SHEET INDEX

GENERAL NOTES

1. 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.

2. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

3. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY PHRA DATED JUNE 2003.

4. 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. 38BB AND 32IA WERE USED FOR THIS PROJECT.

5. BOUNDARY SURVEY WAS PERFORMED BY PHRA DATED JUNE 2003.

6. STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED BY DRYWELLS/INFILTRATION TRENCHES LOCATED AROUND THE HOUSE, THEY ARE A PRIVATE FACILITIES TO BE MAINTAINED BY THE HOMEOWNER.

7. EXISTING UTILITIES ARE BASED ON PUBLIC WATER AND PUBLIC SEWER SERVICE, GRANTED UNDER THE TERMS AND PROVISIONS OF SECTION 18.122B OF THE HOWARD COUNTY CODE, EFFECTIVE MAY 22, 2002, ON WHICH DATE DEVELOPER AGREEMENT 14-4015-D WAS FILED AND ACCEPTED. THIS HOUSE SHALL BE PROVIDED WITH GRAVITY SEWER SERVICE TO FIRST FLOOR ONLY. BASEMENT SEWER SHALL BE PROVIDED BY PRIVATE ON SITE PUMP.

8. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.

9. SHC ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE.

10. FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.03. THE DRIVEWAY SHALL BE PROVIDED PRIOR TO RESIDENT OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
A) WIDTH -- 12 FEET, 14' SERVING MORE THAN ONE RESIDENCE
B) SURFACE -- 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2 INCHES MINIMUM);
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 ENSURE ALL WEATHER USE.

11. BASED ON AVAILABLE COUNTY DATA, NO HISTORIC STRUCTURES OR BURIAL GROUNDS EXIST ON SITE.

12. SOILS DATA IS BASED ON HOWARD COUNTY SOIL SURVEY DATED 1968.

13. NO NON-TIDAL WETLANDS EXIST ON SITE BASED ON A SITE EVALUATION BY PHRA.

14. NO 100 YEAR FLOODPLAIN EXISTS ON THIS SITE.

15. PROJECT BACKGROUND INFORMATION:
SUBDIVISION NAME: CHASE ORTHNER PROPERTY
TAX MAP - 38
PARCEL: P/O 683
ZONING: R-12
ELECTION DISTRICT: 1st
DEED REFERENCE: LIBER 6187, FOLIO 001
GROSS AREA: 0.55 ACRES
AREA OF STEEP SLOPES: 0.19 ACRES
AREA OF WETLANDS: 0 ACRES
AREA IN ROW AND ROAD: 0 ACRES
TOTAL AREA OF DISTURBANCE: 0.21 ACRES

16. BA-03-59V - A VARIANCE TO REDUCE THE 20 FOOT SETBACK FROM A PUBLIC STREET RIGHT-OF-WAY TO 10 FEET FOR A SINGLE-FAMILY DETACHED DWELLING TO BE LOCATED IN AN R-12 (RESIDENTIAL-SINGLE) ZONING DISTRICT WAS GRANTED BY DECISION & ORDER DATED MARCH 8, 2004, SUBJECT TO THE FOLLOWING:
A) THAT THE VARIANCE WILL APPLY ONLY TO THE OTHER ACTIVITIES USES AND STRUCTURES AS DESCRIBED IN THE PETITION SUBMITTED AND NOT TO THE USES, STRUCTURES, OR ACTIONS ON THE PROPERTY.

17. 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 ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.

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

19. FINANCIAL SURETY FOR THE REQUIRED 1 TREE IN THE AMOUNT OF $300.00 IS PART OF THE BUILDERS GRADING PERMIT APPLICATION FOR THIS PARCEL.

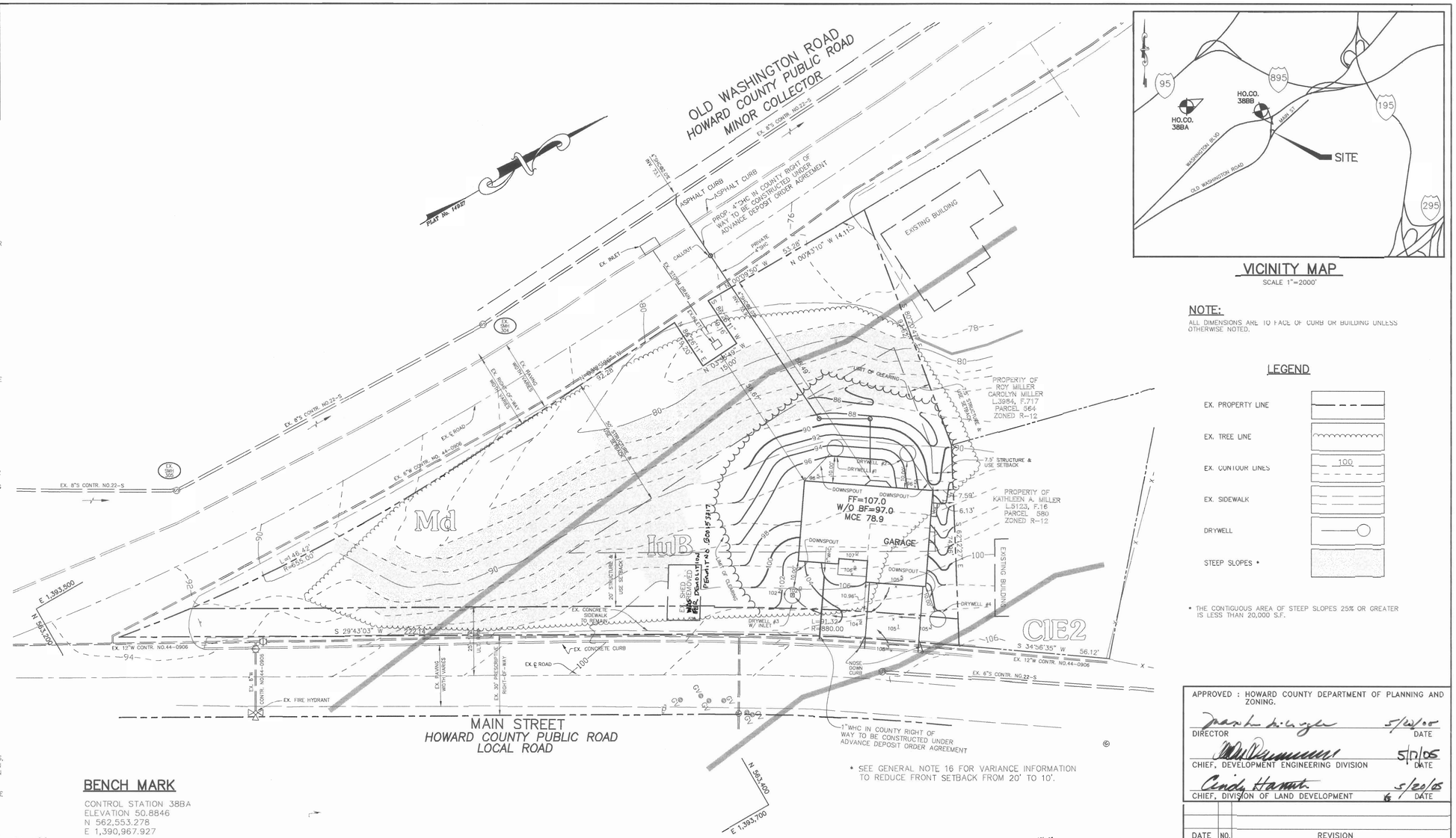
20. THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BECAUSE LOT IS LESS THAN 40,000 S.F. IN SIZE. (SECTION 16.1202(b)(1)(i) OF HOW.CO. CODE).

