

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS ON SPECIALS, AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS ON SPECIALS, AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS ON SPECIALS.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 - MISS UTILITY: 1-800-257-7777
 - VERIZON TELEPHONE COMPANY: 1-410-954-6281
 - HOWARD COUNTY BUREAU OF UTILITIES: 313-2366
 - AT&T CABLE LOCATION DIVISION: 952-3553
 - B.G.&E. CO. CONTRACTOR SERVICES: 850-4620
 - B.G.&E. CO. UNDERGROUND DAMAGE CONTROL: 787-4620
 - STATE HIGHWAY ADMINISTRATION: 531-5533
- SITE ANALYSIS:**
 - TOTAL AREA OF PARCEL A-2: 12.881 (PARCEL A-1: 10.381 AC. + P/O PARCEL 50: 2.500 AC.)
 - AREA OF ACCESS EASEMENT OF PROPOSED CONSTRUCTION: 0.46 AC.
 - PRESENT ZONING: NT (EMPLOYMENT CENTER - INDUSTRIAL, FDP-142-A-1)
 - LAND USE: HYBRID LIGHT INDUSTRIAL/OFFICE
 - AREA OF EX. BUILDING 1: 28,000 SF. (0.643 AC)
 - USE: INDUSTRIAL
 - AREA OF EX. BUILDING 2: 53,000 SF. (1.217 AC)
 - USE: INDUSTRIAL
 - AREA OF BUILDING 3: 36,410 SF. (0.836 AC) + (015 SF (0.04 AC) MEZZANINE
 - USE: INDUSTRIAL/OFFICE / RESEARCH
 - AREA OF BUILDING 4: 29,369 SF. (0.674 AC)
 - USE: INDUSTRIAL/OFFICE
 - EX. BUILDING 1 COVERAGE ON SITE: 0.643 AC. OR 4.99% OF GROSS AREA
 - EX. BUILDING 2 COVERAGE ON SITE: 1.217 AC. OR 9.45% OF GROSS AREA
 - BUILDING 3 COVERAGE ON SITE: 0.836 AC. OR 6.49% OF GROSS AREA
 - BUILDING 4 COVERAGE ON SITE: 0.674 AC. OR 5.23% OF GROSS AREA
 - TOTAL BUILDING COVERAGE ON SITE: 3.370 AC. OR 26.16% OF GROSS AREA
 - PAVED PARKING LOT/AREA WITHIN LOD: 2.91 AC. OR 22.71% OF GROSS AREA
 - AREA OF VEGETATION WITHIN LOD: 1.58 AC. OR 12.27% OF GROSS AREA
 - TOTAL IMPERVIOUS AREA: 8.50 AC. OR 65.99% OF GROSS AREA
 - LIMIT OF DISTURBED AREA: 6.00 AC. OR 46.56% OF GROSS AREA
 - CUT: 7,100 CY. FILL: 7,000 CY.
- PROJECT BACKGROUND:**
 - LOCATION: COLUMBIA, MD.; TAX MAP 42, BLOCK 11, PARCEL A-2
 - ZONING: NT
 - SUBDIVISION: E. G. U.
 - SECTION: 2
 - AREA: 6
 - TOTAL SITE AREA OF A-1 AND PARCEL 50: 56.71 AC.
 - FDP-142-A-1, WP-05-120, PLATS 8872-8876, FDP-142-A-1, F-07-004
 - DPZ REFERENCES: BA-743-C, ZB-918M, F-73-85C, SDP-74-21C, SDP-75-110C.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND AND SEWER EXTENSION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- ALL REINFORCED CONCRETE FOR STORM DRAIN STRUCTURES SHALL HAVE A MINIMUM OF 28 DAYS STRENGTH OF 3,500 P.S.I.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
- SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROJECT GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOIL TEST PRIOR TO CONSTRUCTION.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY FREDERICK WARD AND ASSOCIATES, DATED OCTOBER 2002. SUPPLEMENTAL TOPOGRAPHY BY ROBERT H VOGEL ENGINEERING, DECEMBER 2003. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- ALL PAVING TO BE P-3 UNLESS OTHERWISE NOTED. GEOTECHNICAL ENGINEER TO CONFIRM PAVING SECTION PRIOR TO CONSTRUCTION. (SEE DETAILS, SHEET 4)
- ALL CURB AND GUTTER TO BE HOWARD COUNTY STANDARD DETAIL 3.01 UNLESS OTHERWISE NOTED. (SEE DETAILS, SHEET 4)
- CONTRACTOR RESPONSIBLE TO CONSTRUCT ALL HANDICAP RAMPS AND HANDICAP ACCESS IN ACCORDANCE WITH CURRENT ADA REQUIREMENTS.
- WHERE DRAINAGE FLOWS AWAY FROM CURB, CONTRACTOR TO REVERSE THE GUTTER PAN.
- ALL ELEVATIONS ARE TO CURB UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- PUBLIC WATER AVAILABLE THROUGH CONTRACT NO. 24-4364-D
- SEWER AVAILABLE THROUGH CONTRACT NO. C-482-D-S.
- STORMWATER MANAGEMENT QUALITY IS PROVIDED BY THE 2-PROPOSED UNDERGROUND SAND FILTER SYSTEMS AND 1-BIOTRETENTION FACILITY. THE PROPOSED STORMWATER MANAGEMENT FACILITIES TO BE PRIVATELY OWNED AND MAINTAINED BY STONEWOOD BUSINESS CENTER.
- ALL EXTERIOR LIGHTING TO CONFORM TO SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS. (DETAIL ON SHEET 4)
- GEOTECHNICAL REPORT PREPARED BY HILLIS-CARNE ENGINEERING ASSOCIATES, INC., DATED MARCH 30, 2003.
- THE LANDSCAPE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
- ANY EXISTING STREET TREES DAMAGED OR DESTROYED DURING CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR.
- THE SUBJECT PROPERTY IS EXEMPT FROM FOREST CONSERVATION REQUIREMENTS AS STATED IN THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, SECTION 16.202.(b)(1)(v).
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$19,200.00 FOR THE REQUIRED 42 SHADE TREES AND 44 EVERGREEN TREE.
- TRAFFIC STUDY PREPARED BY THE TRAFFIC GROUP, DATED AUGUST 11, 2003.
- ALL STORMDRAIN PIPE BEDDING IS TO BE CLASS "C".
- BUILDINGS TO HAVE INSIDE WATER METER SETTINGS.
- THIS PLAN IS SUBJECT TO MDE APPLICATION TRACKING NO. 03-NT-0309/200364995 DATED AUGUST 14, 2003. THE WETLANDS SHOWN HEREON WERE DELINEATED BY ENVIRONMENTAL SYSTEM ANALYSIS, INC. AUGUST 2, 2002; AND BY ECO-SCIENCE PROFESSIONAL, INC., DATED FEBRUARY 10, 2005.
- MINIMUM COVER OVER WATER LINES TO BE 4'
- CONTRACTOR TO MAINTAIN A MINIMUM 1' CLEARANCE AT ALL UTILITY CROSSINGS.
- THIS PLAN IS SUBJECT TO WAMER PETITION WP-05-120, APPROVED MARCH 7, 2006; TO SECTIONS:
 - a. 16.116(a)(1) TO PERMIT CLEARING, GRADING AND DEVELOPMENT WITHIN 25 FEET OF A WETLAND;
 - b. 16.116(a)(2)(i) TO PERMIT CLEARING, GRADING AND DEVELOPMENT WITHIN 50 FEET OF AN INTERMITTENT STREAM IN A NON-RESIDENTIAL ZONING DISTRICT;
 - c. 16.144(i) AND (j) AND (k) AND (l) AND (m) TO NOT REQUIRE THE SUBMISSION AND APPROVAL OF SKETCH AND PRELIMINARY PLANS FOR THE SUBDIVISION OF NON-RESIDENTIALLY ZONED PART OF TM PARCEL 50; AND
 - d. 16.102(c)(2) TO NOT REQUIRE THE PLATTING OF THE RESIDUE OF TM PARCEL 50.
- APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
 - 1. THE WOODED 50' STRIP BUFFER AND WOODED 25' WETLAND BUFFER AT THE REAR OF THE SITE ON WHAT IS CURRENTLY PART OF TM PARCEL 50 SHALL NOT BE DISTRIBUTED BY ANY CLEARING, GRADING OR DEVELOPMENT.
 - 2. ANY REQUIRED 404/401 PERMIT/CERTIFICATE SHALL BE OBTAINED AND ITS/THEIR TRACKING NUMBER(S) SHALL BE NOTED ON SHEET 1 OF SDP-05-105.
 - 3. THE ENCLOSED SCD COMMENT #4 OF 2/6/06 IS REQUIRED TO BE COMPLIED WITH ON SDP-05-105.
 - 37. BUILDING USE LIMITED TO 25% OFFICE AND 75% WAREHOUSE (BUILDING 3 AND 4)

STONEWOOD BUSINESS CENTER

SITE DEVELOPMENT PLAN

PARCEL 'A-2'

