

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, licenses and permits, sediment control division prior to the start of any construction (313-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and to be in for soil erosion and sediment control and replanting thereon.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, piles, perimeter slopes and all slopes steeper than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12 of the Howard County design manual, storm drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1984 Maryland standards and specifications for soil erosion and sediment control for permanent stabilization (Sec. 51), SOD (Sec. 54), temporary seeding (Sec. 50), and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding data do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County sediment control inspector.

**7) Site Analysis:**  
 Total area of site 23,932 SQ.FT.  
 Area disturbed 20,473 SQ.FT.  
 Total cut 305.18 cu.yds.  
 Total fill 220.37 cu.yds.

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 completed seeding with other soil disturbance or grading. 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.

**SEQUENCE OF CONSTRUCTION**

- Obtain grading permit.
- Install sediment controls as shown on Plan. (1 day)
- Perform necessary grading and stabilize the site (2 days)
- Construct dwelling on site (90 days)
- After the site is stabilized and permission is granted from the sediment control inspector, remove sediment controls and stabilize any remaining disturbed areas.

**TEMPORARY SEEDING NOTES**

Apply to graded or cleared areas likely to be re-disturbed where a short-term vegetative cover is needed.

**Seedbed preparation:**  
 Loosen upper three inches of soil by raking, disking or other acceptable means before seeding. If not previously loosened.

**Soil Amendments:**  
 Apply 600 LBS. Per acre 10-10-10 fertilizer (14 lbs./1,000 Sq. Ft.)

**Seeding:**  
 For the periods March 1 through April 30, and August 1 through November 15, seed with 1/2 bushel per acre (3.2 lbs./1,000 sq. ft.) for the period May 1 through August 14. Seed with 1/3 bushel per acre (2.1 lbs./1,000 sq. ft.) for the period August 15 through November 15. For the period November 16 through 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./1,000 sq. ft.) of unrattled small grain straw immediately after seeding. Anchor mulch immediately after application using 200 gallons per acre (5 gal./1,000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal./1,000 sq. ft.) for anchoring.

Refer to the 1988 Maryland standards and specification for soil erosion and sediment control for rate and methods not covered.

**Permanent Seeding Notes**  
 All disturbed areas shall be stabilized as follows:

**Seedbed preparation:**  
 Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.

**Soil Amendments:**  
 Apply two tons per acre Dolomitic limestone (92 lbs./1,000 sq. ft.) and 600 lbs. Per acre 0-20-20 fertilizer (14 lbs./1,000 sq. ft.) before seeding. Apply 400 lbs. Per acre 39-0-0 ureiform fertilizer (9 lbs./1,000 sq. ft.) and 500 lbs. Per acre 01.5 lbs./1,000 sq. ft.) of 10-20-20 fertilizer.

**Seeding:**  
 For the periods March 1 through April 30, and August 1 through October 15, seed with 100 lbs. Per acre (2.3 lbs./1,000 sq. ft.) of Kentucky 31 tall fescue, for the period May 1 through July 31, seed with 80 lbs./acre (1.8 lbs./1,000 sq. ft.) of Kentucky 31 tall fescue and 2 lbs. Per acre (0.05 lbs./1,000 sq. ft.) of seeding legume. During the period of October 16 through February 28, protect site by: Option (1) Two tons per acre of well anchored straw mulch and seed as soon as possible in the spring using Option (2) seed with 100 lbs./acre Kentucky 31 tall fescue and mulch with two tons/acre well anchored straw. All slopes should be hydroseeded.

**Maintenance:**  
 Inspect all seeded areas and make needed repairs, replacements and reseedings.  
 ? For public ponds substitute chernom crownweath at 15 lbs./acre and Kentucky 31 tall fescue at 40 lbs./acre as the seeding requirement. Optimum seeding date for this mixture is March 1 to April 30.

**TOPSOIL SPECIFICATIONS** - soil to be used as topsoil must meet the following:  
 Topsoil shall be a loam, sandy loam, clay loam, silty 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 texture subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, rotta trash, or other materials larger than 1 1/2" 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 topsoil 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 slope operations as described in the following procedures:

