

No.	REVISIONS	DATE
1	Rotate hwy & Rev. Grd.	11-7-97

SEDIMENT AND EROSION CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECS FOR SOIL EROSION AND SEDIMENT CONTROL and SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and remove temporary stabilization shall be completed within:
 - 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1
 - 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 perimeters in accordance with Vol. 1, Chapter 7, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above, in accordance with the 1994 MARYLAND STANDARDS AND SPECS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings, sod, temporary stabilization and mulch. Once in place, it can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- SITE ANALYSIS:**
 - Total Area of Site: 0.36 Acres
 - Area Disturbed: 0.36 Acres
 - Area to be roofed or paved: 0.12 Acres
 - Area to be vegetatively stabilized: 0.14 Acres
 - Total Cut: 500 CY
 - Total Fill: 500 CY
 - Offsite Waste/Borrow Area Location: _____
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.
- The total amount of silt fence = 275 LF
- The total amount of super silt fence = 58 LF
- The total amount of earth dike = 0'

* It is the responsibility of the contractor to identify the soil/borrow site and notify and gain approval from the sediment control inspector of the site and its grading permit number at the time of construction.

CONSTRUCTION SEQUENCE:

	NO. OF DAYS
1. Obtain grading permit	7
2. Install tree protection fence	7
3. Install sediment and erosion control devices and stabilize	14
4. Excavate for foundations, rough grade and temporary stabilize	30
5. Construct structures, sidewalks and driveways	14
6. Final grade and stabilize in accordance with SDCS and Specs.	14
7. Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize	7

* Delay construction of houses on lots: N/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 soil pH, and moderate to high sand, silt, and/or clay content. The soil must be capable of supporting a 100 lb. plant in a 12 inch pot.

Conditions Where Practice Applies:

- This practice is limited to areas having 21 or fewer acres where:
 - The texture of the exposed subsoil/parent material is not conducive to producing vegetative growth.
 - The soil material is so erodible that the existing area is not enough to support plants or furnish soil.
 - The original soil to be vegetated contains material toxic to plant growth.
- The soil is so erodible that treatment with straw is not feasible.

Construction and Material Specifications:

- Topsoil placed from the existing site may be used provided that it meets the standards set forth in these specifications. Topsoil, the depth of topsoil to be placed for a given area can be used in the remaining area of the site. The soil must be tested by a laboratory approved by the Department of Agriculture/Experimental Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, or silty loam, sandy clay loam, sandy clay, or silty clay. Other soils may be used if approved by an approved soil and agricultural agent by the appropriate authority. Topsoil shall not be a mixture of contrasting natural materials and shall contain no rocks, clumps of roots, cinders, stones, slag, coarse fragments, gravel, sticks, wire, trash, or other material larger than 1" and 1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, wiregrass, etc., unless otherwise specified.
 - When the subsoil is either highly acidic or composed of heavy clays, the topsoil shall be spread in layers of 2" or less. The depth of topsoil to be placed prior to the placement of topsoil. Limb shall be specified uniformly over the disturbed area and where the soil is in contact with those operations as described in the table below.
- Price topsoil (if required) and apply soil amendments as specified in 21.0 Vegetative Stabilization Section.

TEMPORARY SEEDING NOTES

SEEDING PREPARATION: Loosen upper three inches of soil by raking, stirring or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: Apply 500 lbs. per acre 10-10-10 fertilizer (74 lbs./1000 sq ft).

SEEDING: For areas having 1 thru April 30 and from August 15 thru November 15 seed with 2 1/2 bushels per acre of annual ryegrass (2.2 lbs./1000 sq ft) for the period May 1 thru August 14, seed with 1 lb. per acre of annual ryegrass (0.7 lbs./1000 sq ft). For the period November 1 thru February 28, plant site or seeding 2 times per acre of annual ryegrass (0.7 lbs./1000 sq ft) and 2 times per acre of a clover (0.7 lbs./1000 sq ft) and seed on soil as possible in the spring or use seed.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq ft) of certified annual grass straw immediately after seeding. Apply 2 1/2 tons per acre (125 lbs./1000 sq ft) of mulch immediately after seeding using mulch spreading equipment or 2 1/2 gallons per acre (125 lbs./1000 sq ft) of mulch spreader. For slopes of 3:1 or higher, use 348 gallons per acre (169 lbs./1000 sq ft) for mulching.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHOD NOT COVERED.

