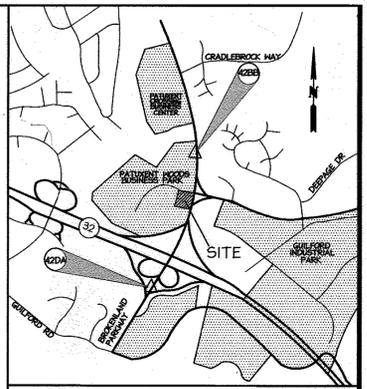


GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION FOR WORK IN THE COUNTY RIGHT-OF-WAY."
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION DIVISION (410) 313-1800 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK. THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS/BUREAU OF HIGHWAYS AT (410) 313-2450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER AND SEWER MAINS.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE STATE HIGHWAY ADMINISTRATION (SHA). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE PER HOWARD COUNTY RECORDS.
- THIS SITE IS LOCATED IN THE LITTLE PATUXENT RIVER WATERSHED.
- ALL FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED AND VERIFIED IN ACCORDANCE WITH AASHTO T-99 - STANDARD.
- CONTRACTOR SHALL MAINTAIN ALL SEDIMENT CONTROL DEVICES WITHIN THE LIMITS OF THE SITE DURING CONSTRUCTION OF THE SITE IMPROVEMENTS. CONTRACTOR SHALL PROVIDE ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES AS MAY BE NECESSARY DURING CONSTRUCTION AND/OR BY GOVERNING AGENCIES.
- PER FEMA MAP# 24004A0099B DATED DECEMBER 04, 1986, THIS SITE IS NOT LOCATED WITHIN THE 100 YR FLOODPLAIN.
- THERE ARE NO EXISTING WETLANDS ON SITE.
- THERE ARE NO STEEP SLOPES AND NO HIGHLY ERODIBLE SOILS WITHIN THE PROPOSED CONSTRUCTION LIMITS.
- THERE ARE NO KNOWN CEMETERIES OR BURIAL GROUNDS ON THIS SITE. HOWEVER, UPON DISCOVERY OF ANY EVIDENCE OF BURIAL OR GRAVES, THE DEVELOPER WILL BE SUBJECT TO SECTION 16.1005 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- THE SUBJECT PROPERTY IS NEW TOWN (NT) IN ACCORDANCE WITH THE 2/2/04 COMPREHENSIVE ZONING PLAN AND THE "COMP LITE" ZONING AMENDMENTS DATED 7/28/06.
- THE TOPOGRAPHY AND SITE BOUNDARY WERE PREPARED BY christopher consultants, ON JULY 2007.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLAN COORDINATE SYSTEM. MONUMENT NUMBERS 42B AND 42DA WERE USED FOR THIS PROJECT (NAD 83/91).
- ALL EXISTING UNDERGROUND UTILITIES TO BE FIELD VERIFIED. UTILITIES CONTRACTOR SHALL VERIFY THE SIZE AND LOCATIONS OF ALL UNDERGROUND UTILITIES AND TEST FIT ALL UTILITIES, INCLUDING PROPOSED TIE IN LOCATIONS, AT LEAST 5 DAYS PRIOR TO STARTING ANY WORK ON THESE DRAWINGS. DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IN ADVANCE OF CONSTRUCTION START.
- THE CONTRACTOR SHALL ENSURE THAT CURRENT AS-BUILT RECORDS ARE MAINTAINED DURING CONSTRUCTION. UPON COMPLETION OF CONSTRUCTION, CERTIFIED (I.E. STAMPED) AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE OWNER.
- THE SITE WAS PREVIOUSLY DEVELOPED UNDER SDP-86-166C. SINCE THE SITE HAS BEEN PREVIOUSLY GRADED, WHETHER IT IS PAVED OR NOT IT CAN BE CONSIDERED IMPERVIOUS. THEREFORE THE SITE IS SUBJECT TO REDEVELOPMENT CRITERIA FOR STORMWATER MANAGEMENT. THE REDEVELOPMENT CRITERIA INCLUDES WATER QUALITY MANAGEMENT TO TREAT 100% OF THE NEW AREA (LOT AND 20% (2.97 AC.) OF EXISTING IMPERVIOUS AREA. BASED ON THE SUPPLEMENTAL REPORT PREPARED BY ECS, THE SITE HAS BEEN PREVIOUSLY PASS GRADED. THE AREA DEFINED BY ECS AS BEING PREVIOUSLY PASS GRADED IS 2.97 ACRES. THIS PLAN PROPOSES 2.06 ACRES TO BE IMPERVIOUS, WHICH EQUATES TO A 30% REDUCTION. NO FACILITIES WILL BE UTILIZED FOR WATER QUALITY OR QUANTITY MANAGEMENT. THIS CRITERIA ALSO ALLEVIATES THE RECHARGE AND CHANNEL PROTECTION STORAGE REQUIREMENTS. THEREFORE, NO ADDITIONAL STORAGE FOR THESE VOLUMES HAS PROVIDED.
- THE PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1000 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BECAUSE IT IS LOCATED IN NEW TOWN AND IS PART OF A PLANNED UNIT DEVELOPMENT WHICH HAS PRELIMINARY DEVELOPMENT PLAN APPROVAL AND 50% OR MORE OF THE LAND IS RECORDED AND SUBSTANTIALLY DEVELOPED BEFORE DECEMBER 31, 1992. (16.1002(B)(1)(IV)).
- BUILDING FOOTPRINTS SHOWN ARE BASED ON SDP-86-166C AND FIELD SURVEY FOR THE EXISTING BUILDING.
- ALL HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM 2% SLOPE IN ANY DIRECTION WITHIN THE HANDICAP PARKING AREA.
- UNLESS OTHERWISE NOTED, DIMENSIONS FROM CURB ARE MEASURED AT FACE OF CURB.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS PRIOR TO STARTING ON THESE PLANS:
 -PES UTILITY 1-800-257-7777
 -HOWARD COUNTY DPWT, BUREAU OF UTILITIES (410) 313-4900
 -BALTIMORE GAS AND ELECTRIC COMPANY CONTRACTOR SERVICES (410) 850-4620
 -BALTIMORE GAS AND ELECTRIC COMPANY UNDERGROUND DAMAGE CONTROL (410) 787-9066
 -VERIZON 1-800-444-5266
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS AS NECESSARY TO GRADE THE SITE AND COMPLETE ANY REQUIRED EXCAVATIONS.
- christopher consultants, INC. SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION, MEANS, METHODS, TECHNIQUES, OR PROCEDURES UTILIZED BY THE CONTRACTOR FOR THE SERVICE OF PUBLIC OR CONTRACTOR'S EMPLOYEES, OR FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND STANDARD CONSTRUCTION PRACTICES.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES WHICH ARE TO REMAIN FREE FROM DAMAGE AND MAINTAIN UNINTERRUPTED SERVICE TO ALL USERS. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OR SUBCONTRACTOR'S ACTIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- SCALING OF THESE PLANS IS DISCOURAGED UNLESS DIRECTED BY THE ENGINEER. IN THE EVENT OF A DISCREPANCY BETWEEN THE SCALED AND THE FIGURED DIMENSIONS, THE FIGURED DIMENSIONS SHALL BE HELD.
- T.B.R. = TO BE REMOVED
- PROVIDE SIGNAGE ON THE BUILDING AND AT THE STREET IDENTIFYING THE BUILDING ADDRESS; IDENTIFY EACH SEPARATE SUITE BY LETTER.
- ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (4" GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- PER HOWARD COUNTY BUILDING CODE SECTION 904.1.1 ALL BUILDINGS IN EXCESS OF 5,000 SF IN SIZE WILL HAVE A COMPLETE AUTOMATIC DESIGNED IN ACCORDANCE WITH NFPA #13.
- A KNOX BOX FOR FIRE DEPARTMENT ACCESS IS REQUIRED TO BE PLACED ON THE FRONT OF THE BUILDING. IT SHALL BE PLACED TO THE RIGHT OF THE MAIN ENTRANCE APPROXIMATELY 4'-5" IN HEIGHT AND NO MORE THAN 8' LATERALLY FROM THE DOOR. THE BOX SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSSED.
- TREES WITH MATURE HEIGHTS GREATER THAN 25' SHALL NOT BE PLANTED WITHIN 20' OF EITHER SIDE OF THE UTILITY POLE LINES. TREES WITH MATURE HEIGHTS GREATER THAN 40' SHALL NOT BE PLACED WITHIN 40' OF THE UTILITY POLE LINES. TREES PLANTED OR RETAINED TO COMPLY WITH THE FOREST CONSERVATION PLAN OR OTHER PERPETUAL EASEMENT REQUIREMENTS SHALL MEET THE ABOVE CONDITIONS. SEE SHALL HAVE THE PERPETUAL RIGHT TO TRY OR REMOVE ANY PROTECTED TREES IF IN THE SOLE OPINION OF DGE, THE TREE OR TREES ARE ENDANGERING THE OVERHEAD ELECTRIC FACILITIES.
- NO GRADING, REMOVAL OF VEGETATION COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OF THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
- THERE WILL BE NO IMPROVEMENTS TO THE WATER OR SEWER SYSTEMS, THEREFORE NO ALLOCATIONS WILL BE APPLIED FOR.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IN THE AMOUNT OF \$16,110 HAS BEEN POSTED AS PART OF THE BUILDERS GRADING PERMIT APPLICATION. (40 SHADE TREES, 6 EVERGREEN TREES, AND 107 SHRUBS).
- ALL EXTERIOR LIGHT FIXTURES SHALL BE ORIENTED TO DIRECT LIGHT INWARDS AND DOWNWARDS ON-SITE AWAY FROM ALL PUBLIC ROADS IN ACCORDANCE WITH SECTION 154 OF THE HOWARD COUNTY ZONING REGULATIONS.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THIS PLAN PROPOSED IS TO COMPLETE THE PREVIOUSLY APPROVED PARKING LOT (UNDER SDP-86-166), THEREFORE THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING HAS DETERMINED THAT PLANNING BOARD APPROVAL IS NOT NECESSARY.

COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1 9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND 21046

BENCHMARK
 HORIZONTAL: MARYLAND NAD83 (ADJ 1991)
 VERTICAL: NAVD83
 GEODETIC SURVEY CONTROL: 42B
 NORTHING: 160065.2
 EASTING: 413191.7
 ELEVATION: 93.19
 GEODETIC SURVEY CONTROL: 42DA
 NORTHING: 67110.01
 EASTING: 412813.35
 ELEVATION: 91.15
 DESCRIPTIONS:
 STAMPED DISC SET ON 3" DEEP COLUMN
 OF CONCRETE



VICINITY MAP
SCALE 1"=2000'
AD# 20703123

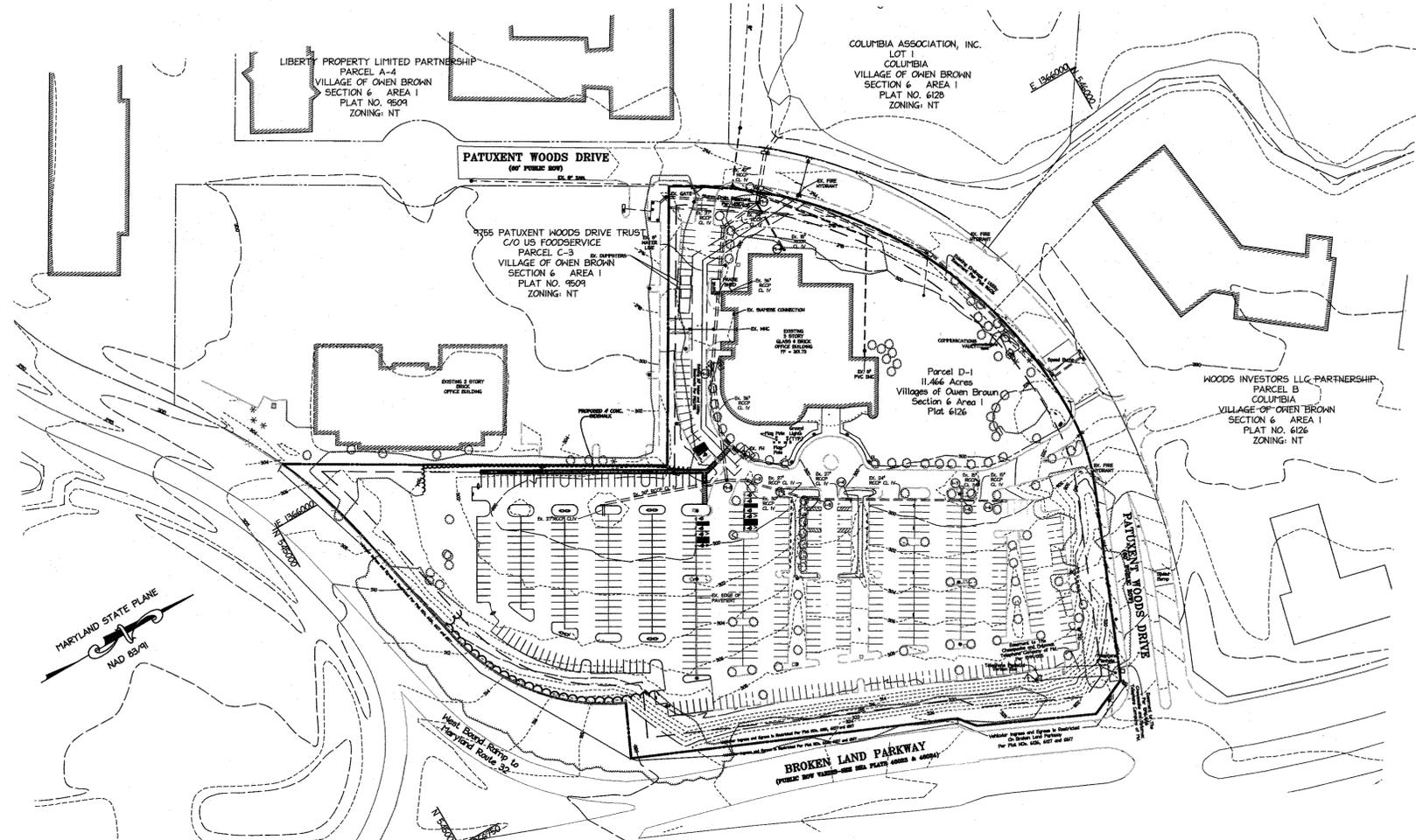
HOWARD COUNTY, MAP 15, GRID 4-18
HOWARD COUNTY CONTROL STATIONS

ADDRESS CHART	
LOT/PARCEL #	STREET ADDRESS
D1/480	9705 PATUXENT WOODS DRIVE

PROFESSIONAL CERTIFICATION
 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.

John M. Householder 8.13.08
 SIGNATURE OF ENGINEER DATE

JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010



SITE ANALYSIS DATA CHART

- TOTAL PROJECT AREA: 11.46 AC.± (499,171.6 SF.)
- AREA OF THIS PLAN SUBMISSION: 5.3 AC.±
- LIMIT OF DISTURBED AREA: 3.17 AC.±
- ZONING: NEW TOWN INDUSTRIAL
- USE: EXISTING OFFICE BUILDING AND PARKING LOT. PARKING LOT WILL BE EXPANDED.
- FLOOR SPACE:
 FLOOR#1 OFFICE: 17,295 SF CONFERENCE: 7,528 SF CIRCULATION I/E BATH: 13,046 SF
 FLOOR#2 OFFICE: 16,111 SF LUNCH ROOM: 3,457 SF CIRCULATION I/E BATH: 4,563 SF 10,334 SF
 FLOOR#3 OFFICE: 17,264 SF 17,210 SF CIRCULATION I/E BATH: 6,351 SF
 FLOOR#4 OFFICE: 19,822 SF CIRCULATION I/E BATH: 4,351 SF
 TOTAL: OFFICE: 66,492 SF CONFERENCE: 7,528 SF CIRCULATION: 34,304 SF, LUNCH ROOM: 3,457 SF
 67,591 36,282 2,816
- OPEN SPACE ON-SITE: 0.74 AC. (6.45%)
- BUILDING COVERAGE: 1.71 AC. (10.21%) (FROM SDP-86-166C)
 FLOOR AREA RATIO: 3.723 AC. (32.47%) (FROM SDP-86-166C)
- NO IMPROVEMENTS TO THE WATER OR SYSTEMS ARE PROPOSED. THERE ARE NO IMPROVEMENTS TO THE BUILDING.
- PARKING REQUIRED PER SDP 86-166C PER FDP CRITERIA 2 SPACES/1000 SF OF OFFICE SPACE WHICH REQUIRED: 438 SPACES / 136 SPACES HANDICAP SPACES: 1 SPACE FOR EVERY 25 SPACES FOR TOTAL PARKING LESS THAN OR EQUAL TO 500 2% FOR TOTAL PARKING IF THE PARKING EXCEEDS 500 SPACES. VAN SPACES: 1 OUT EVERY 4 HANDICAP SPACES MUST BE VAN ACCESSIBLE.
 364
 NUMBERS OF PARKING SPACES: 374 (EXISTING, 10 HANDICAPPED)
 212 228 (PROPOSED, INCLUDING 10 HANDICAP SPACES, WHICH WAS CONVERTED FROM 12 EXISTING SPACES)
 574 441 (TOTAL, WHICH REQUIRES 28 (8%) TOTAL HANDICAP SPACES, 48 PROVIDED, 5 ARE VAN ACCESSIBLE)
- ASSOCIATED PLANS: FDP #147 PLAT #6817 SDP-86-166 F-86-58C
 NOTE: 401 TOTAL SPACES PRIOR TO THIS REDLINE REVISION. THERE ARE 27 SPACES THAT ARE BEING REMOVED AND REPLACED WITH GRASS, REDUCING THE TOTAL NUMBER OF PARKING SPACES TO 574 SPACES, WELL ABOVE THE 136 SPACES REQUIRED.

SITE DATA

PROPERTY INFORMATION:
 TAX MAP NO. 42, GRID 2 PARCEL 480
 LIBER/FOLIO 4557 / 687
 ELECTION DISTRICT 16
 TAX ACCOUNT# 1416182060
 PLAT# 6817 BLOCK 3
 NET TRACT AREA: 11.46 AC

SITE LOCATION: 9705 PATUXENT WOODS DRIVE
 VILLAGE OF OWEN BROWN, COLUMBIA, MARYLAND 21046

ZONING: NEW TOWN INDUSTRIAL
 PROPOSED PROPERTY USE: COMMERCIAL

WATER CATEGORIES: E-13
 SEWER CATEGORIES: 5290000
 CENSUS TRACT: 606103
 LEGAL DESCRIPTION: PARCEL #D1= 11.46 ACRES

ZONING REGULATIONS:
 SETBACKS:
 PUBLIC RIGHT-OF-WAYS: 25'
 MAXIMUM HEIGHT: 20'
 PARKING: PUBLIC RIGHT-OF-WAYS: 25'
 ADJACENT LOT LINES: 10'

NOTE: THE NEW IMPERVIOUS COVER, 4,950 SF IS EXEMPT FROM PROVIDING STORMWATER MANAGEMENT. ANY ADDITIONAL CONSTRUCTION THAT DISTURBS IN EXCESS OF 5,000 SF CUMULATIVE SHALL COMPLY WITH CURRENT STORMWATER MANAGEMENT CRITERIA.