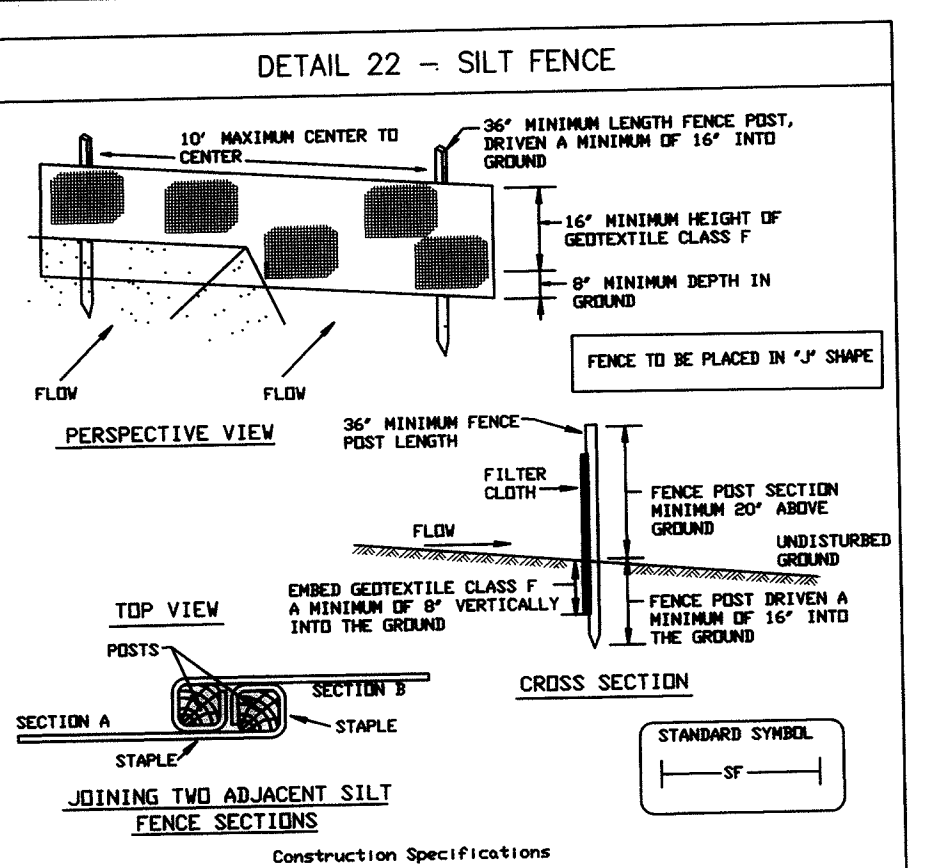
**PROPOSED CONTOUR** 398  
**EXISTING CONTOUR** 398  
**LOD = LIMIT OF DISTURBANCE**  
**S.F. = SILT FENCE**  
**PROPOSED EL. X 400.5**

Reviewed For Howard SCD and meets Technical Requirements  
 Jim Morgan 12/14/06  
 U.S. NATURAL RESOURCES CONSERVATION SERVICE DATE  
 This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
 John H. White 12/14/06  
 HOWARD SCD DATE

**APPROVED: DEPARTMENT OF PLANNING AND ZONING**  
 Chief, Development Engineering Division 12-26-06  
 Chief, Division of Land Development 12-07  
 Director 12/17

**DEVELOPER CERTIFICATION**  
 I/We certify that all development and construction will be done according to the plan, and that any responsible personnel involved in the construction project will have a certificate of attendance at a Department of the environment approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic on site inspection by the Howard Soil Conservation District.  
 William H. Brown 12-06-06  
 Signature of Developer Date

**ENGINEER'S CERTIFICATE**  
 I hereby certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site condition and that it was prepared in accordance with the requirements of the Howard Soil Conservation.  
 Rafik Bazikian, P.E. 12-06-06  
 Signature of Engineer Date



