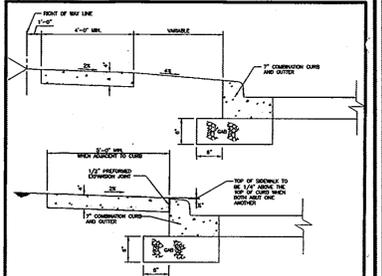


LEGEND:

---	EXISTING CONTOUR
---	PROPOSED CONTOUR
+	PROPOSED SPOT ELEVATION
---	EXISTING CURB AND GUTTER
---	PROPOSED CURB AND GUTTER
---	EXISTING LIGHT POLE WITH CONCRETE BASE
---	EXISTING SIGN
---	EXISTING SANITARY MANHOLE
---	EXISTING SANITARY LINE
---	EXISTING CLEANOUT
---	EXISTING FIRE HYDRANT
---	EXISTING WATER LINE
---	PROPOSED STORM DRAIN
---	PROPOSED STORM DRAIN INLET
---	EXISTING FENCE
---	PROPERTY LINE
---	RIGHT-OF-WAY LINE
---	SOILS BOUNDARY
---	PROPOSED SIDEWALK
---	20' DRAINAGE AND UTILITY EASEMENT
---	PROPOSED STREET LIGHT
---	EXISTING TREES TO BE REMOVED
---	EXISTING TREE LINE
---	PROPOSED TREE LINE
---	TYPICAL 3FT STRIPING SECTION WITH 24 INCH COLUMN

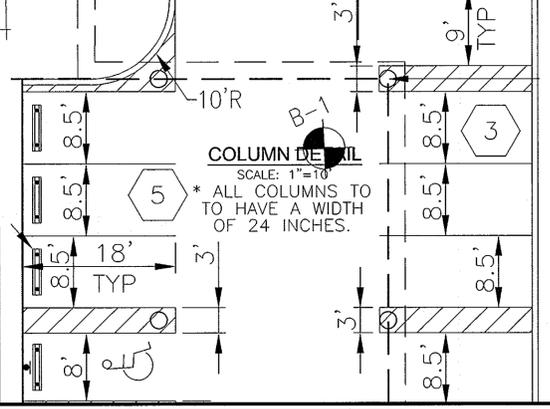


NOTES:

1. SIDEWALK TO BE STRIPPED IN 2'-0" WADIAN STRIPES.
2. CONCRETE SIDEWALK SHOULD BE STRIPPED WITH TO BE MORE THAN 1/4" DEPTH.
3. 1/4" STRIPPED SIDEWALK IN CONCRETE SHOULD BE MORE THAN 1/4" DEPTH.
4. CONCRETE TO BE STRIPPED.
5. STRIP SIDEWALK CURB SHOULD BE 1/4" ABOVE CURB WITH 1/2" PROTRUSION EXPOSED AND BEHIND SIDEWALK AND CURB.
6. ON CONCRETE SIDEWALK STRIPES OF 24 INCHES, A CONCRETE STRIPER OF 24 INCHES SHOULD BE USED TO STRIP THE STRIPES. STRIPING SHOULD BE CHECKED FOR THE STRIPES. STRIPES SHOULD BE STRIPPED TO THE STRIPES.
7. SIDEWALK WITH STRIPES TO CURB SHOULD BE 2'-0" WADIAN STRIPES ADJACENT TO CURB IN 24 INCH STRIPES WITH 24 INCH COLUMN.
8. SIDEWALK LOCATED 2' OR MORE FROM CURB MAY BE 4'-0" IN WIDTH WITH A 24 INCH STRIPING STRIPES STRIP.
9. 4'-0" SIDEWALK REQUIRES A PAVED AREA ONE (ONE) FEET (1'-0").

Howard County, Maryland	Concrete Sidewalk	Detail
Department of Public Works		R-3.05

EX. WHC ABANDONMENT NOTE:
 THE ABANDONMENT OF THE EXISTING 3" WATER TO FOLLOW VOLUME IV REQUIREMENTS FOR CLOSING THE VALVE, CUTTING AND CAPPING THE 3" WATER BEHIND THE VALVE, AND REMOVAL OF THE ROADWAY BOX.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 10/16/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 10/20/08
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 10/20/08
 DIRECTOR

APPROVED
 PLANNING AND ZONING
 DEPARTMENT OF HOWARD COUNTY

DATE: April 10, 2008

ACTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA ROADING RATIO (CRR)			
		3 TO 4	4 TO 5	5 TO 6	6 TO 7
P-1	PARKING LOT	1.5	1.5	1.5	1.5
	PARKING LOT WITH SIDEWALK	2.0	2.0	2.0	2.0
	PARKING LOT WITH SIDEWALK AND BIKEWAY	2.5	2.5	2.5	2.5
P-2	PARKING LOT WITH SIDEWALK AND BIKEWAY	2.5	2.5	2.5	2.5
	PARKING LOT WITH SIDEWALK AND BIKEWAY AND BIKEWAY	3.0	3.0	3.0	3.0
	PARKING LOT WITH SIDEWALK AND BIKEWAY AND BIKEWAY AND BIKEWAY	3.5	3.5	3.5	3.5
P-3	PARKING LOT WITH SIDEWALK AND BIKEWAY AND BIKEWAY AND BIKEWAY	3.5	3.5	3.5	3.5
	PARKING LOT WITH SIDEWALK AND BIKEWAY AND BIKEWAY AND BIKEWAY AND BIKEWAY	4.0	4.0	4.0	4.0
	PARKING LOT WITH SIDEWALK AND BIKEWAY AND BIKEWAY AND BIKEWAY AND BIKEWAY AND BIKEWAY	4.5	4.5	4.5	4.5
P-4	PARKING LOT WITH SIDEWALK AND BIKEWAY AND BIKEWAY AND BIKEWAY AND BIKEWAY AND BIKEWAY	4.5	4.5	4.5	4.5
	PARKING LOT WITH SIDEWALK AND BIKEWAY AND BIKEWAY AND BIKEWAY AND BIKEWAY AND BIKEWAY AND BIKEWAY	5.0	5.0	5.0	5.0
	PARKING LOT WITH SIDEWALK AND BIKEWAY	5.5	5.5	5.5	5.5

OWNER
 TAYLOR FAMILY LP A
 4100 COLLEGE AVENUE
 ELLICOTT CITY, MD 21041
 (410) 465-3500

DEVELOPER
 LAND DESIGN AND DEVELOPMENT
 MR. DONALD REUWER
 5300 DORSEY HALL DR.
 ELLICOTT CITY, MD 21042
 (443) 367-0422

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

[Signature] 10/20/08
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT

**SITE DEVELOPMENT PLAN
 SITE LAYOUT PLAN;
 AND DEMOLITION PLAN
 RIVERS CORPORATE PARK
 RIVERS OVERLOOK**

10000 OLD COLUMBIA RD
 OFFICE BUILDING
 SECTION 1 / AREA 1

TAX MAP 42 BLOCK 8
 6TH ELECTION DISTRICT

PARCEL 322, LOT F-2
 L 10805 / F 478
 HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL
 ENGINEERING, INC.**