SHEET INDEX

NO.	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS AND DEMOLITION PLAN
3	SITE DEVELOPMENT PLAN
4	GRADING AND UTILITY PLAN
5	SITE DETAILS, 5A - SITE DETAILS
6	LIGHTING SPECIFICATIONS AND DETAIL SHEET
7	STORM DRAIN NOTES AND PROFILES 7A - STORMWATER MANAGEMENT
8	DRAINAGE AREA MAP 7B - FLOW AND CALCULATIONS
9	EROSION & SEDIMENT CONTROL PLAN 9A - EROSION & SEDIMENT CONTROL PLAN
10	EROSION & SEDIMENT CONTROL NOTES 9A - EROSION & SEDIMENT CONTROL NOTES
11	LANDSCAPE PLAN
12	LANDSCAPE NOTES AND DETAILS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

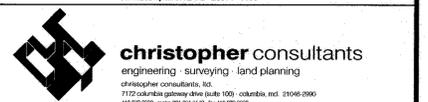
<i>Maria A. Cayul</i> Director of Planning and Zoning	8/14/08 Date
<i>Cindy Hamon</i> Chief, Division of Land Development	8/28/08 Date
<i>John Householder</i> Chief, Development Engineering Division	8/13/08 Date

8/16	2	ATRIUM, GREASE INTERCEPTOR, GENERATOR, STORM UPSIZE, PUMP REMOVAL
4/16	1	DEMO SHED, REPLACE PAVERS, CONC. UTIL PAD AND HANDICAP RAMP

Date No. Revision Description

**COLUMBIA VILLAGE OF OWEN BROWN
SECTION 6, AREA 1, PARCEL D-1
9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION
6TH ELECTION DISTRICT**

OWNER:
 OWENWOOD VILLAGE LLC
 CONTACT: MR. KING DAVIDSON
 TELEPHONE: 301-657-7100
 7500 GEORGETOWN ROAD, 15th FLOOR
 BETHESDA, MARYLAND 20814-6133

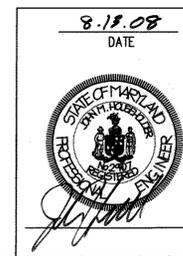


PERMIT INFORMATION CHART

PROJECT NAME COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1	LOT/PARCEL NO. LOT 01/PARCEL 480 LIBER 4557, FOLIO 687	CENSUS TRACT 606703
PLAT NO. GRID NO. 6517 2	ZONE NT	TAX MAP 42
WATER CODE E13	SEWER CODE 5290000	ELECTION DISTRICT 6TH
FDP #147	PRIOR SDP # SDP-86-166	

TITLE:
COVER SHEET

DESIGN: ENJ/PE	SCALE: 1" = 100'	PROJECT: 079401.01
DRAWN: DAM	DATE: JULY 2008	
CHECKED: JMH	APPROVED:	1 OF 16



MDC-716 (SDP)

FOREST STAND NARRATIVE

HEDGEROW 1
 THIS HEDGEROW BUFFERS THE SOUTHWEST EDGE OF THE PROPERTY FROM THE ADJACENT OFFICE BUILDING TO THE WEST. IT CONSISTS MAINLY OF BLACK LOCUST AND BLACK CHERRY WITH SOME WHITE PINE, BOX ELDER, AND NORWAY SPRUCE AS CO-DOMINANT SPECIES. A MAJORITY OF THE TREES HAVE A DIAMETER OF 6-10". RETENTION PRIORITY FOR THIS HEDGEROW IS LOW.

HEDGEROW 2
 THIS HEDGEROW BORDERS PATUXENT WOODS DRIVE TO THE WEST OF THE OFFICE BUILDING ON THE PROPERTY. DOMINANT VEGETATION CONSISTS OF TREES WITH AN AVERAGE DIAMETER OF 9-12" AND INCLUDES RED OAK, RED MAPLE, NORWAY SPRUCE, AND AMERICAN BEECH. RETENTION PRIORITY FOR THIS HEDGEROW IS LOW.

HEDGEROW 3
 THIS HEDGEROW SERVES AS A BUFFER TO THE NORTHERN PORTION OF THE PROPERTY AT THE INTERSECTION OF PATUXENT WOODS DRIVE AND BROKEN LAND PARKWAY. PRIMARY VEGETATION CONSISTS OF RED OAK, RED MAPLE, NORWAY SPRUCE, AND WHITE PINE WITH A RANGE OF DIAMETERS BETWEEN 10-12 INCHES ON AVERAGE. DUE TO ITS SCREENING BENEFITS FROM THE INTERSECTION, RETENTION PRIORITY FOR THIS HEDGEROW IS MODERATE.

HEDGEROW 4
 THIS HEDGEROW IS LOCATED ALONG THE EASTERN BOUNDARY OF THE PROPERTY ALONG BROKEN LAND PARKWAY. THE VEGETATION CONSISTS OF RED OAK, WHITE PINE, AND SERVICEBERRY. THE DOMINANT TREES IN THIS HEDGEROW HAVE AN AVERAGE DIAMETER OF 8-10". RETENTION PRIORITY FOR THIS HEDGEROW IS MODERATE DUE TO ITS ABILITY TO BUFFER THE EFFECTS OF TRAFFIC FROM BROKEN LAND PARKWAY.

FOREST STAND 1 (F-1)
 THIS FOREST STAND IS LOCATED IN THE SOUTHEAST CORNER OF THE PROPERTY ALONG THE OFF RAMP OF BROKEN LAND PARKWAY ONTO ROUTE 32. THE VEGETATION INCLUDES BLACK LOCUST, WHITE PINE, AND BLACK CHERRY AS WELL AS SEVERAL RED OAKS. THE RETENTION PRIORITY OF THIS STAND IS MODERATE DUE TO BUFFERING ABILITY TO THE ROAD.

ABANDONED FIELD (AF-1)
 THIS ABANDONED FIELD IS LOCATED BETWEEN FOREST STAND 1 AND HEDGEROW 1. PRIMARY VEGETATION IS BLACK CHERRY, BLACK LOCUST, AND SERVICEBERRY WITH AN AVERAGE DIAMETER OF 6-9". THE RETENTION PRIORITY FOR THIS ABANDONED FIELD IS LOW.

SOILS

Map Unit Symbol	Previous Unit Symbol	Name	Slope	K-factor	Hydric
UuB	EK/GI	Urban Land-Udorthents	0-65%	0.28	No
UaF	EK/GI	Udorthents	0-8%	-	No

COLUMBIA ASSOCIATION, INC.
 LOT 1
 COLUMBIA
 VILLAGE OF OWEN BROWN
 SECTION 6 AREA 1
 PLAT NO. 6128
 ZONING: NT

Key	A. Type of Community	B. Area (acres)	C. Soil Information	Typical Forest Cover for soil type	D. Existing Vegetation (Dominant Species Approximate %)	E. Stand Characteristics (Avg. Size (Diam) Age (Yrs) General Conditions)	F. Forest Area in Sensitive Environments (acres)	G. Habitat Value
F-1	FOREST	40.50	UuB	MIXED UPLAND HARDWOOD MAINLY OAKS (PREVIOUSLY A ELIOAK/UGLENE/LG SOIL)	34% BLACK LOCUST 33% BLACK CHERRY 33% WHITE PINE	9" 7" 10-20 GOOD	0.0	1
AF-1	ABANDONED FOREST	42.02	UuB UaF	MIXED UPLAND HARDWOOD MAINLY OAKS (PREVIOUSLY A ELIOAK/UGLENE/LG SOIL)	50% BLACK LOCUST 20% BLACK CHERRY 30% SERVICEBERRY	8" 6" 7" 10-15 GOOD	0.0	1 1 1

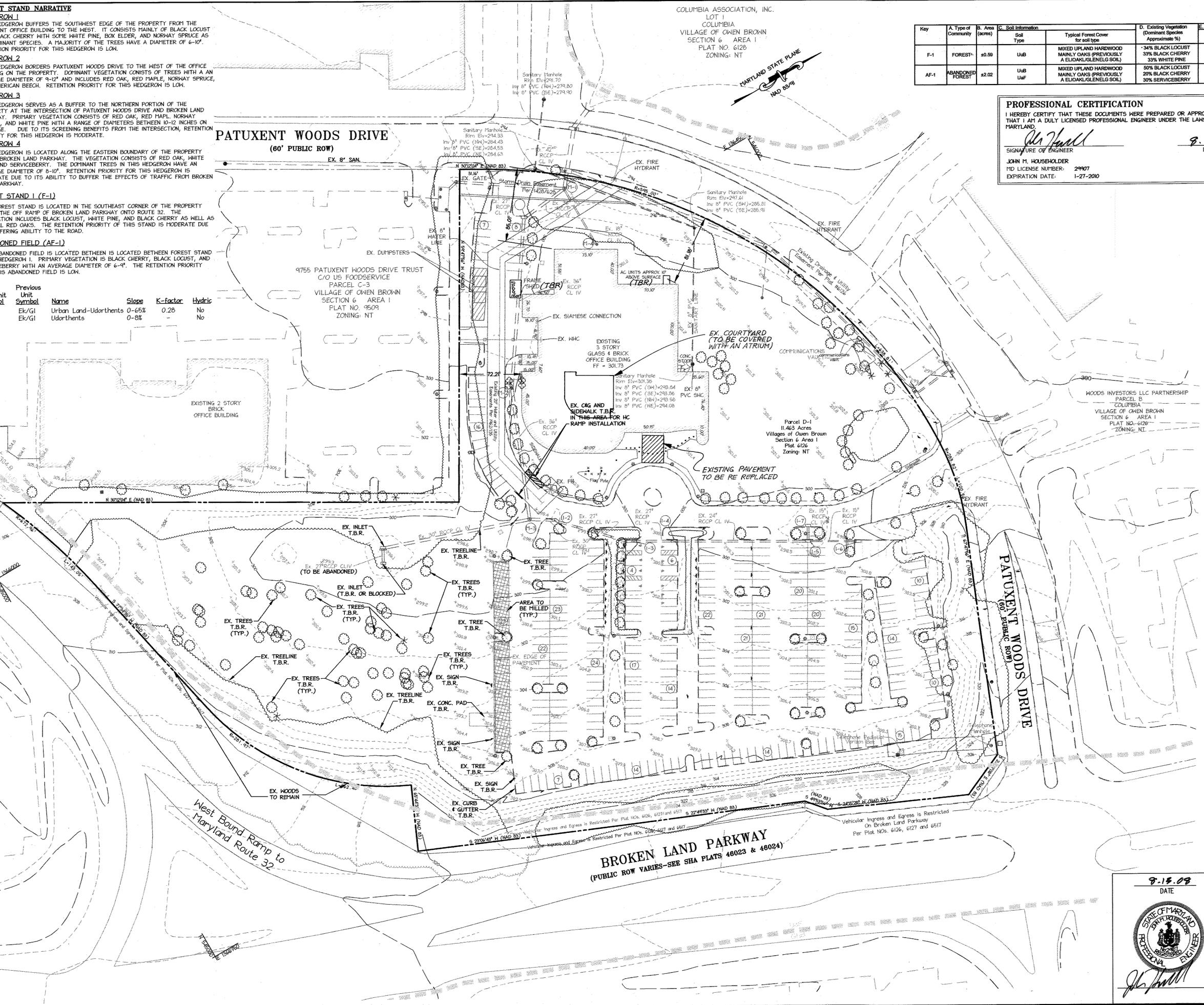
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 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

 SIGNATURE OF ENGINEER
 JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010
 DATE: 8.13.08

LEGEND

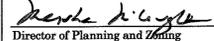
EXISTING CONTOURS	---
EXISTING STORM DRAIN	---
EXISTING SANITARY SEWER	---
EXISTING WATER	---
EXISTING TRANSFORMER	⊕
EXISTING SIGN	---
PROPERTY LINE	---
EXISTING PARKING SPACE	---
EXISTING TREELINE	---
EXISTING TREES	---
EXISTING SOILS LINE	---
AREA TO BE SANICUT AND REPAVED	---
AREA TO BE REMOVED FOR HC RAMPS TO BE REMOVED	---
TBR	---

MATCHLINE - SEE SHEET 5 OF 12 FOR CONTINUATION



48 Hours
 Before You Dig
 Call
MISS UTILITY
 Service Protection Center

 CALL TOLL FREE
 1-800-257-7771

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 9/2/08
 Director of Planning and Zoning
 8/25/08
 Chief, Division of Land Development
 8/21/08
 Chief, Development Engineering Division

Date	No.	Revision Description
8/16	2	ATRIUM, GREASE INTERCEPTOR, GENERATOR, STORM UPSIZE, PAVT REMOVAL
4/16	1	DEMO SHED, REPLACE PAVERS, CONC. UTIL PAD AND HANDICAP RAMP

COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1
 9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION
 6TH ELECTION DISTRICT

OWNER
 OAKWOOD VAN DORN, LLC
 CONTACT: MR. KING DAWSON
 TELEPHONE: 301-657-7100
 7500 GEORGETOWN ROAD, 15th FLOOR
 BETHESDA, MARYLAND 20814-6133

 **christopher consultants**
 engineering - surveying - land planning
 christopher consultants, inc.
 7175 columbia gateway drive suite 100, columbia, md. 21046-2960
 410.672.8888 - ext. 201 410.672.8888

PERMIT INFORMATION CHART

PROJECT NAME	COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1	LOT/PARCEL NO.	LOT D1/PARCEL 480 LIBER 4557, FOLIO 687	CENSUS TRACT	606703
PLAT NO. / GRID NO.	6517 / 2	ZONE	NT	TAX MAP	42
WATER CODE	E13	SEWER CODE	5290000	ELECTION DISTRICT	6TH
FDP #147		PRIOR SDP #	SDP-86-166		
TITLE: EXISTING CONDITIONS & DEMOLITION PLAN					
DESIGN: ENJ/PE	SCALE: 1" = 50'	PROJECT:	079401.01		
DRAWN: DAM	DATE: JULY 2008				
CHECKED: JMH	APPROVED:				2 OF 16

8.15.08
 DATE



MDC-716 (SDP)

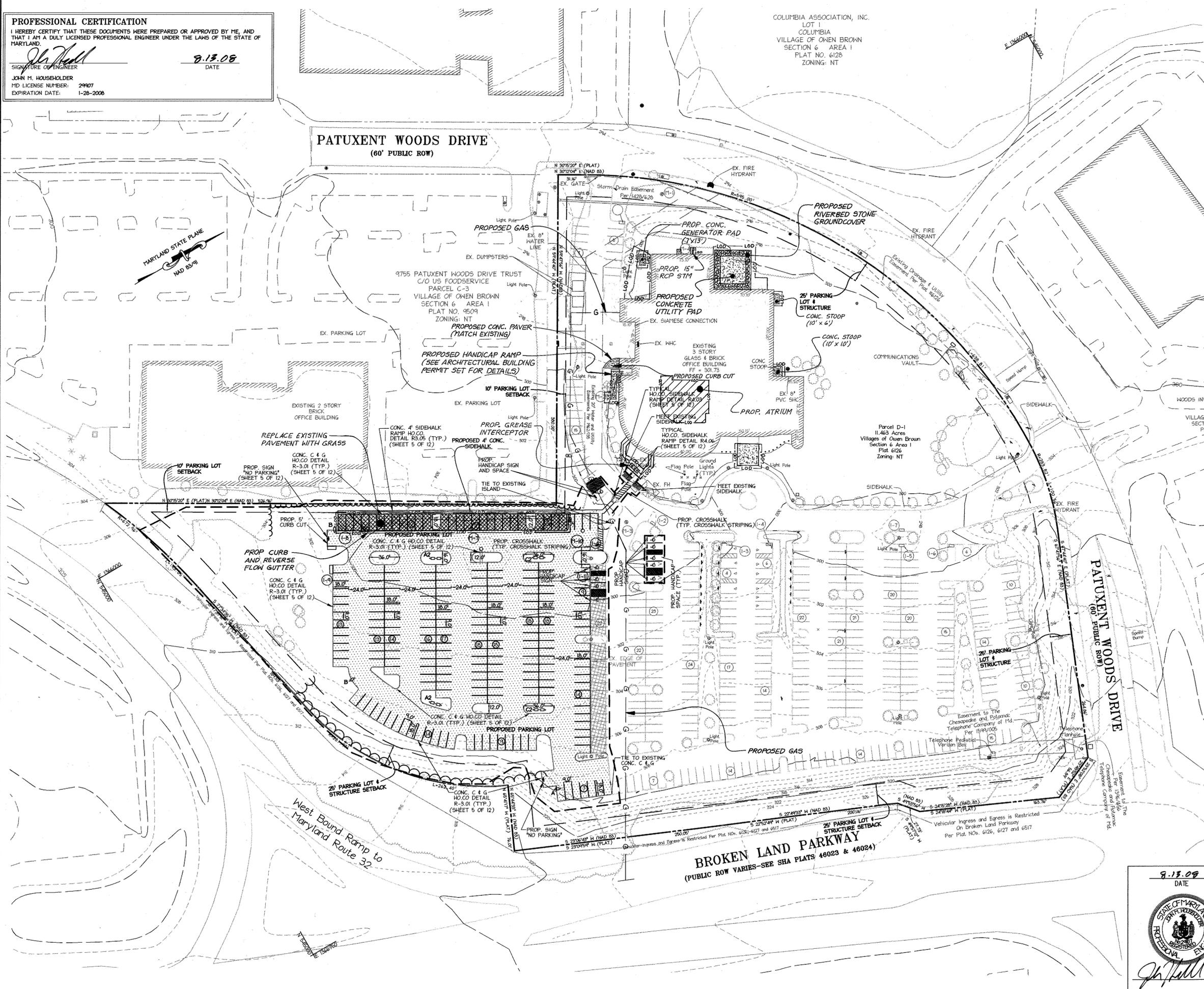
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 SIGNATURE OF ENGINEER: *J.M. Householder*
 JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29107
 EXPIRATION DATE: 1-28-2008
 DATE: 8.13.08

COLUMBIA ASSOCIATION, INC.
 LOT 1
 COLUMBIA
 VILLAGE OF OWEN BROWN
 SECTION 6 AREA 1
 PLAT NO. 6128
 ZONING: NT

LEGEND

- EXISTING CONTOURS
- EXISTING STORM DRAIN
- EXISTING SANITARY SEWER
- PROPERTY LINE
- EXISTING TREELINE
- EXISTING CURB & GUTTER
- EXISTING EDGE OF PAVEMENT
- PROPOSED SETBACK LINES
- PROPOSED TREELINE
- HANDICAP SPACE (VAN ACCESSIBLE)
- PARKING COUNT
- EXISTING LIGHT POLE
- PROPOSED CURB & GUTTER (HOCO DETAIL R-3.01)
- PROPOSED CROSSWALK
- PROPOSED SIDEWALK (HOCO DETAIL R-3.05)
- PROPOSED PAVING AREA (REFER TO SHEET 5)
- AREA TO BE SANGUT AND REPAVED
- LIMITS OF PROPOSED WORK
- PROPOSED LIGHT POLE

NOTE:
 ALL DETAILS CAN BE FOUND ON SHEET 5 OF 12.



APPROVED: DEPARTMENT OF PLANNING AND ZONING

<i>Paul A. Cagle</i>	8/12/08
Director of Planning and Zoning	Date
<i>Cindy Hamilton</i>	8/28/08
Chief, Division of Land Development	Date
<i>John Dammann</i>	8/21/08
Chief, Development Engineering Division	Date

Date	No.	Revision Description
8/16	2	ATRIUM, GREASE INTERCEPTOR, GENERATOR, STORM UPSIZE, PVMT REMOVAL
4/16	1	DEMO SHED, REPLACE PAVERS, CONC. UTIL PAD AND HANDICAP RAMP

COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1
 9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION
 6TH ELECTION DISTRICT

OWNER:
 OAKWOOD VAN BORN, LLC
 CONTACT: MR. KING DANSON
 TELEPHONE: 301-657-7100
 7500 GEORGETOWN ROAD, 15th FLOOR
 BETHESDA, MARYLAND 20814-6133

christopher consultants
 engineering - surveying - land planning
 christopher consultants, inc.
 7177 columbian gateway drive suite 100 | columbia, md. 21046-2990
 410.322.8880 • www.301.881.0146 • fax.410.322.8880

PERMIT INFORMATION CHART

PROJECT NAME	LOT/PARCEL NO.	CENSUS TRACT	
COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1	LOT D1/PARCEL 480 LIBER 4557, FOLIO 687	606703	
PLAT NO. / GRID NO.	ZONE	TAX MAP	ELECTION DISTRICT
6517 / 2	NT	42	6TH
WATER CODE	SEWER CODE		
FDP #147	PRIOR SDP #	SDP-86-166	

TITLE: **SITE DEVELOPMENT PLAN**

DESIGN: ENJ/PE	SCALE: 1" = 50'	PROJECT: 079401.01
DRAWN: DAM	DATE: JULY 2008	
CHECKED: JMH	APPROVED:	3 of 16

8.13.08
 DATE

STATE OF MARYLAND
 PROFESSIONAL ENGINEER

J.M. Householder

MDC-716 (SDP)

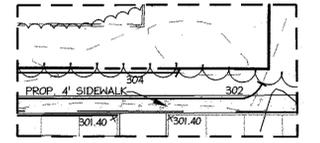
COLUMBIA ASSOCIATION, INC.
 LOT 1
 COLUMBIA
 VILLAGE OF OWEN BROWN
 SECTION 6 AREA 1
 PLAT NO. 6126
 ZONING: NT

PROFESSIONAL CERTIFICATION
 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.