PERMANENT SEEDING NOTES

SEEDING PREPARATION: Loosen upper three inches of soil by raking, stirring or other acceptable means before seeding, if not previously loosened.

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

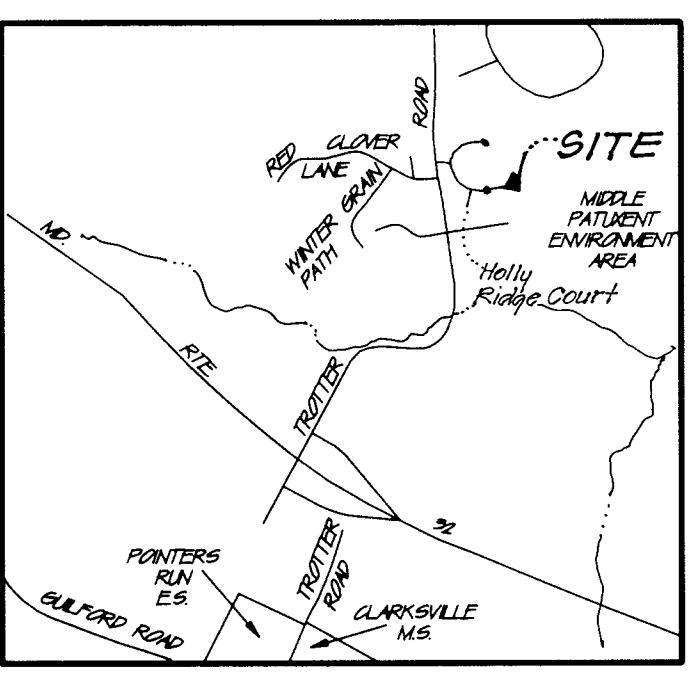
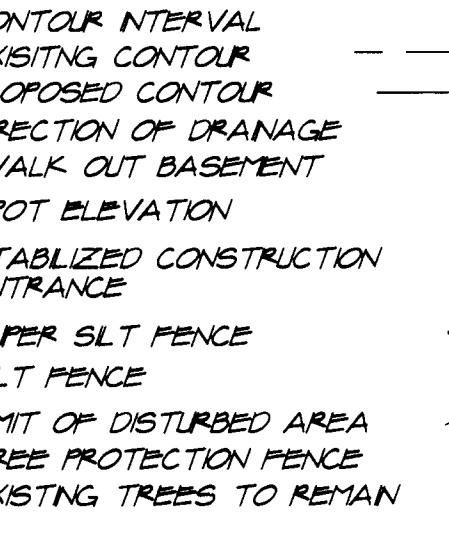
- 1) 100 lbs./1000 sq ft of 10-10-10 fertilizer (7.4 lbs./1000 sq ft) before seeding, stir or mix into upper three inches of soil at the time of seeding, and 2) 2 lbs./1000 sq ft of urea (28 lbs./1000 sq ft) before seeding, stir or mix into upper three inches of soil.
- 2) 100 lbs./1000 sq ft of 10-10-10 fertilizer (7.4 lbs./1000 sq ft) and 2 lbs./1000 sq ft of urea (28 lbs./1000 sq ft) before seeding, stir or mix into upper three inches of soil.

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 2 lbs. per acre (2 lbs./1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 2 lbs. per acre (2 lbs./1000 sq ft) of Tall Fescue per acre and 2 lbs. per acre of Kentucky 31 Tall Fescue per acre and 2 lbs. per acre of Kentucky 31 Tall Fescue per acre. For the period October 16 thru February 28, plant site or seeding 2 times per acre of annual ryegrass (0.7 lbs./1000 sq ft) and 2 times per acre of a clover (0.7 lbs./1000 sq ft) and seed on soil as possible in the spring or use seed.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq ft) of certified annual grass straw immediately after seeding. Apply 2 1/2 gallons per acre (125 lbs./1000 sq ft) of mulch spreader. For slopes of 3:1 or higher, use 348 gallons per acre (169 lbs./1000 sq ft) for mulching.

MAINTENANCE: Inspect all seeded areas and make needed repairs, reseedings and weedings.