ENGINEERS • SURVEYORS • PLANNERS

8407 MAIN STREET
 ELLICOTT CITY, MD 21043

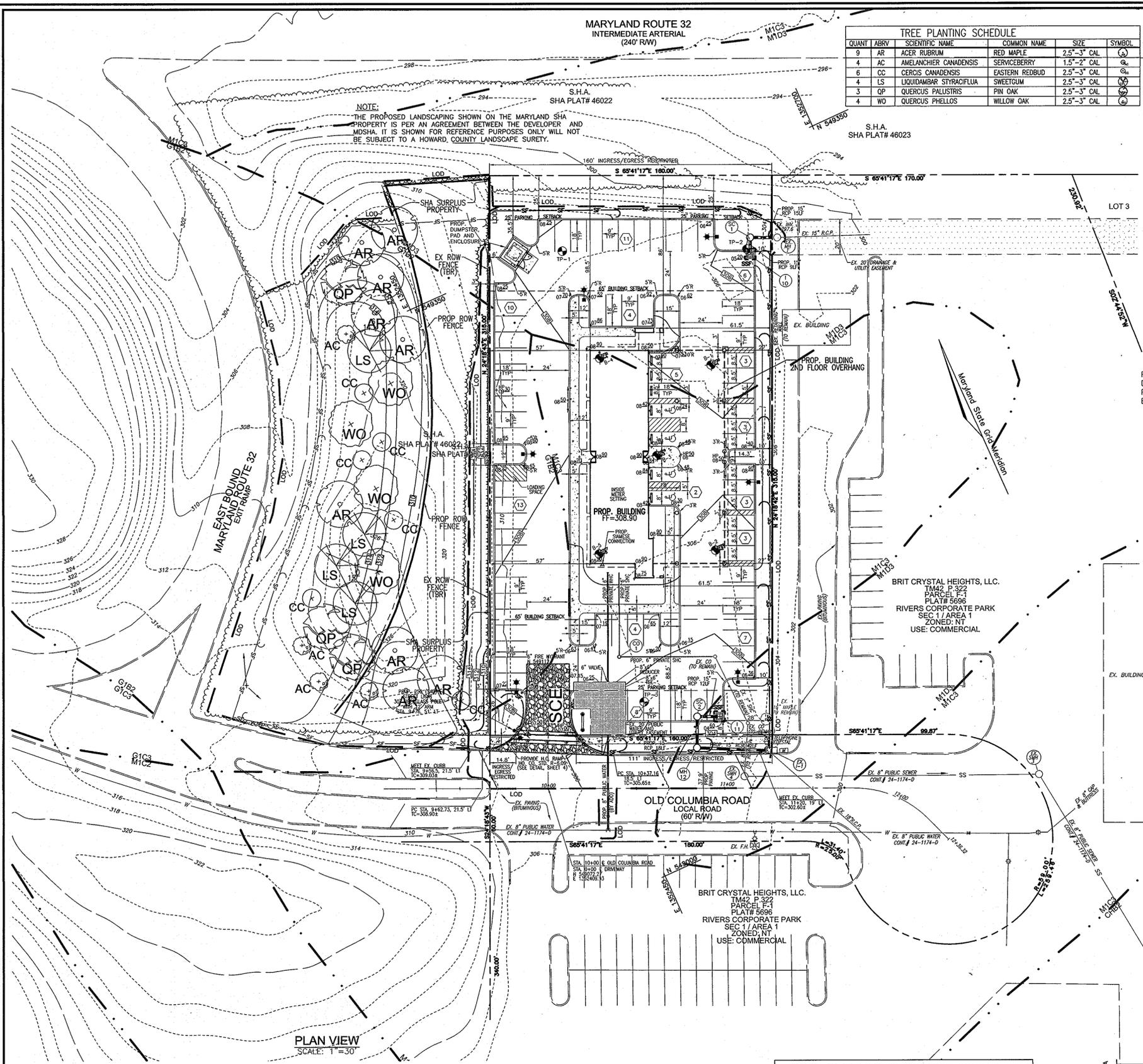
TEL: 410.461.7666
 FAX: 410.461.8961

PROFESSIONAL CERTIFICATE

DESIGN BY: RHV
 CHECKED BY: JMR
 DATE: OCTOBER 2008
 SCALE: AS SHOWN
 W.O. NO.: 06-58

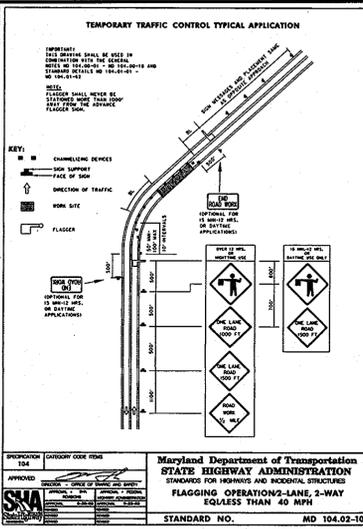
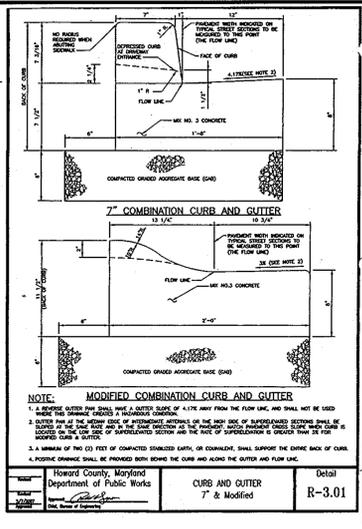
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE 09-27-2016.

2 SHEET OF 6



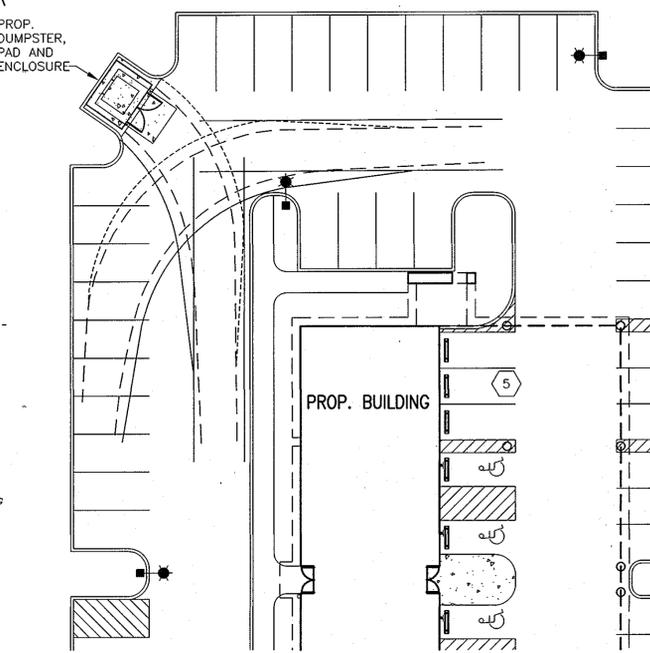
TREE PLANTING SCHEDULE

QUANT	ABRV	SCIENTIFIC NAME	COMMON NAME	SIZE	SYMBOL
9	AR	ACER RUBRUM	RED MAPLE	2.5"-3" CAL	(A)
4	AC	AMELANCHIER CANADENSIS	SERVICEBERRY	1.5"-2" CAL	(C)
6	CC	CERCIS CANADENSIS	EASTERN REDBUD	2.5"-3" CAL	(O)
4	LS	LIQUIDAMBAR STRYACIFLUA	SWEETGUM	2.5"-3" CAL	(S)
3	QP	QUERCUS PALUSTRIS	PIN OAK	2.5"-3" CAL	(Q)
4	WO	QUERCUS PHELLOS	WILLOW OAK	2.5"-3" CAL	(W)



LEGEND:

	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING SPOT ELEVATION
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN INLET
	PROPOSED TREE LINE
	EXISTING TREE LINE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	SOILS BOUNDARY
	PROPOSED SIDEWALK
	SILT FENCE
	SUPER SILT FENCE
	LIMIT OF DISTURBANCE
	20' DRAINAGE AND ENTRANCE
	STABILIZED CONSTRUCTION UTILITY EASEMENT
	PROPOSED STREET LIGHT
	TEST PIT BORING LOCATION



