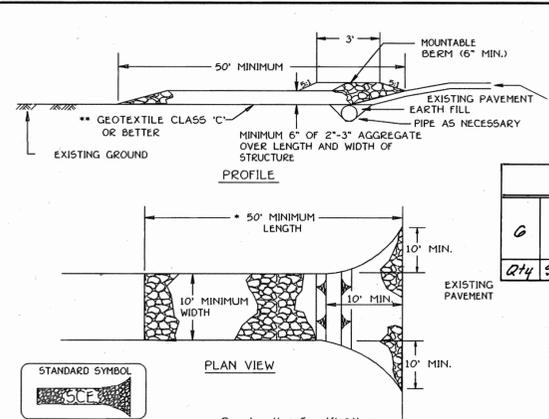


SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSING AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1859).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-CONSTRUCTION, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DICES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, 30 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT CONTROL STRUCTURES MUST BE ERECTED 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 501, 500 USEC. 54), TEMPORARY SEEDING (SEC. 501, 500 USEC. 52), TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR CONSTRUCTION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMSSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
 - TOTAL AREA OF SITE: 144 ACRES
 - AREA DISTURBED: 0.27 ACRES
 - AREA TO BE ROOFED OR PAVED: 0.10 ACRES
 - AREA TO BE VEGETATIVELY STABILIZED: 0.17 ACRES
 - TOTAL CUT: 194 CU.YDS.
 - TOTAL FILL: 702 CU.YDS.
 - OFFSITE WASTE/BORROW AREA LOCATION: N/A
- 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 CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY 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.



- Construction Specification**
- Length - minimum of 50' (+30' 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. **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 installed through the stabilized construction entrance shall be protected with a mounatable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
 - Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

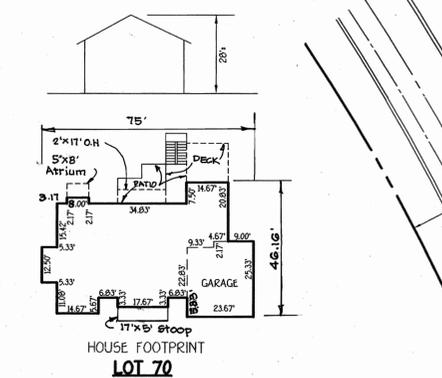
STABILIZED CONSTRUCTION ENTRANCE - 2

NOT TO SCALE

- WIP-04-22 granted August 27, 2009, by the Howard County Department of Planning and Zoning, approves the request to waive Section 16.110 (c)(1), which prohibits grading, removal of vegetative cover and new structures within 25 feet of a wetland, and Section 16.111 (a)(2)(ii) which prohibits grading, removal of vegetative cover and trees, paving and new structures within 75 feet of a perennial streambank. Approval is subject to the planting of 6 (six) deciduous trees located in the areas where the existing vegetative cover was disturbed.
- State of Maryland Department of the Environment Water Management Administration, Authorization to Proceed (After the Fact) Authorization No. 03-NT-0483/20046017, Effective Date December 1, 2009, states that in accordance with Environmental Article Section 5-203 (a) and Section 5-206 (a), Comar 26.17.04 and 26.29.01, authorizes the ability to perform the following activities in a Nontidal Wetland, Nontidal Wetland Buffer and/or in a 100-year Floodplain in accordance with Best Management Practices, placement of fill necessary for the construction of a single family home. This project will impact 1,980 sq. ft. of Nontidal Wetlands Buffer, but will not impact Nontidal Wetlands or Waters of the State.

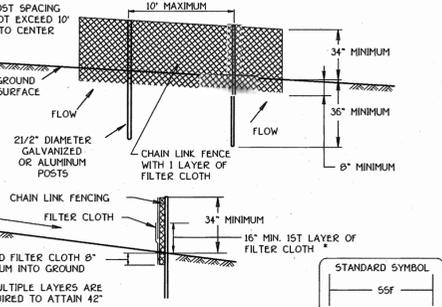
LANDSCAPING PLANT LIST

Qty	Symbol	Name	Size
	(Symbol)	Acer Saccharum	2"-2 1/4" Caliper Full Crown
	(Symbol)	Green Mountain	
	(Symbol)	Green Mtn./Sugar Maple	



HOUSE FOOTPRINT LOT 70

NOT TO SCALE



- 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 truss rods, drive anchors and post caps are not required except on the ends 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 buildups removed when "bulges" 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 stakes at top and mid section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min)	Test: MSMT 509
Flow Rate	0.3 gal/ft /min/ft (max)	Test: MSMT 322
Filtering Efficiency	75% (min)	Test: MSMT 322

DESIGN CRITERIA

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 101	Unlimited	Unlimited
10 - 20%	101 - 51	200 feet	1500 feet
20 - 33%	51 - 31	100 feet	1000 feet
33 - 50%	31 - 21	100 feet	500 feet
50% +	21 -	50 feet	250 feet

SUPER SILT FENCE

NOT TO SCALE

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 REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION

LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS IMMEDIATELY AFTER SEEDING. IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS

APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (4 LBS./1000 SQ. FT.)