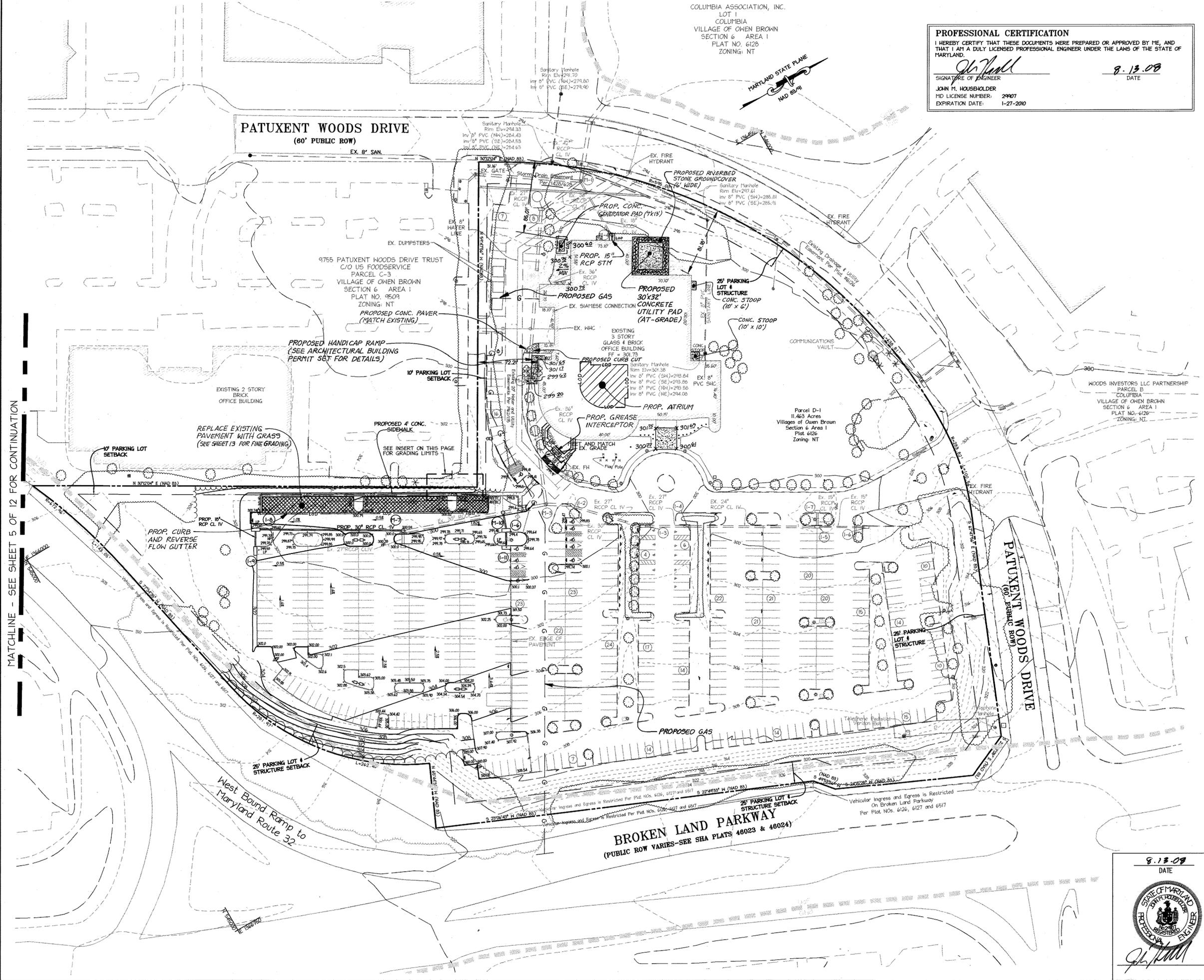
 SIGNATURE OF ENGINEER
 JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010
 DATE: 8-13-08

LEGEND

EXISTING CONTOURS	---
EXISTING STORM DRAIN	--- EX. 12" RCP
EXISTING SANITARY SEWER	--- EX. 8" SAN
PROPERTY LINE	---
EXISTING TREELINE	---
PROPOSED SETBACK LINES	---
PROPOSED CONTOURS	--- 300
PROPOSED TREELINE	---
PROPOSED STORM DRAIN	---



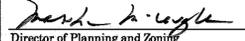
PLAN VIEW
 SCALE: 1" = 20'
 NOTE: PLAN VIEW TO SHOW PROPOSED GRADING ALONG PROPOSED TREELINE.



48 Hours
 Before You Dig
 Call
MISS UTILITY
 Service Protection Center

 CALL TOLL FREE
 1-800-257-7171

APPROVED: DEPARTMENT OF PLANNING AND ZONING

	9/4/08
Director of Planning and Zoning	Date
	8/20/08
Chief, Division of Land Development	Date
	8/22/08
Chief, Development Engineering Division	Date

Date	No.	Revision Description
8/16	2	ATRIUM, GREASE INTERCEPTOR, GENERATOR, STORM UPSIZE, PYMT REMOVAL
4/16	1	DEMO SHED, REPLACE PAVERS, CONC. UTIL PAD AND HANDICAP RAMP

COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1
 9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION
 6TH ELECTION DISTRICT
 OWNER:
 OAKWOOD VAN DORN, LLC
 CONTACT: MR. KING DAWSON
 TELEPHONE: 301-657-7100
 7500 SECRETOWN ROAD, 15th FLOOR
 BETHESDA, MARYLAND 20814-6133

 **christopher consultants**
 engineering - surveying - land planning
 christopher consultants, inc.
 7175 woodbridge gateway drive suite 1000 - columbia, md 21046-0900
 410.672.8800 - md:410.307.9811 - va:410.672.8800

PERMIT INFORMATION CHART

PROJECT NAME	LOT/PARCEL NO.	CENSUS TRACT	
COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1	LOT D1/PARCEL 480	606703	
LIBER 4557, FOLIO 687			
PLAT NO. / GRID NO.	ZONE	TAX MAP	ELECTION DISTRICT
6517 / 2	NT	42	6TH
WATER CODE	E13	SEWER CODE	5290000
FDP #147		PRIOR SDP #	SDP-86-166

8-13-08
 DATE

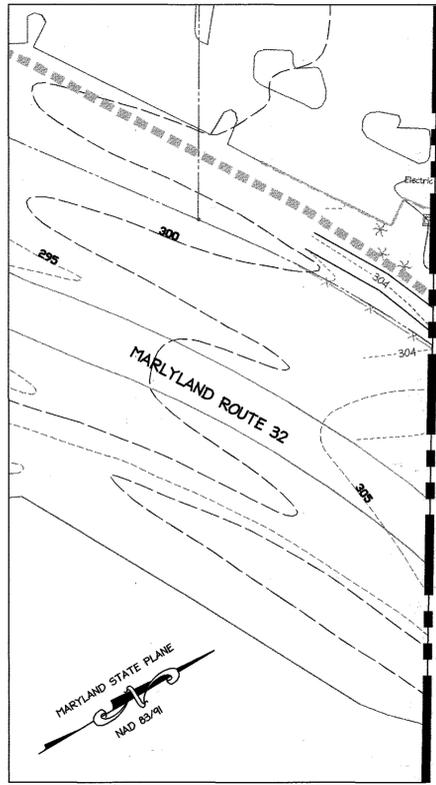
 APPROVED:

GRADING AND UTILITY PLAN

DESIGN: ENJ/PE	SCALE: 1" = 50'	PROJECT: 079401.01
DRAWN: DAM	DATE: JULY 2008	
CHECKED: JMH	APPROVED:	4 of 16

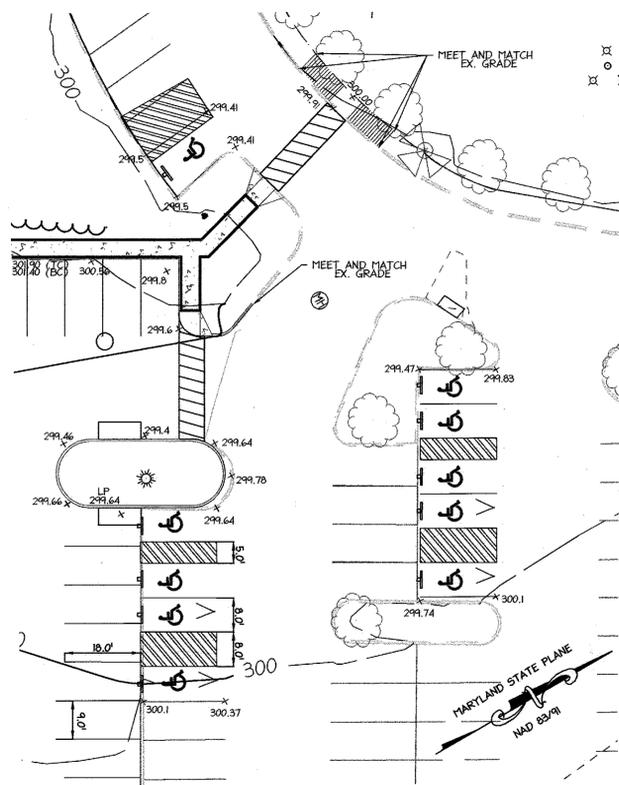
MATCHLINE - SEE SHEET 5 OF 12 FOR CONTINUATION

MDC-716 (SDP)



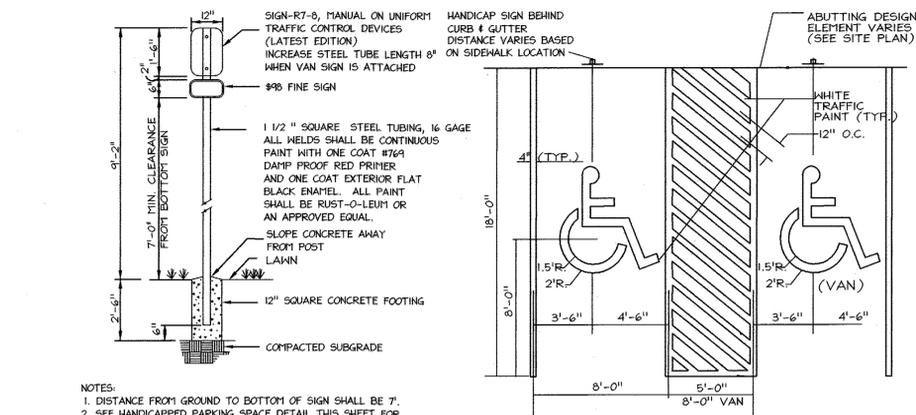
EXISTING TOPOGRAPHY PLAN VIEW

SCALE: 1" = 50'



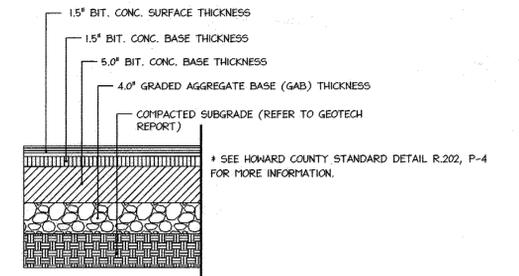
PROPOSED HANDICAP PARKING DETAIL

SCALE: 1" = 20'



HANDICAP PARKING SPACE DETAIL

N.T.S.



PAVING SECTION DETAIL

N.T.S.

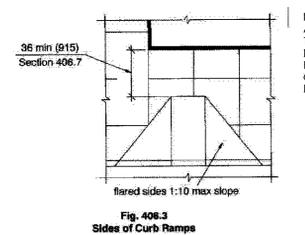
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 Signature: *John M. Householder* DATE: 8.13.08
 JOHN M. HOUSEHOLDER 29907
 MD LICENSE NUMBER: 1-27-2010
 EXPIRATION DATE:

Table 405.2—Allowable Ramp Dimensions for Construction in Existing Sites, Buildings, and Facilities

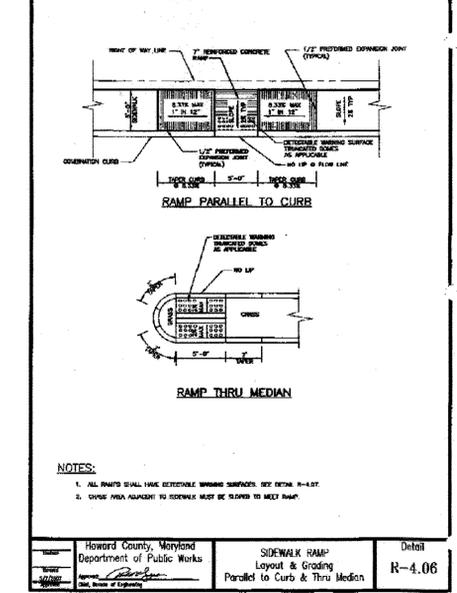
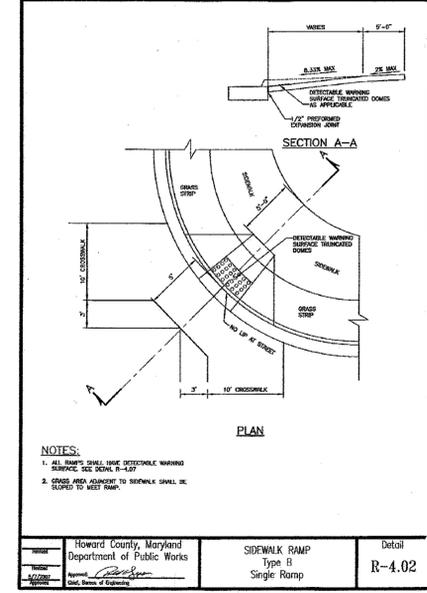
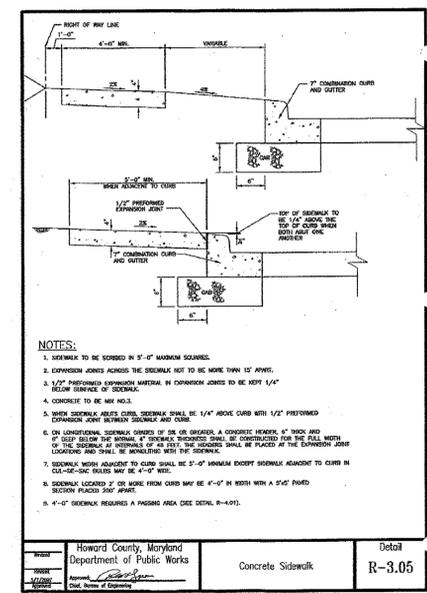
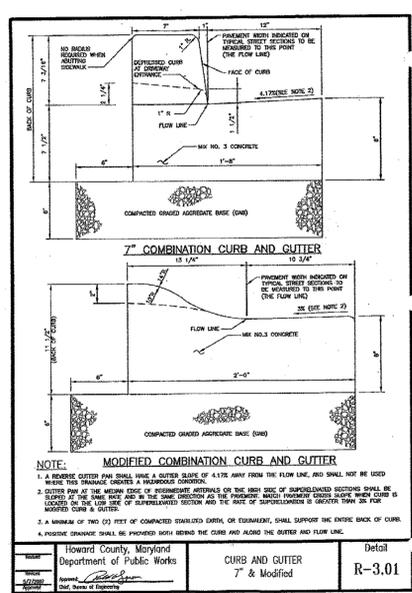
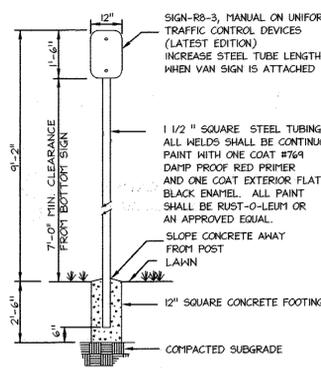
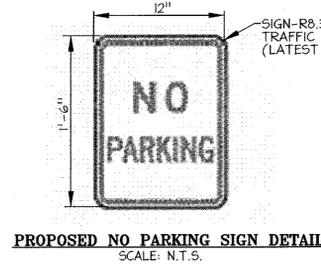
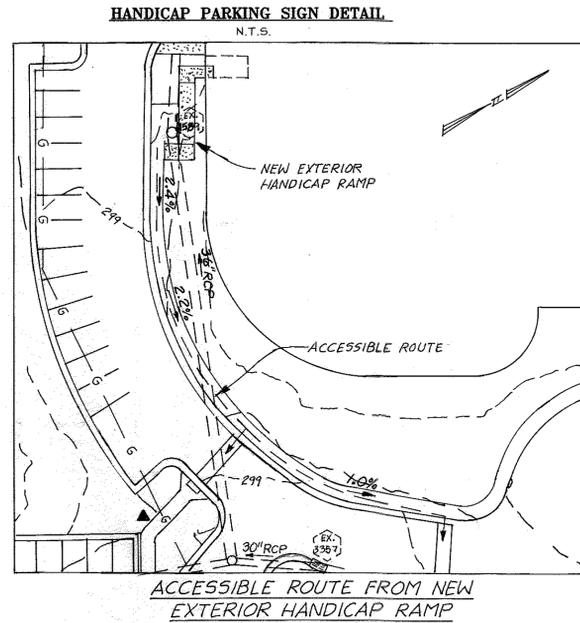
Slope ¹	Maximum Rise
Steeper than 1:10 but not steeper than 1:8	3 inches (75 mm)
Steeper than 1:12 but not steeper than 1:10	6 inches (150 mm)

¹A slope steeper than 1:8 shall not be permitted.

Fig. 405.2 Counter Slope of Surfaces Adjacent to Curb Ramps



NOTE: ANSI STANDARD DETAILS PROVIDED TO SUPPLEMENT H.O.G.O. AND SHAW DETAILS AND ENSURE THAT ADA REGULATIONS ARE MET. WHERE CONFLICTS ARISE ANSI STANDARDS DICTATE.



APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Director of Planning and Zoning: *Paul L. Lewis* Date: 8/2/08
 Chief, Division of Land Development: *Cathy Hamon* Date: 8/28/08
 Chief, Development Engineering Division: *John P. ...* Date: 8/21/08

Date	No.	Revision Description
4/16	1	DEMO SHED, REPLACE PAVERS CONC. UTIL PAD AND HANDICAP RAMP

COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1
 9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION 6TH ELECTION DISTRICT

OWNER: OAKWOOD VAN BORN, LLC
 CONTACT: MR. KING DAVIDSON
 TELEPHONE: 301-657-7700
 7500 SECRETOWNE ROAD, 15TH FLOOR
 BETHESDA, MARYLAND 20814-6133

christopher consultants
 engineering • surveying • land planning
 1777 COLUMBIA GREENWAY DRIVE SUITE 100, COLUMBIA, MD 21046-2900
 TEL: 410-326-8800 FAX: 410-326-8805

PERMIT INFORMATION CHART

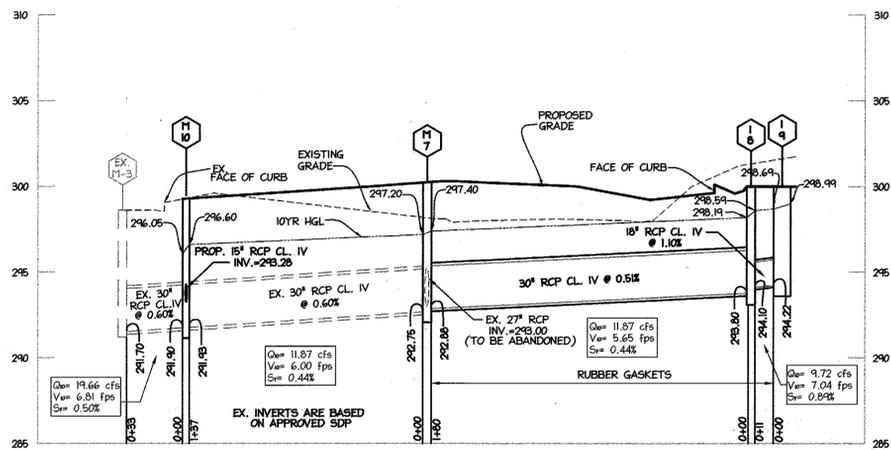
PROJECT NAME	LOT/PARCEL NO.	CENSUS TRACT
COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1	LOT D1/PARCEL 480	606703
PLAT NO./GRID NO.	ZONE	TAX MAP
6517 / 2	NT	42
WATER CODE	SEWER CODE	ELECTION DISTRICT
E13	5290000	6TH
FDP #147	PRIOR SDP #	SDP-86-166

TITLE: **SITE DEVELOPMENT & SWM PLAN NOTES AND DETAILS**

DESIGN: ENJ/PE SCALE: AS SHOWN PROJECT: 079401.01
 DRAWN: DAM DATE: JULY 2008
 CHECKED: JMH APPROVED: *John P. ...* 5 OF 16

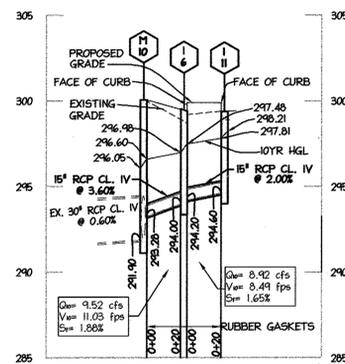
MDC-776 (SDP)

PROFESSIONAL CERTIFICATION
 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.
John M. Householder
 SIGNATURE OF ENGINEER
 JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010
 DATE: 8.13.09



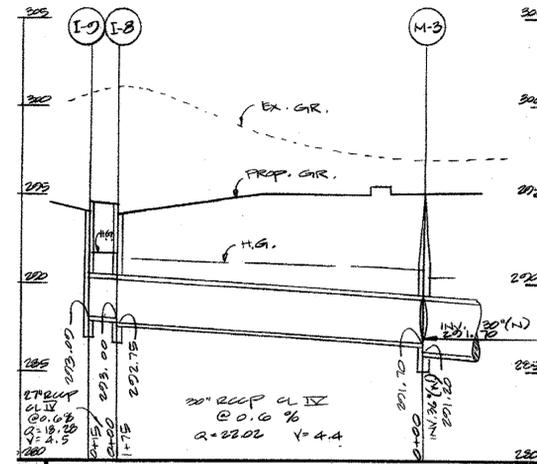
STORMDRAIN PROFILE I-9 - M-3

HOR 1"=50'
 VER 1"= 5'



STORMDRAIN PROFILE I-11 - EXISTING 30" STORMDRAIN

HOR 1"=50'
 VER 1"= 5'



DOWNSTREAM SYSTEM

NOTE:
 EX. I-4 TO BE REMOVED AND PROP. M-7 TO REPLACE EX. I-8. TAKEN FROM APPROVED SDP 86-166C USED TO CALCULATE HGL'S AND VERIFICATION THAT PROPOSED FLOWRATE (19.66 cfs) TO EX M-3 IS LESS THAN OR EQUAL TO THE PREVIOUSLY APPROVED FLOWRATE (22.02 cfs). THE EXISTING SYSTEM HAS CAPACITY FOR THE PROPOSED DEVELOPMENT.

STRUCTURE SCHEDULE						
NO.	TYPE	WIDTH DIAM.	INV. ELEV.	AS-BUILT INV. ELEV.	ELEV. TOP	STANDARD DETAIL
I-11	A-10 INLET	10'	294.60		299.40	HOWARD CO. DPH DETAIL D-4.01
I-9	A-10 INLET	10'	294.22		300.00	HOWARD CO. DPH DETAIL D-4.01
I-8	A-5 INLET	5'	293.80		300.00	HOWARD CO. DPH DETAIL D-4.03
I-6	A-5 INLET	5'	294.00		299.40	HOWARD CO. DPH DETAIL D-4.03
M-7	BRICK MANHOLE #	4'	292.75		300.59	HOWARD CO. DPH DETAIL G-9.01
M-10	BRICK MANHOLE **	5'	291.90		299.53	HOWARD CO. DPH DETAIL G-9.02
EX. I-8	EX. INLET TO BE REPLACED					TO BE REPLACED/UPGRADED PER M-7
EX. I-9	EX. INLET TO BE REMOVED/BLOCKED					TO BE REMOVED/BLOCKED

* EX 27" TO BE ABANDONED, BLOCK 27" OPENING
 ** M-10 IS TO BE CONSTRUCTED TO CONNECT EX 30" RCP.

PIPE SCHEDULE					
FROM	TO	SIZE	TYPE	LENGTH	
I-11	I-6	15"	RCP CL-IV	20'	
I-9	I-8	18"	RCP CL-IV	11'	
I-8	M-7	30"	RCP CL-IV	180'	
I-6	M-10	15"	RCP CL-IV	20'	

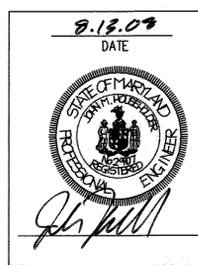
PIPE SUMMARY		
SIZE	TYPE	LENGTH
15"	RCP CL-IV	40'
18"	RCP CL-IV	11'
30"	RCP CL-IV	180'
TOTAL		231'

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Mark A. Cull 7/2/09
 Director of Planning and Zoning Date
Cindy Harsh 8/28/09
 Chief, Division of Land Development Date
John M. Householder 8/27/09
 Chief, Development Engineering Division Date

COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1
 9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION 6TH ELECTION DISTRICT
 OWNER:
 OAKWOOD VAN BORN, LLC
 CONTACT: MR. KING DAVIDSON
 TELEPHONE: 301-657-7100
 7500 SECRETOWNE ROAD, 15th FLOOR
 BETHESDA, MARYLAND 20814-6133



PERMIT INFORMATION CHART		
PROJECT NAME COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1	LOT/PARCEL NO. LOT D1/PARCEL 480 LIBER 4557, FOLIO 687	CENSUS TRACT 606703
PLAT NO. 6517	GRID NO. 2	ZONE NT
TAX MAP 42	ELECTION DISTRICT 6TH	
WATER CODE E13	SEWER CODE 5290000	
FDP #147	PRIOR SDP #	SDP-86-166



TITLE:
STORMDRAIN NOTES AND PROFILES
 DESIGN: ENJ/PE SCALE: AS SHOWN PROJECT: 079401.01
 DRAWN: DAM DATE: JULY 2008
 CHECKED: JMH APPROVED: *John M. Householder*
7 OF 16

MDC-776 (SDP)

SOILS CLASSIFICATION

Map Unit	Previous Unit	Name	Slope	K-factor	Hydric
UaB	Ek/Gl	Urban Land-Udorthents	0-65%	0.26	No
UaF	Ek/Gl	Udorthents	0-8%	-	No

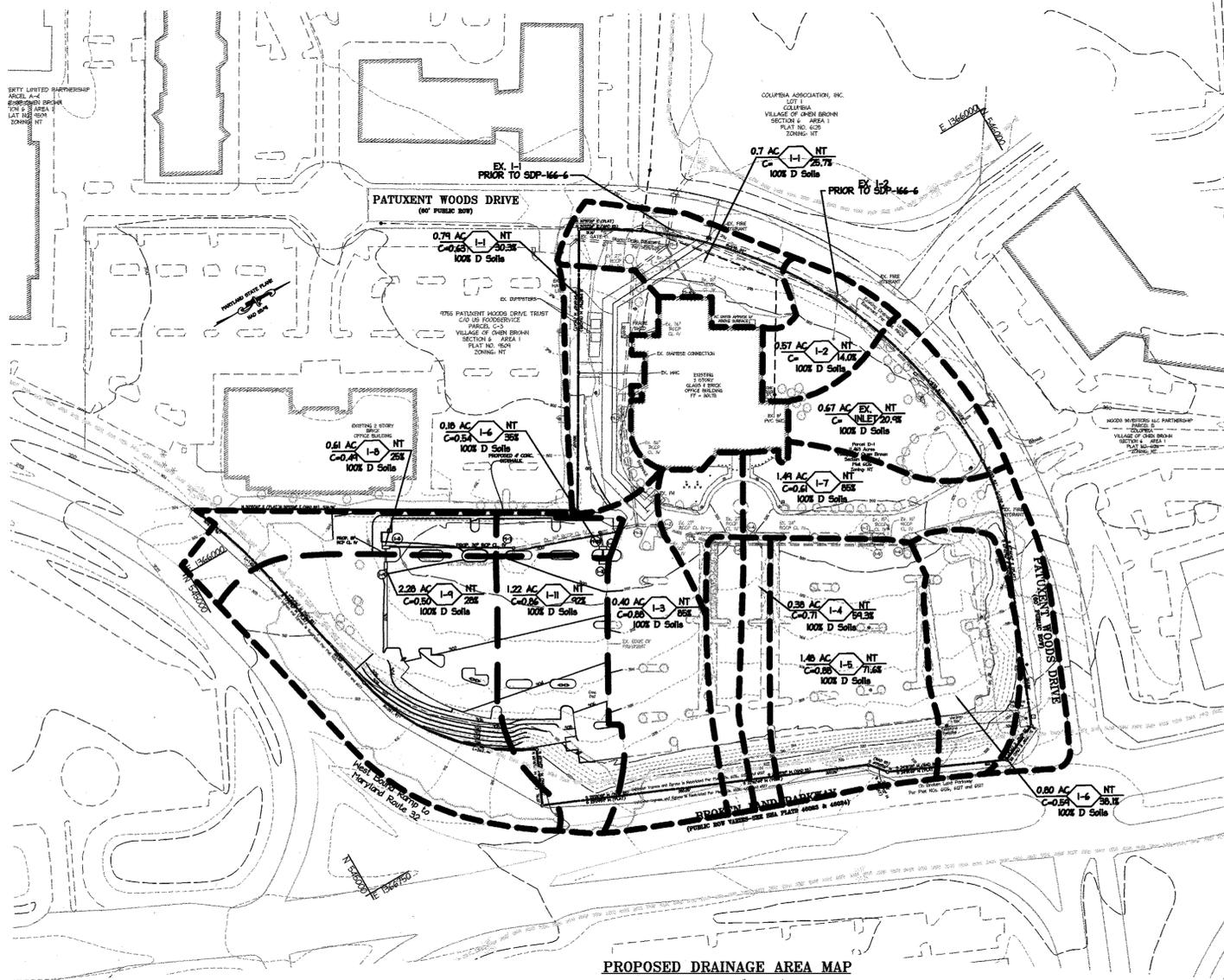
*NOTE: THE ENTIRE SITE IS COMPOSED OF SOIL TYPE UaB, WHICH IS A D SOIL.

PROPOSED DRAINAGE AREA MAP NOTES

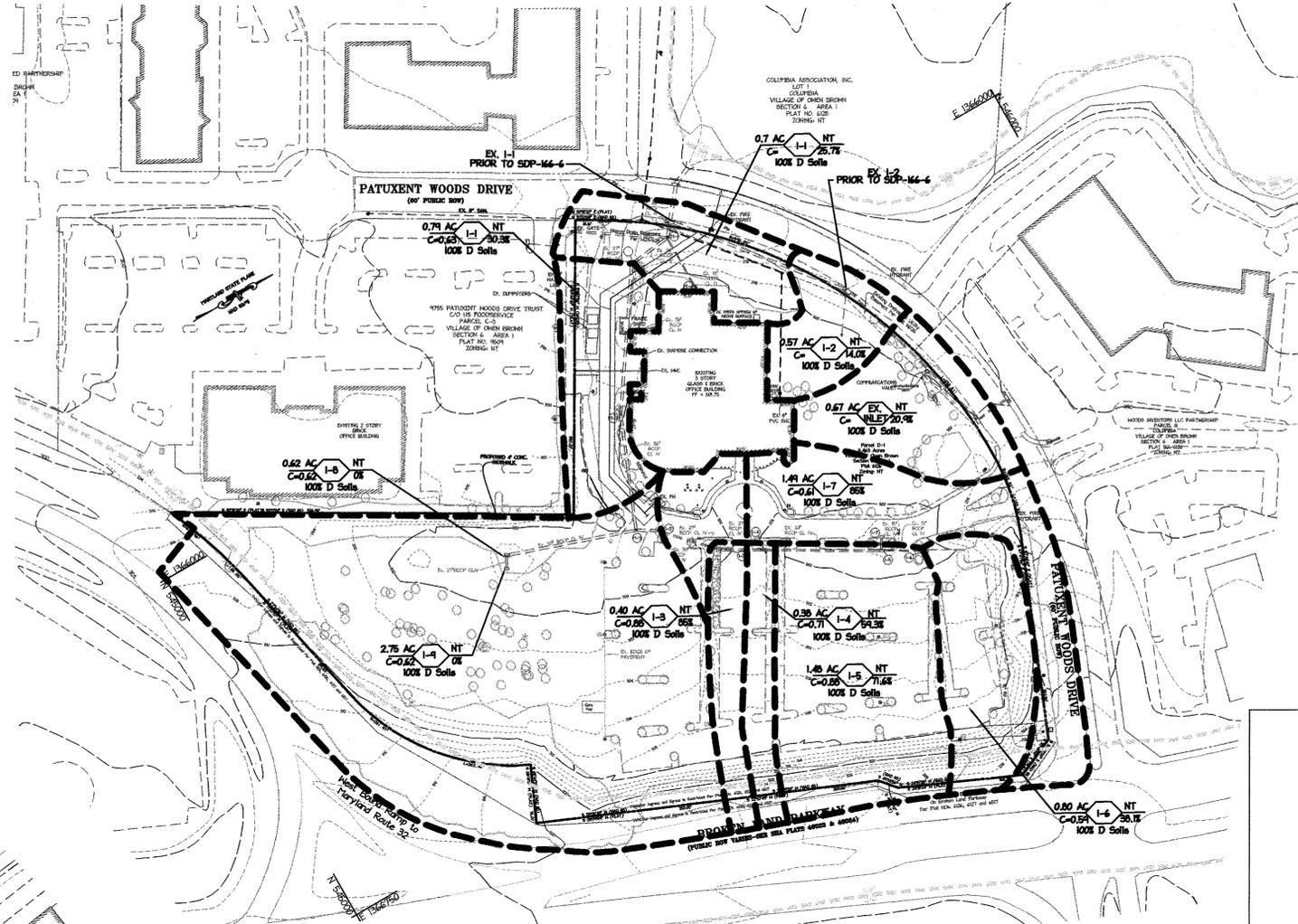
1. SINCE THE SITE IS LARGELY COVERED BY IMPERVIOUS, A TC OF 0.1HR WAS ASSUMED FOR ALL STUDY POINTS

PROPOSED LEGEND

EXISTING CONTOURS	--- 200 ---
PROPOSED CONTOUR	--- 300 ---
EXISTING STORM DRAIN	EX 3" RCP
PROPERTY LINE	---
PROPOSED PUBLIC STORM DRAIN	PROP 24" S.D.
DRAINAGE AREA	---
EXISTING INLET / MANHOLE (PER SDP-86-166C)	⊕ ⊕
PROPOSED INLET / MANHOLE	⊕ ⊕
EXISTING TREELINE	~~~~~
EXISTING SOILS LINE	UaB UaF
EXISTING TREES	*O



PROPOSED DRAINAGE AREA MAP
SCALE: 1" = 100'



EXISTING DRAINAGE AREA MAP
SCALE: 1" = 100'

EXISTING LEGEND

EXISTING CONTOURS	--- 200 ---
EXISTING STORM DRAIN	EX 3" RCP
PROPERTY LINE	---
EXISTING SUB-DRAINAGE AREA	---
EXISTING INLET / MANHOLE (PER SDP-86-166C)	⊕ ⊕
EXISTING TREELINE	~~~~~
EXISTING SOILS LINE	UaB UaF
EXISTING TREES	*O

PROFESSIONAL CERTIFICATION

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.

Signature of Engineer: *John M. Householder*
DATE: 8.13.09
JOHN M. HOUSEHOLDER
MD LICENSE NUMBER: 29907
EXPIRATION DATE: 1-27-2010



APPROVED: DEPARTMENT OF PLANNING AND ZONING
Debra K. Gault 9/2/08
 Director of Planning and Zoning Date
Cindy Handa 8/25/08
 Chief, Division of Land Development Date
John P. ... 8/20/08
 Chief, Development Engineering Division Date

Date No. Revision Description
COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1
9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION
6TH ELECTION DISTRICT
 OWNER: OAKWOOD VAN BORN, LLC
 CONTACT: MR. KING DAVIDSON
 TELEPHONE: 301-657-7100
 7500 SECRETOWNE ROAD, 15th FLOOR
 BETHESDA, MARYLAND 20814-6133



PERMIT INFORMATION CHART

PROJECT NAME	LOT D1/PARCEL NO. 480	CENSUS TRACT
COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1	LIBER 4557, FOLIO 687	606703
PLAT NO. GRID NO.	ZONE TAX MAP	ELECTION DISTRICT
6517 2	NT 42	6TH
WATER CODE E13	SEWER CODE 5290000	
FDP #147	PRIOR SDP # SDP-86-166	

DRAINAGE AREA MAP		
DESIGN: ENJ/PE	SCALE: 1" = 100'	PROJECT: 079401.01
DRAWN: DAM	DATE: JULY 2008	
CHECKED: JMH	APPROVED:	8 of 16

MDC-776 (SDP)

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

John R. Robertson 8/26/08
 Signature of Engineer Date

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.

John M. Householder 8/13/08
 Signature of Engineer Date

JOHN M. HOUSEHOLDER, P.E.
 Print name below signature

DEVELOPER'S CERTIFICATE

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 inspection by the Howard Soil Conservation District.