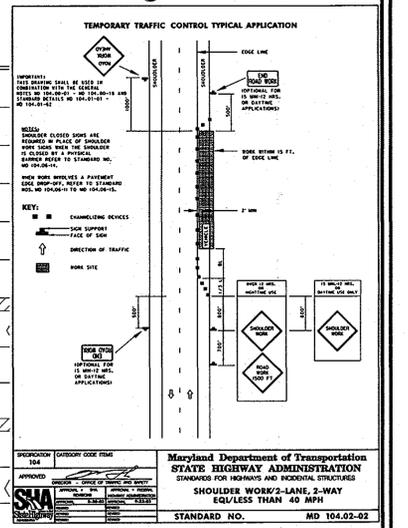
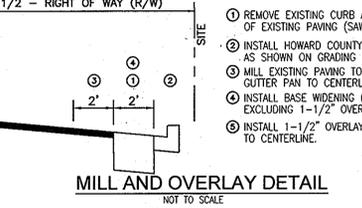
***TRASH COLLECTION NOTE**
ALL TRASH COLLECTION TO BE DONE AFTER WORK HOURS

TRASH TRUCK TURNING RADIUS DETAIL
SCALE: 1"=20'

APPROVED PLANNING BOARD of HOWARD COUNTY
DATE: April 10, 2008

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP
CHB2	CHESTER SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
CO	COBORUS SILT LOAM	C
G1B2	GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
G1C3	GLENELG LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
M1C2	MANOR LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
M1C3	MANOR LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
M1D3	MANOR LOAM, 15 TO 25 PERCENT SLOPES, SEVERELY ERODED	B



REPLACEMENT SHEET

OWNER: TAYLOR FAMILY LP A
4100 COLLEGE AVENUE
ELLICOTT CITY, MD 21041
(410) 465-3500

DEVELOPER: LAND DESIGN AND DEVELOPMENT
MR. DONALD RUEWER
5300 DOORSEY HALL DR.
ELLICOTT CITY, MD 21042
(443) 367-0422

NO.	ADD OFFSITE GRADING	REVISION	DATE
1	ADD OFFSITE GRADING		4/12/12

REVISED SITE DEVELOPMENT PLAN
SITE GRADING, SEDIMENT AND EROSION CONTROL PLAN
RIVERS CORPORATE PARK RIVERS OVERLOOK
10000 OLD COLUMBIA RD
OFFICE BUILDING
SECTION 1/AREA 1
PARCEL 322, LOT F-2
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELLICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

DESIGN BY: RHV
DRAWN BY: JR/HS
CHECKED BY: RHV
DATE: FEBRUARY, 2012
SCALE: AS SHOWN
W.O. NO.: 06-58

PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A duly LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
EXPIRATION DATE: 09-27-2012

3 SHEET OF 6

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chris Pannunzi 5/14/12
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE

David M. Leightner 5/21/12
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE

David M. Leightner 5/21/12
DIRECTOR
DATE

BY THE DEVELOPER:

John R. ... 4/27/12
SIGNATURE OF DEVELOPER
DATE

BY THE ENGINEER:

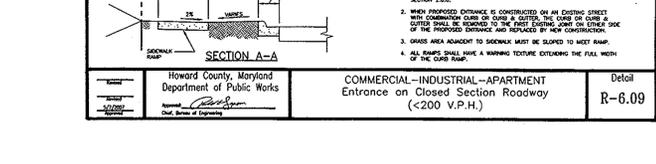
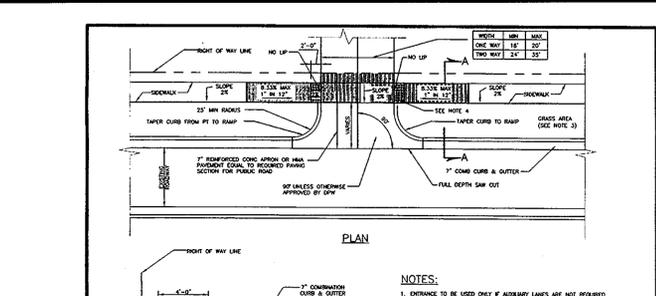
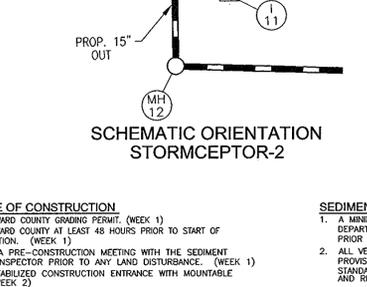
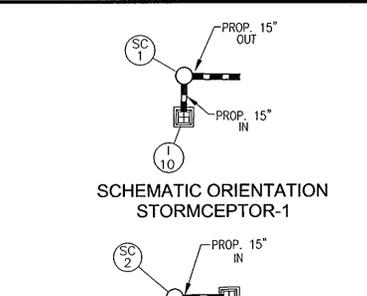
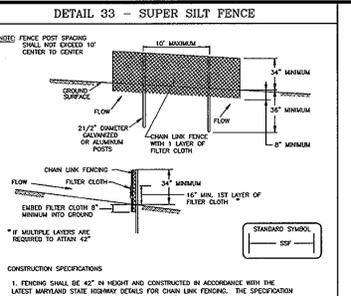
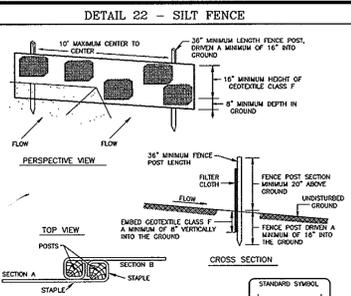
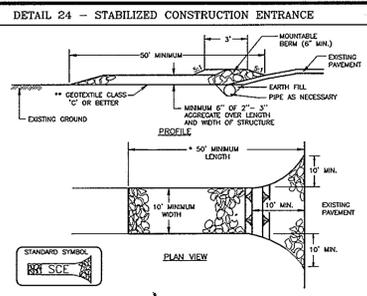
John R. ... 4/27/12
SIGNATURE OF ENGINEER
DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

John R. ... 5/16/2012
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT
DATE

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

John R. ... 5/16/12
HOWARD S.C.D.
DATE



CONSTRUCTION SPECIFICATION

- LENGTH - MINIMUM OF 50' (30' FOR A 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 FABRIC.
- STONE - COARSE AGGREGATE (2\"/>

CONSTRUCTION SPECIFICATIONS

- FENCE POSTS SHALL BE A MINIMUM OF 3\"/>

CONSTRUCTION SPECIFICATIONS

- CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES. THE LOWER TENDON WIRE, BRACE AND TRESS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT REQUIRED TO BE ON THE TOP OF THE POSTS.
- FILTER CLOTH SHALL BE FASTENED TO THE CHAIN LINK FENCE WITH SPACED EVERY 24\"/>

CONSTRUCTION SPECIFICATIONS

- FENCING SHALL BE 42\"/>

NOTES:

- STORMCEPTOR SHALL BE USED ONLY IF ADJACENT LINES ARE NOT REQUIRED TO BE CLOSED OFF WITH SIGNAGE. SEE SECTION 2.1.1.1 AND 2.1.1.2.
- WHEN PROPOSED DISTANCE IS CONSIDERED ON AN EXISTING STREET, THE DISTANCE SHALL BE MEASURED TO THE EAST ENDING CURB ON EITHER SIDE OF THE PROPOSED DISTANCE. DISTANCES SHALL BE MEASURED TO THE CENTER OF THE CURB LINE.
- GRASS AREA SHOULD BE MAINTAINED TO REMAIN TO KEEP STORMCEPTOR CLEAR.
- ALL BASES SHALL HAVE A WARNING TEXTURE EXCEEDING THE FULL WIDTH OF THE CURB LINE.