21. THE SUBJECT PROPERTY IS ZONED R-12 PER THE 2-2-04 COMPREHENSIVE ZONING PLAN.

22. SIGNATURE APPROVAL OF THIS PLAN IS SUBJECT TO APPROVAL BY MARYLAND AVIATION ADMINISTRATION (MAA). MAA APPROVAL LETTER RECEIVED, DATED DECEMBER 20, 2004.

23. A NOISE STUDY HAS BEEN COMPLETED BY MARS GROUP, INC., DATED DECEMBER, 2004. NO 65dBA IMPACTS TO THE PROPERTY ARE EXPECTED.

24. A DESIGN MANUAL WAIVER REGARDING STORMWATER MANAGEMENT IMPERVIOUS AREAS WAS APPROVED BY THE DEVELOPMENT ENGINEERING DIVISION ON NOVEMBER 5, 2004, WITH THE STIPULATION THAT NO ADDITIONAL IMPERVIOUS SURFACES, INCLUDING SWIMMING POOLS, DRIVEWAY EXPANSIONS, STRUCTURAL ADDITIONS OR SHEDS ARE PLACED ON THE SITE WITHOUT ADDITIONAL STORMWATER MANAGEMENT BEING PROVIDED.



VICINITY MAP
SCALE 1"=2000'

NOTE:
ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE NOTED.

LEGEND

EX. PROPERTY LINE

EX. TREE LINE

EX. CONTOUR LINES 100

EX. SIDEWALK

DRYWELL

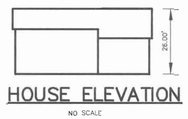
STEEP SLOPES *

* THE CONTIGUOUS AREA OF STEEP SLOPES 25% OR GREATER IS LESS THAN 20,000 S.F.

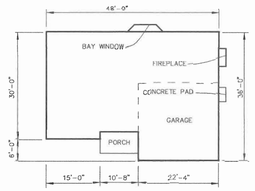
BENCH MARK

CONTROL STATION 38BA
ELEVATION 50.8846
N 562,553.278
E 1,390,967.927

CONTROL STATION 38BB
ELEVATION 19.6328
N 564,007.646
E 1,393,649.975



HOUSE ELEVATION
NO SCALE



HOUSE PLAN
NO SCALE

ADDRESS CHART

PARCEL	STREET ADDRESS
P/O ~~905~~ 683	5929 MAIN STREET

SUBDIVISION NAME -			SECT./AREA -		PARCEL -
CHASE ORTHNER			N/A		P/O 683
L/F -	BLOCK -	ZONING -	TAX MAP NO. -	ELECT. DIST. -	CENSUS TRACT -
6187/001	4	R-12	38	1st	6012
WATER CODE -		SEWER CODE -			
-		-			

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/12/05

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/10/05

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 5/20/05

DATE	NO.	REVISION

OWNER / DEVELOPER

CARLTON E. CHASE & HANS ORTHNER
835 COACHWAY
ANNAPOLIS, MARYLAND 21401

PROJECT
CHASE/ORTHNER PROPERTY
FIRST (WESTERN) PART

AREA
TAX MAP 38, ZONED R-12
PARCEL P/O 683, FIRST (WESTERN) PART L.6187 F.001
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
SITE DEVELOPMENT PLAN

Patton Harris Rust & Associates, pc
Engineers. Surveyors. Planners. Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

4.29.05
DATE

STATE OF MARYLAND — CHRISTOPHER J. REID — NO. 19949 — REGISTERED PROFESSIONAL ENGINEER

CHRISTOPHER J. REID #19949

DESIGNED BY : C.J.R.
DRAWN BY: MAD
PROJECT NO : 11946-2-0/ENGR/PLANS/C400SIT
DATE : DECEMBER 22, 2004
SCALE : 1" = 20'
DRAWING NO. 1 OF 4

SDP-04-143

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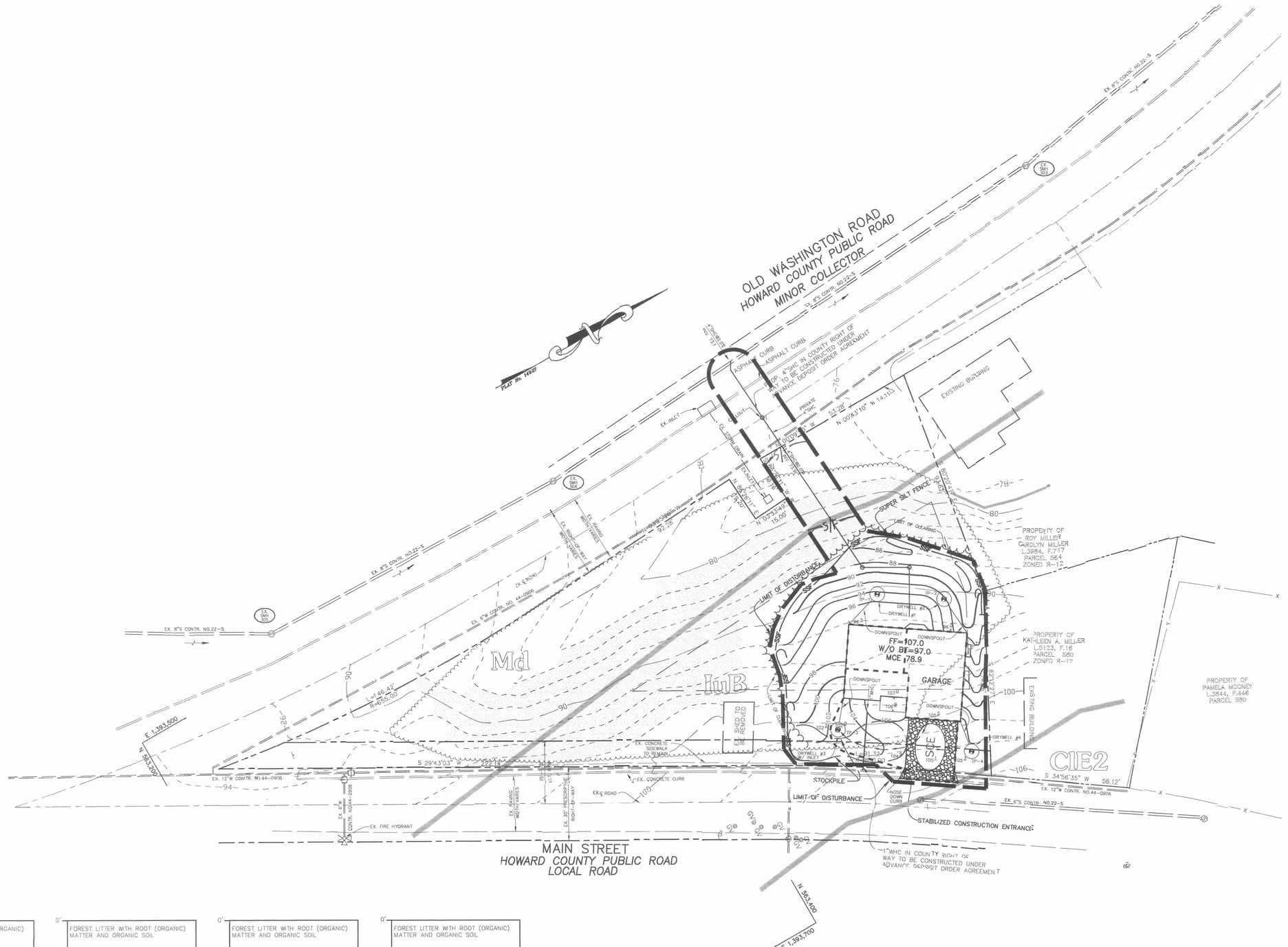