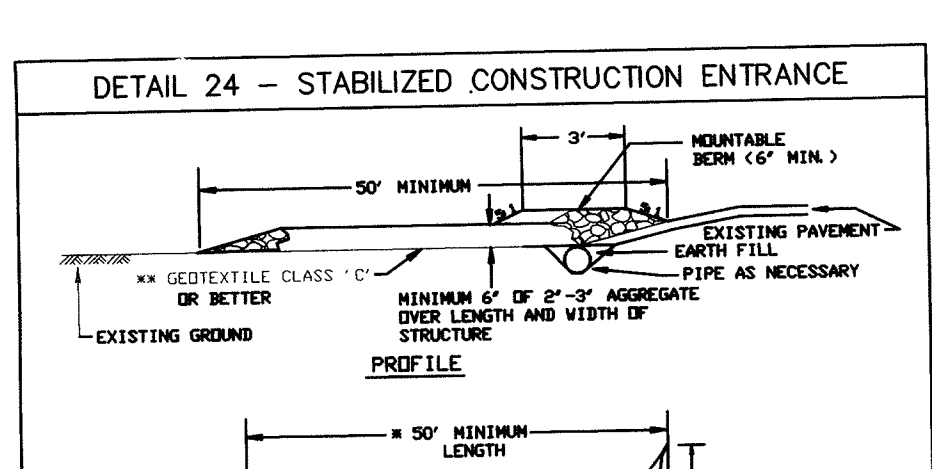
**Construction Specifications**

- Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum cut), or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard 1" or 1 1/2" section rebar with not less than 1.00 pound per linear foot.
- Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: NHT 509
Tensile Modulus	20 lbs/in (min.)	Test: NHT 509
Flow Rate	0.9 gal/ft <sup>2</sup> /minute (max.)	Test: NHT 582
Filtering Efficiency	75% (min.)	Test: NHT 582

- Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- Silt fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reaches 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE PAGE 1-18-3  
 SOIL CONSERVATION SERVICE MARKLAND DEPARTMENT OF ENVIRONMENT AND WATER MANAGEMENT ADMINISTRATION



**Construction Specification**

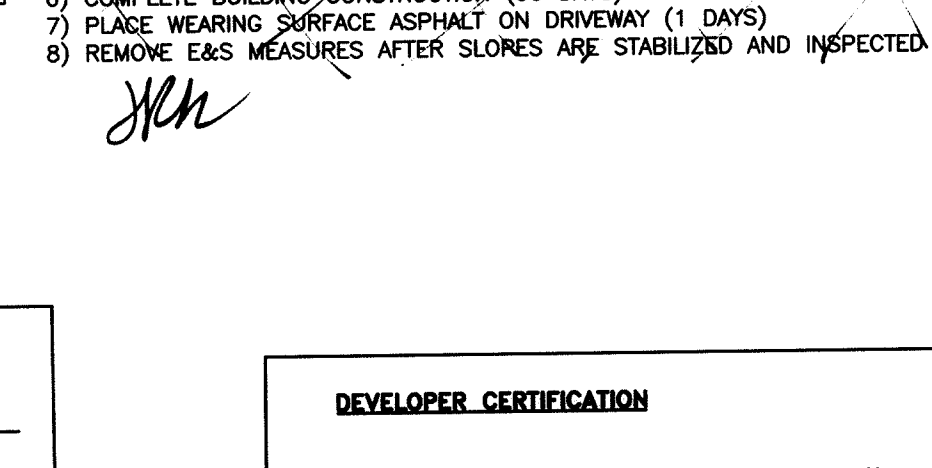
- Length - minimum of 50' (400' for single residence lot).
- Width - 10' minimum, should be flared at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. With the plan approval authority may not require single family residences to use geotextile.
- 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 to be placed stone. With the plan approval authority may not require single family residences to use geotextile.

U.S. DEPARTMENT OF AGRICULTURE PAGE 1-17-3  
 SOIL CONSERVATION SERVICE MARKLAND DEPARTMENT OF ENVIRONMENT AND WATER MANAGEMENT ADMINISTRATION

**MISS UTILITY**  
 CALL "MISS UTILITY" AT 1-800-657-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THESE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH THESE REQUIREMENTS.