PERMANENT SEEDING NOTES

APPLY TO GRASS OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHEN A PERMANENT LONG-LEAF 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: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED: APPLY 2 TONS/ACRE DOLOMITE LIMESTONE (92 IBS/1000 SQ. FT.) AND 600 IBS/ACRE 10-10-10 FERTILIZER (14 IBS/1000 SQ. FT.) BEFORE SEEDING.
- ACCEPTABLE: APPLY 2 TONS/ACRE DOLOMITE LIMESTONE (92 IBS/1000 SQ. FT.) AND 1000 IBS/ACRE 10-10-10 FERTILIZER (2 IBS/1000 SQ. FT.) BEFORE SEEDING.
- SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 IBS/ACRE (1.4 IBS/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 IBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 IBS/ACRE (0.5 IBS/1000 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS/ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING.
- OPTION 2: USE SOU.
- OPTION 3: SEED WITH 60 IBS/ACRE KENTUCKY 30 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 IBS/1000 SQ. FT.) OF UNROTATED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPE 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

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

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 VEGETATIVE GROWTH.

CONDITIONS WHERE PRACTICE APPLIES

- AREAS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
 - THE DISTURBANCE OF PARENT MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEPER THAN 18\"/>
- AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL APPROVAL AND DESIGN FOR ABSOLUTE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- 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 EXPERIMENTAL STATION.
- 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, AND OTHER SOILS WHICH MAY BE USED IF RECOMMENDED BY AN AGRICULTURIST OR A SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE AGENCY OR SOIL SCIENTIST AND BY THE VOLUME OF CHISELS, SLUGS, CRAB APPLES, FRAGMENTS, GRAVEL, STONES, TRASH, OR OTHER MATERIALS LARGER THAN 1\"/>
- ALTERNATIVE TO PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW.
 - COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1000 SQUARE FEET.
 - COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT OF HEAVY METALS (LEAD, COPPER, ZINC, CADMIUM, CHROMIUM, 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 TOY TO USE.
 - COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF 1 LB/1000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

SEQUENCE OF CONSTRUCTION

- OBTAIN HOWARD COUNTY GRADING PERMIT. (WEEK 1)
- NOTIFY HOWARD COUNTY AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. (WEEK 1)
- CONDUCT A PRE-CONSTRUCTION MEETING WITH THE SEDIMENT CONTROL INSPECTOR PRIOR TO ANY LAND DISTURBANCE. (WEEK 1)
- INSTALL STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BEAM. (WEEK 2)
- INSTALL ALL SILT FENCE, AS INDICATED ON PLANS. (WEEK 2)
- WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR, CLEAR AND GRUB SITE. (WEEK 3)
- BEGIN SITE GRADING AND UTILITY CONSTRUCTION. PROVIDE INLET PROTECTION AS SHOWN ON SEDIMENT CONTROL PLAN. WASH INLETS 1-1 AND 1-2 IN SUPER SILT FENCE. (WEEK 4)
- BEFORE BUILDING CONSTRUCTION, REMOVE ALL EXISTING BENCH COURSES AND EXISTING CURBS AND GUTTERS. (WEEK 5)
- INSTALL ALL CURB & GUTTER AND PAVEMENT CONSTRUCTION. (WEEK 12)
- INSTALL ALL PAVING SURFACE COURSE. (WEEK 13)
- INSTALL SIDEWALK FOR SITE. (WEEK 13)
- FINISH GRADE AND STABILIZE ALL AREAS OF PARCEL INCLUDING ANY EXPOSED EARTH AREAS OUTSIDE THE CURB, REMOVE ALL TRASH, JUNK AND DEBRIS FROM ENTIRE PARCEL. (WEEK 14)
- INSTALL SITE LANDSCAPING. (WEEK 15)
- REMOVE ALL SEDIMENT CONTROL MEASURES AFTER RECEIVING APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR. (WEEK 15)

SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSE AND PERMITS SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855).
- ALL VEGETATION 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.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN (A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES, AND ALL SLOPES GREATER 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 7, HOWARD COUNTY STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND ESTABLISHMENT OF THEM.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:**
 - TOTAL AREA: 1.61 ACRES
 - AREA TO BE ROOFED OR PAVED: 0.88 ACRES
 - AREA TO BE VEGETATIVELY STABILIZED: 0.73 ACRES
 - TOTAL CUT: 22.86 CY
 - TOTAL FILL: 1.00 CY
 - WASTE/BORROW 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 CONTROL, 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.

* TO BE DETERMINED BY CONTRACTOR, WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR WITH AN APPROVED AND ACTIVE GRADING PLAN.

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP
CHB2	CHESTER SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
CO	CODORUS SILT LOAM	C
G1B2	GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
G1C3	GLENELG LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
M1C2	MANOR LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
M1C3	MANOR LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
M1D3	MANOR LOAM, 15 TO 25 PERCENT SLOPES, SEVERELY ERODED	B

OWNER
TAYLOR FAMILY LP A
4100 COLLEGE AVENUE
ELICOTT CITY, MD 21041
(410) 465-3500

DEVELOPER
LAND DESIGN AND DEVELOPMENT
MR. DONALD REWERT
5300 DORSEY HALL DR.
ELICOTT CITY, MD 21042
(443) 367-0422

TEMPORARY SEEDING NOTES

APPLY TO GRASS 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 IBS/ACRE 10-10-10 FERTILIZER (14 IBS/1000 SQ. FT.).

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 IBS/1000 SQ. FT.) FOR THE PERIOD MAY 1 - AUGUST 14, SEED WITH 3 IBS/ACRE OF WEEPING LOVEGRASS (0.7 IBS/1000 SQ. FT.) FOR THE PERIOD NOVEMBER 16 - FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS/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/ACRE (70 TO 90 IBS/1000 SQ. FT.) OF UNROTATED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPE 8 FT. OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

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

CONSTRUCTION SPECIFICATIONS

- PLACE TOPSOIL, (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 21.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

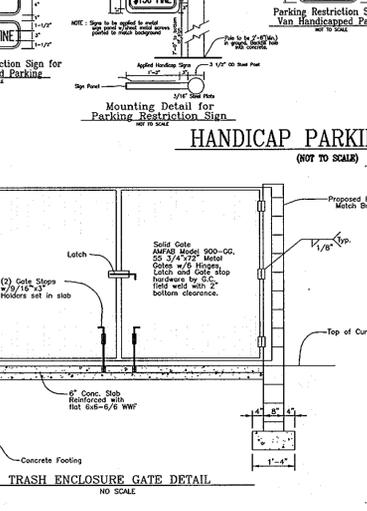
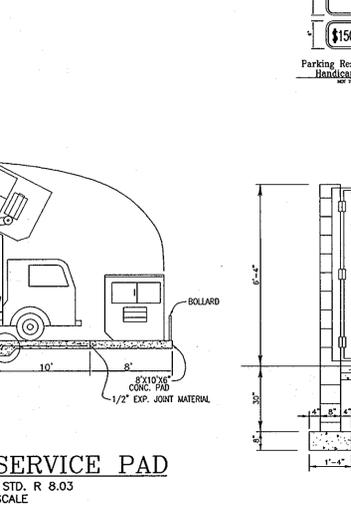
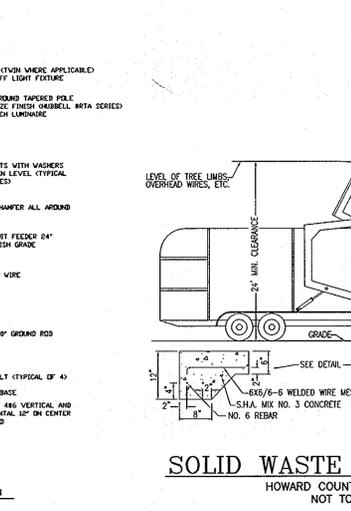
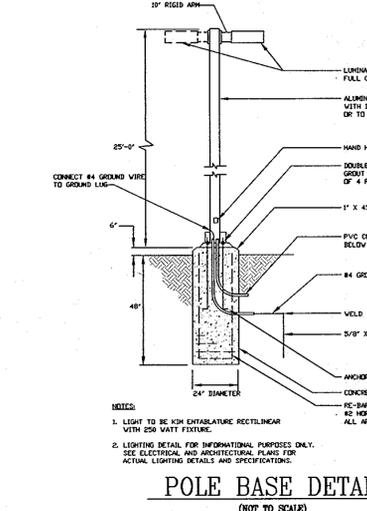
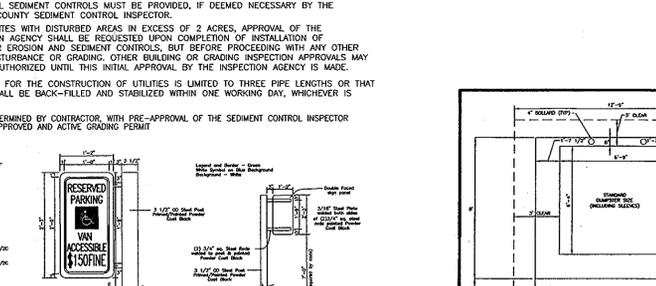
SEQUENCE OF CONSTRUCTION