LEGEND



GENERAL NOTES

- Subject property is zoned: R-ED per 10-18-93 Comprehensive Zoning Plan.
- The total area included in this submission is: 0.36 Acres
- The total number of lots included in this submission is: 1
- Improvement to property: Single Family Detached
- SHC Elevation shown at Property Line.
- Department of Planning and Zoning reference file numbers are: P-95-165, P-95-14, WP-94-325-94-TPB-216
- Utilities shown as existing are taken from approved Water and Sewer plans Contract # 34-3392-D, approved Road Construction plans P-95-165.
- Any damage to county owned rights-of-way shall be corrected at the developer's expense.
- All roadways are public and existing.
- The existing topography was field run by Clark, Finefrock & Sackett, Inc. in March 1997.
- The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System - Howard County Station Nos.: 3532 & 355A.
- The contractor shall notify the Department of Public Works/Division of Construction Inspection at (410) 318-1800 at least twenty-four (24) hours prior to the start of work.
- The contractor shall notify 'Miss Utility' at 1-800-257-7777 at least 48 hours prior to any excavation work.
- For driveway entrance details, refer to Ho. Co. Design Manual Volume IV details R-6.05.
- Stormwater Management is provided per: P-95-165
- In accordance with Howard County Zoning Regulations Section 12B bay windows or chimneys not more than 16' in width may project more than 4 feet into any setbacks; porches and decks may project not more than 10 feet into the front or rear setbacks.

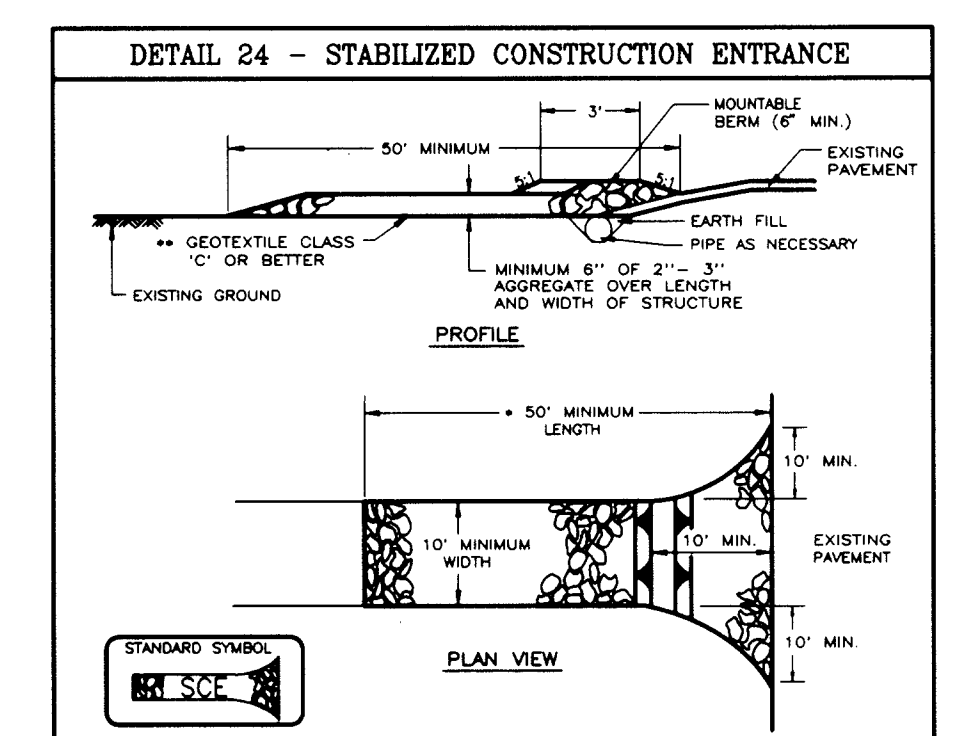
SPECIAL NOTES:

This plan is for house siting and lot grading only. Improvements shown within the rights-of-way on this S.D.P. are not to be used for construction. For construction see approved Road Construction Plans P-95-165 and/or approved Water and Sewer Plans Contract #34-3392-D.