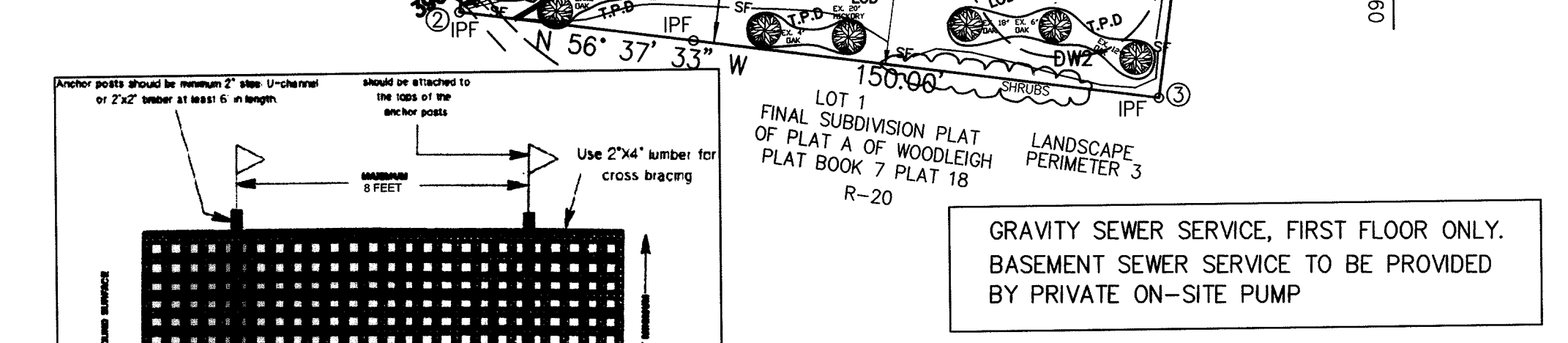
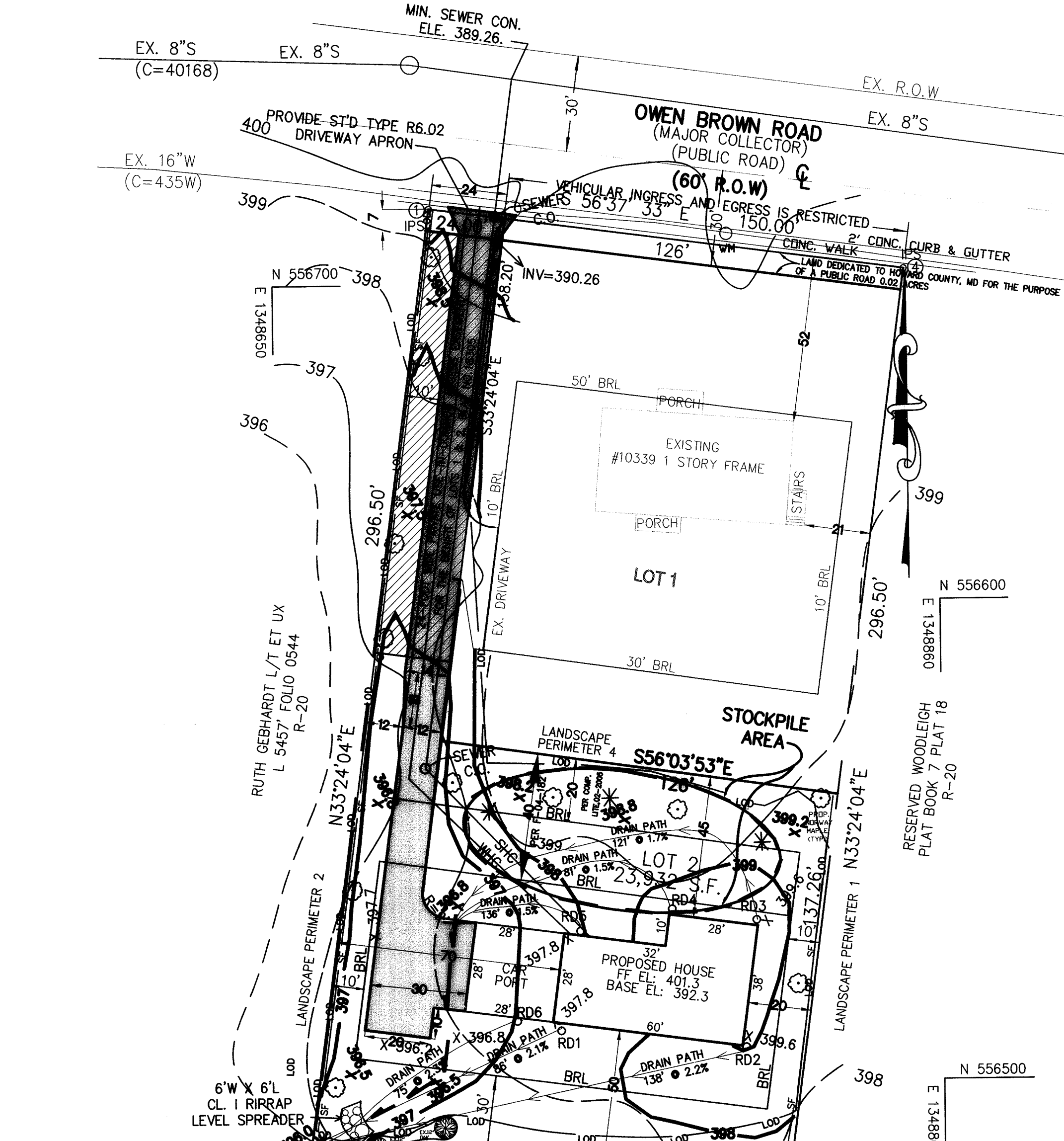
**CONSTRUCTION SEQUENCE**