- INSTALL STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BEAM. (WEEK 2)
- INSTALL ALL SILT FENCE, AS INDICATED ON PLANS. (WEEK 2)
- WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR, CLEAR AND GRUB SITE. (WEEK 3)
- BEGIN SITE GRADING AND UTILITY CONSTRUCTION. PROVIDE INLET PROTECTION AS SHOWN ON SEDIMENT CONTROL PLAN. WASH INLETS 1-1 AND 1-2 IN SUPER SILT FENCE. (WEEK 4)
- BEFORE BUILDING CONSTRUCTION, REMOVE ALL EXISTING BENCH COURSES AND EXISTING CURBS AND GUTTERS. (WEEK 5)
- INSTALL ALL CURB & GUTTER AND PAVEMENT CONSTRUCTION. (WEEK 12)
- INSTALL ALL PAVING SURFACE COURSE. (WEEK 13)
- INSTALL SIDEWALK FOR SITE. (WEEK 13)
- FINISH GRADE AND STABILIZE ALL AREAS OF PARCEL INCLUDING ANY EXPOSED EARTH AREAS OUTSIDE THE CURB, REMOVE ALL TRASH, JUNK AND DEBRIS FROM ENTIRE PARCEL. (WEEK 14)
- INSTALL SITE LANDSCAPING. (WEEK 15)
- REMOVE ALL SEDIMENT CONTROL MEASURES AFTER RECEIVING APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR. (WEEK 15)

SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSE AND PERMITS SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855).
- ALL VEGETATION 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.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN (A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES, AND ALL SLOPES GREATER 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 7, HOWARD COUNTY STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND ESTABLISHMENT OF THEM.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:**
 - TOTAL AREA: 1.61 ACRES
 - AREA TO BE ROOFED OR PAVED: 0.88 ACRES
 - AREA TO BE VEGETATIVELY STABILIZED: 0.73 ACRES
 - TOTAL CUT: 22.86 CY
 - TOTAL FILL: 1.00 CY
 - WASTE/BORROW 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 CONTROL, 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.

* TO BE DETERMINED BY CONTRACTOR, WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR WITH AN APPROVED AND ACTIVE GRADING PLAN.



PIPE SCHEDULE

SIZE	TYPE	LENGTH
15"	RCP, CLASS IV	96 LF

STRUCTURE SCHEDULE

NO.	TYPE	LOCATION	TOP ELEV.	INV. IN	INV. OUT	COMMENTS
I-11	TYPE "S" COMBINATION INLET	N 549069 E 1.352515	304.60	-	299.12	HO. CO. STD. D-4.32
I-10	TYPE "S" COMBINATION INLET	N 549299 E 1.352638	305.20	-	300.50	HO. CO. STD. D-4.32
MB-12	STANDARD 4' PRECAST MANHOLE	N 549058 E 1.352496	33.90	298.74	298.64	HO. CO. STD. G-5.12
SC-1	STORMCEPTOR	N 549307 E 1.352642	306.00	300.38	300.28	SEE DETAIL STC 900
SC-2	STORMCEPTOR	N 549074 E 1.352503	304.82	299.00	298.92	SEE DETAIL STC 900

NOTES:

1. ELEVATIONS ARE AT CENTER OF GRADE.
2. FOR TOP SLOPES SEE GRADING PLAN.
3. A MINIMUM OF 12\"/>

APPROVED
OF HOWARD COUNTY
DATE: April 10, 2008

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT
DATE: 10/27/08

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DATE: 10/16/08

DATE: 10/20/08

DATE: 10/20/08

BY THE DEVELOPER:

DATE: 10/16/08

DATE: 10/20/08

DATE: 10/20/08

BY THE ENGINEER:

DATE: 10/16/08

DATE: 10/20/08

DATE: 10/20/08

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

DATE: 10/16/08

DATE: 10/20/08

NOTE: 1. TOP ELEVATIONS ARE AT CENTER OF GRADE FOR TYPE "S" COMBINATION INLETS AND TOP OF MANHOLE COVER FOR MANHOLES.

2. FOR TOP SLOPES SEE GRADING PLAN.

3. SEE ARCHITECTURAL PLANS FOR ROOF DRAIN DETAILS.

Stormceptor Inset/Project Form

Project Name: **STC 900**

Contract Information: Designer: **J. Vogel**, Checker: **J. Vogel**, Date: **10/20/08**

Inset Type: **Stormceptor**

Submerged Inset (When 2\"/>

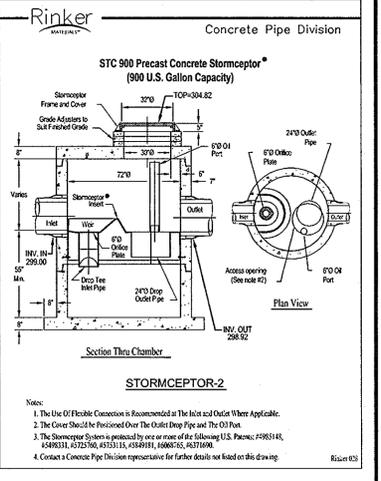
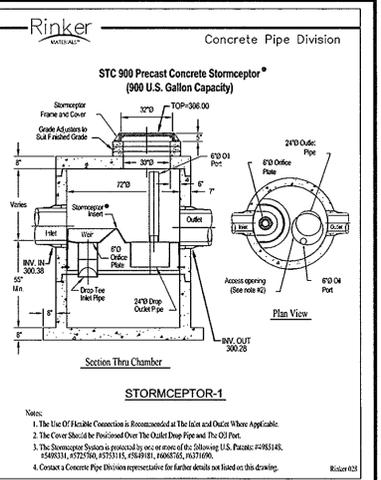
Stormceptor Inset/Project Form

Project Name: **STC 900**

Contract Information: Designer: **J. Vogel**, Checker: **J. Vogel**, Date: **10/20/08**