E.G.U. SUBDIVISION

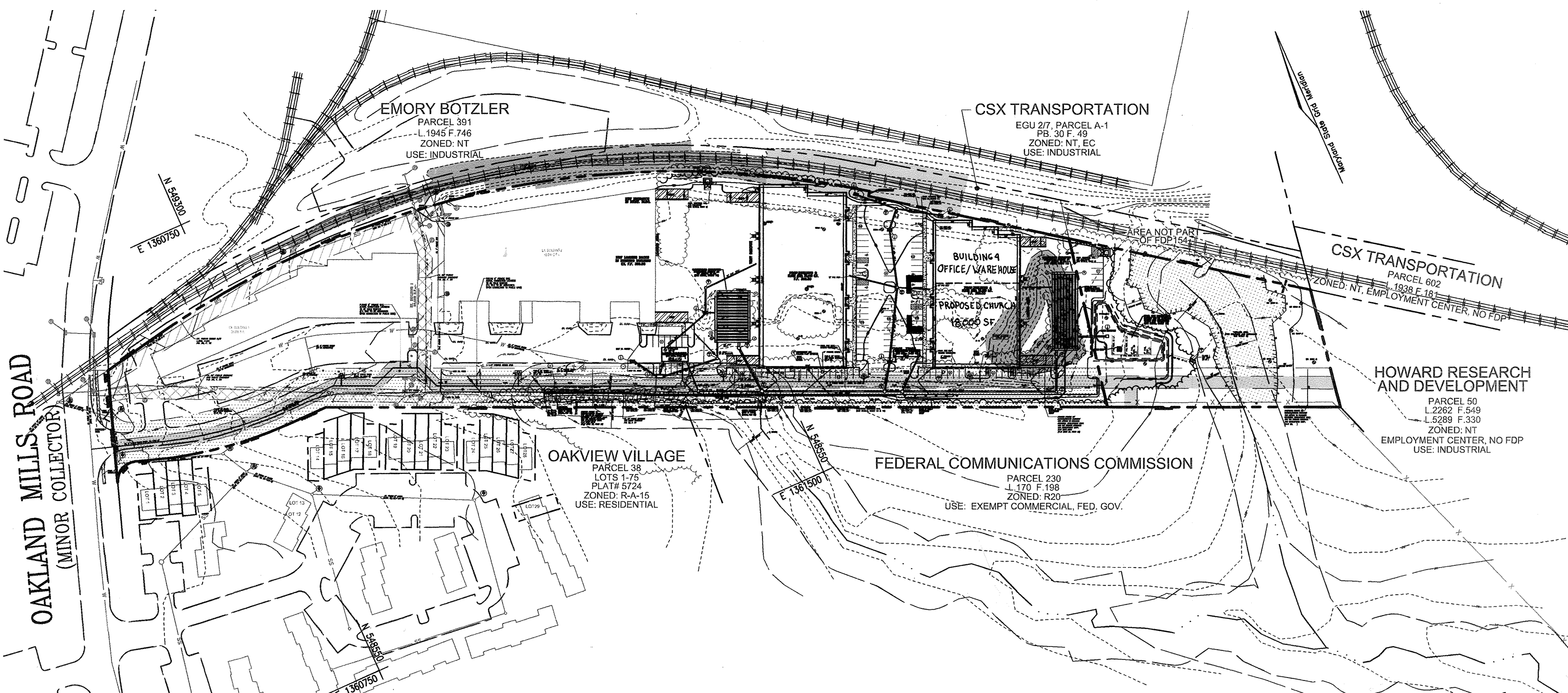
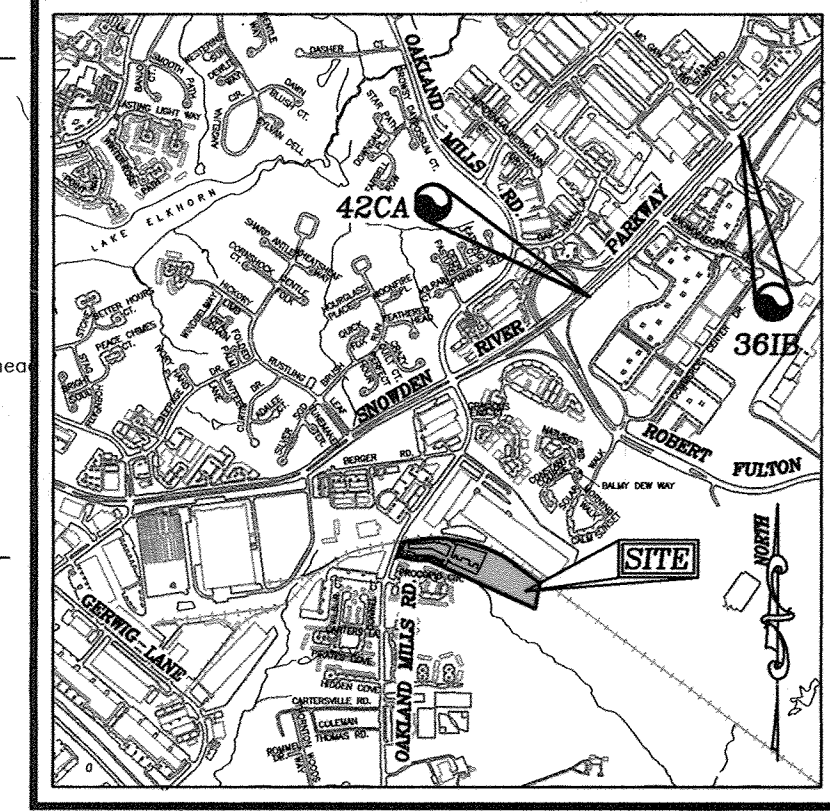
SECTION 2 / AREA 6

LEGEND

Existing Contour	--- 382 ---
Proposed Contour	--- 382.5 ---
Existing Spot Elevation	+82.53
Proposed Spot Elevation	+82.53
Direction of Flow	→
Existing Trees to Remain	(Tree Symbol)
Light Poles	○ Single Overhead ○ Double Overhead
Concrete	(Concrete Pattern)

BENCHMARKS

HOWARD COUNTY BENCHMARK 42CA	N 551695.734	E 1362506.43	ELEV. 376.493
HOWARD COUNTY BENCHMARK 361B	N 553348.652	E 1364085.211	ELEV. 386.424



SHEET INDEX

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GRADING AND SEDIMENT AND EROSION CONTROL PLAN	5 OF 14
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RETAINING WALL PLANS	14 OF 14

PARKING TABULATION (CONT'D)

EX. BUILDING #1	REQUIRED
DOG DAYCARE (11,041 SF) 4 EMPLOYEES + 4 CUSTOMERS	= 8 SPACES
DOG BARCINE (7,100 SF) 4 EMPLOYEES + 4 CUSTOMERS	= 8 SPACES
* INDUSTRIAL CONTRACTOR (9,841 SF) 4 EMPLOYEES	= 2 SPACES
EX. BUILDING #2	
* INDUSTRIAL CONTRACTOR (8,746 SF) 4 EMPLOYEES	= 2 SPACES
TRAMPOLINE GYM (30,354 SF) 5 SPACES PER 1,000 SF COURT AREA	= 76 SPACES
PLAY GYM (13,716 SF) 5 SPACES PER 1,000 SF PLAY AREA	= 40 SPACES



PARKING TABULATION (COMBINED PARKING TABULATION: SDP-14-21C AND SDP-05-105)

PER 2c SECT. 133.0.3 THE PARKING REQUIREMENTS ARE:

- OFFICE: 3.3 SPACES PER 1000 SF OF NET LEASE AREA
- INDUSTRIAL: 1 SPACE PER 2 EMPLOYEES
- COMMERCIAL/RETAIL SALES: 5 SPACES/1,000 SF OF NET LEASE AREA
- RESEARCH: 3.3 SPACES PER 1,000 SF OF NET LEASEABLE PER ZONING CODE SECTION 133.0.3

BUILDING 3

A. OFFICE & RESEARCH - 2,761 SF OFFICE FIRST FLOOR + 1,073 SF OFFICE MEZZANINE = 3,834 SF OFFICE @ 3.3 SPACES/1,000 SF = 13 SPACES, 7.16 RESEARCH @ 3.31,000 SF = 25 SPACES

B. OFFICE: 19,940 SF OFFICE @ 2 SPACES/1,000 SF = 40 SPACES + 540 SF MEZZANINE (STORAGE) = 0 SPACES

C. INDUSTRIAL (10 EMPLOYEES) @ 2 SPACES/1,000 SF = 5 SPACES

BUILDING 4

A. CHURCH 18,000 SF 450 SEATS @ 1 SPACE/3 SEATS = 150 SPACES * OVERLAPS WITH INDUSTRIAL/WAREHOUSE WHICH DOES NOT OPERATE ON SUNDAYS = 25 SPACES

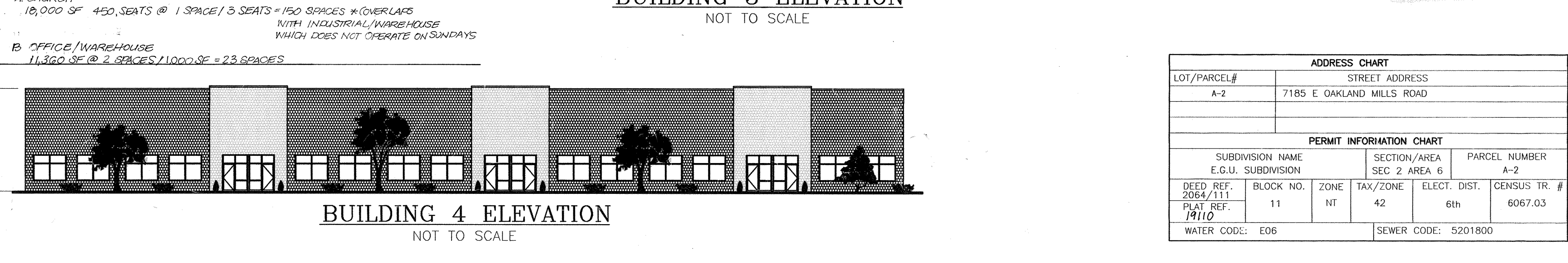
B. OFFICE/WAREHOUSE 11,360 SF @ 2 SPACES/1,000 SF = 23 SPACES

TOTAL REQUIRED PARKING: 400 SPACES

TOTAL PROVIDED (SDP-14-21C) 177 SPACES (10 HANDICAP)

TOTAL PROVIDED (THIS SDP) 270 SPACES * SEE NOTE UNDER BUILDING 4

TOTAL PARKING PROVIDED (SDP-14-21C) AND THIS SDP = 447 SPACES



ADDRESS CHART

LOT/PARCEL#	STREET ADDRESS
A-2	7185 E OAKLAND MILLS ROAD

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
E.G.U. SUBDIVISION	SEC 2 AREA 6	A-2
DEED REF. 2064/111	BLOCK NO. 11	ZONE NT
PLAT REF. 19110	TAX/ZONE 42	ELECT. DIST. 6th
	CENSUS TR. # 6067.03	
WATER CODE: E06	SEWER CODE: 5201800	

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Wm. D. ... 5/9/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Cindy Hamstra 5/16/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Mark L. ... 5/16/07
DIRECTOR DATE

SITE DEVELOPMENT PLAN

COVER SHEET

STONEWOOD BUSINESS CENTER
PARCEL A-2 - E.G.U. SUBDIVISION
SECTION 2 / AREA 6

TAX MAP 42 BLOCK 11 PARCEL 'A-2'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

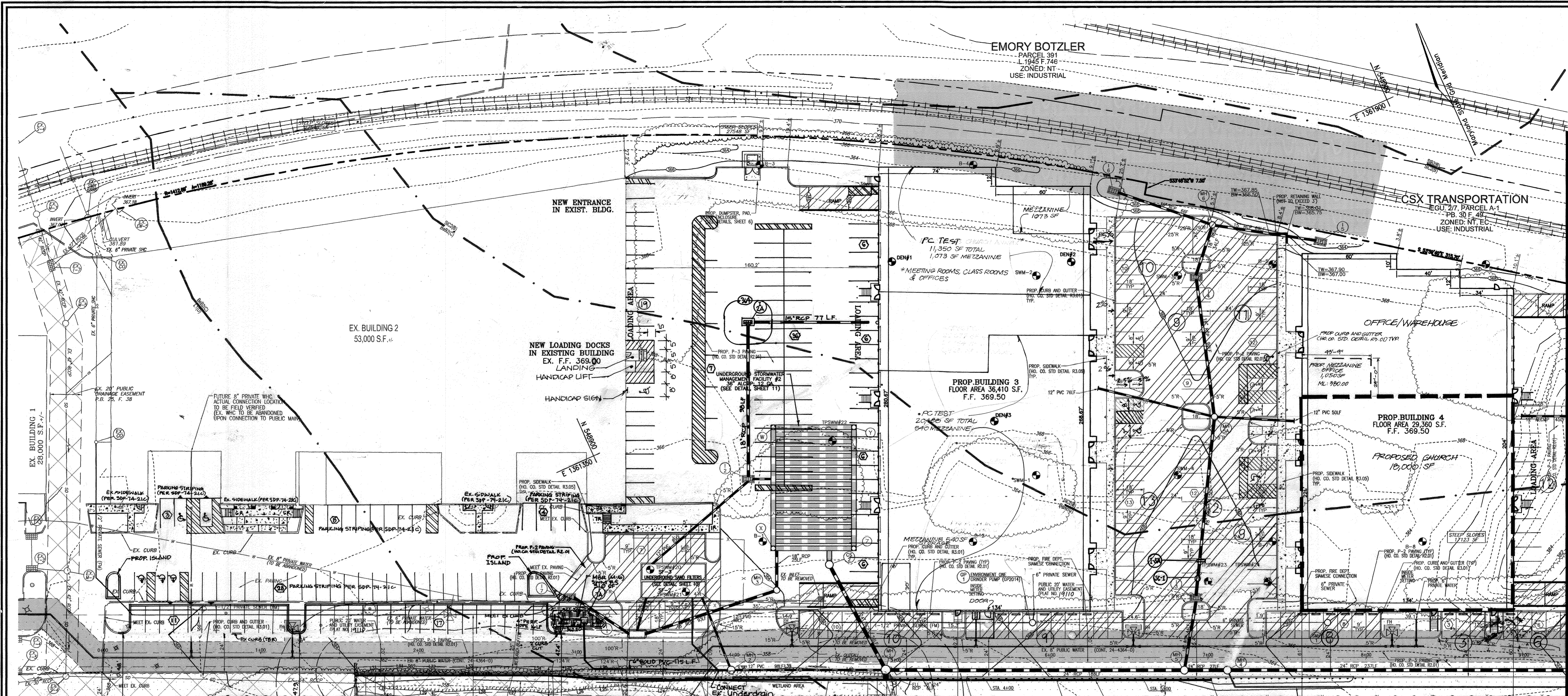
ROBERT H. VOGEL ENGINEERING, INC.