- PLACE THE SUBBASE GRAVEL AT FINISHED GRADE TO BE USED AS (1 DAY)
- INSTALL TREE PROTECTIVE DEVICE (ORANGE FENCE)
- INSTALL EROSION AND SEDIMENT CONTROL AS SHOWN (1 DAY)
- EXCAVATE AND GRADE THE SITE (2 DAYS)
- SEED AND MULCH NEW SLOPES (1 DAY)
- COMPLETE BUILDING CONSTRUCTION (90 DAYS)
- PLACE WEARING SURFACE ASPHALT ON DRIVEWAY (1 DAY)
- REMOVE E&S MEASURES AFTER SLOPES ARE STABILIZED AND INSPECTED (10 DAY)



**PLANTING DETAIL: DECIDUOUS TREE**

WRAP TRUNK WITH TREE WRAP TO SECOND TIER OF BRANCHES  
 HOSE OVER WIRE  
 WIRE ON  
 TIE 1/2" IN INITIAL BRANCHING, RETAINING NATURAL FORM  
 STAKES (3 REQUIRED)  
 REMOVE COVERING FROM TOP OF BALL  
 FIRST LATERAL ROOT FLUSH WITH FINISHED GRADE  
 3" MULCH  
 3" SOIL WELL  
 FINISHED GRADE  
 UNDISTURBED SOIL  
 PLANTING SOIL



**SCHEDULE A LANDSCAPE CHART**

CATEGORY	ADD TO ROWWAY	ADD TO PER-PROP. PERIMETER	ADD TO DRIVEWAY PERIMETER	ADD TO PER-PROP. PERIMETER 4
LANDSCAPE TYPE	N/A	A	A	B
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	N/A	137	296	150' 125'
CREDIT FOR EXISTING VEGETATION	N/A	0	0	150' 0
CREDIT FOR WALL FENCE OR BERM	N/A	N/A	N/A	N/A 0
SHRUB TREES	N/A	2 SHADE TREES	6 SHADE TREES	3 SHADE 3 EVER-GREEN
NO. OF PLANTS REQD.	N/R	2	6	3
SHRUBS EVERGREEN TREES	N/A	0	0	0