Inset Type: **Stormceptor**

Submerged Inset (When 2\"/>



REVISIONS

NO.	REVISION	DATE
2	REVISE SEQUENCE OF CONSTRUCTION AND SITE ANALYSIS	4/17/12

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

**SITE DEVELOPMENT PLAN
SEDIMENT AND EROSION
CONTROL NOTES AND DETAILS
RIVERS CORPORATE PARK
RIVERS OVERLOOK
10000 OLD COLUMBIA RD
OFFICE BUILDING
SECTION 1/AREA 1
L 10065 / F 479**

TAX MAP 42 BLOCK 8
6TH ELECTION DISTRICT

PARCEL 322, LOT F-2
HOWARD COUNTY, MARYLAND

PROFESSIONAL CERTIFICATE

DESIGN BY: **RHV**

DRAWN BY: **JMR**

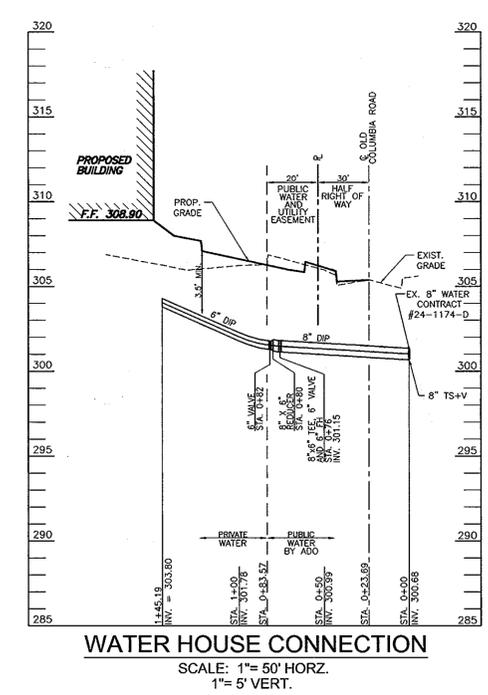
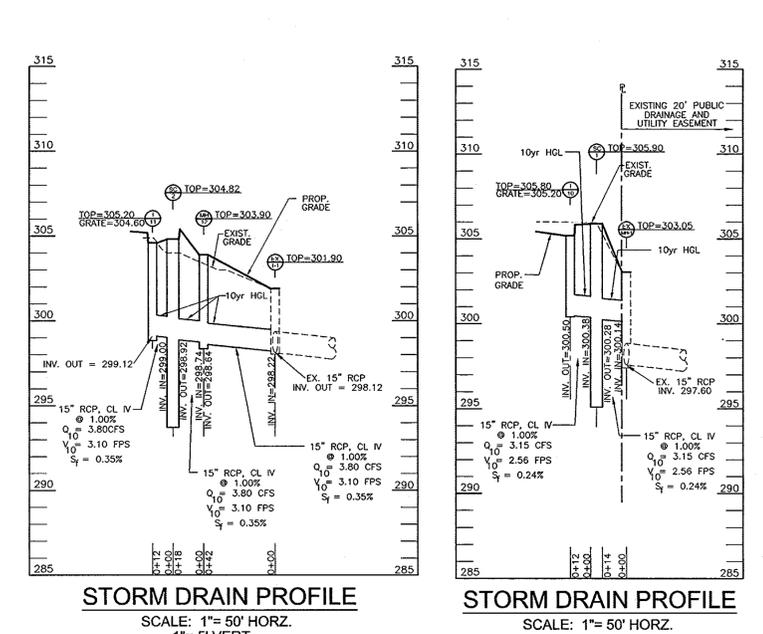
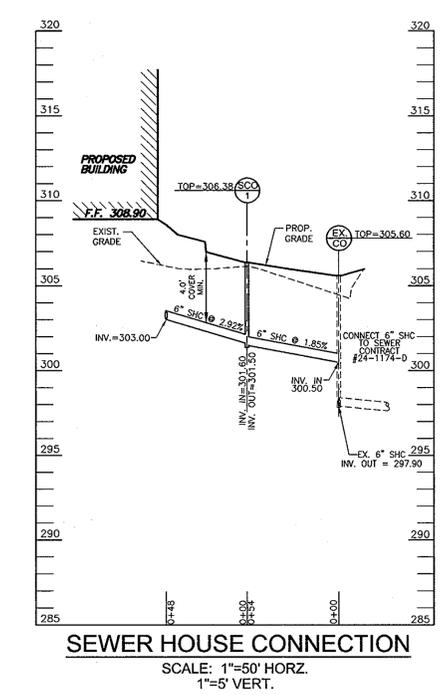
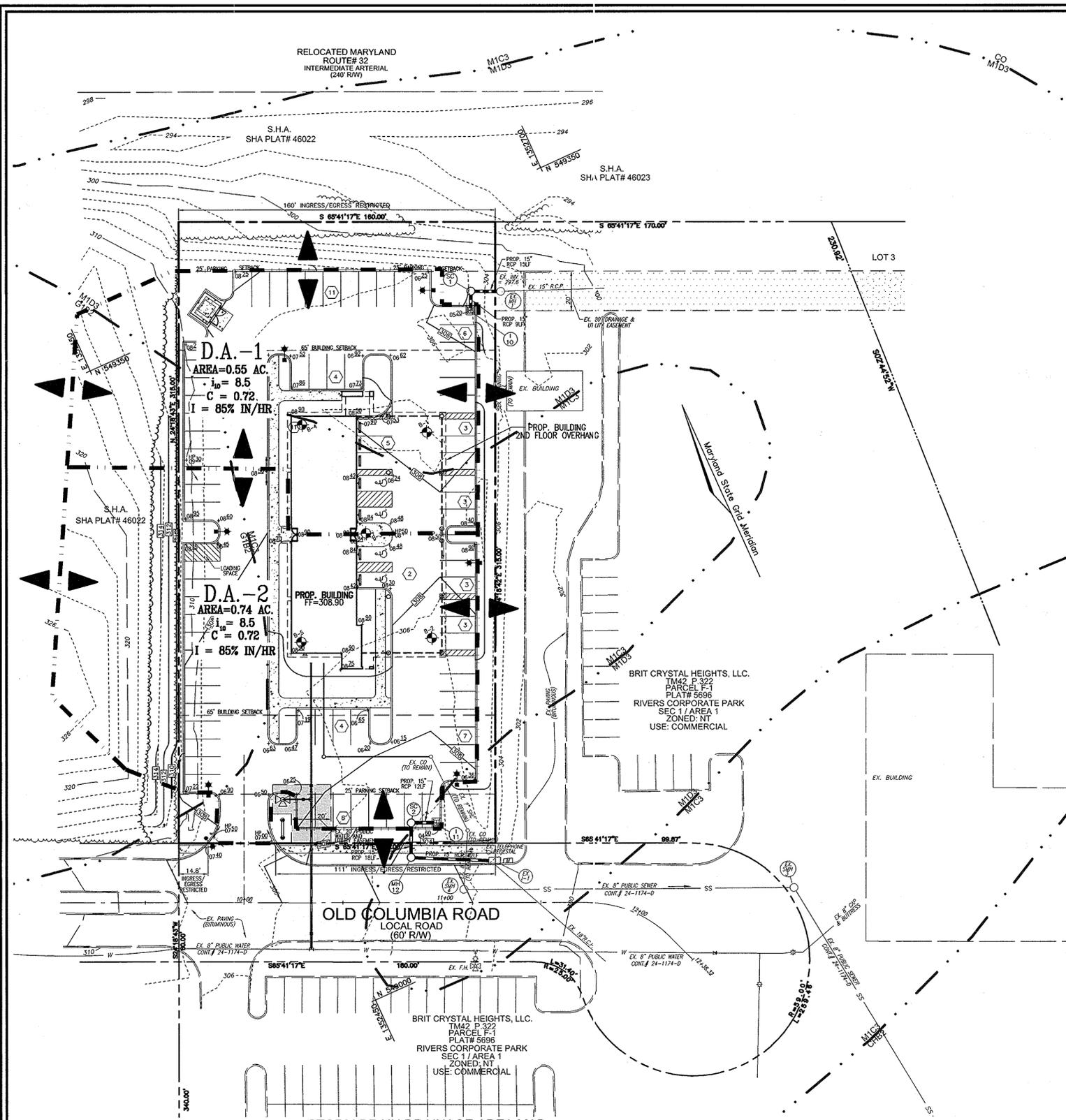
CHECKED BY: **RHV**