ENGINEERS • SURVEYORS • PLANNERS

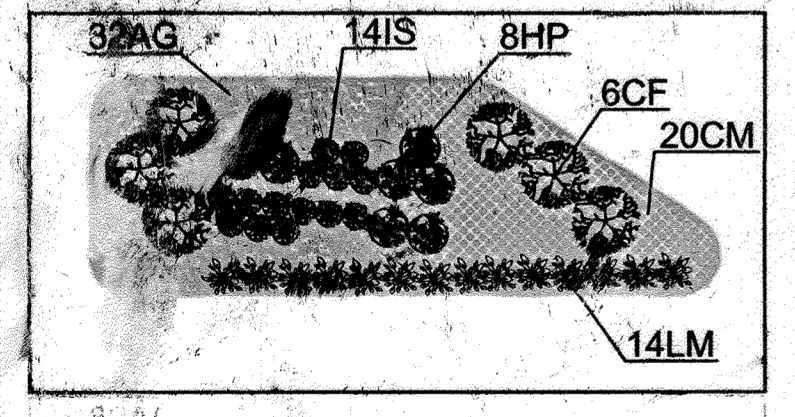
8407 MAIN STREET TEL: 410.461.7666
ELLICOTT CITY, MD 21043 FAX: 410.461.8961

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CHECKED BY: WGZ
DATE: FEB. 2007
SCALE: AS SHOWN
W.O. NO.: 04-90

1 SHEET OF 14



MATCHLINE SEE SHEET 3



KEY	QTY	BOTANICAL NAME/COMMON NAME	SIZE	REMARKS
IS	183	IRIS SPERICA 'BENNERUP BLUE' BENNERUP BLUE SIBERIAN	1 GALLON	5' O.C.
HP	111	HEMORRHOLLIS X PRINCE BLUE EYES PRAIRIE BLUE EYES DAYLILY	1 GALLON	30" O.C.
LM	112	LIRIOPE MUSCARI 'BIG BLUE' BIG BLUE LIXTURE	4" HT	SPECIMEN QUALITY STURDY LEADER
CF	40	CORNUS SERICEA 'FLAMMREA' YELLOW TWIGGED DOGWOOD	4" HT	SPECIMEN QUALITY STURDY LEADER
CM	494	CONNALLARIA MAJALIS LILY-OF-THE-VALLEY	1 QT.	12" O.C.
AC	656	AGORUS GRAMINEUS 'OCEAN' GOLDEN VARIATED SWEET FLAG	1 QT.	12" O.C.

MBR	AREA	STEMS REQUIRED	STEMS PROVIDED
1	310 SF	8	8

BIORETENTION AREAS ARE TO BE PLANTED BASED ON A MINIMUM DENSITY OF 1000 STEMS PER PLANTED ACRE (1029 STEMS PER SQ. FT.)

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* 5/19/07

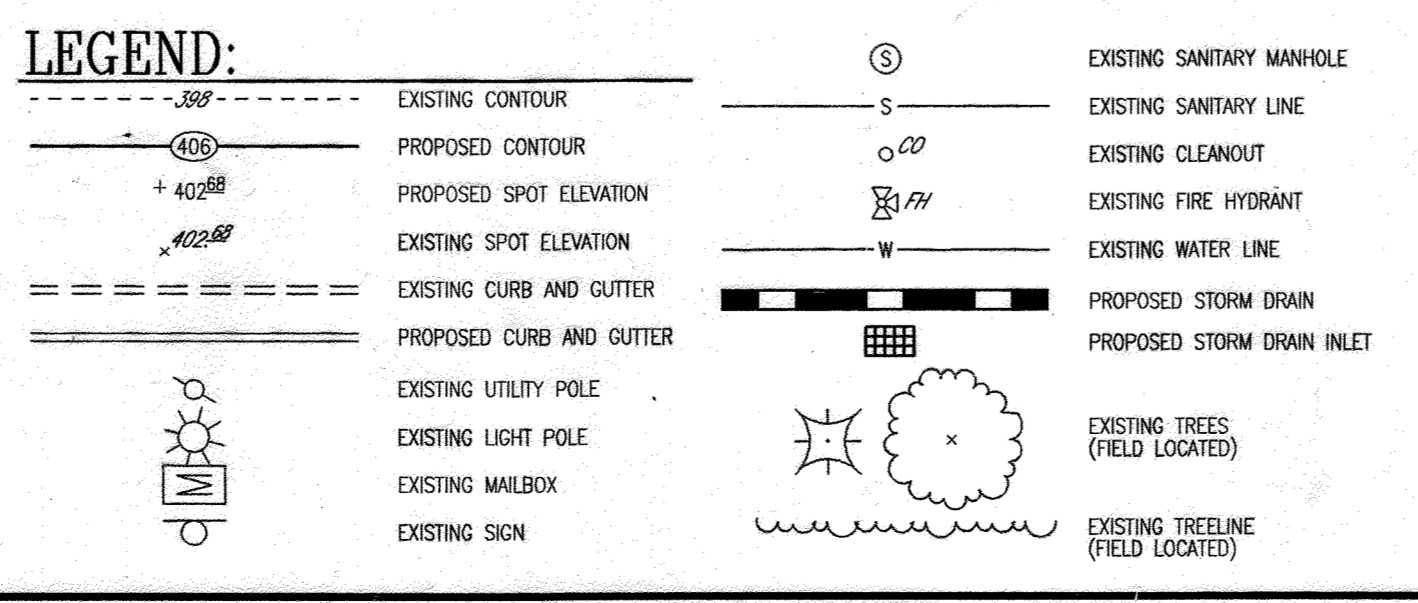
CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* 5/16/07

DIRECTOR: *[Signature]* 5/12/07

SCHEDULE D: STORMWATER MANAGEMENT AREA LANDSCAPING

LINEAR FEET OF FORMER	20 FT
CREDIT FOR EXISTING VEGETATION (NO. YES AND LINEAR FEET)	NO
CREDIT FOR OTHER LANDSCAPING (NO. YES AND FT)	YES, 1000'
NUMBER OF TREES REQUIRED (8' BUFFER) SHADE TREES EVERGREEN TREES	(8' BUFFER) 0 SHADE TREES 0 EVERGREEN TREES
NUMBER OF TREES PROVIDED SHADE TREES EVERGREEN TREES	SEE BIORETENTION PLANT LIST

SURETY FOR BUREAU OF PUBLIC WORKS IN THE DISTRICT OF COLUMBIA (J.E.D. - STC-1)



STORMWATER MANAGEMENT FACILITY PRIVATELY OWNED AND MAINTAINED

OWNER/DEVELOPER
STONEWOOD BUSINESS CENTER
GULFORD I LIMITED PARTNERSHIP
11628 LOG JUMP TRAIL
ELlicott CITY, MARYLAND 21043

NO.	REVISION	DATE
10	AS-BUILT SWH W/REV. 1-10-16, INSTALLATION OF STORMWATER AND INLET	10/31/16
9	REVISE PLANTING TOLERANCE AT PLG. 3	4-24-16
8	REVISE INTERIOR BUILDING CONFIGURATION	11/9/15
7	REVISE PLAN TO ADD 9,733 SF OF CHURCH/SUNICAY SCHOOL CLASSROOMS AND TWO MEZZANINES TOTALING 1,613 SF	10/16/15
6	ADD 1,050 SF MEZZANINE TO BUILDING #4	7/19/2010
5	REVISE USE OF BUILDING #4 TO OFFICE/WAREHOUSE	5-20-07
4	ADD CHURCH AND CHURCH	5-26-09
3	REMOVE SANDFILTER, SP-1 REPLACE WITH STORMCATCHOR	12/17/08

SITE DEVELOPMENT PLAN
SITE LAYOUT PLAN

STONEWOOD BUSINESS CENTER
PARCEL A-2- E.G.U. SUBDIVISION
SECTION 2 / AREA 6

TAX MAP 42 BLOCK 11
6TH ELECTION DISTRICT

PARCEL 'A-2'
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
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8407 MAIN STREET
ELlicott CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

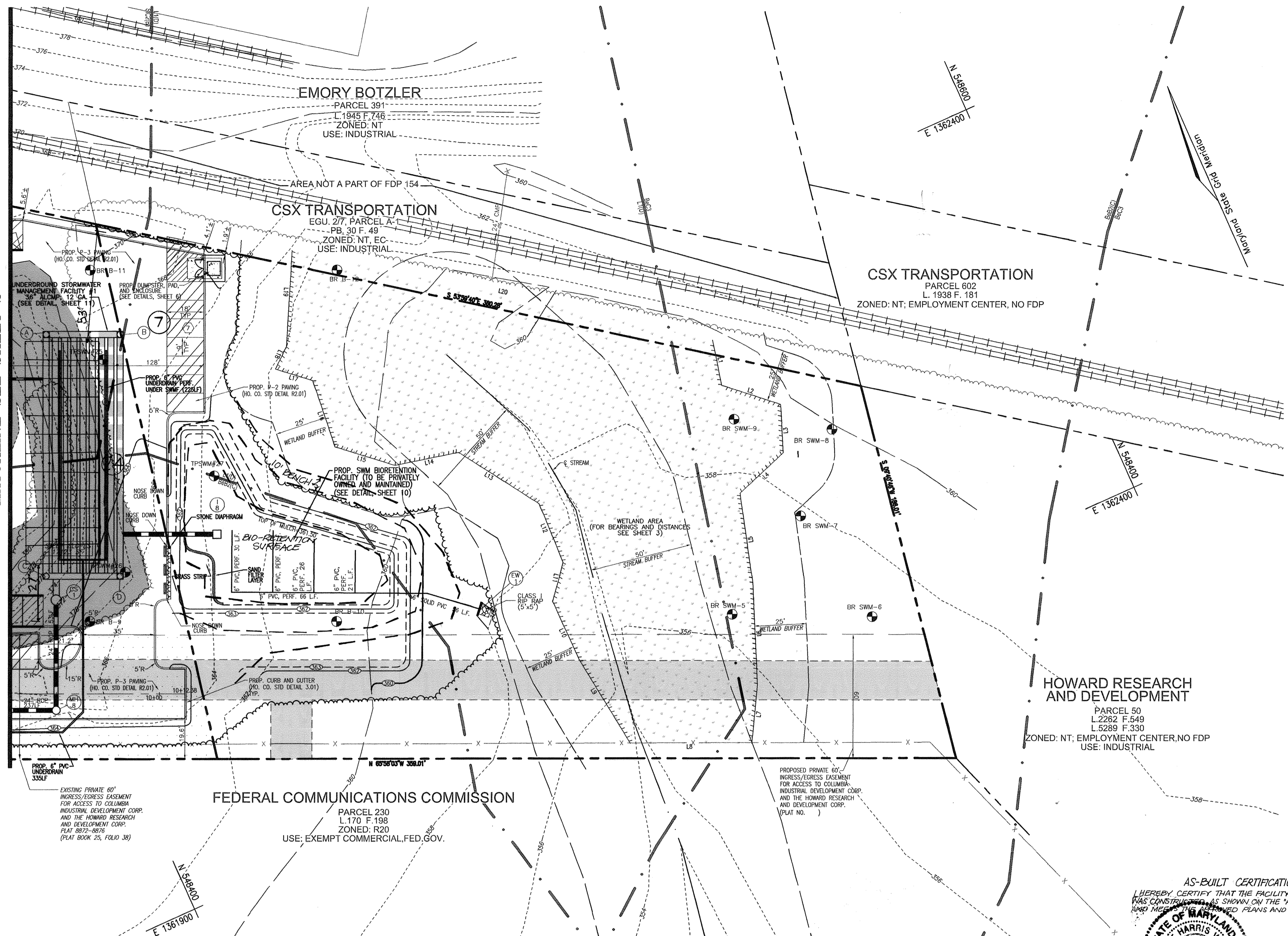
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DATE: FEB. 2007
SCALE: 1"=30'
W.O. NO.: 04-90