**PROVIDED LANDSCAPING PLANT LIST**

QTY.	KEY	NAME	SIZE
11	NM	NORWAY MAPLE	2 1/2" - 3" CALIPER FULL CROWN
3	*	EVERGREEN	6' - 8' HEIGHT

**LANDSCAPE CERTIFICATE**

I/WE CERTIFY THAT THE REQUIRED LANDSCAPING WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

OWNER  
 W. H. POE  
 10339 OWEN BROWN RD  
 COLUMBIA MD, 21044  
 PHONE: 410-997-8772

Signature of Engineer: William H. Brown 12-6-06

- GENERAL NOTES:**
- 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' (14' SERVING MORE THAN ONE RESIDENCE);  
 B) SURFACE- 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING. (1-1/2" MIN)  
 C) GEOMETRY- MAXIMUM 15% GRADE, MAX 10% GRADE CHANGE AND MINIMUM OF 45' TURNING RADIUS, TURNING RADIUS.  
 D) STRUCTURES (CULVERTS/ BRIDGES)--CAPABLE OF SUPPORTING 25 GROSS TONS (H 25 LOADING).  
 E) DRAINAGE ELEMENTS-- CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.  
 F) MAINTENANCE-- SUFFICIENT TO INSURE ALL WEATHER USE.
  - THE SUBJECT PROPERTY IS ZONED R-20 PER THE 2/2/04 COMPREHENSIVE ZONING PLAN AND PER COMPLETE ZONING REGULATIONS, COUNCIL BILL 02-2005, EFFECTIVE 7/28/06.
  - THIS PLAT IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT FEB. 2, 2004 BY THE J.E. CLARK CO. MD. REG. #4379.
  - THE CONTRACTOR OR DEVELOPER SHALL CONTACT THE CONSTRUCTION INSPECTION DIVISION 24 HOURS IN ADVANCE OF COMMENCEMENT OF WORK AT (410) 313-1880.
  - B.R.L. INDICATES BUILDING RESTRICTION LINE.
  - NO STREAMS OR WETLANDS EXIST ON-SITE AS CERTIFIED BY A SITE REVIEW PERFORMED BY ECO-SCIENCE PROFESSIONALS ON MARCH 24, 2004.
  - FOR FLAG OR PIPE STEM LOTS: REFUSE COLLECTION SNOW REMOVAL, AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPE STEM LOT DRIVEWAY.
  - THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL BILL 45-2003 AND THE ZONING REGULATIONS AS AMENDED BY CB 75-2003. DEVELOPMENT OR CONSTRUCTION ON THESE (LOTS/ PARCELS) MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION, OR BUILDING/ GRADING PERMIT.
  - WATER AND SEWER SERVICE TO THE LOT 2 WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122B OF THE HOWARD COUNTY CODE, PUBLIC WATER & PUBLIC SEWER ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME. EXISTING WATER # 435 W CODE # E 30, SEWER # 20-0974 CODE # 532400 CAPITAL PROJECT # S-1-6109.
  - THIS SUBDIVISION IS EXEMPT FROM FOREST CONSERVATION, BECAUSE IT IS A MINOR SUBDIVISION THAT CREATED 0 ADDITIONAL LOT AND HAS NO FURTHER SUBDIVISION POTENTIAL, PER SECT. 16.120(B)(1)(VIII) OF THE HOWARD COUNTY CODE. (F-04-182)
  - THE USE-IN-COMMON EASEMENT MAINTENANCE AGREEMENT HAS BEEN RECORDED, LIBER 440/FOLIO 0709 AT THE HOWARD COUNTY LAND RECORDS SIMULTANEOUSLY WITH THE PLAT (F-04-182)
  - THE STORMWATER MANAGEMENT IS PROVIDED BY ROOF TOP DISCONNECTION AND GRASS CHANNEL CREDITS FOR WQV. CPV IS NOT REQUIRED FOR THIS SITE.
  - DESIGN MANUAL WAIVER REQUEST TO USE AVAILABLE ROADWAY STOPPING SIGHT DISTANCE DATED FEB 23,2005 WAS APPROVED APRIL 14, 2006.
  - SEWER HOUSE CONNECTION GRADE WILL BE AT 2% MINIMUM SLOPE.
  - LANDSCAPING HAS BEEN PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY LANDSCAPE CODE AND THE LANDSCAPE MANUAL. SURETY IN THE AMOUNT OF \$3,750.00 WILL BE POSTED WITH THE GRADING PERMIT APPLICATION FOR 11 SHADE AND 3 EVERGREEN TREES.
  - IN ACCORDANCE WITH SECTION 16.127(c)(2)(iii), A BUILDING MUST BE LOCATED TO MINIMIZE INFRINGEMENT ON THE PRIVACY OF ADJOINING RESIDENTIAL PROPERTIES. THIS NEW HOUSE WILL BE LOCATED MORE THAN 50 FEET FROM ANY EXISTING BUILDING/ HOMES (EXCEPT FOR THE EXISTING HOUSE ON LOT 1 OF THE POE PROPERTY) AND THE PERIMETERS WILL BE BUFFERED WITH LANDSCAPE TREE PLANTINGS.
  - PROPOSED DRIVEWAY TO BE CONNECTED TO OWEN BROWN ROAD BY A STANDARD DRIVEWAY APRON TYPE R6-02.
  - THE SOD IS SUBJECT TO F-04-182, RECORDED AS PLAT NO. 18305 ON MAY 31, 2006.
  - THE BASEMENT GRAVITY SEWER SERVICE IS WAIVED BY DPW APPROVAL LETTER DATED NOVEMBER 8, 2006.

**SITE ANALYSIS DATA CHART**

A. TOTAL PROJECT AREA: 0.549 ACRES (23,932 SQ.FT.)  
 B. LIMIT OF DISTURBED AREA: 0.47 ACRES  
 C. PRESENT ZONING DESIGNATION: R-20  
 D. PROPOSED USES FOR SITE AND STRUCTURES: SINGLE FAMILY DETACHED DWELLING  
 E. TOTAL NUMBER OF UNITS ALLOWED FOR PROJECT AS SHOWN ON FINAL PLAT: ONE  
 F. TOTAL NUMBER OF UNITS PROPOSED ON SUBMISSION: ONE  
 G. MAXIMUM NUMBER OF EMPLOYEES, TENANTS ON SITE PER USE: N/A  
 H- NO. OF PARKING SPACE REQUIRED BY HOWARD COUNTY ZONING REGULATIONS AND/ OR FDP CRITERIA: N/A