Alex King Davidson 8/8/08
 Signature of Developer Date

Alex King Davidson
 Print name below signature

SEQUENCE OF CONSTRUCTION

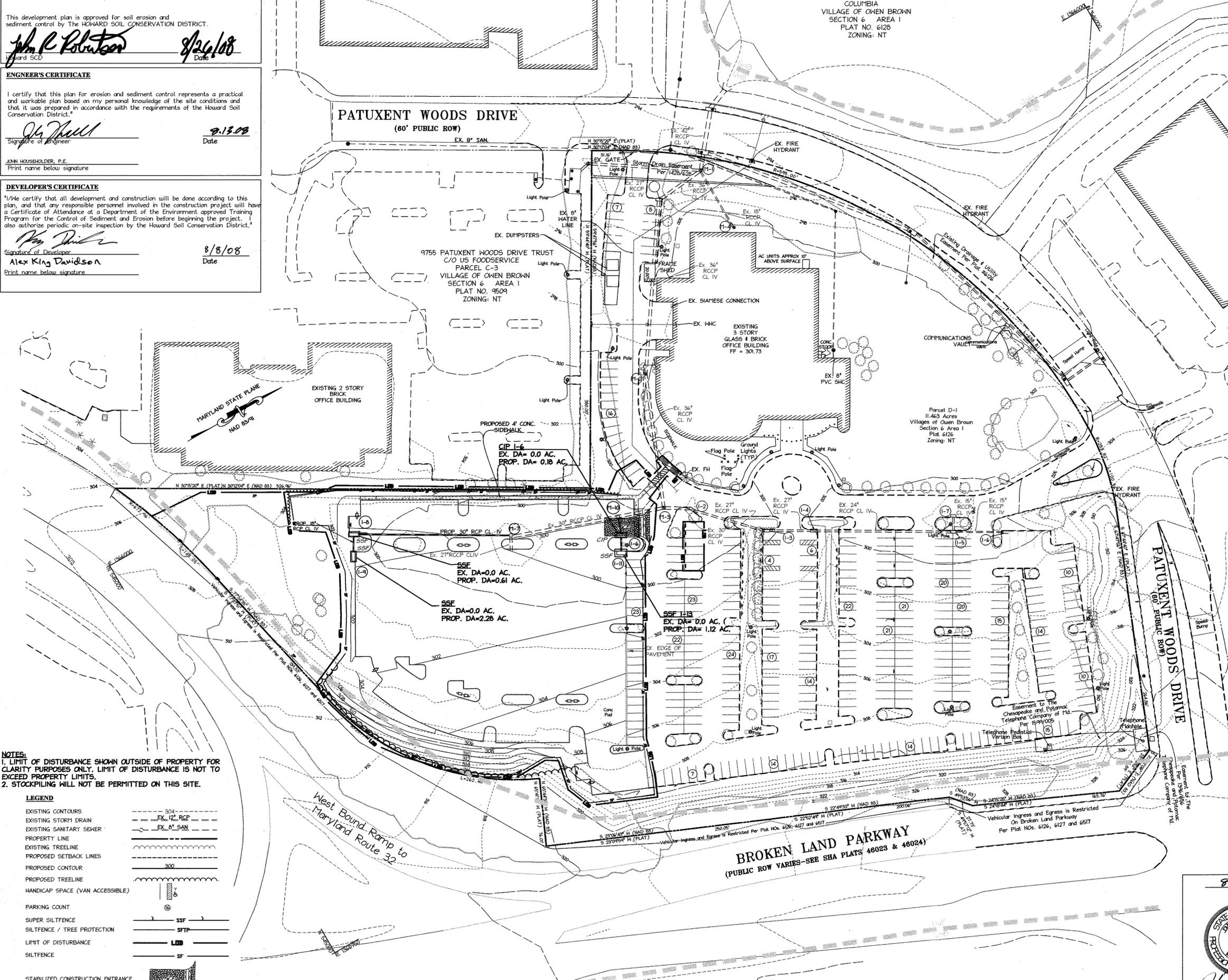
1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO COMMENCING ANY LAND DISTURBANCE ACTIVITIES. (1 DAY)
 2. AN ON-SITE PRECONSTRUCTION MEETING SHALL BE CONDUCTED WITH THE CONTRACTOR AND THE HOWARD COUNTY INSPECTOR AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION. CONTACT THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT (410) 313-1880 TO SCHEDULE. (1 DAY)
 3. CLEAR AND GRUB FOR INSTALLATION OF THE PERIMETER SEDIMENT CONTROL DEVICES INCLUDING TREE PROTECTION, SUPER SILT FENCE AND INLET PROTECTION ON EX INLET 8 AND 4 AND THE STABILIZED CONSTRUCTION ENTRANCE (2 DAYS)
 4. BEGIN ROUGH GRADING THE SITE. (10 DAYS)
 5. BEGIN INSTALLATION OF STORMDRAIN PIPES AND OTHER UNDERGROUND UTILITY LINES STORMDRAIN SHOULD BE CONSTRUCTED FROM DOWNSTREAM TO UPSTREAM. INSTALL CURB INLET PROTECTION AND SUPER SILT FENCE AS SOON AS STORMDRAIN IS CONSTRUCTED. STABILIZED CONSTRUCTION ENTRANCE TO BE REMOVED AND REPLACED AS NECESSARY TO INSTALL STORMDRAIN BETWEEN M-10 AND I-6. (15 DAYS)
 6. COMPLETE ALL GRADING. (4 DAYS)
 7. BEGIN CURB AND GUTTER CONSTRUCTION. (5 DAYS)
 8. BASE PAVE PARKING LOT. INSTALL ALL REMAINING STORMDRAIN. (5 DAYS)
 9. COMPLETE ALL OTHER ON-SITE IMPROVEMENTS. (1 WEEK)
 10. STABILIZE ALL DISTURBED AREA. (2 DAYS)
 11. SURFACE PAVE PARKING AREA (2 DAYS)
 12. STABILIZE ALL REMAINING DISTURBED AREAS (1 DAY)
 13. WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR REMOVE ANY REMAINING SEDIMENT CONTROL DEVICES.
- TOTAL CONSTRUCTION TIME: 53 DAYS

PROFESSIONAL CERTIFICATION

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.

John M. Householder 8.13.08
 Signature of Engineer Date

JOHN M. HOUSEHOLDER
 MD LICENSE NUMBER: 29907
 EXPIRATION DATE: 1-27-2010



NOTES:

1. LIMIT OF DISTURBANCE SHOWN OUTSIDE OF PROPERTY FOR CLARITY PURPOSES ONLY. LIMIT OF DISTURBANCE IS NOT TO EXCEED PROPERTY LIMITS.
2. STOCKPILING WILL NOT BE PERMITTED ON THIS SITE.

LEGEND

- EXISTING CONTOURS
- EXISTING STORM DRAIN
- EXISTING SANITARY SEWER
- PROPERTY LINE
- EXISTING TREELINE
- PROPOSED SETBACK LINES
- PROPOSED CONTOUR
- PROPOSED TREELINE
- HANDICAP SPACE (VAN ACCESSIBLE)
- PARKING COUNT
- SUPER SILT FENCE
- SILT FENCE / TREE PROTECTION
- LIMIT OF DISTURBANCE
- SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE

LIMIT OF DISTURBANCE: 138,397.3 SQ.FT. 3.17 ACRES

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Frank A. Lyle 8/14/08
 Director of Planning and Zoning Date

Cindy Hantz 8/20/08
 Chief, Division of Land Development Date

Wm. D. Williams 8/20/08
 Chief, Development Engineering Division Date

Date	No.	Revision Description

COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1
 9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION
 6TH ELECTION DISTRICT

OWNER
 OAKWOOD VAN DORN, LLC
 CONTACT: MR. KING DAVIDSON
 TELEPHONE: 301-657-7100
 7500 GEORGETOWN ROAD, 15th FLOOR
 BETHESDA, MARYLAND 20814-6133

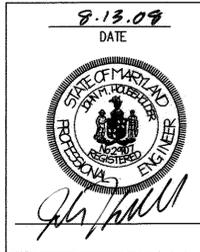
christopher consultants
 engineering · surveying · land planning
 christopherconsultants.com
 7177 columbian gateway drive suite 100 · columbia, md 21046-2980
 410.326.8888 · fax: 410.326.8888

PERMIT INFORMATION CHART

PROJECT NAME COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1	LOT/PARCEL NO. LOT D1/PARCEL 480	CENSUS TRACT 606703
PLAT NO. GRID NO. 6517 2	ZONE NT	TAX MAP 42
WATER CODE E13	SEWER CODE 61H	ELECTION DISTRICT 61H
FDP #147	PRIOR SDP #	SDP-86-186

EROSION AND SEDIMENT CONTROL PLAN

DESIGN: ENJ/PE SCALE: 1" = 50' PROJECT: 079401.01
 DRAWN: DAM DATE: JULY 2008
 CHECKED: JMH APPROVED:



MDC-776 (SDP)

21.0 Standards and Specifications For Land Grading

Definitions

Reshaping of the existing land surface in accordance with a plan as determined by engineering survey and layout.

Purpose

The purpose of a land grading specification is to provide for erosion control and vegetative establishment on those areas where the existing land surface is to be reshaped by grading according to plan.

Design Criteria

The grading plan should be based upon the incorporation of building designs and street layouts that fit and utilize existing topography and desirable natural surrounding to avoid extreme grade modifications.

Many countries have regulations and design procedures already established for land grading and cut and fill slopes. Where these requirements exist, they should be followed.

1. Provisions shall be made to safely conduct surface runoff to storm drains, protected outlets or to stable water courses to insure that surface runoff will not damage slopes or other graded areas.

2. Cut and fill slopes that are to be stabilized with grasses shall not be steeper than 2:1. (Where the slope is to be mowed the slope should be no steeper than 3:1; 4:1 is preferred because of safety factors related to mowing steep slopes.)

3. Reverse benches shall be provided whenever the vertical interval (height) of any 2:1 slopes exceeds 20 feet; for 3:1 slopes it shall be increased to 30 feet and for 4:1 to 40 feet. Benches shall be located to divide the slopes face as equally as possible and shall convey the water to a stable outlet.

a. Benches shall be a minimum of six-feet wide to provide ease of maintenance.

b. Benches shall be designed with a reverse slope of 6:1 to flatter to the toe of the upper slope and with a minimum of one foot in depth. Bench gradient to the outlet shall be between 2 percent and 3 percent, unless accompanied by appropriate design and computations.

c. The flow length within a bench shall not exceed 800' unless accompanied by appropriate design and computations. For flow channel stabilization see temporary swales.

4. Surface water shall be diverted from the face of all cut and/or fill slopes by the use of earth dikes, ditches and swales or conveyed downslope by the use of a designated structure, except where:

a. The face of the slope is or shall be stabilized and the face of all graded slopes shall be protected for surface runoff until they are stabilized.

b. The face of the slope shall not be subjected to any concentrated slous of surface water such as from natural drainways, graded swales, dounspouts, etc.

c. The face of the slope will be protected by special erosion control materials, to include, but not limited to: approved vegetative stabilization practices (see section G), rip-rap or other approved stabilization methods.

5. Cut slopes occurring in ripable rock shall be serrated as shown on the following diagram. These serrations shall be made with conventional equipment as the excavation is made. Each step or serration shall be constructed on the contour and will have steps cut at nominal two-foot intervals with nominal three-foot horizontal shelves.

6. Surface drainage shall be provided where necessary to intercept seepage that would otherwise adversely affect slope stability or create excessively wet site conditions.

7. Slopes shall not be created to close to property lines as the endanger adjoining properties without adequately protecting such properties against sediment, erosion, slippage, settlement, subsidence or other related damages.

8. Fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris, and other objectionable material. It should be free of stones over two (2) inches in diameter where compacted by hand or mechanical tampers over eight (8) inches in diameter where compacted by rollers or other equipment.

9. Stockpiles, borrow areas and spoil shall be shown on the plans and shall be subjected to the provisions of the Standard and Specifications.

All disturbed areas shall be stabilized structurally or vegetatively in compliance with 20.0 Standards and Specifications for Vegetative Stabilization.

21.0 Standards and Specifications For Topsoil

Definitions

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose

To provide a suitable soil medium for vegetative growth. Soil of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies

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 materials toxic to plant growth
d. The soil is so acidic that treatment with limestone is not feasible.

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

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:

- 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.
ii. Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutgrass, poison ivy, thistle, or other as specified.
iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread to the rate of 4-8 tons/acre (200-400 pounds per 1,000square feet) prior to the placement of topsoil.

For sites having disturbed areas under 5 acres:

Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

For sites having disturbed areas over 5 acres:

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 tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise 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 day min.) to permit dissipation of phytotoxic materials.

Note: Topsoil substitutes or amendments as recommended by a qualified agronomist or soil scientist approved by the appropriate approval authority, may be used in lieu of natural topsoil.

Place topsoil (if required) and apply soil amendments as specified on 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

Topsoil Application

When topsoiling, maintain needed erosion and sediment control practiced such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fences and Sediment Traps and Basins.

Grades in the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.

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.

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:

Composted Sludge Materials for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:

- a. Composted sludge shall be supplied by, or originated 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.

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.

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 when in and off-site damage is likely without treatment.

Specifications

Temporary Methods

Mulches - See standards for vegetative stabilization with mulches only. Mulch should be crimped or tacked to prevent blowing.

2. Vegetative 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 similar 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 materials 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 re-treatment.

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. Topsoil - Covering with less erosive 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 Use in Predicting Soil Loss.
2. Agriculture Information Bulletin 354. How to Control Wind Erosion, USDA - ARS.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seeded 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:

- 1. Preferred--Apply 2 tons/acre dolomitic limestone (92 lbs/1000 sq. ft.) and 600 lbs/acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.) before seeding.
2. Acceptable--Apply 2 tons/acre dolomitic limestone (92 lbs/1000 sq. ft.) and 1000 lbs/acre 10-10-10 fertilizer (23 lbs/1000 sq. ft.) before seeding.

Seeding -- For the periods March 1 -- April 30, and August 1 -- October 15, seed with 60 lbs/acre (1.4 lbs/1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 -- July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs/acre (0.5 lbs/1000 sq. ft.) of weeping lovegrass. During the period of October 16 -- 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 sod. Option 3 -- Seed: with 60 lbs/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 lbs/1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 216 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 reseeding.

TEMPORARY SEEDING NOTES.

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

Seeded preparation: -- Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

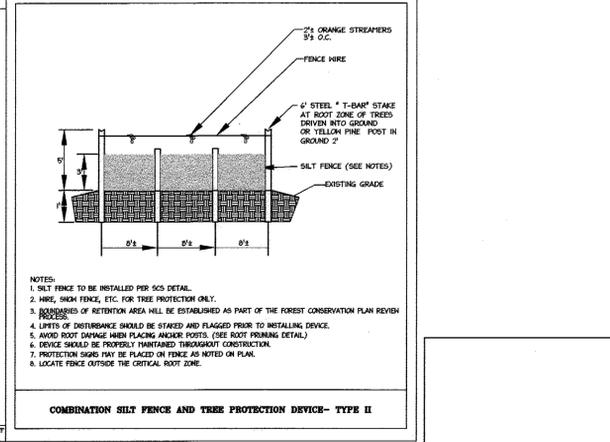
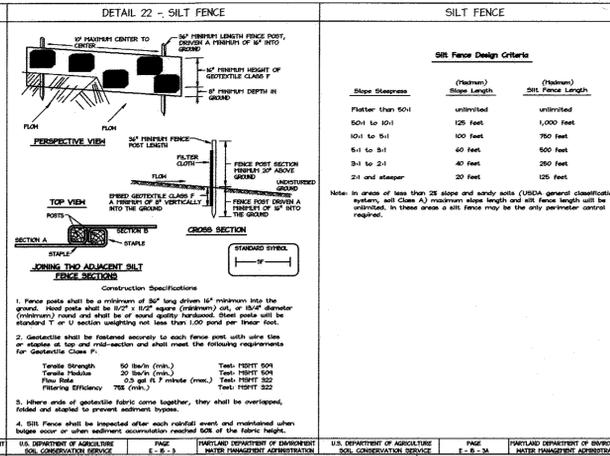
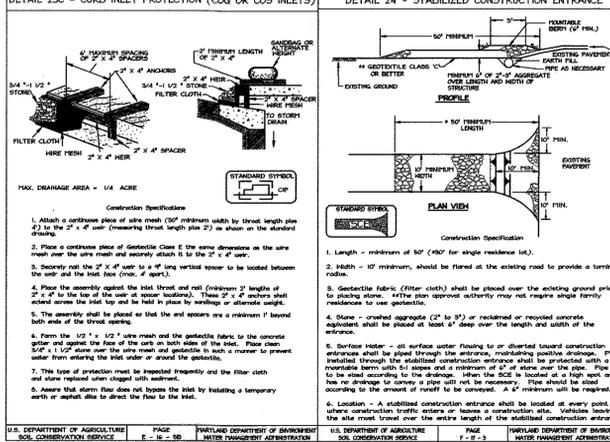
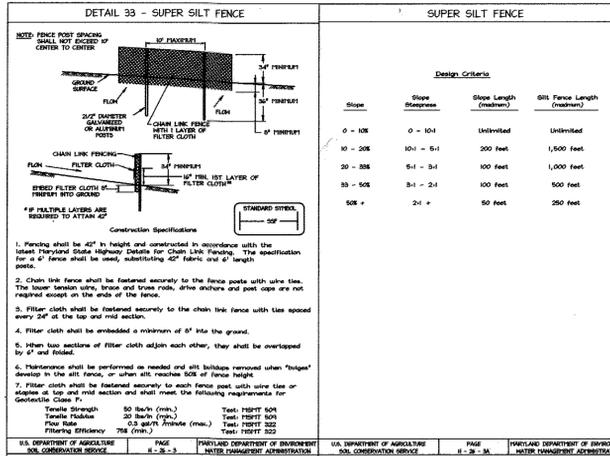
Soil Amendments: -- Apply 600 lbs/acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.).

Seeding: -- For periods March 1 -- April 30 and from August 15 -- October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sq. ft.). For the period May 1 -- August 14, seed with 3 lbs/acre of weeping lovegrass (.07 lbs/1000 sq. ft.). For the period November 16 -- February 28 protect the site by applying 2 tons/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/acre (70 to 90 lbs/1000 sq. ft.) of unrotted weed-free, small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 216 gal. per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slope 8 ft. or higher, use 348 gal. per acre (8 gal/1000 sq. ft.) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.

DEVELOPER'S CERTIFICATE, ENGINEER'S CERTIFICATE, and REVIEWED FOR HOWARD COUNTY SHEETS TECHNICAL REQUIREMENTS. Includes signatures of King Davidson and John M. Householder, dated 8/8/08 and 8/13/08.



PROFESSIONAL CERTIFICATION. 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. Signature: John M. Householder, dated 8/13/08.

NOTE: * THE BIORETENTION FACILITY IS NOT TO BE USED FOR SEDIMENT CONTROL.

HOWARD COUNTY SOIL CONSERVATION DISTRICT 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 conform with the most current 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 greater 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 their perimeter in accordance with Vol 1, Chapter 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specific above in accordance with the 1995 MARYLAND STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. 51), sod (Sec. 54), temporary seeding (Section 52). Temporary stabilization with mulch along can only be done when recommended seeding dates do not allow for proper germination and establishment 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 by the Howard County Sediment Control Inspector.
7. Site Analysis: Total Area of Site 11.46 Acres, Area Disturbed 3.17 Acres, Area to be roofed or paved 2.06 Acres, Area to be vegetatively stabilized 0.50 Acres, Total Cut 6,324 Cu. Yds., Total Fill 0 Cu. Yds., Offsite waste/borrow area location: TO BE DETERMINED.
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 control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
10. On all site 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 any construction as shown on these plans by the end of each work day, whichever is shorter.

APPROVED: DEPARTMENT OF PLANNING AND ZONING. Director of Planning and Zoning: [Signature], dated 8/13/08. Chief, Division of Land Development: [Signature], dated 8/13/08. Chief, Development Engineering Division: [Signature], dated 8/13/08.

Table with 3 columns: Date, No., Revision Description. Includes revision 1 on 8/13/08.

COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1 9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION 6TH ELECTION DISTRICT

OWNER: OWEN BROWN, LLC. CONTACT: MR. KING DAWSON. ADDRESS: 7500 SECRETOWNE ROAD, 15TH FLOOR, BETHESDA, MARYLAND 20814-9133. christopher consultants logo and contact info.

PERMIT INFORMATION CHART. PROJECT NAME: COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1. LOT/PARCEL NO.: LOT D1/PARCEL 480. CENSUS TRACT: 606703. TITLE: EROSION AND SEDIMENT CONTROL NOTES & DETAILS. DESIGN: ENJ/PE, SCALE: AS SHOWN, PROJECT: 079401.01. DRAWN: DAM, DATE: JULY 2008. CHECKED: JMH, APPROVED: [Signature]. 10 OF 16.

