PROFESSIONAL CERTIFICATION"**

I 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. 17248, EXPIRATION DATE: 02/11/2009

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Chief of Development Engineering Division  
 Chief of Planning and Zoning  
 Director

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

THE DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT

APPROVED: HOWARD SCD  
 Director

**ENGINEERS 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 COUNTY SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SCD  
 Director

**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 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 COUNTY CONSERVATION DISTRICT

APPROVED: HOWARD SCD  
 Director

**LANDSCAPE CERTIFICATE**

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE(1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

APPROVED: HOWARD SCD  
 Director

**OWNER / DEVELOPER**

IKE OKOYE  
 4317 SHILER OAKS TRAIL  
 OWINGS MILLS, MD 21117

Advanced Engineering Consultants, P.C.  
 Engineers & Planners  
 P. O. BOX 129 RIDGEWOOD, MD 21139  
 TEL.: 410-382-9180 FAX: 410-296-0505  
 mizadi@aec-engineers.biz

**REVISIONS**

NO.	DESCRIPTION	DATE

**TITLE: PROPOSED SITE PLAN**

**IKE OKOYE RESIDENCE**  
 5080 ILCHESTER RD  
 ELECTION DISTRICT 01  
 TAX MAP #31, GRID 15  
 HOWARD COUNTY, MARYLAND.

**DRAWN BY:** TH  
**CHECKED BY:** MI  
**SCALE:** AS SHOWN

**DATE:** 03-03-2008

**SHEET 1 OF 2**

**PROJECT NO.** SDP-08-053

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

DEFINITION

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

UNUSE

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 SOLOGRATIONS.

CONDITIONS WHERE PRACTICES AND/OR

- THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
  - THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
  - 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.
  - THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
  - THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
- 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

1. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

- TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
  - TOPSOIL SHALL BE A CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURES AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CONCRETE, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, TRASH, OR OTHER MATERIALS LARGER THAN 1" IN DIAMETER.
  - TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
  - 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.
- FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
  - PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:
  - ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
    - 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 SPECIFIED TO RAISE THE PH TO 6.5 OR HIGHER.
    - ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
    - TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
    - NO SOD OR SEED SHALL 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.
  - PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION 1 - 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.
- GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBERT 4" - 8" HIGHER IN ELEVATION.
- 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 SEDIMENTING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
- TOPSOIL SHALL NOT BE PLACED 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 SEEDING PREPARATION.
- ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNT OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:
  - COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESERVE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS: A COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.
  - COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE.
  - COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF 4 LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

NOTES: 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.

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REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING, MD-YA, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES, REVISED 1973.

PERMANENT SEEDING SUMMARY

SEED MIXTURE (HARDINESS ZONE 7A)				FERTILIZER RATE			LIME
FROM TABLE 25				10 - 20 - 20			RATE
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTH	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
1	TALL FESCUE CANADA BLUEGRASS KENTUCKY BLUEGRASS RED TOP	75% 15%	3/01 - 5/15 8/15 - 11/15	1/4" - 1/2"	2.0 LBS/1,000 SQ. FT.	4.0 LBS/1,000 SQ. FT.	2 TONS/AC 100#/1,000SF
3	TALL FESCUE PERENNIAL BLUEGRASS KENTUCKY BLUEGRASS	85% 10% 10%	3/1 - 5/15 8/15 - 11/15	1/4" - 1/2"	2.0 LBS/1,000 SQ. FT.	4.0 LBS/1,000 SQ. FT.	2 TONS/AC 100#/1,000SF
7	TALL FESCUE WEEDING LOVEGRASS SERECIA LESPEDEZA	83% 2% 15% 1%	3/1 - 5/15 5/16 - 8/14 8/15 - 11/15	1/4" - 1/2"	2.0 LBS/1,000 SQ. FT.	4.0 LBS/1,000 SQ. FT.	2 TONS/AC 100#/1,000SF

PERMANENT AND TEMPORARY SEEDING, SODDING AND MULCHING

- SITE PREPARATION:
  - INSTALL EROSION AND SEDIMENT CONTROL STRUCTURES (EITHER TEMPORARY OR PERMANENT) SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, WATERWAYS, OR SEDIMENT CONTROL BASINS.
  - PERFORM ALL GRADING OPERATIONS AT RIGHT ANGLES TO THE SLOPE. FINAL GRADING AND SHAPING IS NOT USUALLY NECESSARY FOR TEMPORARY SEEDING.
  - SCHEDULE REQUIRED SOIL TESTS TO DETERMINE SOIL AMENDMENT COMPOSITION AND APPLICATION RATES FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES.
- SOIL AMENDMENTS (FERTILIZATION AND LIME SPECIFICATIONS)
  - SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OVER 5 ACRES. SOIL ANALYSIS MAY BE PERFORMED BY THE UNIVERSITY OF MARYLAND OR A RECOGNIZED COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES.
  - FERTILIZERS SHALL BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROVED EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS SHALL ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE STATE FERTILIZER LAWS AND SHALL BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTIES OF THE PRODUCER.
  - LIME MATERIALS SHALL BE GROUND LIMESTONE (HYDRATE OR BURN LIME MAY BE SUBSTITUTED) WHICH CONTAINS AT LEAST 50% TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE SHALL BE GROUND TO SUCH FINENESS THAT AT LEAST 50% WILL PASS THROUGH A #100 MESH SIEVE AND 98 - 100% WILL PASS THROUGH A #20 MESH SIEVE.
  - INCORPORATE LIME AND FERTILIZER INTO THE TOP 3" - 5" OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
- SEEDING PREPARATION:
  - TEMPORARY SEEDING
    - SEEDING PREPARATION SHALL CONSIST OF LOOSENING SOIL TO A DEPTH OF 3" TO 5" BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, SMOOTH SURFACES SHALL BE ROLLED TO SET IN THE ROUGHENED CONDITION. SLOPED AREAS (GREATER THAN 3:1) SHOULD BE TRACKED LEAVING THE SURFACE IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
    - APPLY FERTILIZER AND LIME AS DESCRIBED ON THE PLANS.
    - INCORPORATE LIME AND FERTILIZER INTO THE TOP 3" - 5" OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
  - PERMANENT SEEDING
    - MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT:
      - SOIL PH SHALL BE BETWEEN 6.0 AND 7.0
      - SOLUBLE SALTS SHALL BE LESS THAN 500 PARTS PER MILLION (PPM)
      - THE SOIL SHALL CONTAIN LESS THAN 40% CLAY BUT ENOUGH FINE GRAINED MATERIAL (< .005 SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION IS IF LOESSGRASS OR SERECIA LESPEDEZA IS TO BE PLANTED, THEN A SANDY SOIL (< .005 SILT PLUS CLAY) WILL BE ACCEPTABLE.
      - SOIL SHALL CONTAIN 1.5% MINIMUM ORGANIC MATTER BY WEIGHT.
      - SOIL MUST CONTAIN SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
      - IF THESE CONDITIONS CANNOT BE MET BY SOILS ON SITE, ADDING TOPSOIL IS REQUIRED IN ACCORDANCE WITH SECTION 21.0 STANDARD AND SPECIFICATION FOR TOPSOIL.
    - AREAS PREVIOUSLY GRADED IN CONFORMANCE WITH THE DRAWINGS SHALL BE MAINTAINED IN A TRUE AND EVEN GRADE, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3" - 5" TO PERMIT BONDING OF THE TOPSOIL TO THE SURFACE AREA TO CREATE HORIZONTAL EROSION CHECK SLOTS TO PREVENT TOPSOIL FROM SLIDING DOWN A SLOPE.
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