BORING TP-1
NO SCALE

0'	FOREST LITTER WITH ROOT (ORGANIC) MATTER AND ORGANIC SOIL
0.8'	BROWN SILTY FINE TO COURSE SAND WITH SOME GRAVEL, DAMP TO MOIST (SM) (LOAM)
10.0'	END OF TEST PIT

BORING TP-2
NO SCALE

0'	FOREST LITTER WITH ROOT (ORGANIC) MATTER AND ORGANIC SOIL
0.9'	DARK BROWN FINE TO MEDIUM SANDY SILT WITH TRACE GRAVEL, DAMP (ML) (SANDY LOAM)
4.0'	BROWN FINE TO MEDIUM SANDY SILT WITH INTERLAYERED RED-BROWN SILTY CLAY, MOIST (ML/CL) (SILT LOAM)
10.0'	END OF TEST PIT

BORING TP-3
NO SCALE

0'	FOREST LITTER WITH ROOT (ORGANIC) MATTER AND ORGANIC SOIL
0.9'	BROWN SILTY FINE TO COURSE SAND AND GRAVEL, DAMP (SM/GM) (LOAM)
6.0'	BROWN FINE TO MEDIUM SANDY SILT WITH INTERLAYERED RED-BROWN SILTY CLAY, MOIST (ML/CL) (SILT LOAM)
10.0'	END OF TEST PIT

BORING TP-4
NO SCALE

0'	FOREST LITTER WITH ROOT (ORGANIC) MATTER AND ORGANIC SOIL
0.6'	BROWN FINE TO MEDIUM SANDY SILT WITH TRACE ORGANIC MATTER (ABOVE 2.0 FEET), DAMP TO MOIST (ML) (SANDY LOAM)
5.0'	BROWN SILTY FINE TO COURSE SAND WITH SOMEGRAVEL, MOIST (SM) (LOAM)
9.0'	RED-BROWN WITH LIGHT GRAY SILTY CLAY WITH TRACE FINE SAND, MOIST (CL) (SILTY CLAY LOAM)
12.0'	END OF TEST PIT

BY THE DEVELOPER :

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER — DATE 4/30/05

BY THE ENGINEER :

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.

ENGINEER — DATE 4.29.05

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

NATURAL RESOURCES CONSERVATION SERVICE — DATE 5/5/05

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

HOWARD SOIL CONSERVATION DISTRICT — DATE 5/5/05

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/20/05

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/20/05

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 5/20/05

DATE	NO.	REVISION

OWNER / DEVELOPER

CARLTON E. CHASE & HANS ORTHNER
835 COACHWAY
ANNAPOLIS, MARYLAND 21401

PROJECT
CHASE/ORTHNER PROPERTY
FIRST (WESTERN) PART

AREA TAX MAP 38, ZONED R-12
PARCEL P/O 683, FIRST (WESTERN) PART L.6187 F.001
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
GRADING AND SEDIMENT CONTROL PLAN

Patton Harris Rust & Associates, pc
Engineers. Surveyors. Planners. Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

4.29.05
DATE

STATE OF MARYLAND — CHRISTOPHER J. REID — No. 19949 — PROFESSIONAL ENGINEER

CHRISTOPHER J. REID #19949

DESIGNED BY :	C.J.R.
DRAWN BY:	MAD
PROJECT NO	11946-2-0/ENGR/PLANS/ C200ESC
DATE :	DECEMBER 22, 2004
SCALE :	1" = 20'
DRAWING NO.	2 OF 4

SDP-04-143

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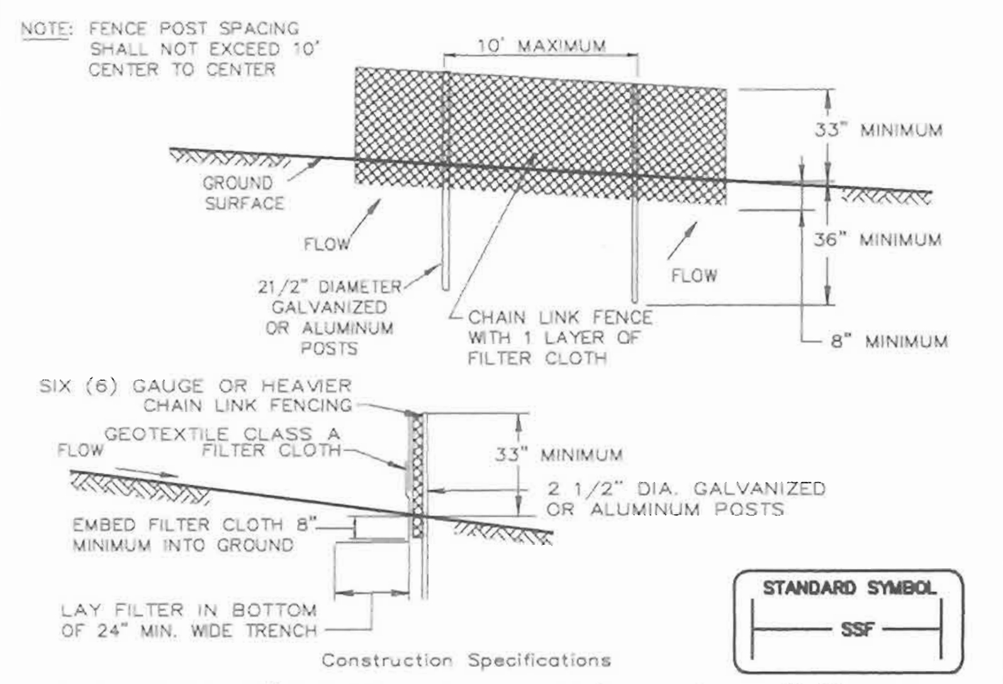
DETAIL 33 – SUPER SILT FENCE



Construction Specifications

1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway (SHA) Details for Chain Link Fencing. The SHA specifications for a 6 foot fence shall be used, substituting 42" fabric and 6 foot length posts.

2. The posts do not need to be set in concrete.

3. Chain link fence shall be fastened securely to the fence posts with wire ties or staples. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence. The chain link fencing shall be six (6) gauge or heavier.

4. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.

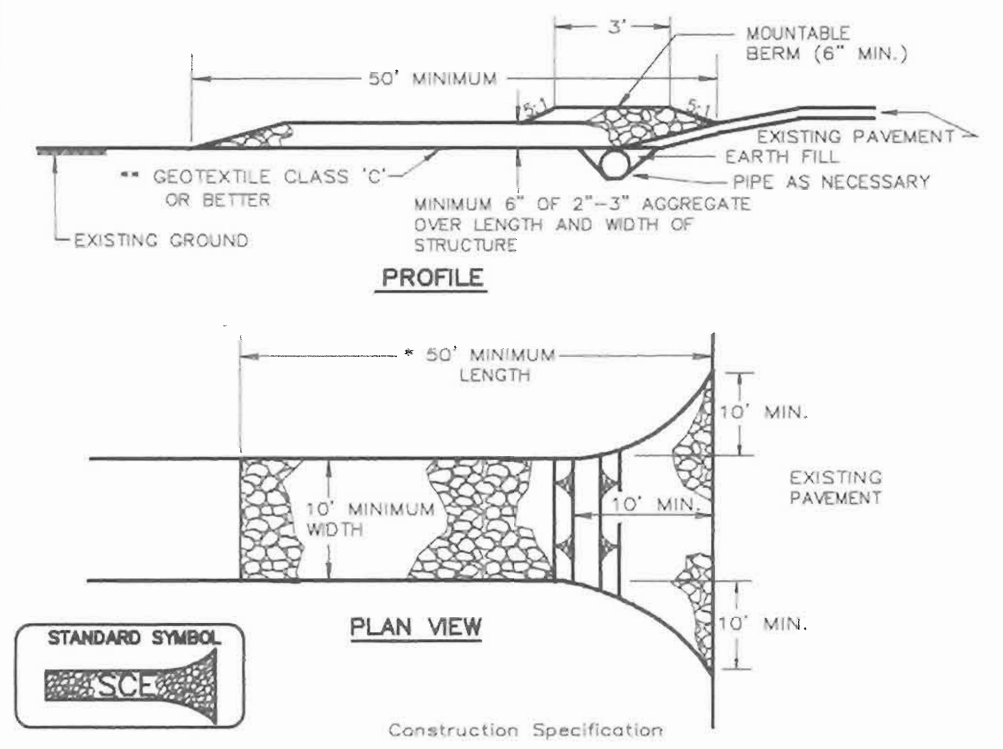
5. Filter cloth shall be embedded a minimum of 8" into the ground.

6. When two sections of geotextile fabric adjoin each other, they shall be overlapped by 6" and folded.

7. 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

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE H – 26 – 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 24 – STABILIZED CONSTRUCTION ENTRANCE



Construction Specification

1. Length – minimum of 50' (*30' for single residence lot).

2. Width – 10' minimum, should be flared at the existing road to provide a turning radius.

3. 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.

4. 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.

5. 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 mountable 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.

6. 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.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F – 17 – 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

30.0 – DUST CONTROL

DEFINITION

CONTROLLING DUST BLOWING AND MOVEMENT ON CONSTRUCTION SITES AND ROADS.

PURPOSE

TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCE ON AND OFF-SITE DAMAGE, HEALTH HAZARDS, AND IMPROVE TRAFFIC SAFETY.

CONDITIONS WHERE PRACTICE APPLIES

THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT.

SPECIFICATIONS

TEMPORARY METHODS

1. MULCHES – SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
2. VEGATATIVE COVER – SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.
3. TILLAGE – TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12" APART, SPRING-TOOTHED HARROWS, AND SIMILIAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
4. IRRIGATION – THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THAT RUNOFF BEGINS TO FLOW.
5. BARRIERS – SOLID BOARD FENCES, SILT FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL BLOWING.
6. CALCIUM CHLORIDE – APPLY AT RATES THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

PERMANENT METHODS

1. PERMANENT VEGETATION – SEE STANDARDS FOR PERMANENT VEGETATIVE COVER, AND PERMANENT STABILIZATION WITH SOD. EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.
2. TOPSOILING – COVERING WITH LESS EROSIVE SOIL MATERIALS. SEE STANDARDS FOR TOPSOILING.
3. STONE – COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

REFERENCES

1. AGRICULTURE HANDBOOK 346. WIND EROSION FORCES IN THE UNITED STATES AND THEIR USES IN PREDICTING SOIL LOSS.
2. AGRICULTURE INFORMATION BULLETIN 354. HOW TO CONTROL WIND EROSION, USDA-ARS.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE H – 30 – 1	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

21.0 STANDARD 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 VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES
I. THIS PRACTICE 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.

II. 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
I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT 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-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTATION STATION.

II. TOPSOIL SPECIFICATIONS – SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
-i. 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 TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1-1/2" IN DIAMETER.
-ii. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
-iii. WHERE 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.

III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
-i. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION – SECTION I – VEGETATIVE STABILIZATION METHODS AND MATERIALS.

IIII. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:
-i. ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING;
--a. 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 PRESCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
--b. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
--c. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
--d. 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.

NOTE: TOPSOIL SUBSTITUTES TO 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.