DATE: **OCTOBER 2008**

SCALE: **AS SHOWN**

W.O. NO.: **06-58**

4 SHEET OF 6



- OPERATION AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY STRUCTURE**
- THE STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE PERIODICALLY INSPECTED AND CLEANED TO MAINTAIN OPERATION AND FUNCTION. THE OWNER SHALL INSPECT THE STORMCEPTOR UNIT YEARLY BY A MINIMUM UTILIZING THE STORMCEPTOR INSPECTION/MONITORING FORM. INSPECTIONS SHALL BE DONE BY USING A CLEAR PLEXIGLASS TUBE (SLUDGE AUGER) TO EXTRACT A WATER COLUMN SAMPLE. WHEN THE SEGMENT DEPTHS EXCEEDS THE LEVEL SPECIFIED IN TABLE 6 OF THE STORMCEPTOR TECHNICAL MANUAL, THE UNIT MUST BE CLEANED.
 - THE STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE CHECKED AND CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES.
 - THE MAINTENANCE OF THE STORMCEPTOR UNIT SHALL BE DONE USING A VACUUM TRUCK WHICH WILL REMOVE THE WATER, SEDIMENT, DEBRIS, FLOATING HYDROCARBONS AND OTHER MATERIALS IN THE UNIT. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
 - THE INLET AND OUTLET PIPES SHALL BE CHECKED FOR ANY OBSTRUCTIONS AT LEAST ONCE EVERY SIX MONTHS. IF OBSTRUCTIONS ARE FOUND THE OWNER SHALL HAVE THEM REMOVED. STRUCTURAL PARTS OF THE STORMCEPTOR UNIT SHALL BE REPAIRED AS NEEDED.
 - THE OWNER SHALL RETAIN AND MAKE THE STORMCEPTOR INSPECTION/MONITORING FORMS AVAILABLE TO THE HOWARD COUNTY OFFICIALS UPON THEIR REQUEST.

OWNER
TAYLOR FAMILY LP A
4100 COLLEGE AVENUE
ELLCOTT CITY, MD 21041
(410) 465-3500

DEVELOPER
LAND DESIGN AND DEVELOPMENT
MR. DONALD REUWER
5300 DORSEY HALL DR.
ELLCOTT CITY, MD 21042
(443) 367-0422

NO.	REVISION	DATE

**SITE DEVELOPMENT PLAN
STORM DRAIN DRAINAGE AREA MAP,
AND UTILITY PROFILES
RIVERS CORPORATE PARK
RIVERS OVERLOOK**
10000 OLD COLUMBIA RD
OFFICE BUILDING
SECTION 1/ AREA 1
L 10695 / F 479

TAX MAP 42 BLOCK 8
6TH ELECTION DISTRICT

PARCEL 322, LOT F-2
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELLCOTT CITY, MD 21043
TEL: 410-461-7666
FAX: 410-461-8961

PROFESSIONAL CERTIFICATE

DESIGN BY: RHV
DRAWN BY: JMR
CHECKED BY: RHV
DATE: OCTOBER 2008
SCALE: AS SHOWN
W.O. NO.: 06-58

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE 09-27-2010

5 SHEET OF 6

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 10/16/08

CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 10/25/08

DIRECTOR
DATE: 10/20/08

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION 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
DATE: 10/10/08

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 OF ENGINEER
DATE: 10/14/08

APPROVED
PLANNING BOARD
OF HOWARD COUNTY

DATE: April 10, 2008

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

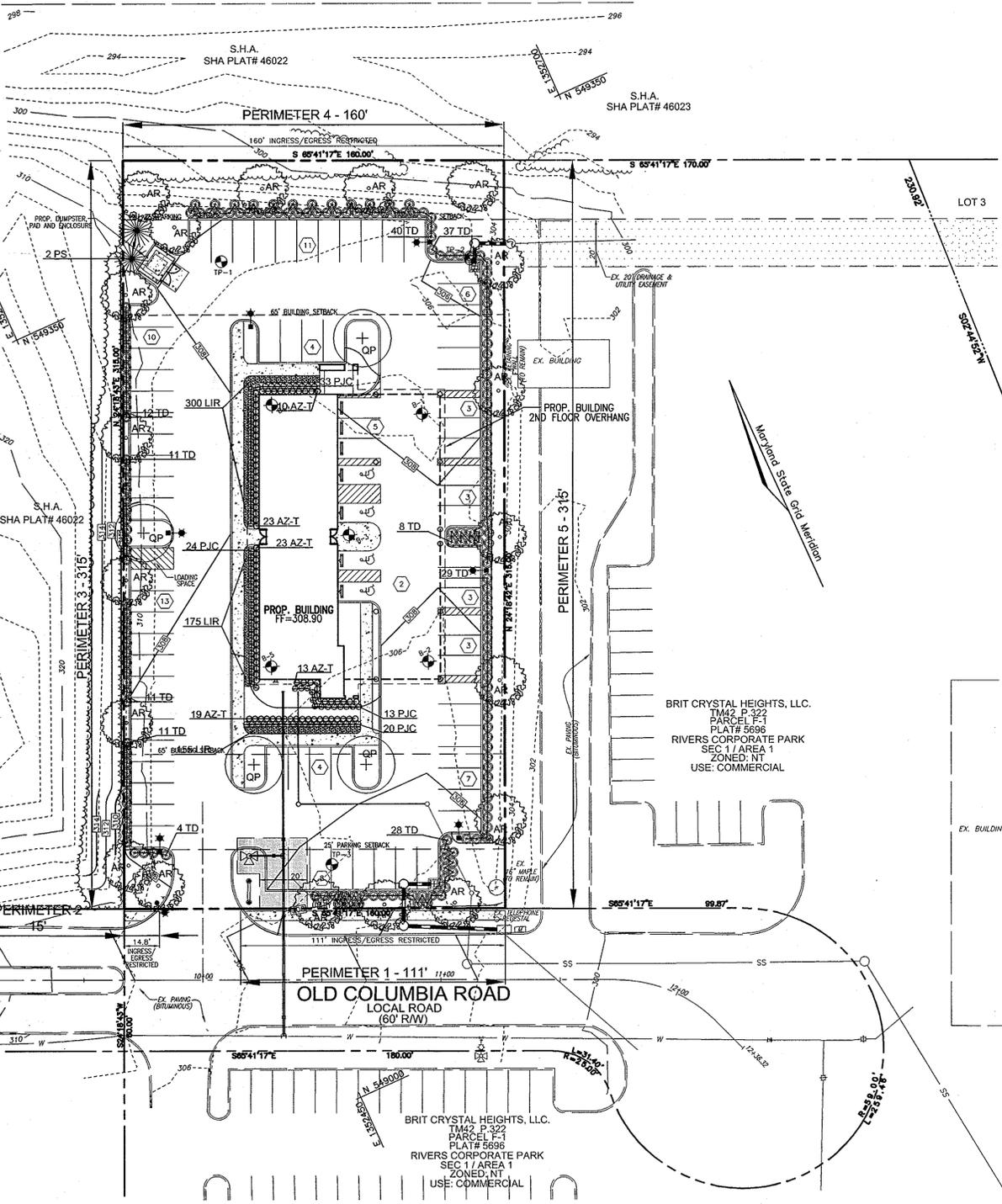
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT 50
DATE: 10/27/08