COLUMBIA
VILLAGE OF OWEN BROWN
SECTION 6 AREA 1
PLAT NO. 6126
ZONING: NT

LEGEND

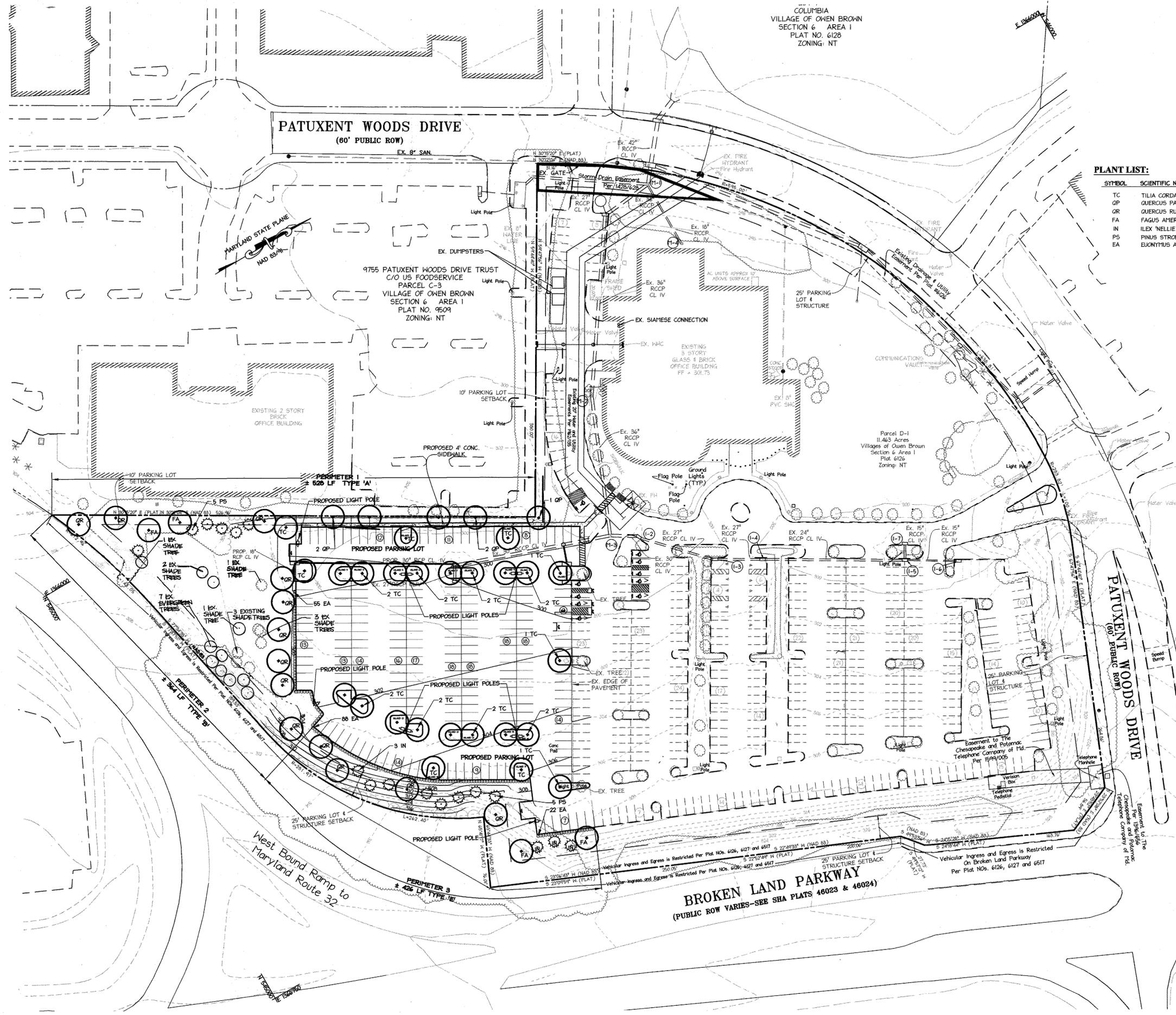
PROPOSED SHADE TREE 

PROPOSED EVERGREEN TREE 

PROPOSED SHRUB 

PLANT LIST:

SYMBOL	SCIENTIFIC NAME	COMMON NAME	QUANTITY	SIZE	REMARKS
TC	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	23	2 1/2" - 3" caliper	BMB
QP	QUERCUS PALUSTRIS	PIN OAK	5	2 1/2" - 3" caliper	BMB
OR	QUERCUS RUBRA	RED OAK	15	2 1/2" - 3" caliper	BMB
FA	FAGUS AMERICANA	AMERICAN BEECH	8	2 1/2" - 3" caliper	BMB
IN	ILEX 'NELLIE R. STEVENS'	NELLIE R. STEVENS HOLLY	9	6-8' HT.	BMB
PS	PINUS STROBUS	WHITE PINE	13	6-8' HT.	BMB
EA	EUONYMUS ALATA 'COMPACTA'	DWARF BURNING BUSH	165	2" - 3" HT.	3 GAL.



APPROVED: DEPARTMENT OF PLANNING AND ZONING

Shirley A. DeLoach 9/1/08
Director of Planning and Zoning Date

Cindy Hanna 8/29/08
Chief, Division of Land Development Date

W. Dammann 8/27/08
Chief, Development Engineering Division Date

Date	No.	Revision Description
1.7.09	1	DELETED 1 SHADE TREE, AND 5 EVERGREEN TREES, AND ADDED 4 EX. SHADE TREES + 7 EVERGREENS (see)

COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1
9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION
6TH ELECTION DISTRICT

OWNER
OAKWOOD VAN DORN, LLC
CONTACT: MR. KING DAMONSON
TELEPHONE: 301-657-7100
7500 GEORGETOWN ROAD, 15TH FLOOR
BETHESDA, MARYLAND 20814-6133

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410.272.8880 · FAX: 301.581.0141 · WWW.CHICONSULTANTS.COM

PERMIT INFORMATION CHART

PROJECT NAME	LOT/PARCEL NO.	CENSUS TRACT
COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1	LOT D1/PARCEL 480 LIBER 4557, FOLIO 687	606703
PLAT NO. GRID NO.	ZONE	TAX MAP
6517 2	NT	42
WATER CODE E13	SEWER CODE	ELECTION DISTRICT
FDP #147	5290000	6TH
TITLE:	PRIOR SDP #	SDP-86-166

LANDSCAPE PLAN

DESIGN: CRH	SCALE: 1" = 50'	PROJECT: 079401.01
DRAWN: CRH	DATE: JULY 2008	
CHECKED: LNG	APPROVED:	11 OF 16



MDC-776 (SDP)

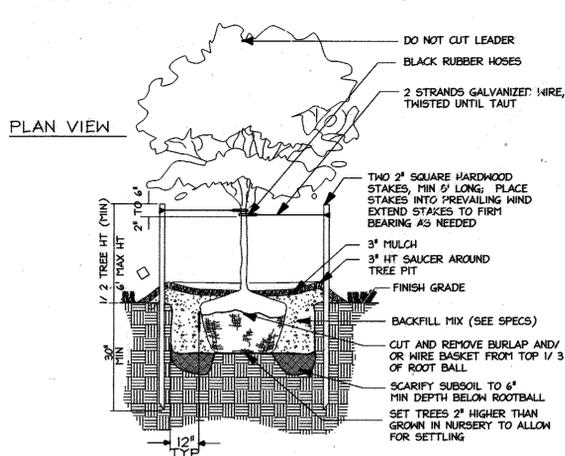
GENERAL PLANTING NOTES

- ALL PLANT MATERIAL TO MEET A.A.N. STANDARDS.
- LANDSCAPING CONTRACTOR TO FOLLOW LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE WASHINGTON METRO AREA APPROVED BY LCAFM.
- NO SUBSTITUTIONS TO BE MADE WITHOUT CONSENT OF LANDSCAPE ARCHITECT OR OWNER.
- IN THE EVENT OF VARIATION BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND THE PLANS, THE PLANS SHALL CONTROL. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES PRIOR TO THE COMMENCEMENT OF WORK. 500 QUANTITY TAKE-OFFS ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL DISCREPANCIES SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO BIDDING. THE CONTRACTOR SHALL FURNISH PLANT MATERIAL IN SIZES AS SPECIFIED IN THE PLANT LIST.
- ALL BEDS TO BE TOPPED WITH THREE INCHES OF HARDWOOD MULCH.
- LANDSCAPE CONTRACTOR TO VERIFY LOCATION OF UTILITIES WITH OWNERS BEFORE PLANTING.
- LANDSCAPE ARCHITECT/OWNER SHALL SELECT, VERIFY AND/OR APPROVE ALL PLANT MATERIAL. AT OWNER'S DISCRETION, SPECIMEN AND OTHER PLANT MATERIAL WILL BE SELECTED.
- LANDSCAPE CONTRACTOR SHALL COORDINATE PLANT BED FILLING OPERATIONS AND PLANT MATERIAL INSTALLATION WITH GENERAL CONTRACTOR AND UTILITIES CONTRACTOR. AT THE TIME OF FINAL INSPECTION WITH ACCEPTANCE, ALL ELECTRIC, WATER, DRAINAGE, AND FOUNTAIN UTILITIES, AS WELL AS ALL PLANT MATERIALS, SHALL REMAIN UNHARMED. LIKEWISE, LANDSCAPE CONTRACTOR AND UTILITIES CONTRACTOR SHALL COORDINATE EFFORTS TO ENSURE THAT SURFACE UTILITIES ARE AT THE PROPER ELEVATION RELATIVE TO FINAL GRADES.
- CONTRACTOR SHALL NOTIFY MISS UTILITY 72 HOURS PRIOR TO CONSTRUCTION.
- THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERRIS, FENCES, AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

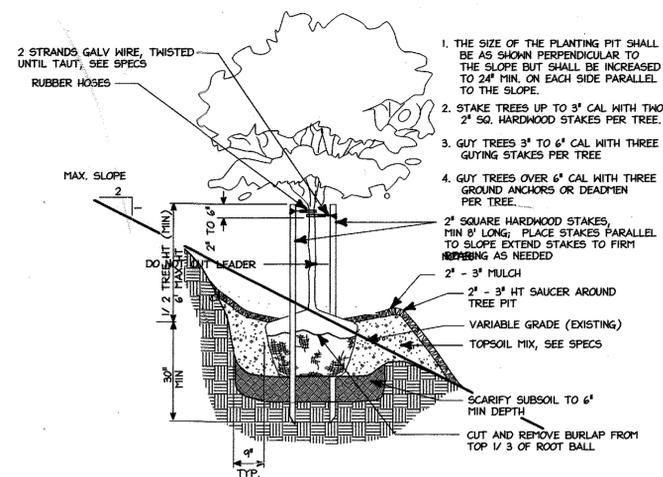
- II. TOPSOIL MIX**
- Planting mix shall be prepared at approved on-site staging area using approved on-site existing soil. Mix minimum quantities of 20 cubic yards or sufficient mix for entire job if less than 20 cubic yards is required.
 - Thoroughly mixed in the following proportions for tree and shrub planting mix:
 - 5 cy existing soil
 - 2 cy sharp sand
 - 3 cy wood residuals
 - 4.5 lbs treble superphosphate
 - 5 lbs dolomite limestone (eliminate for acid loving plants)
 - For bed planting, shrubs and groundcover spaces 24 inches or closer, incorporate the following ingredients per 20 sf and incorporate into top 8 inches of existing soils by rototilling or similar method of incorporation:
 - 2 cy sharp sand
 - 3 cy organic material
 - 4.5 lbs treble superphosphate
 - 5 lbs dolomite limestone (eliminate for acid loving plants)

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16-124 OF THE HOWARD COUNTY CODE. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IN THE AMOUNT OF \$16,110 HAS BEEN POSTED AS PART OF THE BUILDER'S GRADING PERMIT APPLICATION. (40 SHADE TREES, 6 EVERGREEN TREES, AND 107 SHRUBS).
- AT THE TIME OF PLANT INSTALLATION, ALL SHRUBS AND TREES LISTED AND APPROVED ON THE LANDSCAPE PLAN, SHALL COMPLY WITH THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATIONS OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THE APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO THE APPLICABLE PLANS.
- 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 LANDSCAPING MANUAL. I/WE FURTHER CERTIFY THAT UPON TREES 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.

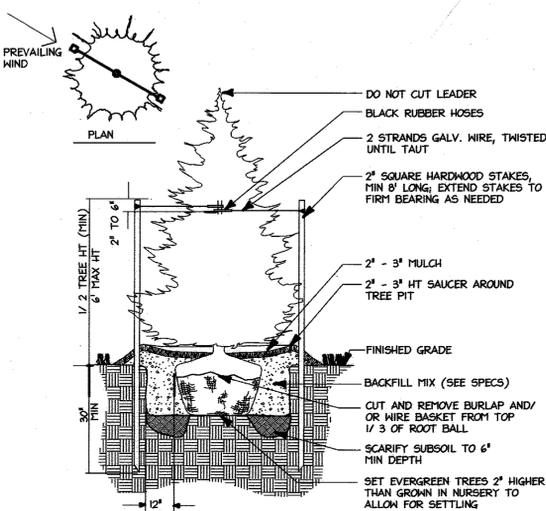
King J.
NAME DATE 8/8/08



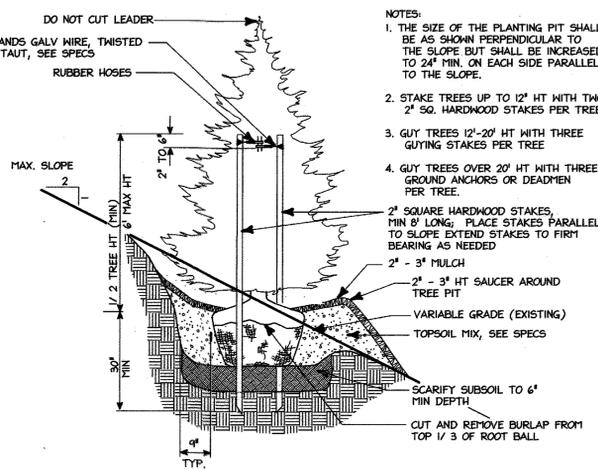
A TREE PLANTING DETAIL
Not To Scale



B TREE PLANTING ON SLOPE DETAIL
Not To Scale



C EVERGREEN TREE PLANTING DETAIL
Not To Scale



D EVERGREEN TREE PLANTING ON SLOPE DETAIL
Not To Scale

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES			ADJACENT TO ROADWAYS		
	P 1	P 2	P 3	P 1	P 2	P 3
PERIMETER						
LANDSCAPE TYPE "A" 1 SHADE TREE PER 60 L.F.	528 LF					
LANDSCAPE TYPE "B" 1 SHADE TREE PER 50 L.F. AND 1 EVERGREEN TREE PER 40 L.F.		364 LF				
LANDSCAPE TYPE "C" 1 SHADE TREE PER 40 L.F. OF PER. 1 SHADE TREE PER 40 L.F. AND 1 SHRUB PER 4 L.F.			426 LF			
CREDIT FOR EX. VEG. BELOW IF NEEDED	NO	YES, 7 EX. EVERGREENS ** 116X. SHADES	NO			
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO			
				TOTALS		
NO. OF PLANTS REQ.						
SHADE TREES	9	0	11			20
EVG. TREES	0	0	0			0
SHRUBS	0	0	107			107
NO. OF PLANTS PROV.						
SHADE TREES	10	0	6			16
EVG. TREES	5	0	11*			16
OTHER TREES	0	0	0			0
SHRUBS	0	55	110			165

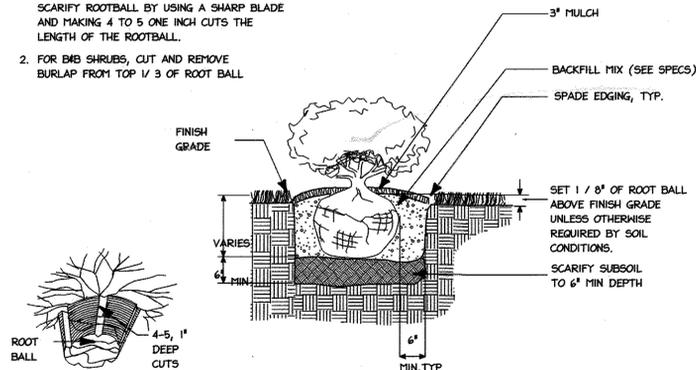
* P3: 11 EVERGREEN TREES HAVE BEEN SUBSTITUTED FOR FIVE SHADE TREES.
** 3 EXISTING EVERGREENS ARE WHITE PINES.

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PROPOSED PARKING SPACES	231
INTERNAL ISLANDS REQUIRED (1 ISLAND/20 PARKING SPACES)	12
INTERNAL ISLANDS PROVIDED (200 SQ. FT./ISLAND)	18
NUMBER OF TREES REQUIRED (1 SHADE TREE/20 PARKING SPACES)	12
NUMBER OF TREES PROVIDED (SHADE TREES OTHER TREES (2:1 SUBSTITUTION))	23 0

NOTES:

- FOR CONTAINER SHRUBS, COMPLETELY REMOVE ALL NON-BIODEGRADABLE CONTAINERS AND SCARIFY ROOTBALL BY USING A SHARP BLADE AND MAKING 4 TO 5 ONE INCH CUTS THE LENGTH OF THE ROOTBALL.
- FOR EMB SHRUBS, CUT AND REMOVE BURLAP FROM TOP 1/3 OF ROOT BALL



E SHRUB BED PLANTING
Not To Scale

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Paul M. Cole 7/2/08
Director of Planning and Zoning Date
Cindy Harris 8/15/08
Chief, Division of Land Development Date
John P. ... 8/27/08
Chief, Development Engineering Division Date

4.7.09 1 DELETED 7 SHADE TREES AND 3 EVERGREEN TREES AND ADDED 11 SHADE TREES + 7 EX. EVERGREENS

Date No. Revision Description

COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1
9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION
6TH ELECTION DISTRICT

OWNER
OWEN BROWN, LLC
CONTACT: MR. KING ANDERSON
TELEPHONE: 301-657-7100
7500 GEORGETOWN ROAD, 15TH FLOOR
BETHESDA, MARYLAND 20814-6133

christopher consultants
engineering · surveying · land planning
christopher consultants, inc.
1712 columbia gateway drive suite 100 | columbia, md. 21046-2900
410.326.8888 · www.christopherconsultants.com

PERMIT INFORMATION CHART

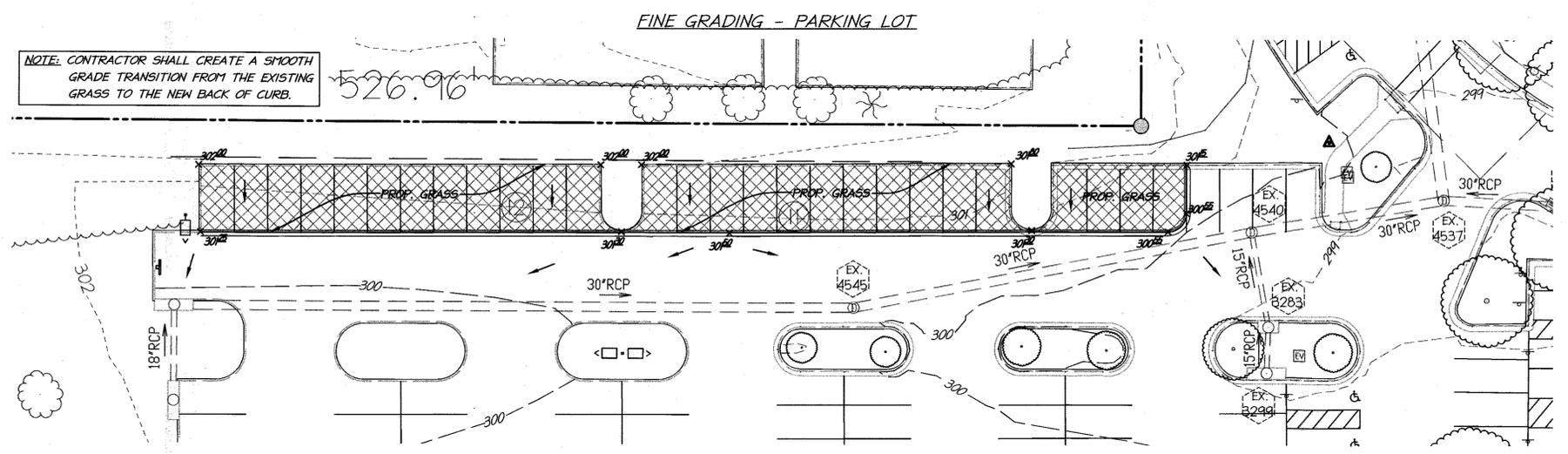
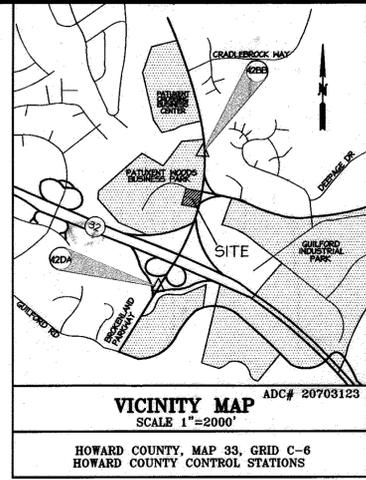
PROJECT NAME COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL D-1	LOT/PARCEL NO. LOT D1/PARCEL 480 LIBER 4557, FOLIO 687	CENSUS TRACT 606703
PLAT NO. GRID NO. 6517 2	ZONE NT	TAX MAP 42
WATER CODE E13	SEWER CODE 5290000	ELECTION DISTRICT 6TH
FDP #147	PRIOR SDP #	SDP-86-166

TITLE:
LANDSCAPE NOTES AND DETAILS

DESIGN: CRH SCALE: NOT TO SCALE PROJECT: 079401.01
DRAWN: CRH DATE: JULY 2008
CHECKED: LING APPROVED: *[Signature]*

12 of 16

PROFESSIONAL CERTIFICATION
 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.
 Signature of Engineer: *David Sharon* DATE: 9-14-16
 DAVID SHARON
 MD LICENSE NUMBER: 27223
 EXPIRATION DATE: 03-19-2018



NOTE: SEE PLUMBING DRAWING FOR DETAIL OF THE PROPOSED GREASE INTERCEPTOR.