SEEDING

FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH NOVEMBER 15, SEED WITH 1 1/2 BUSHEL PER ANNUAL EYE 0.2 LBS./1000 SQ.FT. FOR THE PERIOD MAY 1 THROUGH JULY 14, SEED WITH 3 LBS./ACRE OF WEEDING LOVEGRASS (0.7 LBS./1000 SQ.FT.). 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 SOU.

MULCHING

APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 2 1/2 GALLONS PER ACRE (5 GAL./1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT ACRES, ON SLOPES 3 FEET OR HIGHER, USE 3/8 GALLONS PER ACRE (3 GAL./1000 SQ.FT.) FOR ANCHORING. REFER TO THE 1989 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:

SEEDING PREPARATION

LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS

APPLY TWO TONS PER ACRE DOLOMITE LIMESTONE (92 LBS./1000 SQ.FT.) AND 500 LBS. PER ACRE 0-20-20 FERTILIZER (4 LBS./1000 SQ.FT.) BEFORE SEEDING HARROW OR DISC INTO UPPER THREE INCHES OF SOIL AT TIME OF SEEDING. APPLY 400 LBS. PER ACRE 38-0-0 UREAFORM FERTILIZER (9 LBS./1000 SQ.FT.) AND 500 LBS. PER ACRE (11.5 LBS./1000 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./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE, FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 50 LBS./ACRE (4 LBS./1000 SQ.FT.) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (200 LBS./1000 SQ.FT.) OF WEEDING LOVEGRASS. 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, OPTION (2) - USE SOU, OPTION (3) SEED WITH 100 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD BE HYDROSEDED.

MULCHING

APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (5 GAL./1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT ACRES, ON SLOPES 3 FEET OR HIGHER USE 3/8 GALLONS PER ACRE (3 GAL./1000 SQ.FT.) FOR ANCHORING.

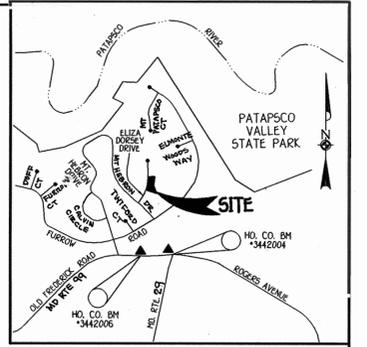
MAINTENANCE

INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS. * FOR PUBLIC PONDS SUBSTITUTE CHEMUNG CROWNVEITCH AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 10 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, 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 TEXTURE, SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CHINDERS, STONES, SLAG, COARSE AGGREGATES, GRAVEL, STICKS, ROOTS 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, NUTGRASS, POISON IVY, THESE, 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 1000 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.



VICINITY MAP

SCALE: 1"=2000'

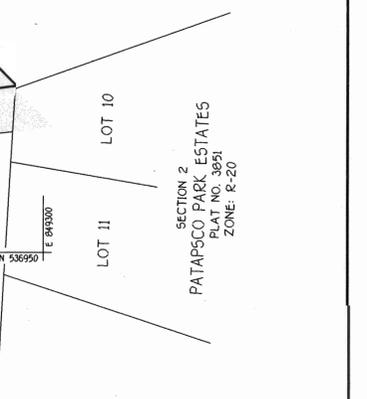
BENCHMARKS

HO. CO. 3442004
HO. CO. 3442006
NOTE: ADDITIONAL BENCHMARK INFORMATION IS NO LONGER AVAILABLE FROM HOWARD COUNTY.