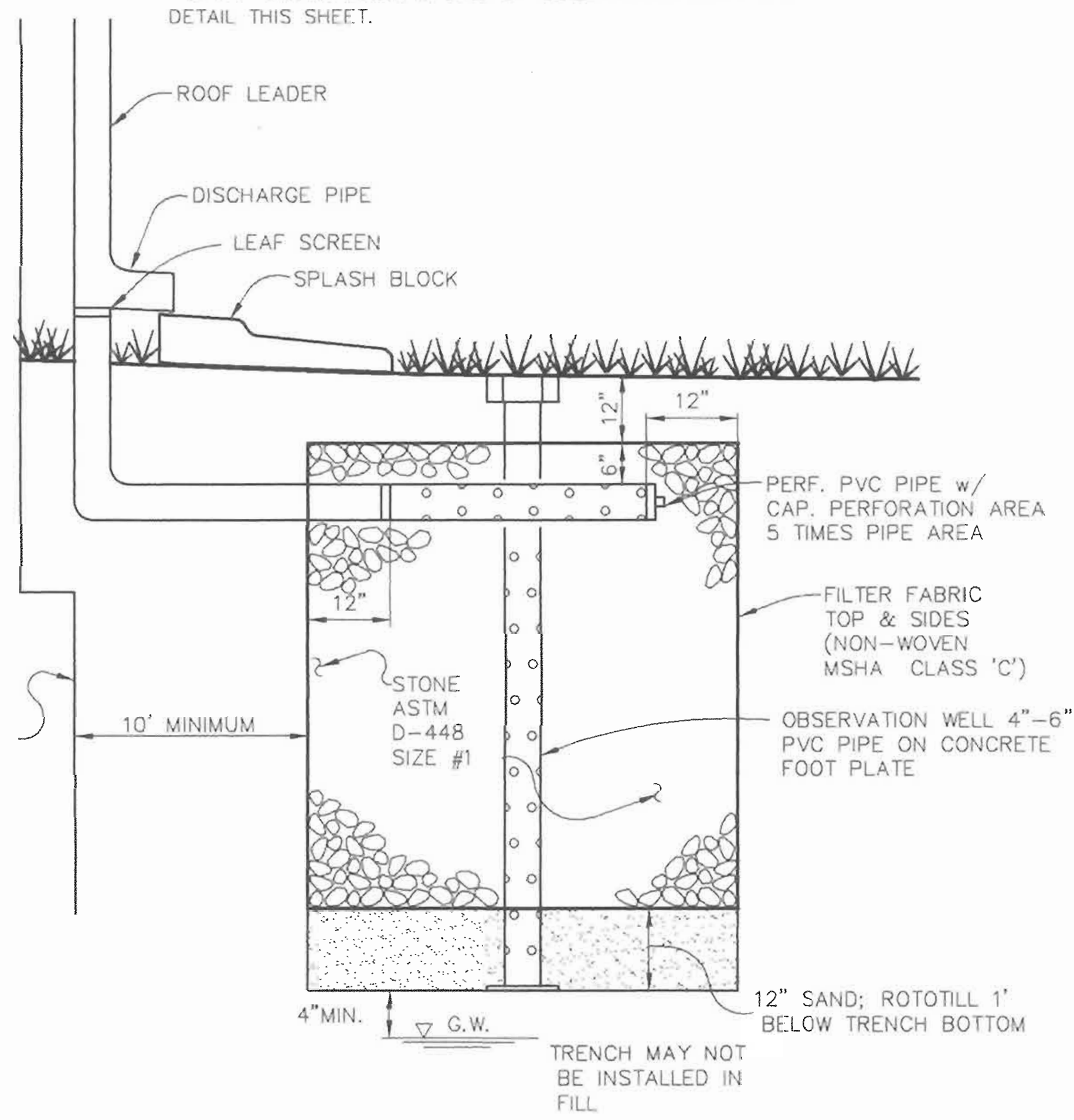
-ii. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION – SECTION I – VEGETATIVE STABILIZATION METHODS AND MATERIALS.

V. TOPSOIL APPLICATION
-i. 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.
-ii. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" – 8" HIGHER IN ELEVATION.
-iii. 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 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 SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
-iv. 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 SEEDBED PREPARATION.

VI. ALTERNATIVE FOR PERMANENT SEEDING – INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:
-i. COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITE 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.
--b. 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.
--c. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.
--d. 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. REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.

DRYWELL#	SIZE	TOP OF STONE ELEV.	BOTTOM OF DRYWELL STONE
1	5' DIA.,4.5' DEEP	90.5	86.0
2	6' DIA.,3.5' DEEP	90.5	87.0
3 *	6.5' DIA.,6' DEEP	101.0	95.0
4	5' DIA.,4.25' DEEP	103.5	99.25

* USE 24" CATCH BASIN IN LIEU OF OBSERVATION WELL. SEE DETAIL THIS SHEET.



DRYWELL #1, #2, & #4 DETAIL
NO SCALE

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION : LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS : APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS. PER 1000 SQ.FT.).

SEEDING : FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 LBS. PER 1000 SQ.FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (0.07 LBS. PER 1000 SQ.FT.). FOR THE PERIOD NOVEMBER 16 THRU 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. PER 1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL. PER ACRE (5 GAL. PER 1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT. OR HIGHER, USE 347 GAL. PER ACRE (8 GAL. PER 1000 SQ.FT.) FOR ANCHORING.

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

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION : LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING 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) PREFERRED – APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS. PER 1000 SQ.FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS. PER 1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS. PER 1000 SQ.FT.).

2) ACCEPTABLE – APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS. PER 1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS. PER 1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING : FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (0.05 LBS. PER 1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY ONE OF THE FOLLOWING OPTIONS :

1) 2 TONS PER ACRE OF WELL-ANCHORED MULCH STRAW AND SEED AS SOON AS POSSIBLE IN THE SPRING.

2) USE SOD.

3) SEED WITH 60 LBS. PER ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE WELL ANCHORED STRAW.

MULCHING : APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS. PER 1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL. PER ACRE (5 GAL. PER 1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT. OR HIGHER, USE 347 GAL. PER ACRE (8 GAL. PER 1000 SQ.FT.) FOR ANCHORING.

MAINTENANCE : INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

DRY WELL NOTES

3.4.6. 2. Dry Well Preparation

Excavate the dry well to the design dimensions. Excavated materials shall be placed away from the excavated sides to enhance wall stability. Large tree roots shall be trimmed flush with the sides in order to prevent fabric puncturing or tearing during subsequent installation procedures. The side walls of the dry well shall be roughened where sheared and sealed by heavy equipment.

3.4.6.3. Fabric Laydown

The filter fabric roll shall be cut to the proper width prior to installation. The cut width must include sufficient material to conform to well perimeter irregularities and for a 6-inch minimum top overlap. Place the fabric roll over the well and unroll a sufficient length to allow placement of the fabric down into the well. Stones or other anchoring objects should be placed on the fabric at the edge of the well to keep the lined well open during windy periods. When overlaps are required between rolls, the upstream roll shall lap a minimum of 2 feet over the downstream roll in order to provide a shingled effect. The overlap ensures fabric continuity or the fabric conforms to the excavation surface during aggregate placement and compaction.

3.4.6.4. Aggregate Placement and Compaction

Drainage aggregate shall be placed in lifts and compacted using plate compactors. As a rule of thumb, a maximum loose lift thickness of 12 inches is recommended. The compaction process ensures fabric conformity to the excavation sides, thereby reducing the potential for soil piping and fabric clogging.

3.4.6.5. Overlapping and covering

Following aggregate placement, the fabric previously weighted by stones should be folded over the aggregate to form a 6" minimum longitudinal lap. The desired fill soil should be placed over the lap at sufficient intervals to maintain the lap during subsequent backfilling.

3.4.6.6. Contamination

Care shall be exercised to prevent natural or fill soils from intermixing with the drainage aggregate. All contaminated aggregate shall be removed and replaced with uncontaminated aggregate.

3.4.6.7. Voids Behind Fabric

Voids can be created between the fabric and excavation sides and should be avoided. Removing boulders or other obstacles from the trench walls is one source of such voids. Natural soils should be placed in these voids at the most convenient time during construction to ensure fabric conformity to the excavation sides. Soil piping, fabric clogging, and possible surface subsidence will be avoided by this remedial process.

3.4.6.8. Unstable Excavation Sides

Vertically excavated trench walls may be difficult to maintain in areas where the soil moisture is high or where soft cohesive or cohesionless soils predominate. These conditions may require laying back of the side slopes to maintain stability; trapezoidal rather than rectangular cross sections may result.

3.4.6.9 Foundation Protection

Dry wells 3 or more feet deep shall be located at least 10 feet down gradient from foundation walls.

3.4.6.10. Observation Well

An observation well, as described in subsection 3.4.4.8 and Figure 3-5, subsection 3.4.4.8 and Figure 3-5, will be provided. The depth of the well, at the time of installation, will be clearly marked on the well cap.