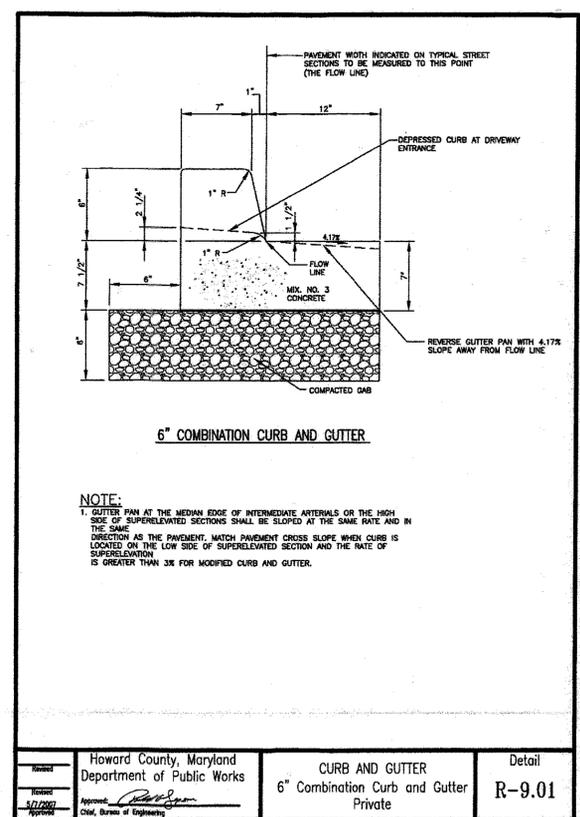
DIP		
PIPE DIA. IN.	"W"	TRENCH PAYMENT WIDTH
4	12	28
6	11	28
8	10	28
10	9	28
12	9	28
14	9	30
16	8	32
18	8	34
20	8	36
24	12	48

RCP		
PIPE DIA. IN.	"W"	TRENCH PAYMENT WIDTH
4	12	28
6	11	28
8	10	28
10	9	28
12	9	28
14	9	30
16	8	32
18	8	34
20	8	36
24	12	48
27	12	54
30	12	54
33	15	63
36	15	66
42	15	72
48	18	84
54	18	90
60	18	96
66	18	102
72	18	108
78	18	114
84	18	120
90	18	126
96	18	132
102	18	138
108	18	144

ALL DIMENSIONS IN INCHES

Howard County, Maryland
 Department of Public Works
 Approved: *[Signature]*
 Chief, Bureau of Engineering

Pipe Trench
 DIP & RCP
 Detail
 G-2.11



APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 10-19-16
 Director of Planning and Zoning Date
[Signature] 10-18-16
 Chief, Division of Land Development Date
[Signature] 10-2-16
 Chief, Development Engineering Division Date

Date	No.	Revision Description
8/16	2	ATRIUM, GREASE INTERCEPTOR, GENERATOR, STORM UPSIZE, PVMT REMOVAL
4/16	1	DEMO SHED, REPLACE PAVERS, CONC. UTIL PAD AND HANDICAP RAMP

COLUMBIA VILLAGE OF OWEN BROWN
SECTION 6, AREA 1, PARCEL 480, LOT D1
 9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION
 6TH ELECTION DISTRICT
 OWNER:
 OAKWOOD VAN DORN, LLC
 CONTACT: MR. KING DAVIDSON
 TELEPHONE: 301-457-7100
 7500 GEORGETOWN ROAD, 15th FLOOR
 BETHESDA, MARYLAND 20814-6133

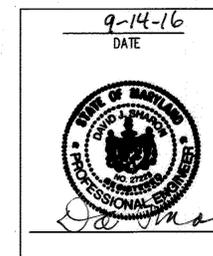


PERMIT INFORMATION CHART

PROJECT NAME	LOT/PARCEL NO.	CENSUS TRACT	
COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL 480, LOT D1	LOT D1/PARCEL 480 LIBER 4557, FOLIO 687	606703	
PLAT NO. / GRID NO.	ZONE	TAX MAP	ELECTION DISTRICT
6517 / 2	NT	42	6TH
WATER CODE	SEWER CODE		
E13	5290000		
FDP #147	PRIOR SDP #		
	SDP-86-166		

TITLE: **SITE DETAILS**

DESIGN: ENJ/PE SCALE: N/A PROJECT: 079401.01
 DRAWN: DAM DATE: JULY 2008
 CHECKED: JMH APPROVED: *[Signature]*

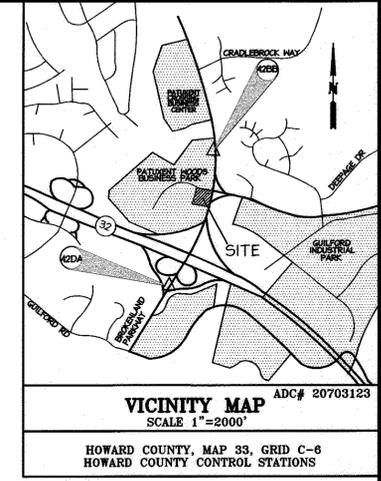


PROFESSIONAL CERTIFICATION

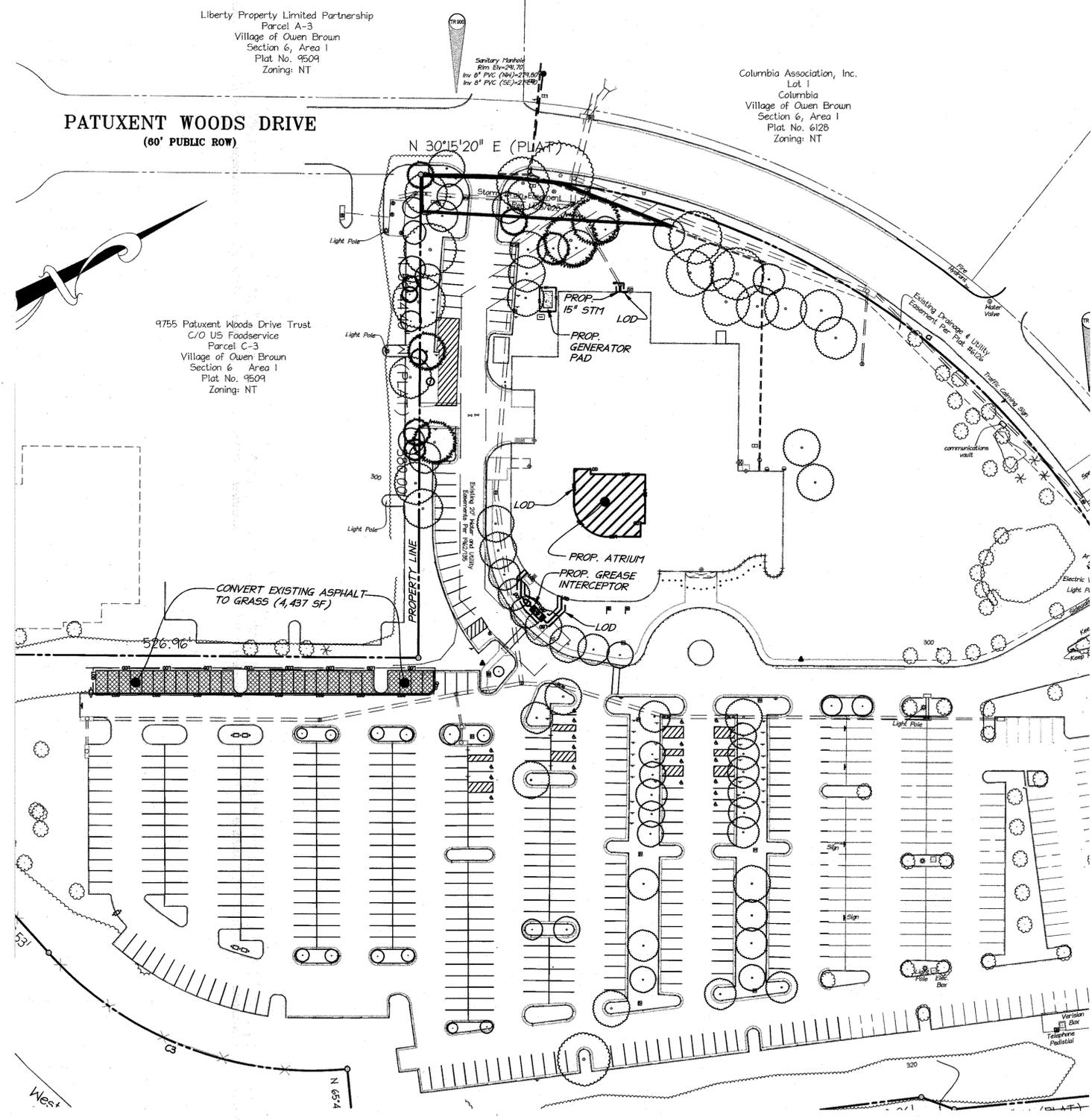
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

DAVID SHARON
 MD LICENSE NUMBER: 27223
 EXPIRATION DATE: 03-19-2016

9-14-16
 DATE



VICINITY MAP ADC# 20703123
 SCALE 1"=2000'
 HOWARD COUNTY, MAP 33, GRID C-6
 HOWARD COUNTY CONTROL STATIONS



SWM NARRATIVE

THIS SITE QUALIFIES FOR THE RE-DEVELOPMENT CONDITIONS BECAUSE THE EXISTING IMPERVIOUS AREA IS GREATER THAN 40% OF THE SITE'S TOTAL AREA. THE PROJECT MUST EITHER DECREASE EXISTING IMPERVIOUSNESS (0.146 Ac.) WITHIN THE LOD BY 50% OR PROVIDE WATER QUALITY TREATMENT FOR AN EQUIVALENT AREA. THE PROPOSED WORK IS FOR ENCLAVING AN INTERIOR BUILDING COURTYARD WITH AN ATRIUM, THE UPSIZING OF A SMALL STORM PIPE FROM 12" TO 15", THE ADDITION OF A NEW GENERATOR AND THE ADDITION OF A GREASE INTERCEPTOR. THE CONSTRAINTS OF THE SITE MAKE THE USE OF ESD PLANNING TECHNIQUES AND TREATMENT PRACTICES IMPRACTICAL WITHIN THE LOD. TO MEET THE STORMWATER REQUIREMENT, TWENTY-SEVEN (27) ASPHALT PARKING SPACES WILL BE REPLACED WITH GRASS. THE LOSS OF PARKING SPACES WILL NOT IMPACT PARKING REQUIREMENTS FOR THE SITE BECAUSE THE EXISTING NUMBER OF PARKING SPACES WELL EXCEEDS THE REQUIREMENT.

ALL EXISTING DRAINAGE DIVIDES WILL REMAIN THE SAME AND THERE WILL BE NO NET INCREASE OF WATER LEAVING THE SITE. THE OUTFALLS WILL REMAIN UNCHANGED.

SWM CALCULATIONS (RE-DEVELOPMENT):

AREA DISTURBED (LOD): 9,276 sq. ft. (0.213 Ac.)
 EX. IMPERVIOUS AREA IN THE LOD: 6,338 sq. ft. (0.146 Ac.)
 PROP. IMPERVIOUS AREA IN THE LOD: 3,142 sq. ft. (0.072 Ac.)

50% REDUCTION OF IMPERVIOUS AREA OR EQUIVALENT WATER QUALITY TREATMENT: 0.146 Ac x 50% = 0.073 Ac.

REDUCTION OF IMPERVIOUS AREA: 0.146 - 0.072 = 0.074 Ac.

THE REDUCTION OF IMPERVIOUS AREA (0.074 Ac.) IS GREATER THAN 50% OF THE EXISTING IMPERVIOUS AREA (0.073 Ac.), THEREFORE THE STORMWATER MANAGEMENT REQUIREMENT HAS BEEN REACHED. NO ADDITIONAL STORMWATER MANAGEMENT MEASURES ARE REQUIRED WITH THIS WORK.

	Existing		
	LOD - Total (sf)	Pervious (sf)	Impervious (sf)
Atrium	2625	1150	1475
Grease	557	557	0
Parking*	5804	941	4863
Storm	43	43	0
Generator	247	247	0
Total	9276	2938	6338

	Proposed		
	LOD - Total (sf)	Pervious (sf)	Impervious (sf)
Atrium	2625	0	2625
Grease	557	557	0
Parking*	5804	5378	426
Storm	43	43	0
Generator	247	156	91
Total	9276	6134	3142

* THE PARKING AREA IS THE 27 PARKING SPACES THAT ARE BEING REMOVED AND REPLACED WITH GRASS. SEE SHEET 5A FOR AN ENLARGEMENT OF THIS AREA.

Summary	
LOD	9276
Ex. Imp	6338
Prop. Imp	3142
50% of Ex. Imp	3169
Net Dec	3196

APPROVED: DEPARTMENT OF PLANNING AND ZONING		
Director of Planning and Zoning	<i>Valentino</i>	10-19-16
Chief, Division of Land Development	<i>West</i>	10-18-16
Chief, Development Engineering Division	<i>Phelan</i>	10-2-16

Date	No.	Revision Description
8/16	2	ATRIUM, GREASE INTERCEPTOR, GENERATOR, STORM UPSIZE, PVTM REMOVAL
4/16	1	DEMO SHED, REPLACE PAVERS, CONC. UTIL PAD AND HANDICAP RAMP

COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL 480, LOT D1
 9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION 6TH ELECTION DISTRICT

OWNER:
 OAKWOOD VAN DORN, LLC
 CONTACT: MR. KING DANESSON
 TELEPHONE: 301-657-7100
 7500 GEORGETOWN ROAD, 15TH FLOOR
 BETHESDA, MARYLAND 20814-6133

christopher consultants
 engineering • surveying • land planning
 christopher consultants, inc.
 7772 columbia gateway drive suite 100 • columbia, md. 21046-2865
 410.372.8891 • www.301.661.2144 • fax 410.372.8893

PERMIT INFORMATION CHART			
PROJECT NAME	LOT/PARCEL NO.	CENSUS TRACT	
COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL 480, LOT D1	LOT D1/PARCEL 480	606703	
PLAT NO. / GRID NO.	ZONE	TAX MAP	ELECTION DISTRICT
6517 / 2	NT	42	6TH
WATER CODE	SEWER CODE	SDP-86-166	
FDP #147	SDP #	SDP-86-166	
TITLE: STORMWATER MANAGEMENT PLAN AND CALCULATIONS			
DESIGN: ENJ/PE	SCALE: 1" = 20'	PROJECT: 079401.01	
DRAWN: DAM	DATE: JULY 2008	14 of 16	
CHECKED: JMH	APPROVED:		

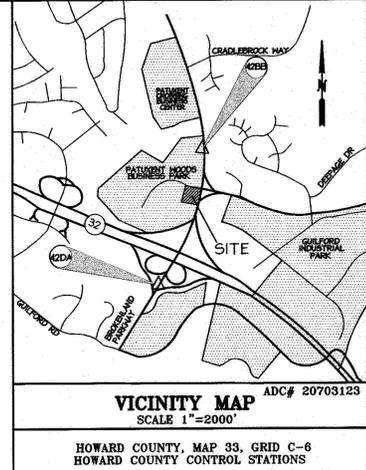
9-14-16
 DATE

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE ONE 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 INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature of Developer: *Jim Walker* Date: 9-14-16
 Print name below signature: Jim Walker

ENGINEER 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: *David Sharon* Date: 9-14-16
 Print name below signature: DAVID SHARON

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature of Howard Soil Conservation District: *John L. Roberts* Date: 9/14/16
 Howard Soil Conservation District

PROFESSIONAL CERTIFICATION
 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.
 Signature of Engineer: *David Sharon* Date: 9-14-16
 DAVID SHARON
 MD LICENSE NUMBER: 27223
 EXPIRATION DATE: 03-14-2018



PATUXENT WOODS DRIVE
 (60' PUBLIC ROW)

Liberty Property Limited Partnership
 Parcel A-3
 Village of Owen Brown
 Section 6, Area 1
 Plat No. 9509
 Zoning: NT