**SOIL NOTE:** THE SOIL TYPE FOR THE ENTIRE SITE IS SHOWN AS G8a ON SHEET 24 OF THE SOIL SURVEY FOR HOWARD COUNTY.

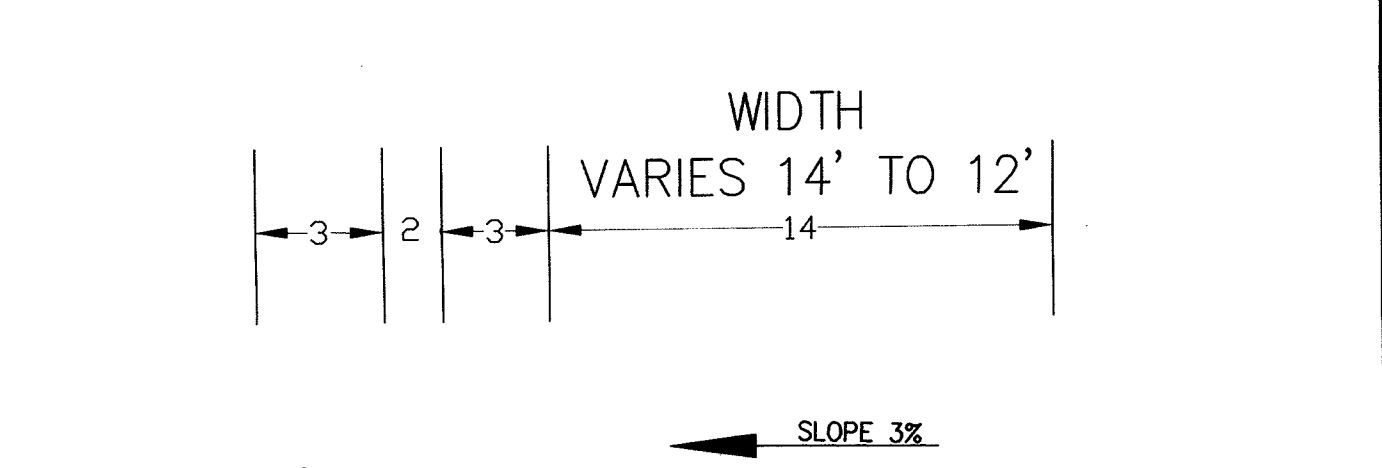
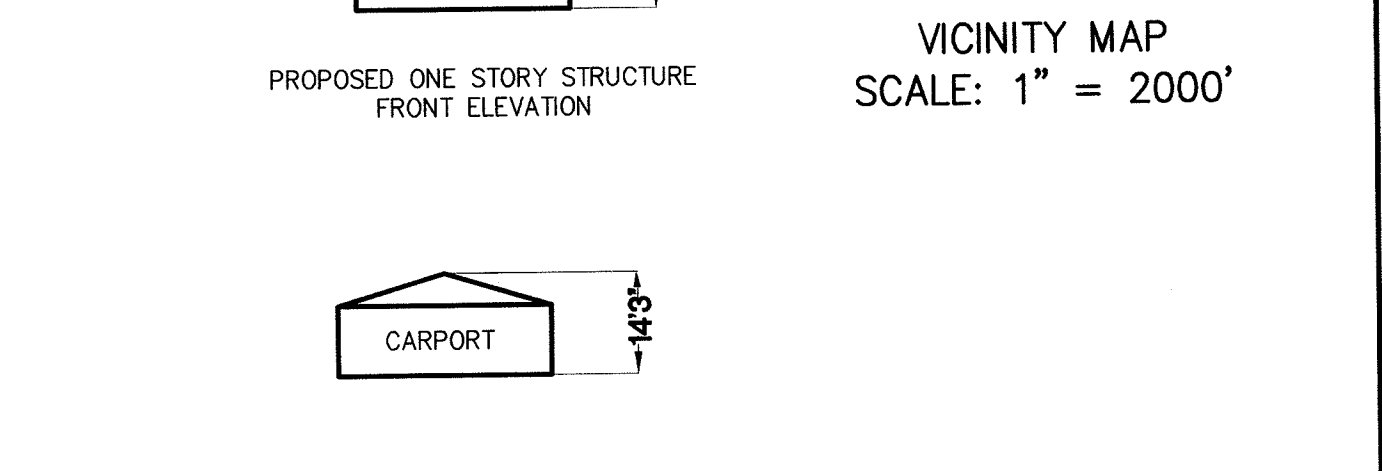
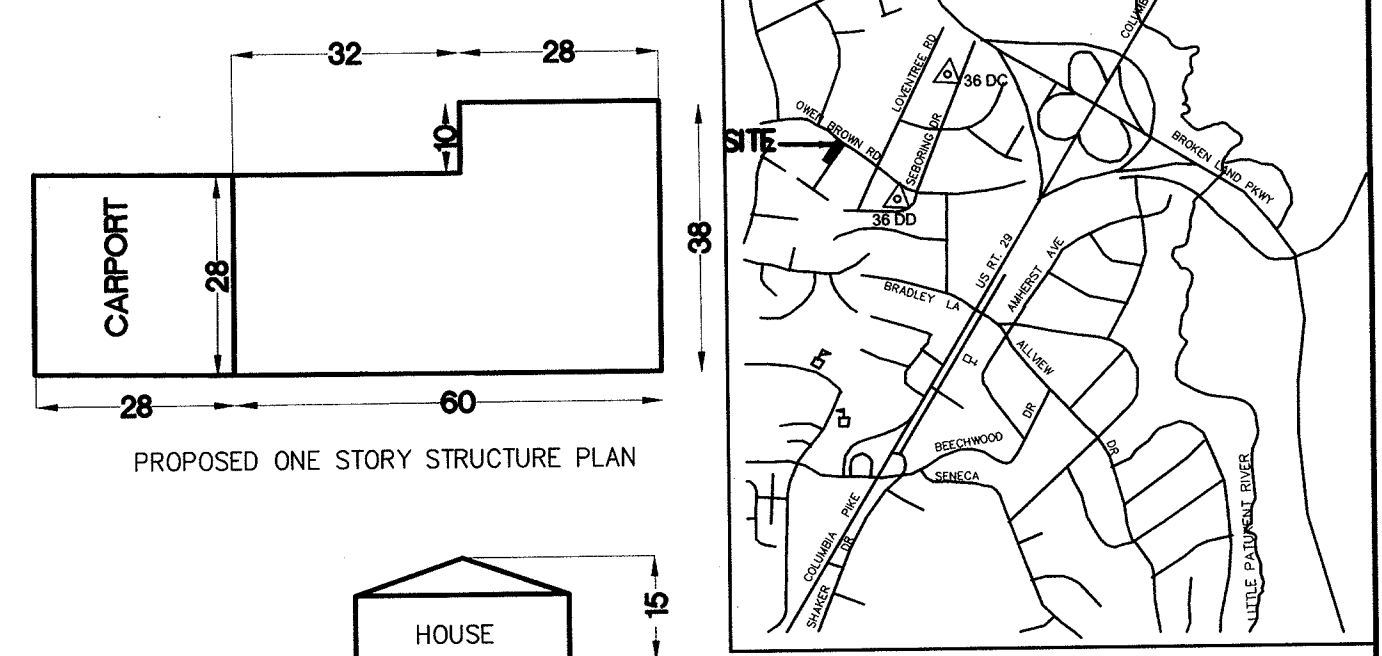