3.4.7. Maintenance

Dry wells shall be designed to minimize maintenance. However, it is recognized that all infiltration facilities are subject to clogging by sediment, oil, grease, grit and other debris. In addition, the performance and longevity of these structures is not well documented. Consequently, a monitoring observation well is required for all infiltration structures.

The observation well should be monitored periodically. For the first year after completion of construction, the well should be monitored on a quarterly basis and after every large storm. It is recommended that a log book be maintained indicating the rate at which the facility dewaters after large storms and the depth of the well for each observation. Once the performance characteristics of the structure have been verified, the monitoring schedule can be reduced to an annual basis, unless the performance data indicate that a more frequent schedule is required.

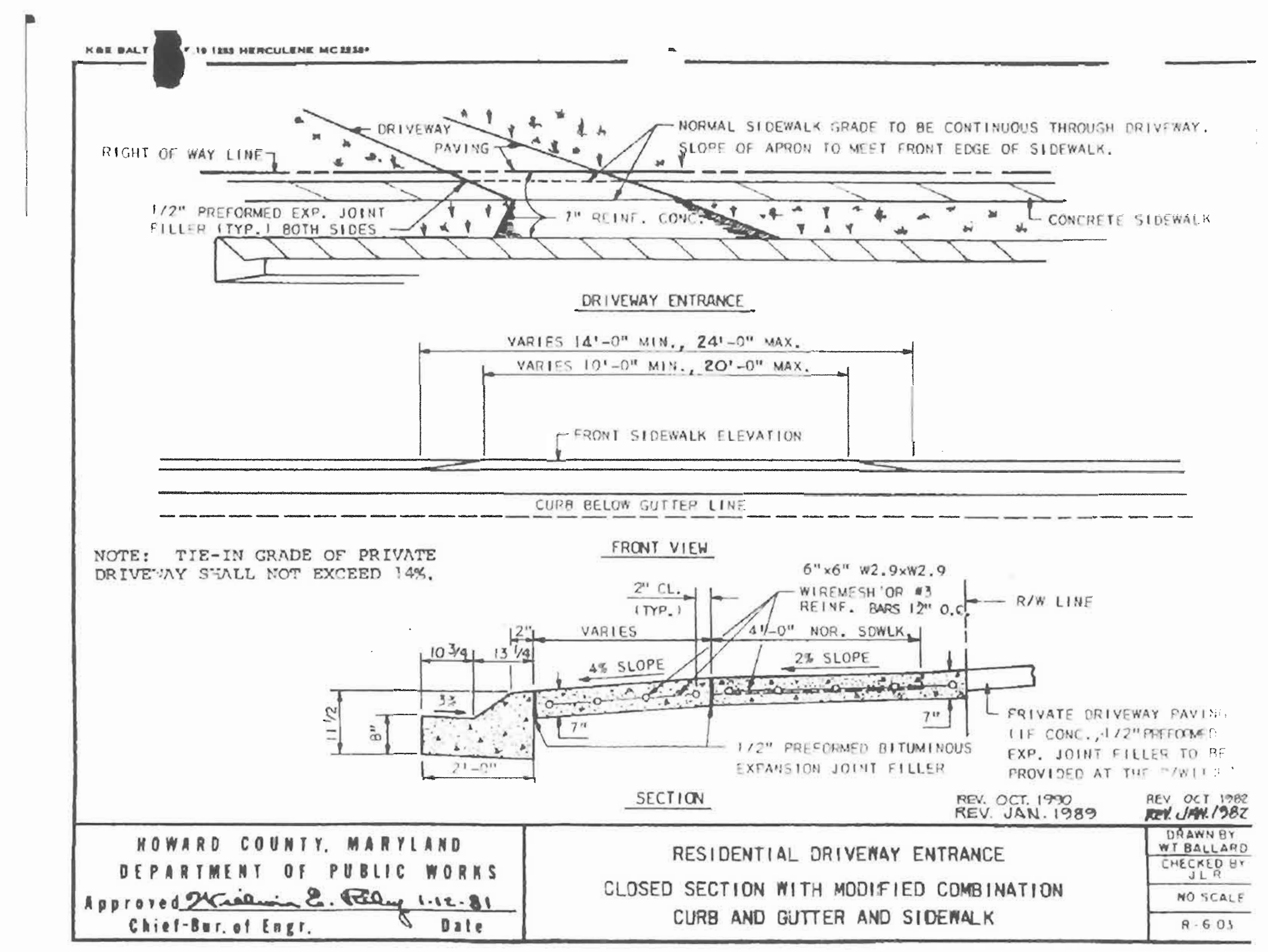
STANDARD SEDIMENT CONTROL NOTES

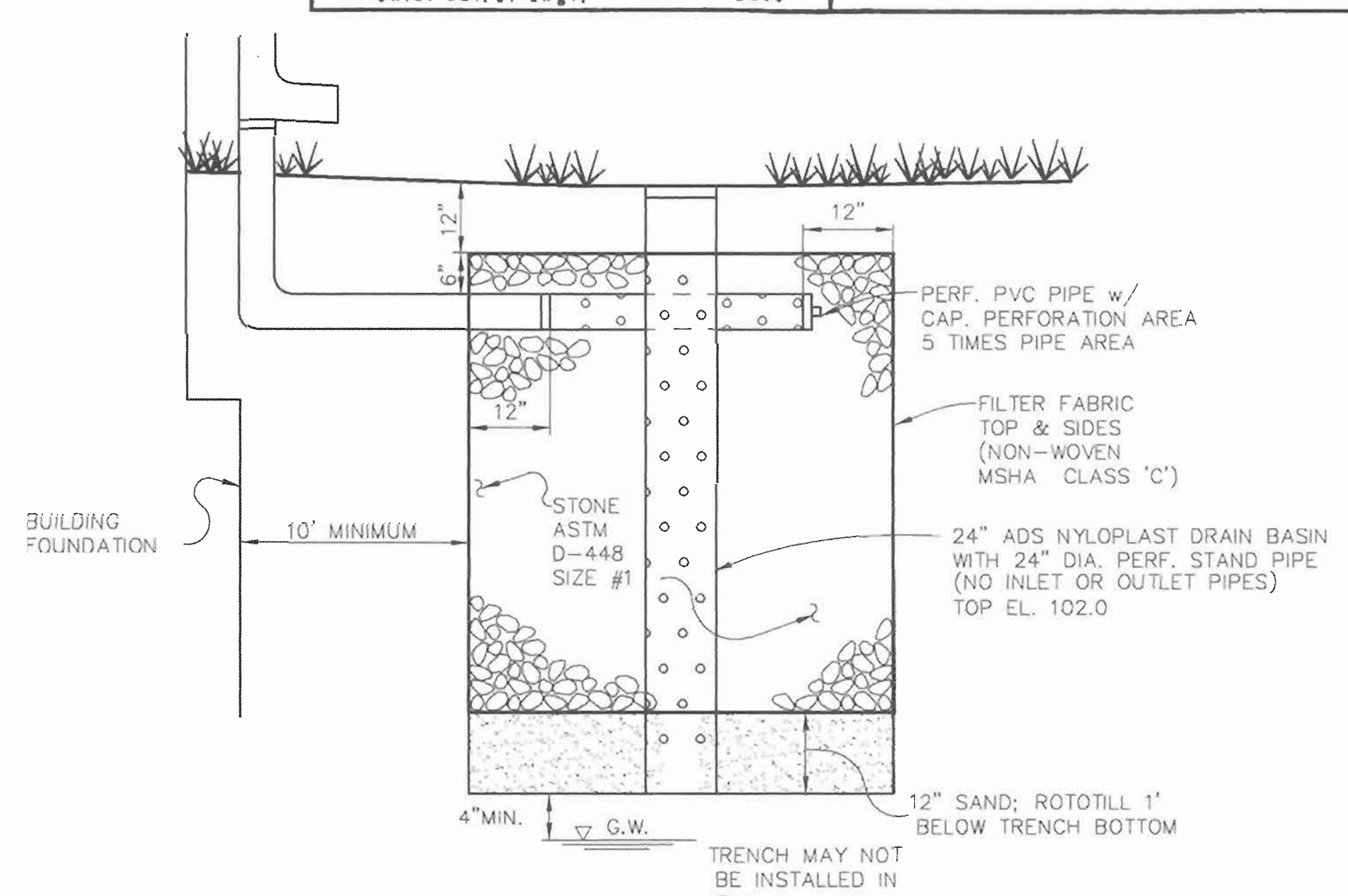
1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
3. 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, DIKES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5. 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, SOD, TEMPORARY SEEDING, AND MULCHING (SEC. G.). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHED OF GRASSES.
6. 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	0.56 ACRES
AREA DISTURBED	0.21 ACRES
AREA TO BE ROOFED OR PAVED	0.05 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.16 ACRES
TOTAL CUT	16 CU. YARDS
TOTAL FILL	670 CU. YARDS