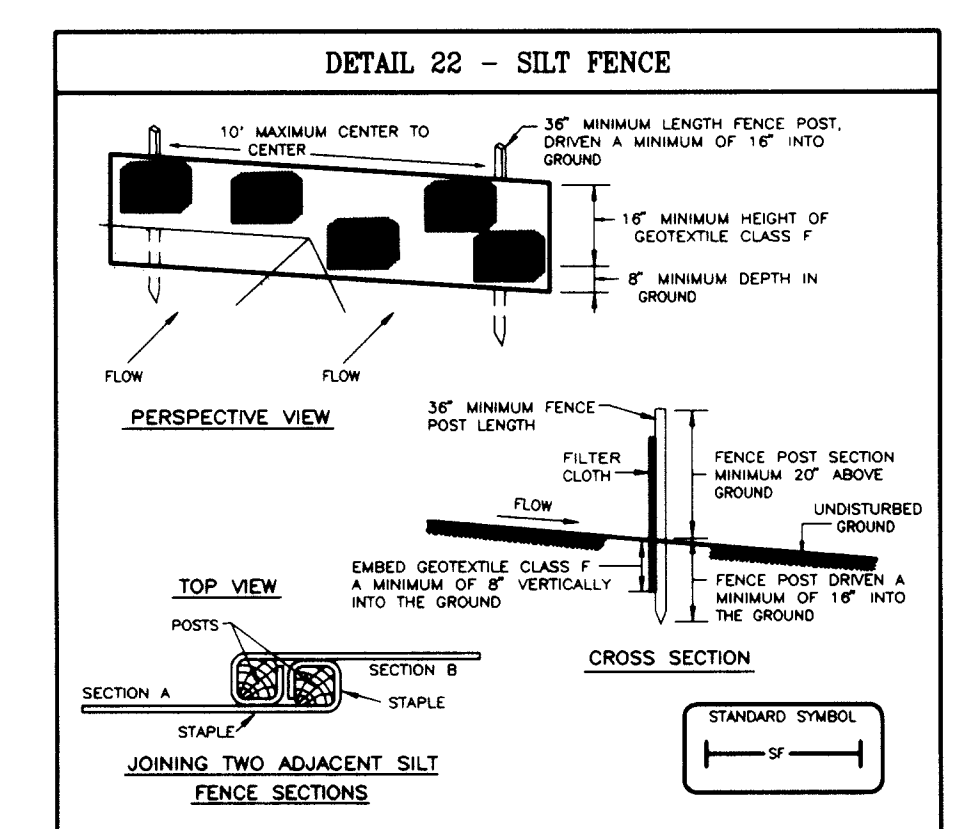
LOT NUMBER	STREET ADDRESS
21	6120 HOLLY RIDGE COURT

BENCHMARKS
Howard County Station #39G2
N534.963631 E1332.934.9300
Howard County Station #39GA
N533.249690 E1332.6213050

OWNER / DEVELOPER
MD-ATLANTIC DEVELOPMENT LLC
5026 Dorsey Hall Drive, Suite 204
Baltimore City, Maryland 21042