2 SHEET OF 14

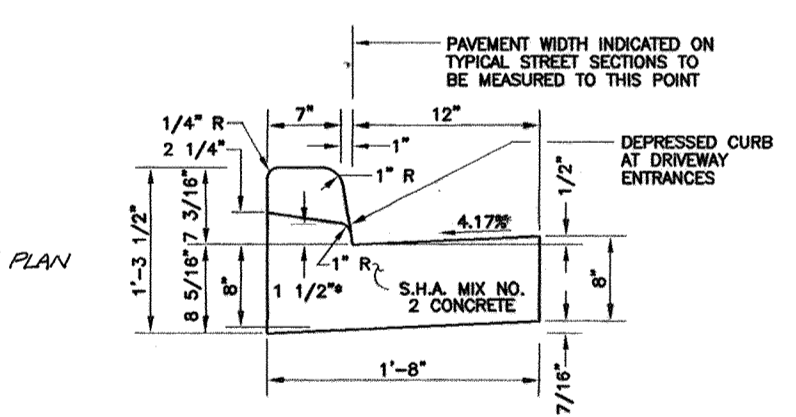
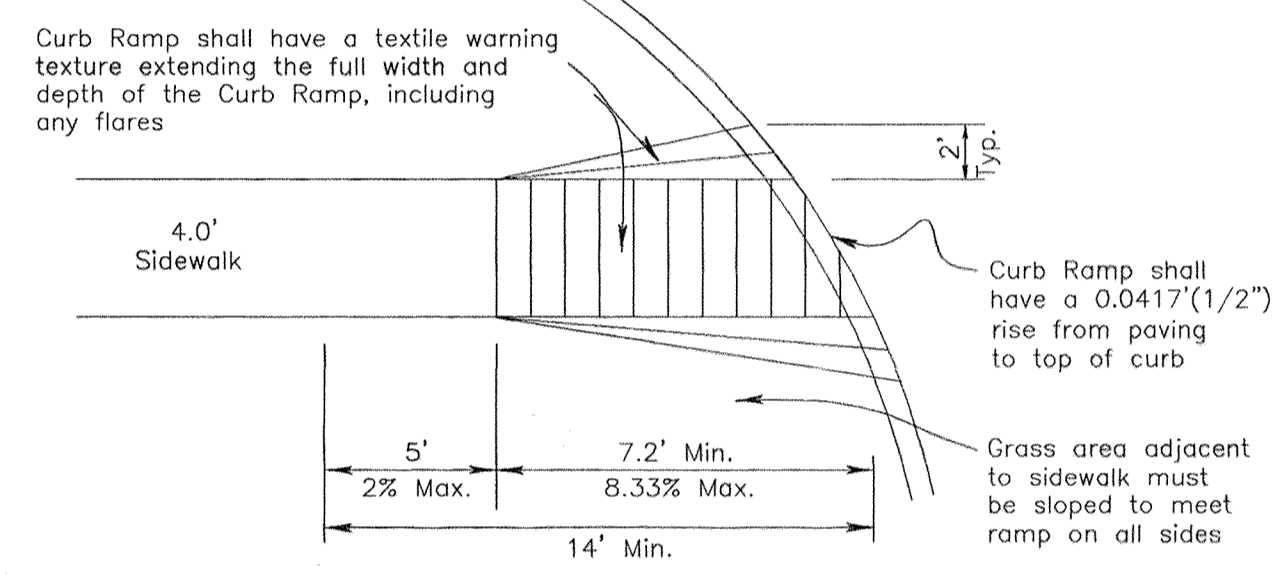
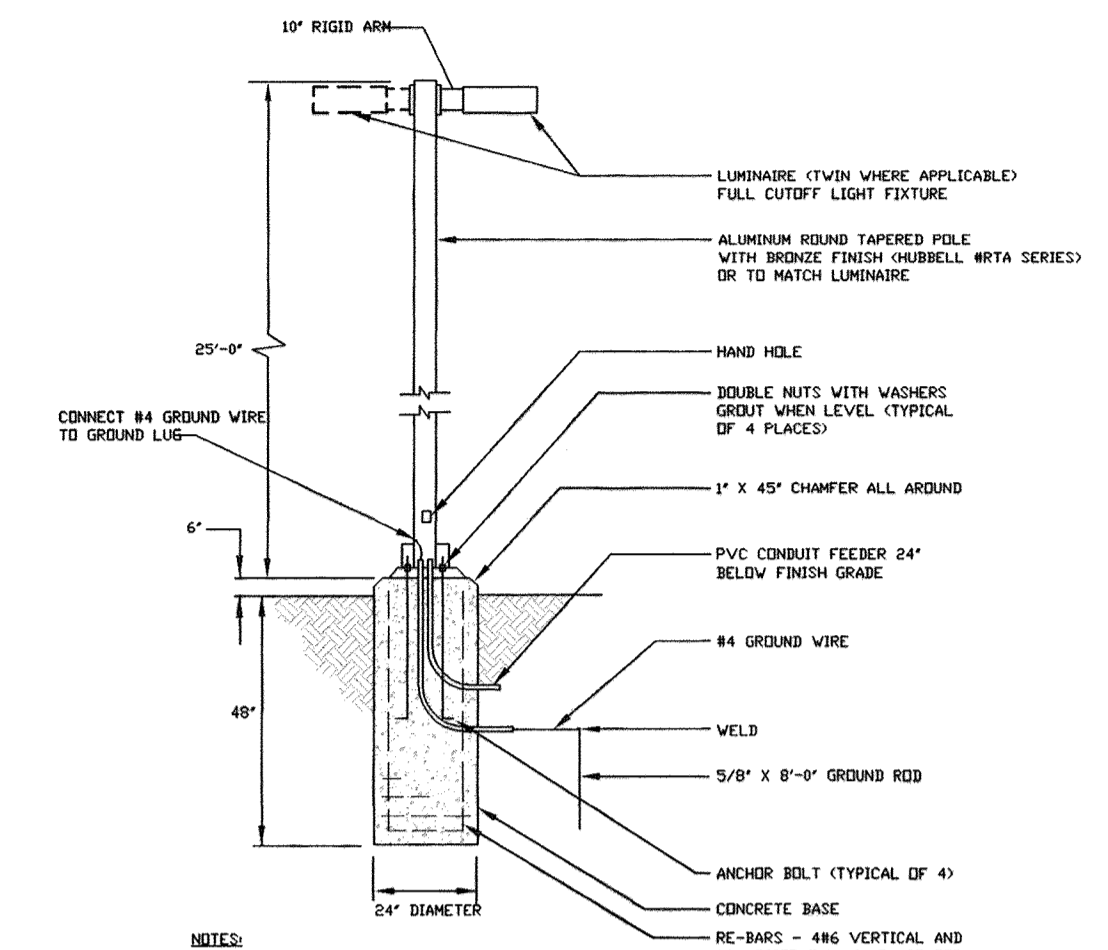
AS-BUILT 4-7-2010

SDP-05-105

MATCHLINE SEE SHEET 2



STORMWATER MANAGEMENT FACILITY PRIVATELY OWNED AND MAINTAINED



LEGEND:

- EXISTING CONTOUR
- - - - PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- PROPOSED STORM DRAIN
- PROPOSED STORM DRAIN INLET
- EXISTING TREES (FIELD LOCATED)
- EXISTING TREELINE (FIELD LOCATED)
- EXISTING VEGETATION (APPROXIMATE LOCATION)
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- SOILS BOUNDARY
- PROPOSED P-2 PAVING
- PROPOSED SIDEWALK