RELOCATED MARYLAND ROUTE 32 INTERMEDIATE ARTERIAL (240 RW)

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION

LEGEND:



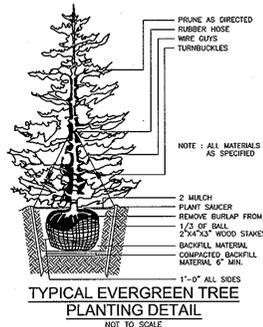
Project Name: Rivers Corp Park F-2 SWM, Location: Howard County, Maryland, Job #: 07827A

Depth	Description	Boring and Sampling Hole	Fac.	NH	SPT Blows	N	SPT Blows/foot
0-1'	Topsoil 3"	10"			4	10	2.5
1-2'	Brown, moist, silty to fine micaceous silty SAND (S&G FILL)	21-21"			24	30	7.0
2-4'	Brown, moist, silty to fine micaceous silty SAND (S&G FILL)	15-15"			28	35	8.0
4-6'	Brown, moist, silty to fine micaceous silty SAND (S&G FILL)	5-5"			14	18	4.5
6-10'	Bottom of Boring at 10.0'						

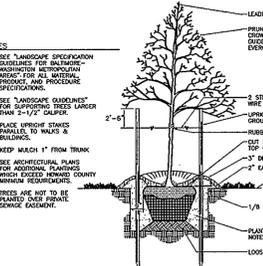
Project Name: Rivers Corp Park F-2 SWM, Location: Howard County, Maryland, Job #: 07827A

Depth	Description	Boring and Sampling Hole	Fac.	NH	SPT Blows	N	SPT Blows/foot
0-1'	Topsoil 2"	10"			4	10	2.5
1-2'	Brown, moist, silty to fine micaceous silty SAND (S&G FILL)	21-21"			24	30	7.0
2-4'	Brown, moist, silty to fine micaceous silty SAND (S&G FILL)	15-15"			28	35	8.0
4-6'	Brown, moist, silty to fine micaceous silty SAND (S&G FILL)	5-5"			14	18	4.5
6-10'	Bottom of Boring at 12.0'						

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- PROPOSED STORM DRAIN
- PROPOSED STORM DRAIN INLET
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- SOILS BOUNDARY
- PROPOSED SIDEWALK
- 20" DRAINAGE AND UTILITY EASEMENT
- EXISTING TREELINE
- PROPOSED TREELINE
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SHRUBS
- PROPOSED GROUND COVER
- LANDSCAPE PERIMETER
- TEST PIT BORING LOCATION



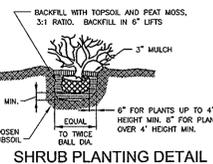
TYPICAL EVERGREEN TREE PLANTING DETAIL NOT TO SCALE



TREE PLANTING AND STAKING REGULAR TREES UP TO 2-1/2" CALIPER NOT TO SCALE

Project Name: Rivers Corp Park F-2 SWM, Location: Howard County, Maryland, Job #: 07827A

Depth	Description	Boring and Sampling Hole	Fac.	NH	SPT Blows	N	SPT Blows/foot
0-1'	Topsoil 3"	10"			4	10	2.5
1-2'	Brown, moist, silty to fine micaceous silty SAND, trace gravel (SM)	9"			3-3	9	2.25
2-4'	Brown, moist, silty to fine micaceous silty sand (SM)	12"			5-7.8	15	3.75
4-6'	Brown, moist, silty to fine micaceous silty sand (SM)	11"			4-5.7	12	3.0
6-10'	Bottom of Boring at 10.0'						



SHRUB PLANTING DETAIL NOT TO SCALE

LANDSCAPE SCHEDULE NOTE:

- ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AAS SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH HED PLANTING SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
- FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
- CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

GENERAL NOTES:

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE REQUIRED PARKING AND PERIMETER LANDSCAPING WILL BE BONDED PER THIS SUBMISSION.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING SHALL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$9,360.00 FOR THE REQUIRED 23 SHADE TREES, 2 EVERGREENS, AND 72 SHRUBS.

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE: April 10, 2008

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

Robert H. Vogel, Inc. ENGINEERS SURVEYORS PLANNERS
8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8961

OWNER: TAYLOR FAMILY LP A 4100 COLLEGE AVENUE ELLICOTT CITY, MD 21041 (410) 465-3500

DEVELOPER: LAND DESIGN AND DEVELOPMENT MR. DONALD REUWER 5300 DORSEY HALL DR. ELLICOTT CITY, MD 21042 (443) 367-0422

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
SITE LANDSCAPE PLAN
RIVERS CORPORATE PARK
RIVERS OVERLOOK
10000 OLD COLUMBIA RD
OFFICE BUILDING
SECTION 1/ AREA 1
L 10605 / F 478 PARCEL 322, LOT F-2
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS SURVEYORS PLANNERS
8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8961

DESIGN BY: RHV
DRAWN BY: JMR
CHECKED BY: RHV
DATE: OCTOBER 2008
SCALE: AS SHOWN
W.O. NO.: 06-58

PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16183, EXPIRATION DATE 09-27-2010

6 SHEET OF 6

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 CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

SIGNATURE OF DEVELOPER: [Signature] DATE: 10/08/08

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION: [Signature] DATE: 10/16/08
CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature] DATE: 10/25/08
DIRECTOR: [Signature] DATE: 10/25/08

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	82
Number of parking lot islands and shade trees required (1 Shade/20 Spaces)	4
Number of landscape islands and shade trees provided	4
Shade Trees (2:1 Substitution)	4
Other Trees	-

LANDSCAPE SCHEDULE

KEY	QUAN.	BOTANICAL NAME	SIZE	CAT
AR	19	ACER RUBRUM	2 1/2"-3" CAL.	B & B
PS	2	PARUS STROBUS	6"-8" HT.	B & B
OP	4	QUERCUS PHellos	2 1/2"-3" CAL.	B & B
TD	191	TAXUS MEDIA 'DENSIFORMIS'	2 1/2"-3" HT.	B & B
AZ-T	88	RHOODODENDRON KURUME X TRADITIONAL AZALEA	24"-30" HT.	B & B
PJC	90	BERRBERIS THUNBERGI 'CRIMSON PYGMY'	24"-30" HT.	B & B
LIR	630	LIRIOPE	GROUND COVER	B & B

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	1	2	3	4	5	6	DUMPSTER
Perimeter/Frontage Designation	1	2	3	4	5	6	6
Linear Feet of Roadway	111	15	315	160	315	35	35
Frontage/Perimeter	-	-	-	-	-	-	-
Credit for Existing Vegetation (Yes, No, Linear Feet)	-	-	-	-	-	-	-
Credit for Wall, Fence or Berm (Yes, No, Linear Feet)	-	-	-	-	-	-	-
Number of Plants Required	1:40 3	1:40 1	1:60 5	1:40 4	1:60 5	1:40 1	1:40 1
Shade Trees	1:4 28	1:4 4	1:4 40	-	-	-	1:20 2
Evergreen Trees	-	-	-	-	-	-	-
Shrubs	-	-	-	-	-	-	-
Number of Plants Provided	3	1	5	4	5	1	1
Shade Trees	-	-	-	-	-	-	2
Evergreen Trees	-	-	-	-	-	-	-
Other Trees (2:1 Substitution)	28	4	45	40	74	-	-
Shrubs (10:1 Substitution)	-	-	-	-	-	-	-
Describe Plant Substitution Credits (Below if needed)	-	-	-	-	-	-	-