GENERAL NOTES

- THE PROPERTY IS ZONED R-20 PER THE 10/18/93 COMPREHENSIVE ZONING PLAN.
- THE TOTAL AREA INCLUDED IN THIS SUBMISSION IS 1.44 AC.
- THE TOTAL NUMBER OF LOTS INCLUDED IN THIS SUBMISSION IS 1.
- THE TOTAL DISTURBED AREA IS 0.27 AC.
- SEE ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE.
- DEPARTMENT OF PLANNING AND ZONING REFERENCE FILE NUMBERS ARE F-99-18 & F-01-3053 & 14-1547-0.
- UTILITIES SHOWN AS EXISTING ARE TAKEN FROM APPROVED WATER AND SEWER PLANS: CONTRACTS 14-303-0 AND 14-1547-0 AND APPROVED ROAD CONSTRUCTION PLANS F-99-187.
- ANY DAMAGE TO COUNTY RIGHTS-OF-WAY SHALL BE REPAIRED AT THE DEVELOPER'S EXPENSE.
- ALL COORDINATES ARE BASED ON MD 27, MARYLAND STATE PLANE GRID AS PROJECTED BY HOWARD COUNTY CONTROL STATIONS 342004 AND 342006.
- IN ACCORDANCE WITH SECTION 15B(10) OF THE HOWARD COUNTY SUPPLEMENTARY ZONING DISTRICT REGULATIONS, BAY WINDOWS OR CHIMNEYS NOT MORE THAN 10 FEET IN WIDTH MAY PROJECT NOT MORE THAN 1 FEET INTO ANY SETBACKS, PORCHES AND DECKS MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR SETBACKS.
- BASED UPON WATER PETITION WP 90-90 (GRANTED 8/23/90), GRADING AND CLEARING ARE ALLOWED ON 25% OR STEEPER SLOPES ADJACENT TO THE STREAM BANK AND WETLANDS, FOR HOUSE CONSTRUCTION.
- STORMWATER MANAGEMENT IS PROVIDED FOR IN THE EXISTING REGIONAL STORMWATER MANAGEMENT FUND LOCATED ON LOT 71. AS APPROVED UNDER F-99-187.
- THE DRIVEWAY ENTRANCE IS PER HOWARD COUNTY STANDARD DETAIL S-405.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION 4800-303-8900 AT LEAST 24 HOURS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MIS UTILITY" (1-800-257-7777) AT LEAST 48 HOURS PRIOR TO EXCAVATION WORK.
- THIS PLAN IS BASED ON A BOUNDARY SURVEY PERFORMED BY PLOUGH & JESCHKE.
- TOPOGRAPHY IS BASED ON FIELD RUN TOPOGRAPHY PERFORMED BY FISHER COLLINS AND CARTER, INC. 12-1099.
- THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SEC. 16.1020 OF THE HO. CO. CODE BECAUSE DEVELOPMENT HAD A PRELIMINARY PLAN APPROVED PRIOR TO 12/31/92 PER SEC. 16.1022 (b)(1)(ii) OF THE HO. CO. CODE.
- NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE REQUIRED WETLANDS STREAMS OR THEIR BUFFERS EXCEPT AS PERMITTED PER WP-90-90.
- AS A CONSEQUENCE OF ITS SUBMISSION ON NOV. 30, 2001, THIS SITE DEVELOPMENT PLAN IS SUBJECT TO THE 5TH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.

Continued Above Left



LEGEND

SYMBOL	DESCRIPTION
(Symbol)	EXISTING CONTOUR 2' INTERVAL
(Symbol)	SPOT ELEVATION
(Symbol)	SUPER SILT FENCE
(Symbol)	PROPOSED WALKOUT
(Symbol)	EXISTING TREE LINE
(Symbol)	L.O.D. LIMIT OF DISTURBANCE
(Symbol)	TREE PROTECTION FENCE
(Symbol)	EXISTING STAFF TOP
(Symbol)	25% or Greater Steep Slopes
(Symbol)	Limits of WETLANDS

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL OFFICE: 10775 CALVERTON NATIONAL FEE
ELLCOTT CITY, MARYLAND 21042
410 481-2855

Professional Engineer Seal for Michael Campbell, License No. 133102, State of Maryland.

ENGINEER'S CERTIFICATE
I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
Signature of Engineer: CHARLES J. CROVO Sr. Date: 1/31/02

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 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.
Signature of Developer: MICHAEL CAMPBELL Date: 1-29-02

Reviewed for HOWARD COUNTY and meets Technical Requirements.
Signature: Jan Myers Date: 1/14/02

This development plan is approved for erosion and sediment control by the HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
Signature: John R. Volante Date: 1/14/02

BUILDER/DEVELOPER
MICHAEL CAMPBELL
5743 RICHARDSON MEWS
BALTIMORE, MARYLAND 21227

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Signature: [Signature] Date: 1/20/02

Chief, Division of Land Development Date: 1/20/02
Chief, Development Licensing Division Date: 1/20/02
Director - Department of Planning and Zoning Date: 1/20/02

PROJECT	PATAPSCO PARK ESTATES	SECTION	4	LOTS NO.	70
PLAT	10721	BLOCK NO.	5	ZONE	R-20
TAX/ZONE	17	ELEC. DIST.	SECOND	CENSUS TR.	6021.00
WATER CODE	H-03	SEWER CODE	1455600		

SITE DEVELOPMENT PLAN, SEDIMENT, EROSION CONTROL PLAN, NOTES & DETAILS

SINGLE FAMILY DETACHED PATAPSCO PARK ESTATES LOT 70 SECTION FOUR

TAX MAP No: 17 PARCEL 38 ZONED: R-20
SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: JANUARY, 2002
SHEET 1 OF 1
WP 90-90, WP 89-128, F-91-167

SDP 02.057