WETLAND CHART

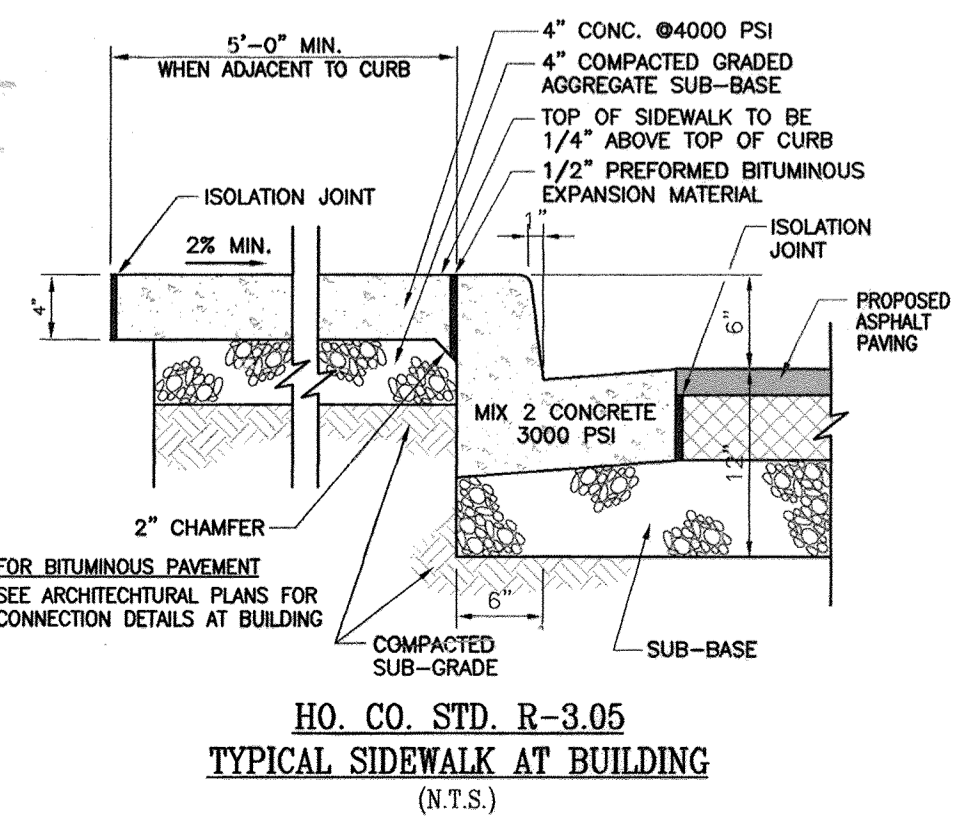
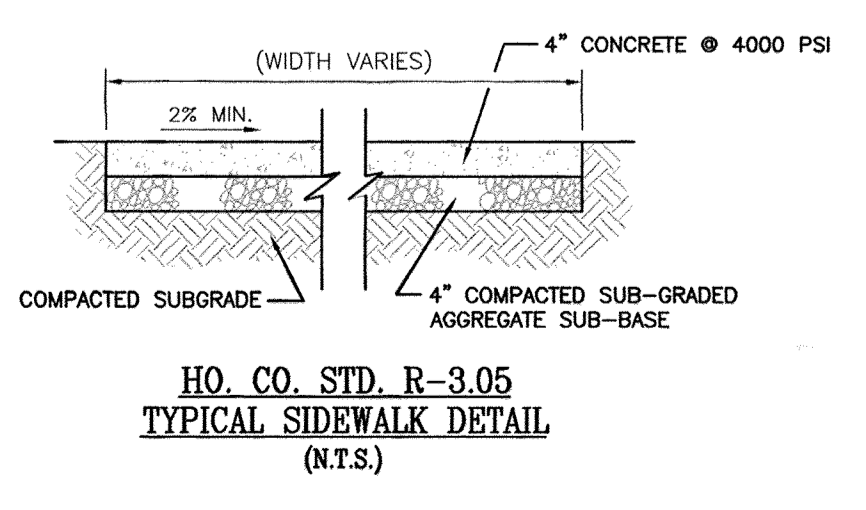
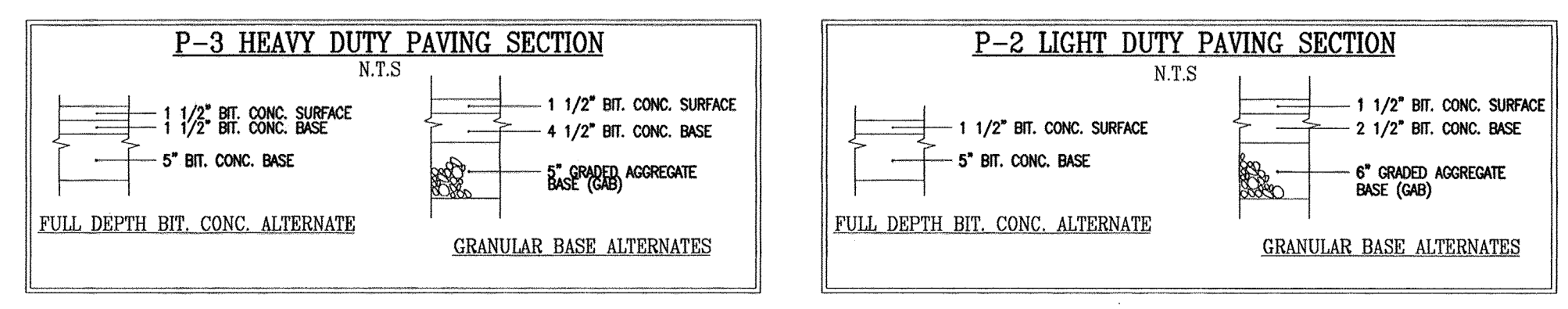
LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L1	S12°23'55"W	14.90	L21	S10°59'30"W	14.70
L2	S47°57'38"E	30.06	L22	N66°47'07"W	122.28
L3	S20°56'52"W	23.48	L23	N35°57'51"W	12.11
L4	S71°02'05"W	28.69	L24	N60°37'41"W	35.11
L5	S15°57'17"W	44.02	L25	N69°44'57"W	27.36
L6	S21°27'14"W	49.04	L26	N73°41'24"W	21.73
L7	S29°09'36"W	36.88	L27	N62°28'25"W	39.87
L8	N65°58'03"W	54.10	L28	N69°08'07"W	27.14
L9	N07°25'22"W	56.19	L29	N63°03'33"W	38.00
L10	N00°30'58"W	30.97	L30	N39°40'53"W	22.46
L11	N39°16'34"E	19.53	L31	S75°23'50"E	18.56
L12	N01°42'12"E	30.75	L32	S64°32'20"E	45.16
L13	N33°31'53"W	46.40	L33	S71°57'18"E	26.05
L14	N77°20'42"W	31.64	L34	S59°41'22"E	34.33
L15	S48°41'20"W	30.41	L35	S69°48'17"E	20.80
L16	N05°24'37"E	33.87	L36	S64°11'40"E	36.96
L17	N48°50'45"W	19.01	L37	S63°01'28"E	21.51
L18	N50°19'08"E	12.13	L38	S67°22'27"E	53.55
L19	N27°28'49"E	39.38	L39	S69°53'14"E	22.23
L20	S53°59'40"E	210.83	L40	S61°57'46"E	60.00

OWNER/DEVELOPER
 STONEWOOD BUSINESS CENTER
 GUILFORD I LIMITED PARTNERSHIP
 11628 LOG JUMP TRAIL
 ELLICOTT CITY, MARYLAND 21043

AS-BUILT CERTIFICATION
 I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THE PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS ALL APPLICABLE PLANS AND SPECIFICATIONS.

STATE OF MARYLAND
 ROBERT H. VOGEL
 PROFESSIONAL ENGINEER
 12/10

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 12/07/06



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE 5/16/07

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE 5/12/07

NO.	REVISION	DATE
3	REVISE THE PLAN TO CHANGE THE USE OF BUILDING #4 FROM OFFICE/WAREHOUSE TO OFFICE/WAREHOUSE AND A CHURCH	5-26-09

SITE DEVELOPMENT PLAN
SITE LAYOUT PLAN

STONEWOOD BUSINESS CENTER
 PARCEL A-2 - E.G.U. SUBDIVISION
 SECTION 2 / AREA 6

TAX MAP 42 BLOCK 11 PARCEL 'A-2'
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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

DESIGN BY: W.G.Z.
 DRAWN BY: D.Z.
 CHECKED BY: W.G.Z.
 DATE: FEB., 2007
 SCALE: 1"=30'
 W.O. NO.: 04-90

3 SHEET OF 14

AS-BUILT 4-7-2010

EMORY BOTZLER
 PARCEL 391
 L. 1945 F. 746
 ZONED: NT
 USE: INDUSTRIAL

CSX TRANSPORTATION
 EGU 217, PARCEL A-1
 PB. 30 F. 45
 ZONED: NT, EC
 USE: INDUSTRIAL

EX. BUILDING 2
 53,000 S.F.

NEW LOADING DOCKS
 IN EXISTING BUILDING
 EX. F.F. 369.00
 HANDICAP LIFT

PROP. BUILDING 3
 FLOOR AREA 35,410 S.F.
 F.F. 369.50

PROP. BUILDING 4
 FLOOR AREA 29,350 S.F.
 F.F. 369.50

OAK VIEW VILLAGE
 PARCEL 38
 LOTS 17-5
 PLAT# 5724
 ZONED: R-A-15
 USE: RESIDENTIAL

FEDERAL COMMUNICATIONS COMMISSION
 PARCEL 230
 L. 170 F. 198
 ZONED: R20
 USE: EXEMPT COMMERCIAL, FED. GOV.

OUTLET PIPE OF LINE TO REMAIN BLOCKED WITH WATER-TIGHT BULKHEAD, UNTIL SITE IS PERMANENTLY STABILIZED AND PERMISSION TO REMOVE IS GRANTED BY THE INSPECTOR. ANY AND ALL ACCUMULATED WATER UPSTREAM OF BULKHEAD MUST BE PUMPED TO TRAP OR FILTERBAG.

FOR REVISION #10 ONLY
 APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 12/07/06

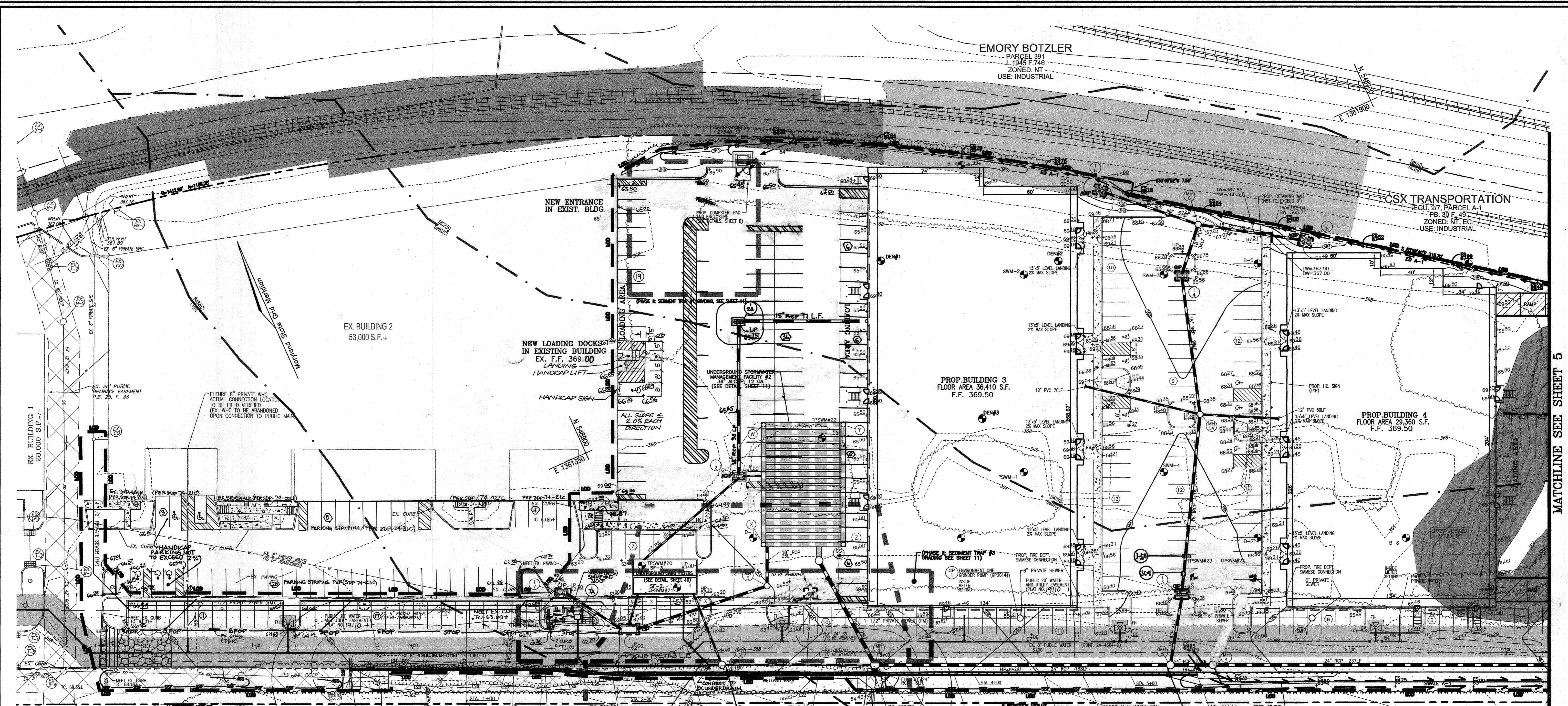
10	AS-BUILT SWM WORK UNDER 3-9916, INSTALLATION OF SIDEWALKER AND LINET	10/31/23
9	REVISE TO SHOW HANDICAP LIFT SPACE AND AISLE	6/27/10
7	REVISE PLAN TO ADD PARKING IN FRONT OF BLDG 2 AND ASSOCIATED SWM; SHOW AS-BUILT SIDEWALK OF BLDG 2; SHOW AS-BUILT STORM DRAIN OF BLDG 3.	04/30/10
2	REMOVE SAND FILTER SF-1 REPLACE WITH STORM CENTER	12/17/06
NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
 PHASE 3 GRADING, SEDIMENT
 AND EROSION CONTROL PLAN
 STONEWOOD BUSINESS CENTER
 PARCEL A-2 - E.G.U. SUBDIVISION
 SECTION 2 / AREA 6
 TAX MAP 42 BLOCK 11
 6TH ELECTION DISTRICT
 PARCEL 'A-2'
 HOWARD COUNTY, MARYLAND

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 4 SHEET OF 14

AS-BUILT 4-7-2010



REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.
 Jim Murray 5-4-07
 USDA-NATURAL RESOURCES CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Jeffrey W. Schomine 5-4-07
 HOWARD S.C.D.