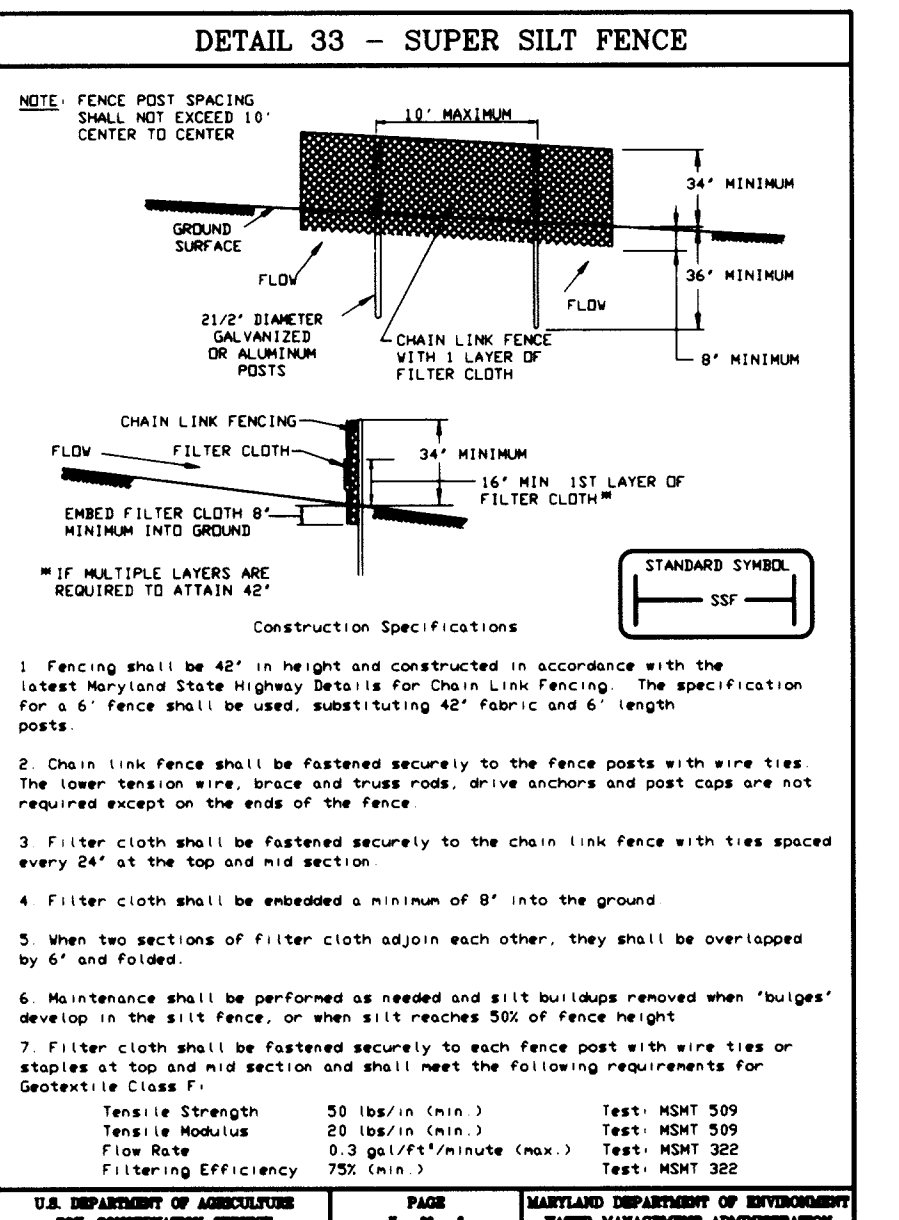


- Construction Specifications**
- Length - minimum of 50' (+ 30' for a single residence lot)
 - Width - 10' minimum, should be formed at the existing road to provide a turning radius.
 - Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The only approved authority may not require single family residences to use geotextile.
 - Stone - crushed aggregate (2" to 3") or recycled or recycled concrete equipment 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 placed through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a geotextile fabric with 2" aggregate and a minimum of 6" of stone. The pipe shall be 10' to 12' long and shall be placed at a high spot and shall not be necessary. If a high spot and has no drainage to convey, a pipe will not be necessary. If a high spot and has no drainage to convey, a pipe will not be necessary. If a high spot and has no drainage to convey, a pipe will not be necessary. If a high spot and has no drainage to convey, a pipe will not be necessary. If a high spot and has no drainage to convey, a pipe will not be necessary.
 - 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.