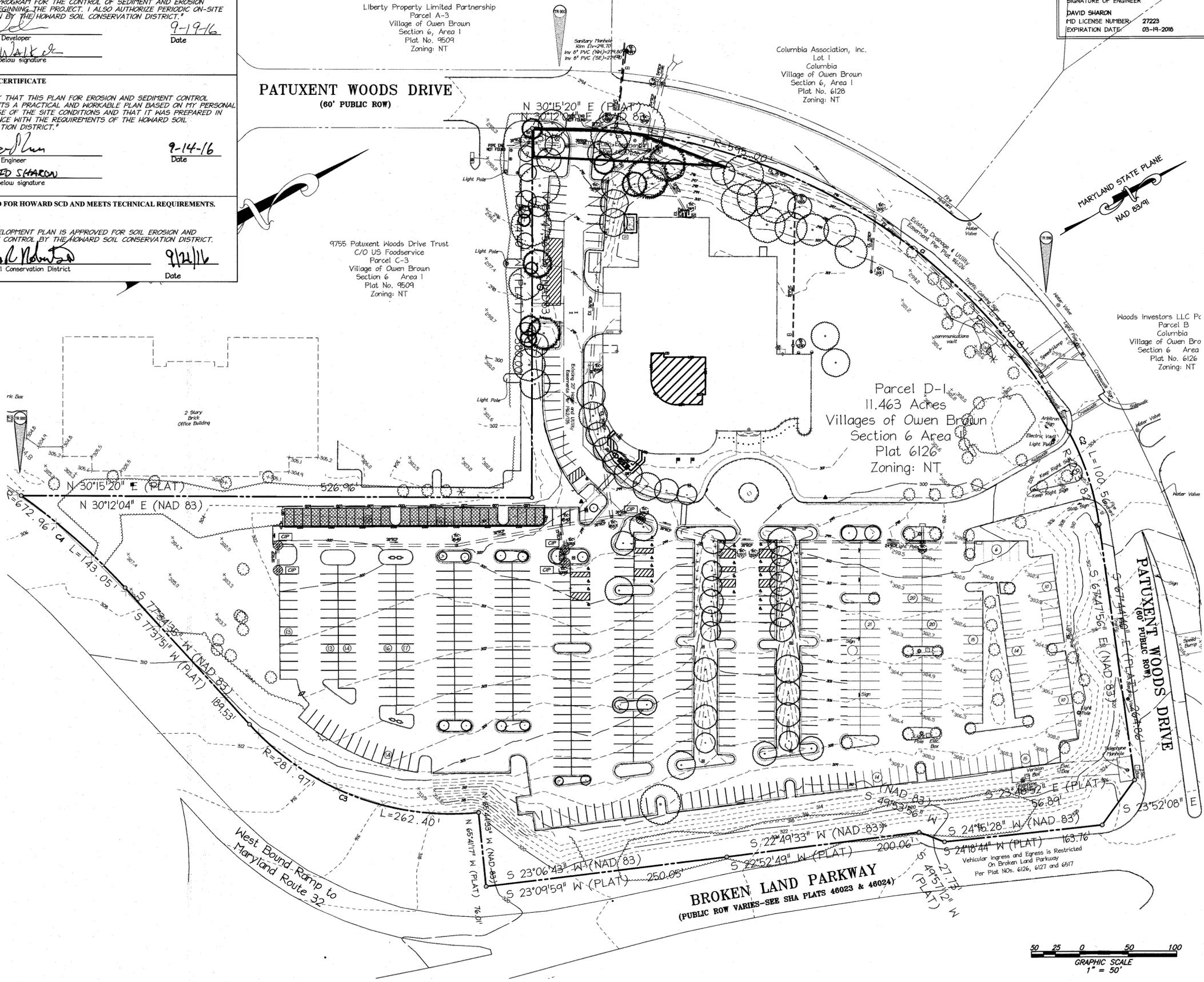
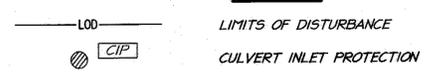
Columbia Association, Inc.
 Lot 1
 Columbia
 Village of Owen Brown
 Section 6, Area 1
 Plat No. 6128
 Zoning: NT

9755 Patuxent Woods Drive Trust
 C/O US Foodservice
 Parcel C-3
 Village of Owen Brown
 Section 6 Area 1
 Plat No. 9509
 Zoning: NT

Parcel D-1
 11.463 Acres
 Villages of Owen Brown
 Section 6 Area 1
 Plat 6126
 Zoning: NT

Woods Investors LLC Pc
 Parcel B
 Columbia
 Village of Owen Bro
 Section 6 Area
 Plat No. 6126
 Zoning: NT

EROSION/SEDIMENT CONTROL LEGEND



APPROVED: DEPARTMENT OF PLANNING AND ZONING

<i>Nadine Miller</i>	10-19-16
Director of Planning and Zoning	Date
<i>Karl Schuler</i>	10-18-16
Chief, Division of Land Development	Date
<i>Paul Smith</i>	10-2-16
Chief, Development Engineering Division	Date

Date	No.	Revision Description
8/16	2	ATRIUM, GREASE INTERCEPTOR, GENERATOR, STORM UPSIZE, PYMT REMOVAL
4/16	1	DEMO SHED, REPLACE PAVERS, CONC. UTIL PAD AND HANDICAP RAMP

COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL 480, LOT D1
 9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION
 6TH ELECTION DISTRICT
 OWNER:
 OAKWOOD VAN DORN, LLC
 CONTACT: MR. KING DANWISON
 TELEPHONE: 301-657-7100
 7500 GEORGETOWN ROAD, 15th FLOOR
 BETHESDA, MARYLAND 20814-6133

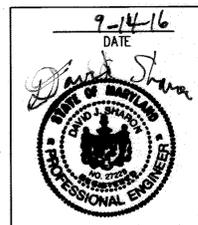
christopher consultants
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 7172 COLUMBIA GATEWAY DRIVE SUITE 1000 · COLUMBIA, MD 21046-5900
 410.577.8899 · FAX: 301.274.1641 · WWW.CHRCR.COM

PERMIT INFORMATION CHART

PROJECT NAME COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL 480, LOT D1	LOT/PARCEL NO. LOT D1/PARCEL 480 LIBER 4557, FOLIO 687	CENSUS TRACT 606703
PLAT NO. 6517	GRD NO. 2	ZONE NT
TAX MAP 42	ELECTION DISTRICT 6TH	WATER CODE E13
SEWER CODE 5290000	PRIOR SDP # SDP-86-166	DATE 9-14-16

TITLE:
EROSION & SEDIMENT CONTROL PLAN

DESIGN: ENJ/PE	SCALE: N/A	PROJECT: 079401.01
DRAWN: DAM	DATE: JULY 2008	
CHECKED: JMH	APPROVED:	15 of 16



SDP-08-043 FDP #147

SDP-08-043
 SDP-86-166

TEMPORARY SEEDING NOTES

B-4.4 STANDARDS AND SPECIFICATIONS

FOR PERMANENT STABILIZATION

Definition

To stabilize disturbed soils with vegetation for up to 6 months.

Purpose

To use fast growing vegetation that provides cover on disturbed soils.

Conditions Where Practice Applies

Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required.

Criteria

- Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardiness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plan and completed, then Table B.1 plus fertilizer and lime rates must be put on the plan.
- For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil tests are not required for Temporary Seeding.
- When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section B-4.3.A.1.b and maintain until the next seeding season.

Temporary Seeding Summary

No.	Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depth (inches)	Fertilizer Rate (10-20-20)	Lime Rate
ANNUAL RYEGRASS	40	3-15-30	0.5"	436 lb/acre (10 lb/1000 sf)	2 tons/acre (90 lb/1000 sf)	
FORAL MILLET	30	5-15-30	0.5"			

B.18

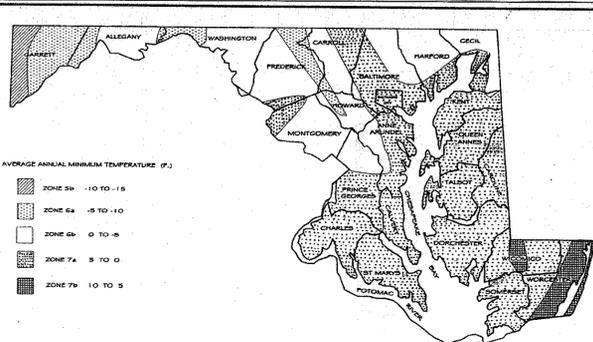


Figure B.3: U.S.D.A. Plant Hardiness Zones

B.19

Table B.1: Temporary Seeding for Site Stabilization

Plant Species	Seeding Rate ^{1/}		Seeding Depth (inches)	Recommended Seeding Dates by Plant Hardiness Zone ^{2/}			
	lb/acre	lb/1000 ft ²		5b and 6a	6b	7a and 7b	
Cool-Season Grasses							
Annual Ryegrass (<i>Lolium perenne</i> ssp. <i>multiflorum</i>)	40	1.0	0.5	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30	
Barley (<i>Hordeum vulgare</i>)	96	2.2	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30	
Oats (<i>Avena sativa</i>)	72	1.7	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30	
Wheat (<i>Triticum aestivum</i>)	120	2.8	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30	
Cereal Rye (<i>Sesale cereale</i>)	112	2.8	1.0	Mar 15 to May 31; Aug 1 to Oct 31	Mar 1 to May 15; Aug 1 to Nov 15	Feb 15 to Apr 30; Aug 15 to Dec 15	
Warm-Season Grasses							
Foxtail Millet (<i>Setaria italica</i>)	30	0.7	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14	
Pearl Millet (<i>Pennisetum glaucum</i>)	20	0.5	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14	

^{1/} Seeding rates for the warm-season grasses are in pounds of Pure Live Seed (PLS). Actual planting rates shall be adjusted to reflect percent seed germination and purity, as tested. Adjustments are usually not needed for the cool-season grasses.

^{2/} Seeding rates listed above are for temporary seedings, where planted alone. When planted as a nurse crop with permanent seed mixtures, use 1/3 of the seeding rate listed above for barley, oats, and wheat. For smaller-seeded grasses (annual ryegrass, pearl millet, foxtail millet), do not exceed more than 5% (by weight) of the overall permanent seeding mix. Cereal rye generally should not be used as a nurse crop, unless planting will occur in very late fall beyond the seeding dates for other temporary seedings. Cereal rye has allelopathic properties that inhibit the germination and growth of other plants. If it must be used as a nurse crop, seed at 1/3 of the rate listed above.

Oats are the recommended nurse crop for warm-season grasses.

^{3/} For sandy soils, plant seeds at twice the depth listed above.

^{4/} The planting dates listed are averages for each Zone and may require adjustment to reflect local conditions, especially near the boundaries of the zones.

B.20

PERMANENT SEEDING NOTES

B-4.5 STANDARDS AND SPECIFICATIONS

FOR PERMANENT STABILIZATION

Definition

To stabilize disturbed soils with permanent vegetation.

Purpose

To use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils.

Conditions Where Practice Applies

Exposed soils where ground cover is needed for 6 months or more.

Criteria

A. Seed Mixtures

1. General Use

- Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.
- Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guide, Section 342 - Critical Area Planning.
- For sites having disturbed area over 5 acres, use and show the rates recommended by the soil testing agency.
- For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 1/2 pounds per 1000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary.

2. Turfgrass Mixtures

- Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.
- Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.
 - Kentucky Bluegrass: Full Sun Mixture: For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and Eastern Shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
 - Kentucky Bluegrass/Perennial Rye: Full Sun Mixture: For use in full sun areas where

B.21

rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.

iii. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes: Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended.

iv. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes: Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1 1/2 to 3 pounds per 1000 square feet.

Notes:
Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendations for Maryland"

Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line

c. Ideal Times of Seeding for Turf Grass Mixtures

Western MD: March 15 to June 1, August 1 to October 1 (Hardiness Zones: 5b, 6a)

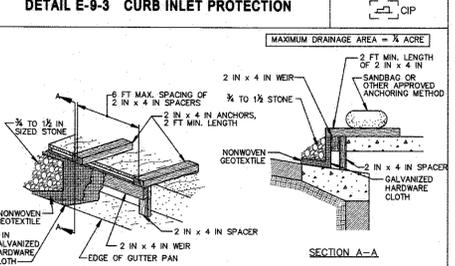
Central MD: March 1 to May 15, August 15 to October 15 (Hardiness Zone: 6b)

Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardiness Zones: 7a, 7b)

d. Till areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1/2 inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose no difficulty.

e. If soil moisture is deficient, supply new seedings with adequate water for plant growth (1/2 to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

DETAIL E-9.3 CURB INLET PROTECTION



CONSTRUCTION SPECIFICATIONS

- USE NOMINAL 2 INCH x 4 INCH LUMBER
- USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
- NAIL THE 2x4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).
- ATTACH A CONTINUOUS PIECE OF 3/8 INCH GALVANIZED HARDWARE CLOTH WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING TO THE 2x4 WEIR, EXTENDING IT 2 FEET BEYOND THROAT ON EACH SIDE.
- PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE OF THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE WEIR AND SECURELY ATTACH TO THE 2x4 WEIR.
- PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2x4 ANCHORS (MINIMUM 2 FEET LENGTH). EXTEND THE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.
- INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING.
- FORM THE HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND FACE OF CURB TO SPAN THE INLET OPENING COVER THE HARDWARE CLOTH AND GEOTEXTILE WITH CLEAN 3/4 TO 1 1/2 INCH STONE OR EQUIVALENT RECYCLED CONCRETE.
- AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET BYPASS.
- STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATIONAL RESOURCES CONSERVATION SERVICE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

PERMANENT SEEDING NOTES (CONT.)

Permanent Seeding Summary

No.	Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depth (inches)	Fertilizer Rate (10-20-20)			Lime Rate
					N	P ₂ O ₅	K ₂ O	
1	SWIFT GRASS	40		1/2-1/2 in	45 pounds per acre (1.0 lb/1000 sf)	90 lb/acre (2 lb/1000 sf)	90 lb/acre (2 lb/1000 sf)	2 tons/acre (90 lb/1000 sf)
2	CRUPPING AND PINE	40		1/2-1/2 in	45 pounds per acre (1.0 lb/1000 sf)	90 lb/acre (2 lb/1000 sf)	90 lb/acre (2 lb/1000 sf)	2 tons/acre (90 lb/1000 sf)

B. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).

1. General Specifications

- Class of turfgrass sod must be Maryland State Certified. Sod labels must be made available to the job foreman and inspector.
- Sod must be machine cut at a uniform soil thickness of 3/4 inch, plus or minus 1/4 inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable.
- Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
- Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
- Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period must be approved by an agronomist or soil scientist prior to its installation.

2. Sod Installation

- During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the sods immediately prior to laying the sod.
- Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
- Wherever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod roots and the underlying soil surface.
- Water the sod immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any piece of sod within eight hours.

3. Sod Maintenance

- In the absence of adequate rainfall, water daily during the first week or as often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day to prevent wilting.
- After the first week, sod watering is required as necessary to maintain adequate moisture content.
- Do not mow until the sod is firmly rooted. No more than 1/4 of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified.

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereof.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 3 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 7 days as to all other disturbed or graded areas on the project site.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. B-4-5), temporary seeding (Sec. B-4-4) and mulching (Sec. B-4-3). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:
Total Area of Site: 11.46 Acres
Area Disturbed: 0.21 Acres
Area to be roofed or paved: 0.06 Acres
Area to be vegetatively stabilized: 0.10 Acres
Total Cut: N/A Cu. Yds.
Total Fill: N/A Cu. Yds.
Offsite waste/borrow are location: N/A
- Any sediment control practice that is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be required 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 by the end of each workday, whichever is shorter.
- Any changes or revisions to the sequence of construction must be reviewed and approved by the plan approval authority prior to proceeding with construction.
- A project is to be sequenced so that grading activities begin on one grading unit (maximum acreage of 20 ac. per grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50 percent of the disturbed area in the preceding grading unit has been stabilized and approved by the enforcement authority. Unless otherwise specified and approved by the approval authority, no more than 30 acres cumulatively may be disturbed at a given time.

Rev. 4/2013

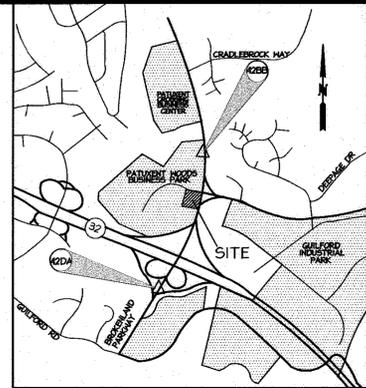
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
Signature: David Sharon
Date: 9-14-16
SIGNATURE OF ENGINEER: [Signature]
DATE: 9-14-16
DAVID SHARON
MD LICENSE NUMBER: 27223
EXPIRATION DATE: 03-19-2016

PROJECT DESCRIPTION:
THE PROPOSED WORK FOR THIS PROJECT IS FOR ENCLAVING AN INTERIOR BUILDING COURTYARD WITH AN ATRIUM, THE UPSIZING OF A SMALL STORM PIPE FROM 12" TO 15", THE ADDITION OF A NEW CONCRETE PAD FOR A GENERATOR AND THE ADDITION OF A GREASE INTERCEPTOR.

THE STORMWATER REQUIREMENTS FOR THIS SITE WILL BE MET BY REMOVING PAVEMENT IN THE PARKING LOT AND REPLACING IT WITH GRASS.

THE FLOW PATTERN OF THE SITE, OUTFALL AND SURROUNDING AREA WILL BE UNCHANGED WITH THE PROPOSED WORK.

- SEQUENCE OF CONSTRUCTION**
- REQUEST FOR A PRE-CONSTRUCTION MEETING WITH THE APPROPRIATE ENFORCEMENT AUTHORITY. (1 DAY)
 - INSTALL CULVERT INLET PROTECTION AS SHOWN ON THE EROSION AND SEDIMENT CONTROL SHEET. (1 DAY)
 - CLEARING AND GRUBBING WITHIN THE LIMITS OF DISTURBANCE. (2 DAYS)
 - DEMOLITION OF THE EXISTING PAVEMENT. (10 DAYS)
 - INSTALL NEW CURB AND GUTTER. PERMANENT SEED THE AREA WHERE PAVEMENT WAS REMOVED. (15 DAYS)
 - INSTALL GREASE INTERCEPTOR. REPLACE 12" STORM PIPE WITH 15" STORM PIPE. (5 DAYS)
 - CONSTRUCTION OF THE ATRIUM. (2 MONTHS)
 - APPROVAL OF THE APPROPRIATE ENFORCEMENT AUTHORITY PRIOR TO REMOVAL OF SEDIMENT CONTROLS. (1 DAY)
 - REMOVAL OF CONTROLS AND STABILIZATION OF AREAS THAT ARE DISTURBED BY REMOVAL OF SEDIMENT CONTROLS. (1 DAY)



VICINITY MAP ADC# 20703123
SCALE 1"=2000'
HOWARD COUNTY, MAP 33, GRID C-6
HOWARD COUNTY CONTROL STATIONS

NOTE:
DURATIONS SHOWN IN THE SEQUENCE OF CONSTRUCTION ARE SUBJECT TO CHANGE BASED ON SITE CONDITIONS.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Director of Planning and Zoning: [Signature] Date: 10-19-16

Chief, Division of Land Development: [Signature] Date: 10-18-16

Chief, Development Engineering Division: [Signature] Date: 10-2-16

Date	No.	Revision Description
8/16	2	ATRIUM, GREASE INTERCEPTOR, GENERATOR, STORM UPSIZE, PWIT REMOVAL
4/16	1	DEMOL SHED, REPLACE PAVERS, CONC. UTIL PAD AND HANDICAP RAMP

COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL 480, LOT D1
9705 PATUXENT WOODS DRIVE PARKING LOT EXPANSION 6TH ELECTION DISTRICT

OWNER:
OWENWOOD VILLAGE, LLC
CONTACT: MR. KING DAVIDSON
TELEPHONE: 301-857-7100
7500 GEORGETOWN ROAD, 15TH FLOOR
BETHESDA, MARYLAND 20814-6133

christopher consultants
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christopherconsultants.com
7172 colintongreenway drive suite 100 | catonsville, md 21046-2800
410.872.8890 · fax: 410.872.8891

PERMIT INFORMATION CHART

PROJECT NAME	LOT/PARCEL NO.	CENSUS TRACT	
COLUMBIA VILLAGE OF OWEN BROWN SECTION 6, AREA 1, PARCEL 480, LOT D1	LOT D1/PARCEL 480	606703	
PLAT NO. / GRID NO.	ZONE	TAX MAP	ELECTION DISTRICT
6517 / 2	NT	42	6TH
WATER CODE	E13	SEWER CODE	5290000
FDP #147		PRIOR SDP #	SDP-86-166
TITLE:	EROSION & SEDIMENT CONTROL NOTES AND DETAILS		
DESIGN: ENJ/PE	SCALE: N/A	PROJECT: 079401.01	
DRAWN: DAM	DATE: JULY 2008		
CHECKED: JMH	APPROVED:	16 of 16	

SDP-08-043 FDP #147

SDP-08-043
SDP-86-166