**PROPOSED ONE STORY STRUCTURE PLAN**

HOUSE: 12' x 12'  
 CARPORT: 14' x 14'

**GRASS SWALE**  
 SCALE: N.T.S.

**EX. UTILITY CONTRACT # S**  
 WATER # 435 W CODE E 30  
 SEWER #20-0974 CODE 532400  
 CAPITAL PROJECT # S-1-6109



**EX. UTILITY CONTRACT # S**  
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**PREPARED BY**  
 CIVIL, TRANSPORTATION, PLANNING, STRUCTURES AND ENVIRONMENTAL ENGINEERS  
 103 A WASHINGTON BLVD., LAUREL, MD 20707  
 TEL. (301) 497 1631. FAX (301) 497 1635  
 INFO@BAZIKIAN.COM

**ADDRESS CHART**

PARCEL #	STREET ADDRESS
LOT 2	10343 OWEN BROWN ROAD, COLUMBIA MD 21044

**PERMIT INFORMATION CHART**

SUBDIVISION NAME	Section/Area	LOT No. 2
POE PROPERTY LOT 2	N/A	
PLAT # OR I/F	Grid #	Zoning
18305	13	R-20
Water Code	E-30	Sewer Code
		5324400

**POE PROPERTY LOT 2**  
**LANDSCAPE AND SEDIMENT/EROSION CONTROL PLAN**  
**SINGLE FAMILY DETACHED**  
 TAX MAP 36, GRID 13, PAR 145  
 ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND  
 DATE: DEC. 06, 2006  
 REVISED:

**SCALE 1"=30'**  
**SHEET 1 OF 1**  
 SDP-07-004