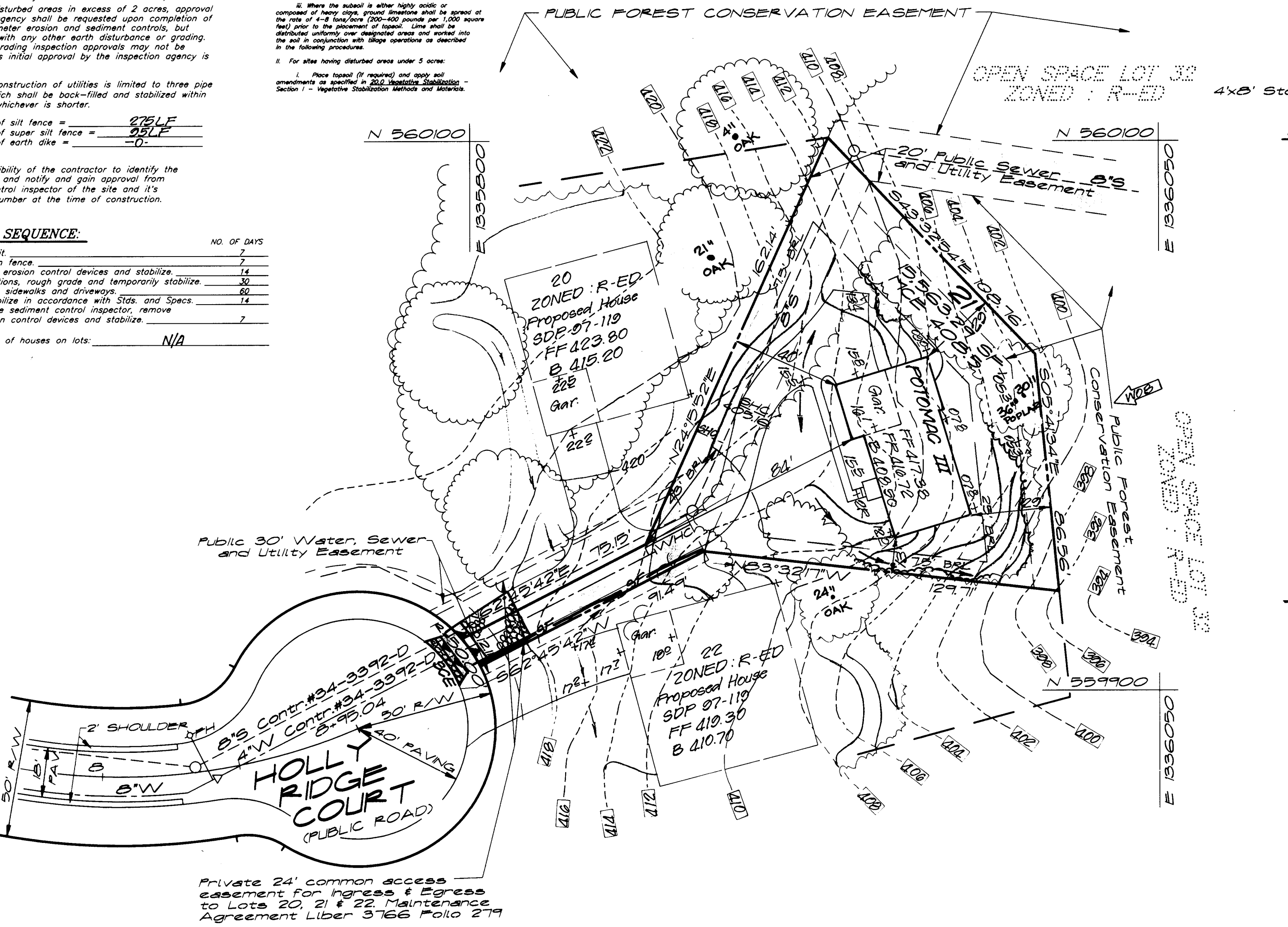
- Construction Specifications**
- Fence posts shall be a minimum of 30" long, driven 18" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or equivalent (minimum) round pipe (minimum) 1 1/2" diameter. Steel posts will be standard T or U section weighing not less than 1.00 lb/ft. Posts shall be spaced 10' on center.
 - 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 lb/in (min.)	Test: MSMT 509
Tensile Modulus	20 lb/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft ² /minute (max.)	Test: MSMT 322
Filtration Efficiency	75% (min.)	Test: MSMT 322
 - 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 siltage occurs or when sediment accumulation reaches 50% of the fabric height.



- Construction Specifications**
- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6" length posts.
 - Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and trade rods, drive anchors and post caps are not required except on the side of the fence.
 - Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
 - Filter cloth shall be embedded a minimum of 8" into the ground.
 - When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
 - Maintenance shall be performed as needed and silt bulldozers removed when 'bulldozers' develop in the silt fence, or when silt reaches 50% of fence height.
 - Filter cloth 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 lb/in (min.)	Test: MSMT 509
Tensile Modulus	20 lb/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft ² /minute (max.)	Test: MSMT 322
Filtration Efficiency	75% (min.)	Test: MSMT 322



Private 24' common access easement for ingress & egress to Lots 20, 21 & 22. Maintenance Agreement Liber 3166 Folio 279

DEVELOPER'S/BUILDER'S CERTIFICATE

I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

ENGINEER'S CERTIFICATE

I hereby 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.

Reviewed for HOWARD SCD and meets technical requirements
 Cheryl Jermine 11-14-97
 U.S. Natural Resources Conservation Service

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

Walter C. Flack 10-7-97
 G. NELSON CLARK 10-7-97

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division 11/18/97
 Chief, Division of Land Development 11/24/97



DESIGNED	JE	SITE DEVELOPMENT PLAN	SCALE	1"=30'
DRAWN	PS	LOT 21	DRAWING	1 of 1
CHECKED	jmw	TROTTER RIDGE	JOB NO.	97-049
DATE	10-97	FFTH (5th) ELECTION DISTRICT	FILE NO.	97-049X
		HOWARD COUNTY, MARYLAND		