OFFSITE WASTE AREA LOCATION TO HAVE ACTIVE GRADING PERMIT

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 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.
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.
12. SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
13. SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
14. CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH MAY AFFECT THE WORK.





DRYWELL #3 DETAIL
NO SCALE

BY THE DEVELOPER :

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

[signature] 4/30/05
DEVELOPER DATE

BY THE ENGINEER :

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] 12.20.04
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

Jim Myers 5/5/05
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R Robertson 5/5/05
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

[signature] 5/23/05
DIRECTOR DATE

[signature] 5/17/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[signature] 5/20/05
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE	NO.	REVISION

OWNER / DEVELOPER

CARLTON E. CHASE & HANS ORTHNER
835 COACHWAY
ANNAPOLIS, MARYLAND 21401

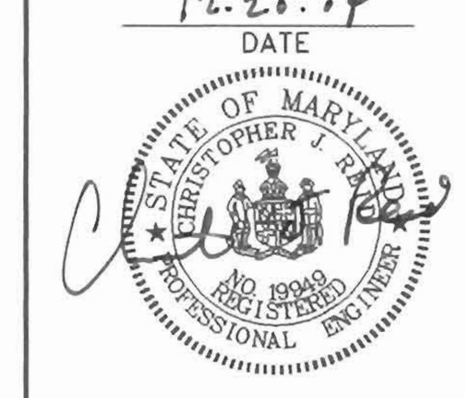
PROJECT
CHASE/ORTHNER PROPERTY
FIRST (WESTERN) PART

AREA
TAX MAP 38, ZONED R-12
PARCEL P/O 683, FIRST (WESTERN) PART L.6187 F.001
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
NOTES AND DETAILS

Patton Harris Rust & Associates,pc
Engineers. Surveyors. Planners. Landscape Architects.
PHR+A
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

12.20.04
DATE



CHRISTOPHER J. REID #19949

DESIGNED BY : C.J.R.
DRAWN BY: MAD
PROJECT NO : 11946-2-0/ENGR/PLANS/ C900DET
DATE : DECEMBER 22, 2004
SCALE : 1" = 20'
DRAWING NO. 3 OF 4

SDP-04-143

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LEGEND

EX. TREELINE

PROP. TREELINE

PROPERTY LINE

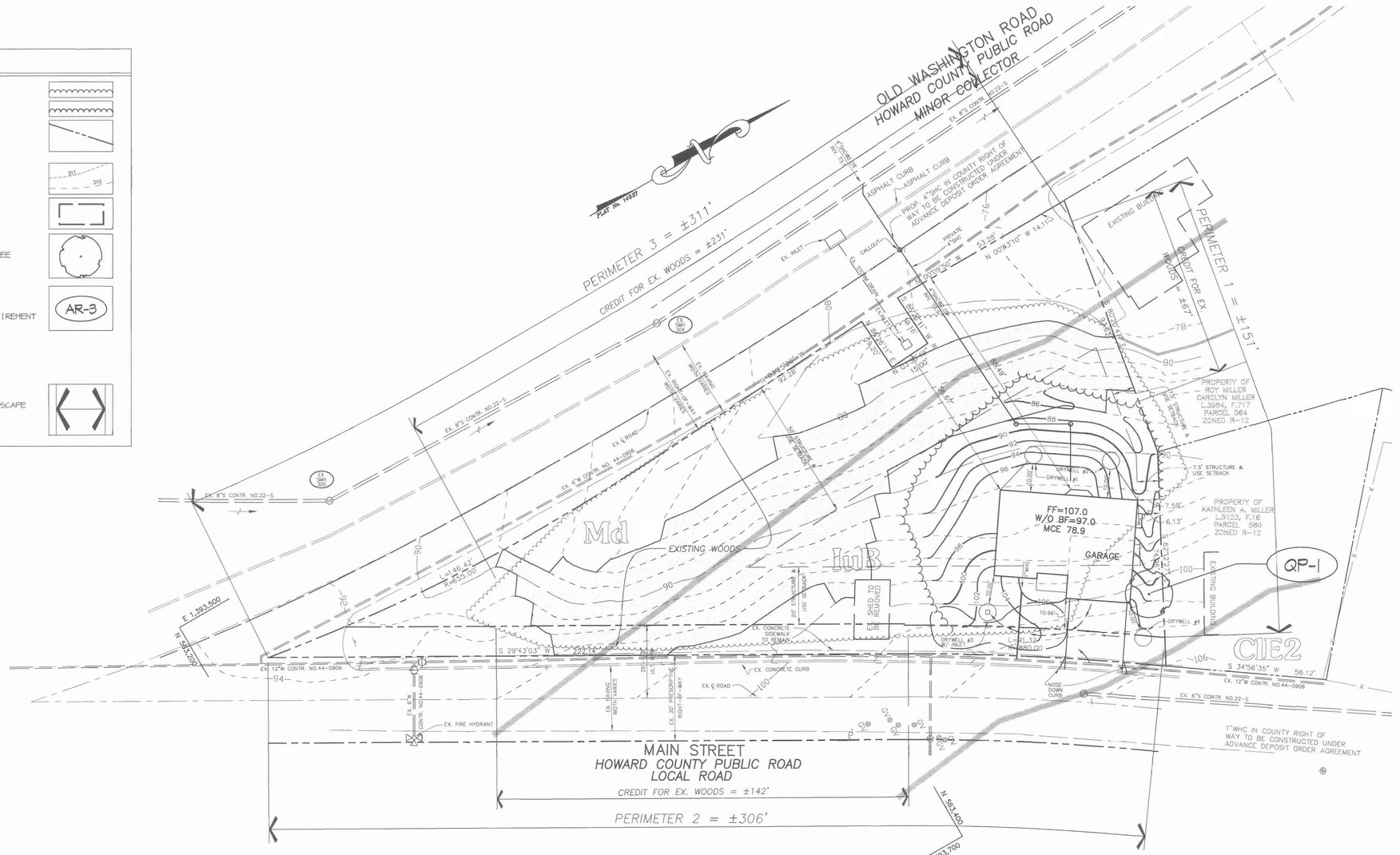
CONTOUR LINES (311 / 310)

EX. BUILDING

PROP. SHADE TREE

PERIMETER LANDSCAPE REQUIREMENT (AR-3)

PERIMETER LANDSCAPE EDGE LIMITS



PLANT LIST

SYMBOL	QTY.	SCIENTIFIC / COMMON NAME	SIZE	ROOT	SPACING
QP	1	Quercus phellos Willow Oak	2-1/2"- 3" CAL	B&B	PLANT AS SHOWN

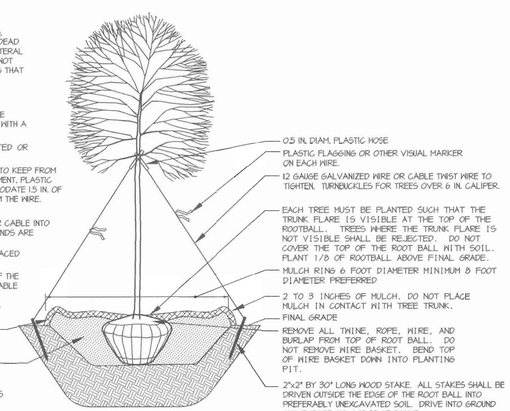
SCHEDULE A - PERIMETER LANDSCAPE EDGE

	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO ROADWAYS	
PERIMETER	1	2	3
LANDSCAPE TYPE	A	NONE	B
LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	±151'	±306'	±311'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	YES ±67'	YES ±142'	YES ±231'
CREDIT FOR WALL, FENCE, BERM OR DRIVE AISLE (YES/NO/LINEAR FEET)	NO -	YES ±20'	NO -
LINEAR FEET REMAINING	±84'	±85'*	0*
NUMBER OF PLANTS REQUIRED SHADE TREES EVERGREEN TREES SHRUBS	 1 - -	 - - -	 - - -
NUMBER OF PLANTS TO BE PROVIDED SHADE TREES EVERGREEN TREES SMALL FLOWERING TREES SHRUBS	 1 - - -	 - - - -	 - - - -

* NO LANDSCAPING PROVIDED FOR SOUTHERN TIP OF PROPERTY WHERE TWO ROADS COME TOGETHER

NOTES:

1. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED, HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
2. STAKE TREES AS SHOWN.
3. DIG PLANTING PIT TWICE AS WIDE AS THE DIAMETER OF THE TOP OF THE ROOT BALL WITH A MINIMUM PLANTING PIT DIAMETER OF 5'.
4. PLACE ROOT BALL ON UNEXCAVATED OR COMPACTED SOIL.
5. TIGHTEN WIRE OR CABLE ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. PLASTIC HOSE SHALL BE LONG ENOUGH TO ACCOMMODATE 1.5 IN. OF GROWTH AND BUFFER ALL BRANCHES FROM THE WIRE.
6. TUCK ANY LOOSE ENDS OF THE WIRE OR CABLE INTO THE WIRE WRAP SO THAT NO SHARP WIRE ENDS ARE EXPOSED.
7. INSTALL THREE GUY WIRES PER TREE, SPACED EVENLY AROUND THE TRUNK.
8. ASSURE THAT THE BEARING SURFACE OF THE PROTECTIVE COVERING OF THE WIRE OR CABLE AGAINST THE TREE TRUNK IS A MINIMUM OF 0.5 IN. REMOVE STAKES AFTER ONE YEAR.



DECIDUOUS B&B TREE PLANTING DETAIL (TREES 3" CAL. OR LARGER)
NOT TO SCALE

GENERAL NOTES:

1) THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
2) FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE POSTED AS PART OF THE **BUILDER'S GRADING PERMIT** IN THE AMOUNT OF $300.00
   1 SHADE TREE @ $300 = $300
   0 ORNAMENTAL TREES @ $150 = 0
   0 EVERGREEN TREES @ $150 = 0
   0 SHRUBS @ $30 = 0
3) THIS PLAN IS FOR LANDSCAPING PURPOSES ONLY.
4) CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
5) ALL MATERIAL SELECTED SHALL BE EQUAL TO OR BETTER THAN THE REQUIREMENTS OF THE "USA STANDARD FOR NURSERY STOCK", LATEST EDITION, AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
6) ALL MATERIAL SHALL BE PLANTED IN ACCORDANCE WITH THE MINIMUM STANDARDS CITED IN THE LATEST EDITION OF "LANDSCAPE SPECIFICATION GUIDELINES" PUBLISHED BY THE LANDSCAPE CONTRACTORS ASSOCIATION.
7) AT THE TIME OF INSTALLATION, ALL SHRUBS AND OTHER PLANTINGS SHALL BE OF THE PROPER HEIGHT AND/OR SPREAD REQUIREMENTS IN ACCORDANCE WITH THIS PLAN AND THE HOWARD COUNTY LANDSCAPE MANUAL.
8) NO SUBSTITUTIONS OR RELOCATION OF PLANTS MAY BE MADE WITHOUT PRIOR APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING OF HOWARD COUNTY. ANY DEVIATION FROM THIS LANDSCAPE PLAN MAY RESULT IN A REQUIREMENT FOR SUBMITTAL OF AN OFFICIAL "REDLINE REVISION" TO THE SITE DEVELOPMENT PLAN(S) AND/OR DENIAL IN THE RELEASE OF LANDSCAPE SURETY.

DEVELOPER'S/BUILDER'S 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 YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

SIGNATURE — DATE 4/30/05

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 5/12/05

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/17/05

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 5/12/05

DATE	NO.	REVISION

OWNER / DEVELOPER

CARLTON E. CHASE & HANS ORTHNER
835 COACHWAY
ANNAPOLIS, MARYLAND 21401

PROJECT
CHASE/ORTHNER PROPERTY
FIRST (WESTERN) PART

AREA TAX MAP 38, ZONED R-12
PARCEL P/O 683, FIRST (WESTERN) PART L.6187 F.001
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
LANDSCAPE PLAN

Patton Harris Rust & Associates, pc
Engineers. Surveyors. Planners. Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

4.29.05
DATE

STATE OF MARYLAND — SCOTT R. WOLFORD — No. 797 — MEMBER OF AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS

SCOTT R. WOLFORD #797

DESIGNED BY :	
DRAWN BY:	MAD
PROJECT NO	11946-2-0/ENGR/PLANS/L200LSCP
DATE :	DECEMBER 22, 2004
SCALE :	1" = 20'
DRAWING NO.	4 OF 4

SDP-04-143

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