OWNER/DEVELOPER
 STONEWOOD BUSINESS CENTER
 GUILFORD I LIMITED PARTNERSHIP
 11628 LOG JUMP TRAIL
 ELLICOTT CITY, MARYLAND 21043

STORMWATER MANAGEMENT
 FACILITY PRIVATELY OWNED
 AND MAINTAINED

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division 5/16/07
 Chief, Division of Land Development 5/16/07
 Director 5/12/07

BY THE DEVELOPER:
 I, _____, CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature of Developer: S. BRUCE JAFFE
 DATE: 4/24/07

BY THE ENGINEER:
 I, _____, CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature of Engineer: ROBERT H. VOGEL, P.E.
 DATE: 4/24/07

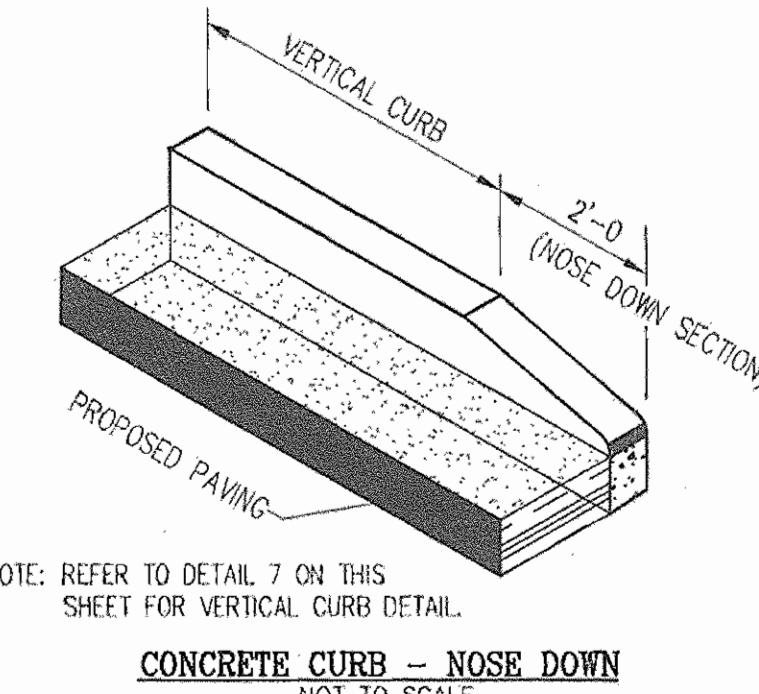
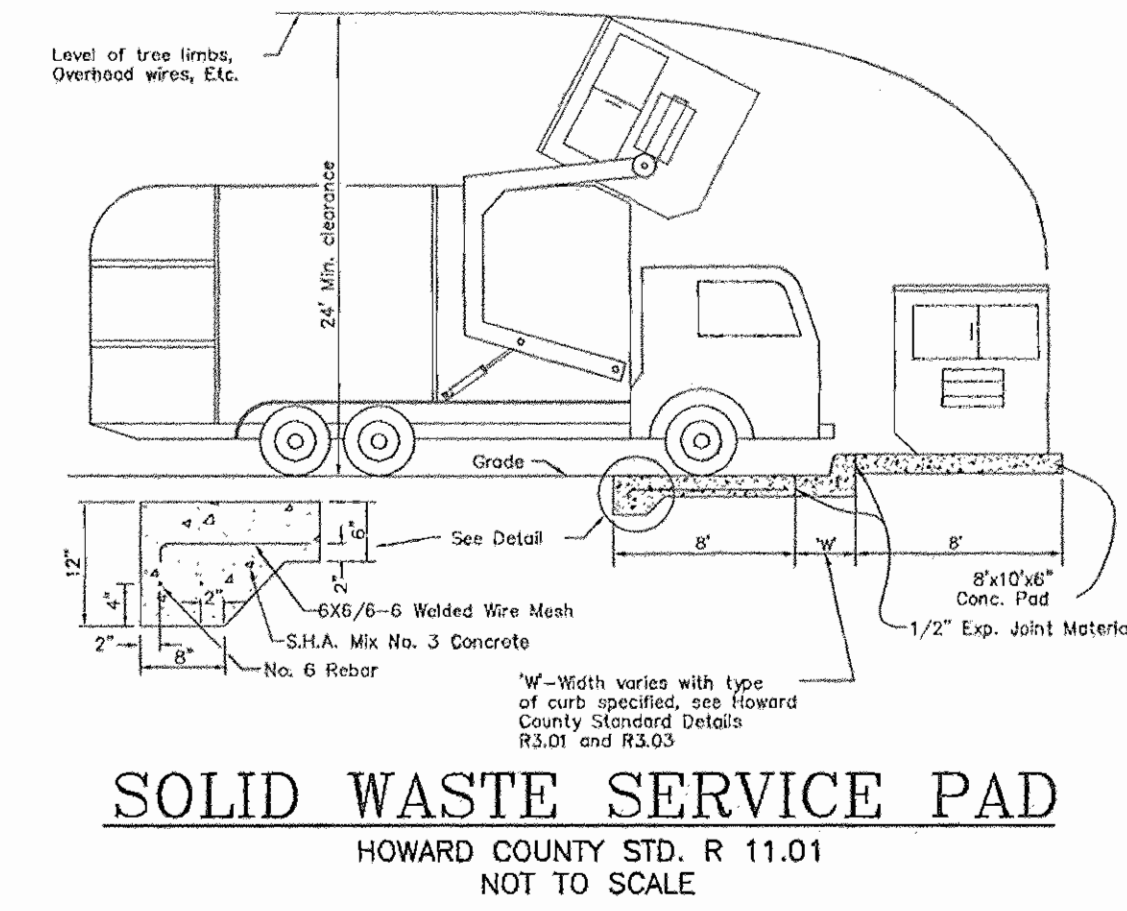
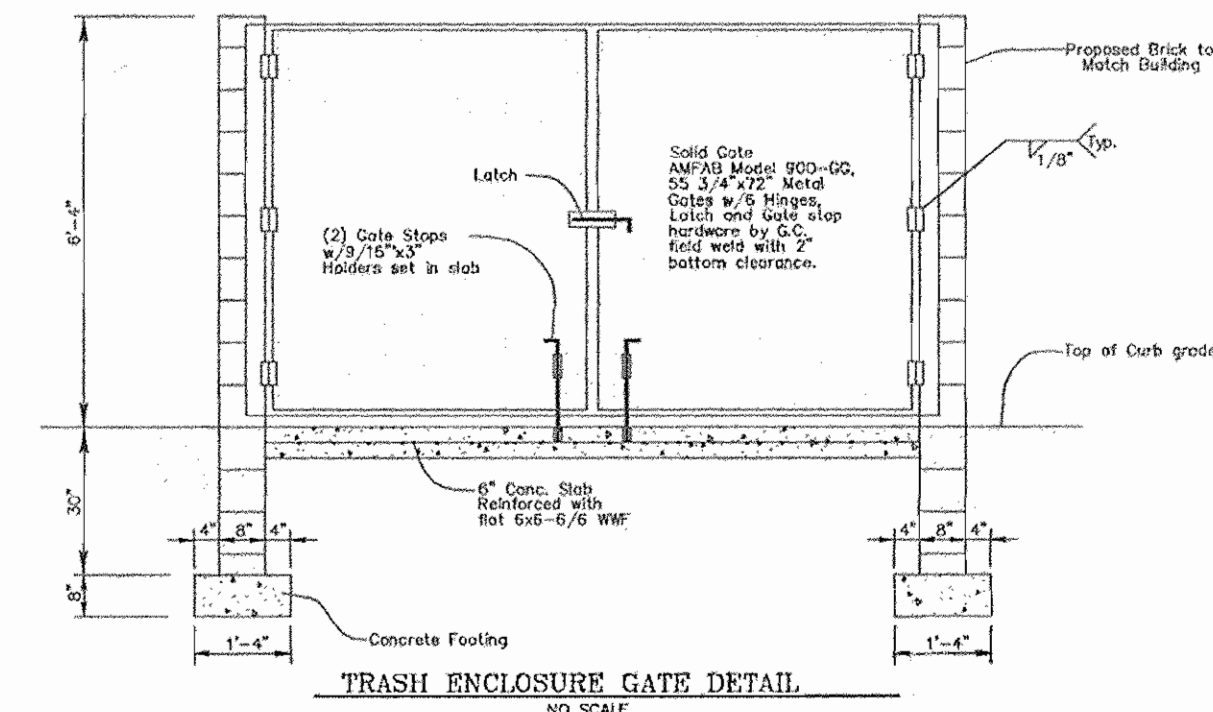
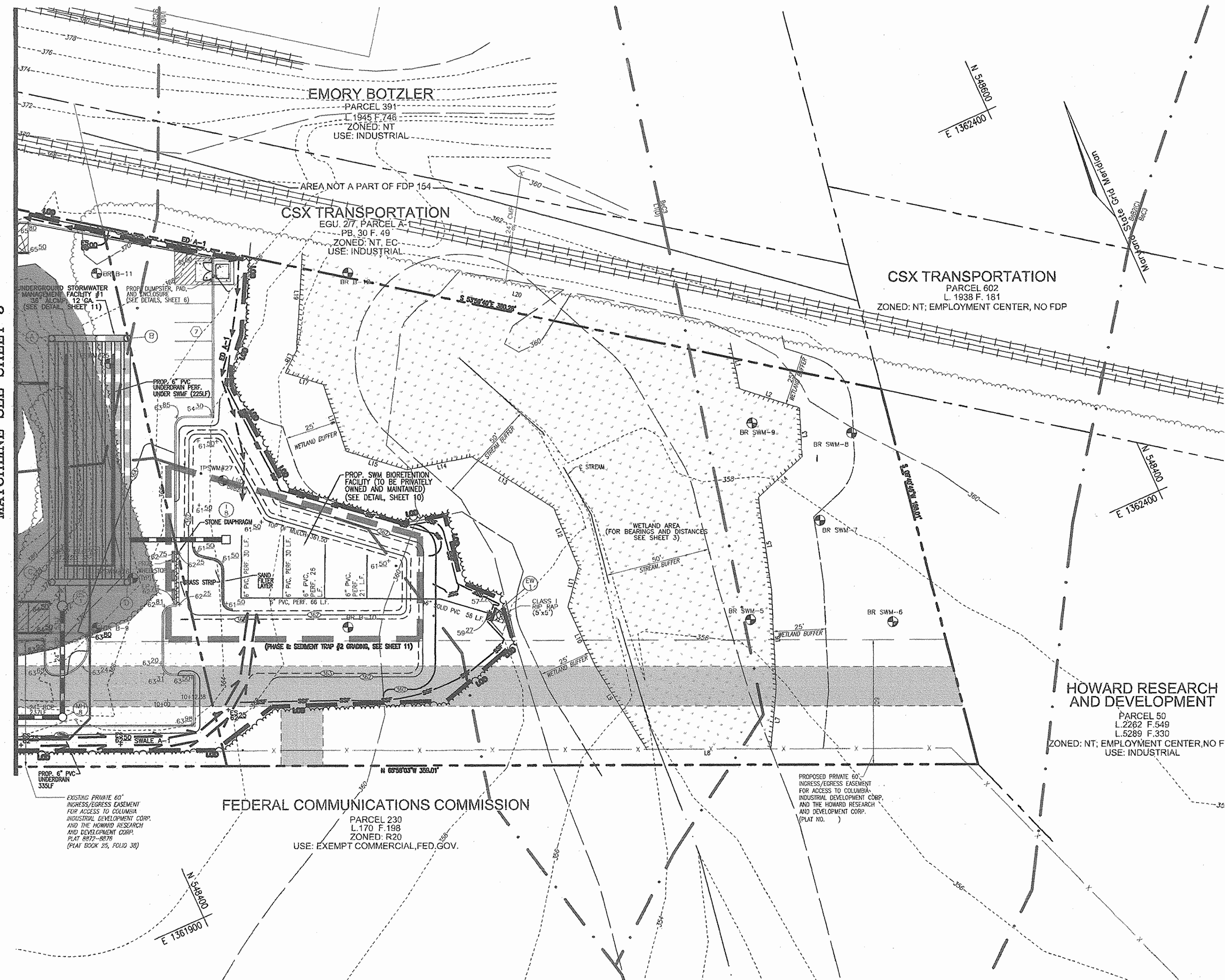
LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- PROPOSED SPOT DRAIN
- PROPOSED STORM DRAIN INLET
- EXISTING TREES (FIELD LOCATED)
- EXISTING TREETRUE (FIELD-LOCATED)
- EXISTING VEGETATION (APPROXIMATE LOCATION)
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- SOILS BOUNDARY
- SILT FENCE
- SUPER SILT FENCE
- PHASE 3 LIMIT OF DISTURBANCE
- AT GRADE
- INLET PROTECTION
- CURB INLET PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE

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MATCHLINE SEE SHEET 5

MATCHLINE SEE SHEET 5

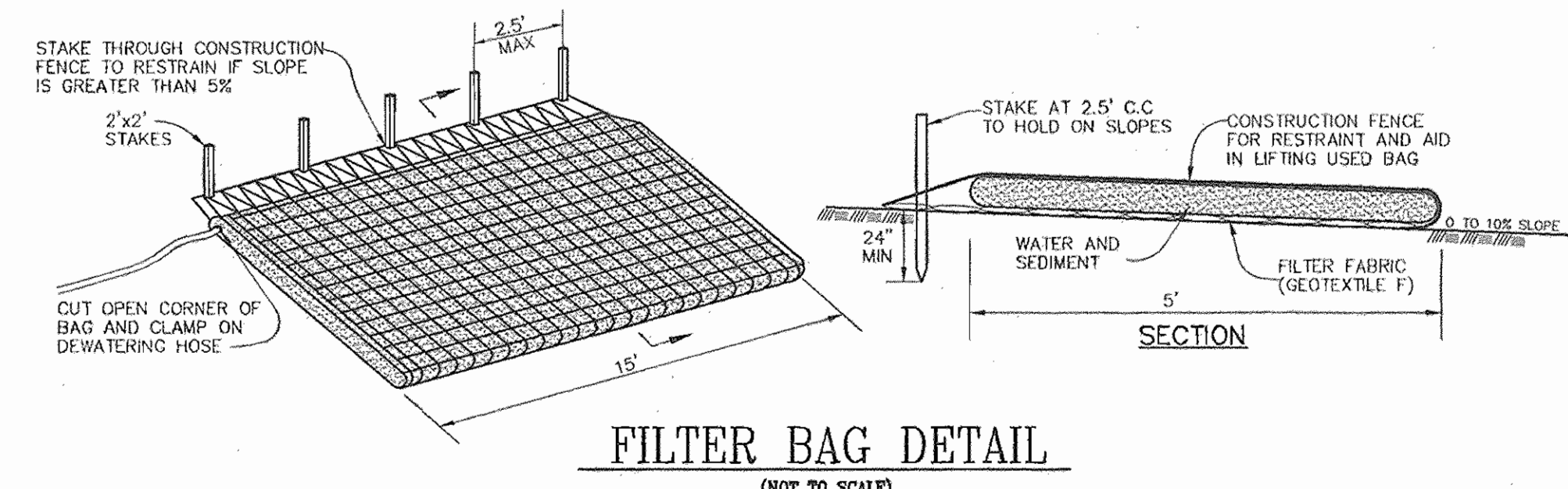
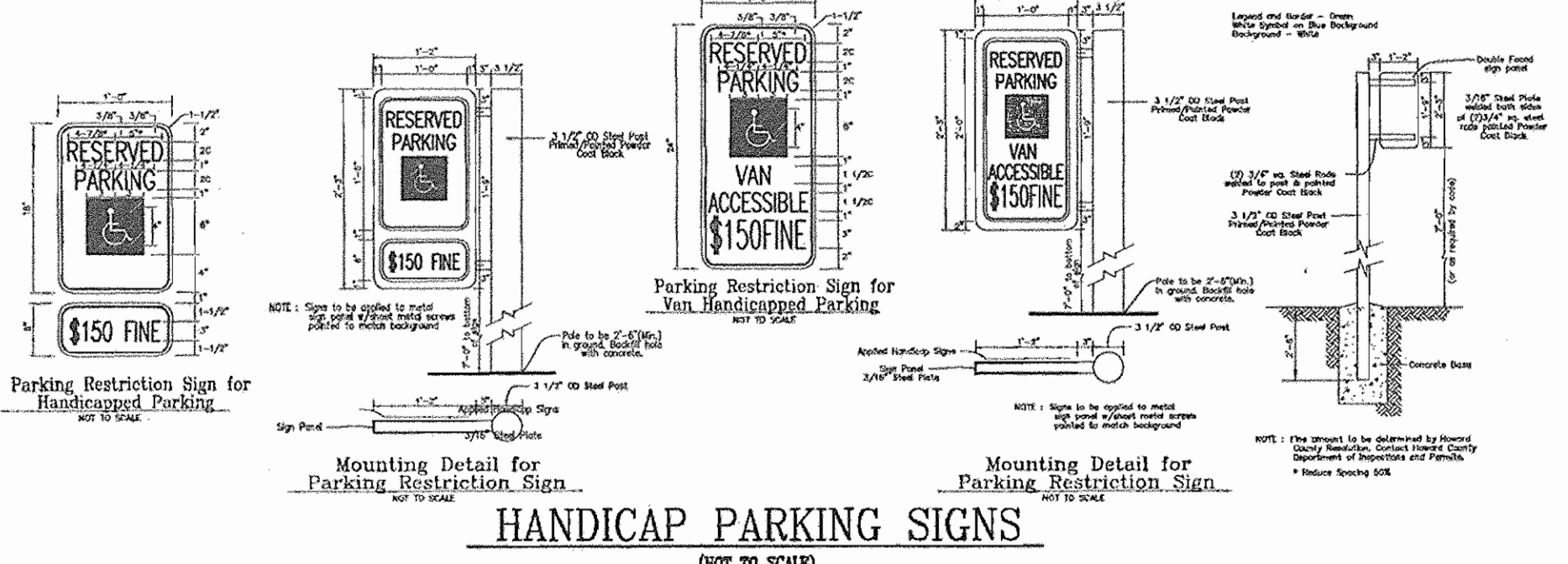


LEGEND:

---	EXISTING CONTOUR
---	PROPOSED CONTOUR
+	PROPOSED SPOT ELEVATION
+	EXISTING SPOT ELEVATION
---	EXISTING CURB AND GUTTER
---	PROPOSED CURB AND GUTTER
⊕	EXISTING UTILITY POLE
⊕	EXISTING LIGHT POLE
⊕	EXISTING MAILBOX
⊕	EXISTING SIGN
⊕	EXISTING SANITARY MANHOLE
⊕	EXISTING SANITARY LINE
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⊕	EXISTING FIRE HYDRANT
⊕	EXISTING WATER LINE
---	PROPOSED STORM DRAIN
---	PROPOSED STORM DRAIN INLET
⊕	EXISTING TREES (FIELD LOCATED)
⊕	EXISTING TREELINE (FIELD LOCATED)
⊕	EXISTING VEGETATION (APPROXIMATE LOCATION)
---	EXISTING FENCE
---	PROPERTY LINE
---	RIGHT-OF-WAY LINE
---	SOILS BOUNDARY
---	SILT FENCE
---	SUPER SILT FENCE
---	PHASE 3 LIMIT OF DISTURBANCE
---	PROPOSED SIDEWALK
---	AT GRADE INLET PROTECTION
---	CURB INLET PROTECTION
---	STABILIZED CONSTRUCTION ENTRANCE

STORMWATER MANAGEMENT FACILITY PRIVATELY OWNED AND MAINTAINED

OWNER/DEVELOPER
STONEWOOD BUSINESS CENTER
GUILFORD I LIMITED PARTNERSHIP
11628 LOG JUMP TRAIL
ELLCOTT CITY, MARYLAND 21043



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
[Signature] 5/19/07
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 5/16/07
 CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 5/12/07
 DIRECTOR

REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.
[Signature] 5-4-07
 USA-NATURAL RESOURCES CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 5-4-07
 HOWARD S.C.D.

BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 4/21/07
 SIGNATURE OF DEVELOPER
 S. BRUCE JAFFE

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 4/21/07
 SIGNATURE OF ENGINEER

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE: 12/07/06

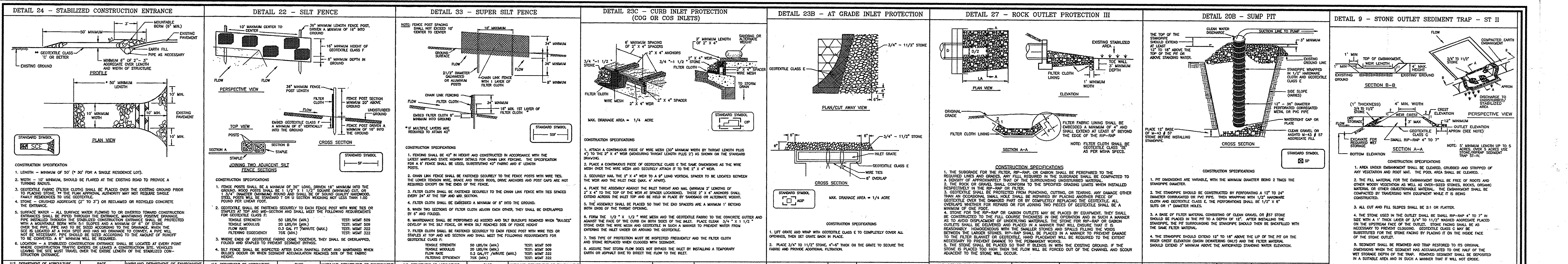
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SITE DEVELOPMENT PLAN
PHASE 3 GRADING, SEDIMENT AND EROSION CONTROL PLAN
STONEWOOD BUSINESS CENTER
 PARCEL A-2 - E.G.U. SUBDIVISION
 SECTION 2 / AREA 6
 TAX MAP 42 BLOCK 11 PARCEL 'A-2'
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
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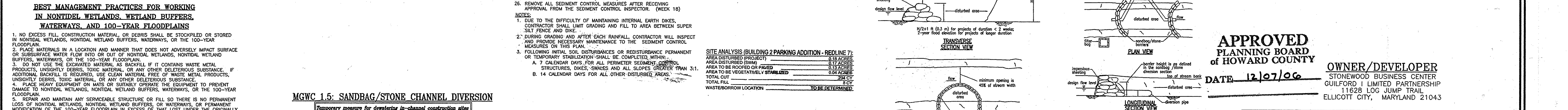
5 SHEET OF 14



PERMANENT SEEDING NOTES
 APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE SEEDBED PREPARATION: Loosen upper three inches of soil by raking, tilling or other acceptable means before seeding. If not previously SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following:
 1. Preferred—Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs per acre 30-0-0 ureamorph fertilizer (9 lbs/1000 sq ft).
 2. Acceptable—Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and apply 1000 lbs per acre 10-10-10 fertilizer (3.2 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.
 3. For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue per acre and 2 lbs per acre of 1/8" clover seed. For the periods November 1 thru August 15, seed with 60 lbs per acre of Kentucky 31 Tall Fescue per acre and 2 lbs per acre of 1/8" clover seed. For the periods February 28, protect site by Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible. For the periods Option (2) Seed with 2 tons/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw mulch.
 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 pins or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on the surface. On slopes 8 feet or higher, use 348 gallons per acre.
 MAINTENANCE: Inspect all seeded areas and make needed repairs.

TEMPORARY SEEDING NOTES
 SEEDBED PREPARATION: Loosen upper three inches of soil by raking, tilling or other acceptable means before seeding. If not previously SOIL AMENDMENTS: Apply 600 lbs per acre 10-10-10 fertilizer. SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual ryegrass (3.2 lbs/1000 sq ft) and 1 bushel per acre of annual rye (3.2 lbs/1000 sq ft) for the periods November 1 thru August 15, seed with 60 lbs per acre of Kentucky 31 Tall Fescue per acre and 2 lbs per acre of 1/8" clover seed. For the periods February 28, protect site by Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible. For the periods Option (2) Seed with 2 tons/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw mulch.
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 REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT LISTED HEREIN.

BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100-YEAR FLOODPLAINS
 1. NO EXCESS FILL, CONSTRUCTION MATERIAL, OR DEBRIS SHALL BE STOCKPILED OR STORED IN NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
 2. PLACE MATERIALS IN A LOCATION AND MANNER THAT DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
 3. DO NOT USE THE EXCAVATED MATERIAL AS BACKFILL IF IT CONTAINS WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DEleterious SUBSTANCE. IF ADDITIONAL OR OTHER EXCESSIVE DEBRIS IS OBSERVED, CONTACT THE MARYLAND DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES.
 4. PLACE HEAVY EQUIPMENT ON DESIGNATED AREAS OR EQUIPMENT TO PREVENT DAMAGE TO NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
 5. REPAIR AND MAINTAIN ANY SERVICEABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, OR WATERWAYS, OR PERMANENT MODIFICATION OF THE 100-YEAR FLOODPLAIN IN EXCESS OF THAT LOST UNDER THE ORIGINALLY AUTHORIZED STRUCTURE OR FILL.
 6. RESTORE ANY NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, OR 100-YEAR FLOODPLAIN TEMPORARILY IMPACTED BY ANY CONSTRUCTION.
 7. ALL STABILIZATION IN THE NONTIDAL WETLAND AND NONTIDAL WETLAND BUFFER SHALL BE LIMITED TO THE FOLLOWING SPECIES: ANNUAL Ryegrass, Annual Rye, Millet (CENchrus ciliaris), Barley (Hordeum sp.), and/or RYE (Secale cereale). THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY RESTORATION OF THE NATURAL AND SPECIES. OTHER NONNATIVE VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE NONTIDAL WETLANDS AND WATERWAYS DIVISION. HERCULEX 31 FERTILIZER SHALL NOT BE UTILIZED IN WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED. MAKE POST-CONSTRUCTION GRADES AND ELEVATIONS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS IN THE TEMPORARILY IMPACTED AREAS.
 8. TO PROTECT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM.
 9. USE 1 WATERWAY: IN-STREAM WORK SHALL BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH JUNE 15, INCLUSIVE DURING ANY YEAR.
 10. STOPPAGES: STOPPAGES SHALL BE CONTROLLED TO PREVENT THE WASHING OF DEBRIS INTO THE WATERWAY.
 11. CULVERTS SHALL BE CONSTRUCTED AND ANY RIPRAP PLACED SO AS NOT TO OBSTRUCT THE MOVEMENT OF AQUATIC SPECIES, UNLESS THE PURPOSE OF THE ACTIVITY IS TO IMPROVE WATERWAY.
 12. CONSTRUCTION MATERIALS SHOULD BE CLEARLY GRABBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
 13. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER UNDESIRABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVELING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
 14. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
 15. ELEVATION OF THE TOP OF ANY DIRT OR STONE TRAP MUST BE EQUAL TO EXCEED THE HEIGHT OF TRAP EMBANKMENT.
 16. STORAGE AREA PROVIDED SHALL BE SIZED BY COMPUTING THE VOLUME MEASURED FROM TOP OF EXCAVATION. (FOR STORAGE REQUIREMENTS SEE TABLE 10).
 17. FILTER CLOTH SHALL BE PLACED OVER THE BOTTOM AND SIDES OF THE OUTLET CHANNEL. PROTECT THE FILTER CLOTH FROM DAMAGE BY TRUCKS OR OTHER EQUIPMENT. FILTER CLOTH SHALL BE SECURED AT LEAST 10" INTO EXISTING CHANNEL AT DISTANCE OF OUTLET CHANNEL.
 18. STONE USED IN THE OUTLET CHANNEL SHALL BE 4" - 7" PLACED 18" THICK.
 19. OUTLET - AN OUTLET SHALL BE PROVIDED WHICH INCLUDES A MEANS OF CONVEYING THE DEBRIS IN AN EXPOSURE FREE MANNER TO AN EXISTING STABLE CHANNEL. THE MEANS OF CONVEYING THE DEBRIS SHALL BE PROVIDED AS NECESSARY.
 20. OUTLET CHANNEL SHALL HAVE POSITIVE DRAINAGE FROM THE TRAP.
 21. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/4 OF THE NET STORAGE DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND SUCH A MANNER THAT IT WILL NOT DROG.
 22. CONSTRUCTION OF TRAPS SHALL BE CARRIED OUT IN SUCH A MANNER THAT SEDIMENT POLLUTION IS KEPT TO A MINIMUM. POINTS OF CONCENTRATED FLOW SHALL BE IDENTIFIED AND PROTECTED BY WOODEN STANDARDS. THE REMAINDER OF THE INTERIOR SURFACE SHOULD BE STABILIZED ONE TIME WITH VEGETATION TO PREVENT COMPLETION AND MONITORED AND MAINTAINED EROSION FREE DURING THE LIFE OF THE TRAP.
 23. THE STRUCTURE SHALL BE DESIGNED BY APPROVED METHODS, REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY REDUCED.



APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE 12/07/06

OWNER/DEVELOPER
 STONEWOOD BUSINESS CENTER
 GUILDFORD I LIMITED PARTNERSHIP
 11628 LOG JUMP TRAIL
 ELLICOTT CITY, MARYLAND 21043

MGCW 1.4: DIVERSION PIPE
 Temporary measure for diverting in-channel construction sites.

MGCW 1.5: SANDBAG/STONE DIVERSION
 Temporary measure for diverting in-channel construction sites.

REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS. BY THE DEVELOPER: *Jane M. [Signature]* DATE 12/10/06
 BY THE ENGINEER: *Walter G. Zawislak, P.E.* DATE 12/10/06

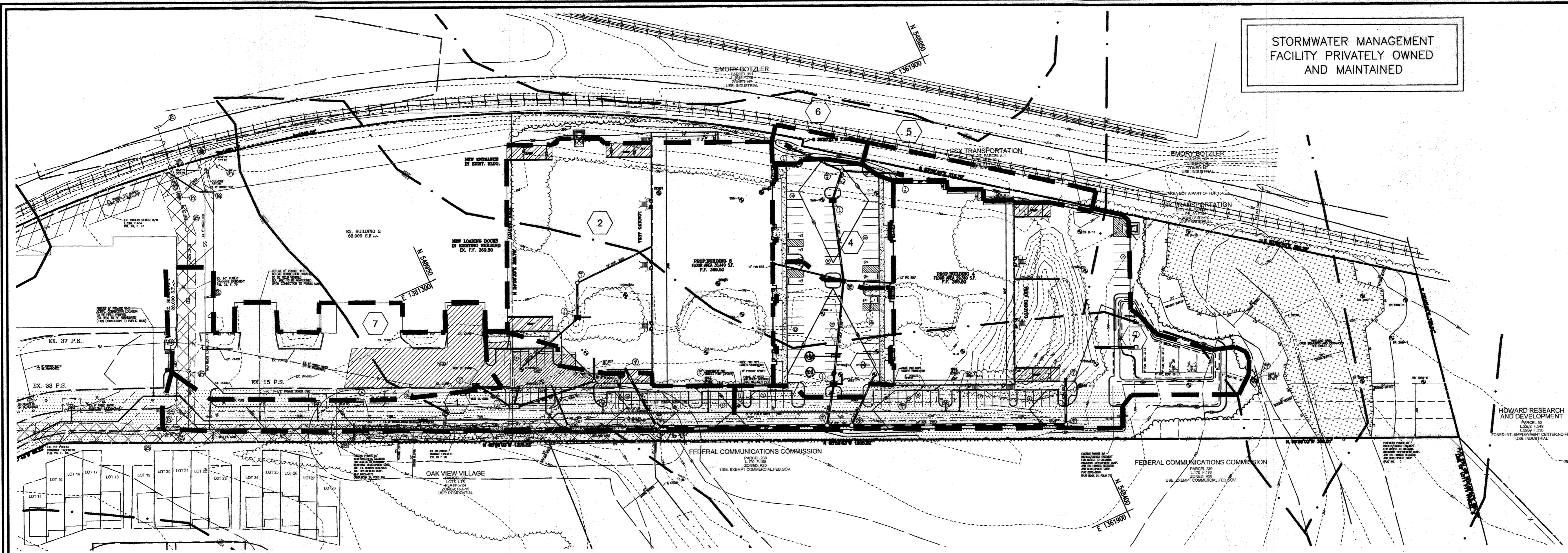
DESIGNER'S CERTIFICATION: I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE CONDUCTED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN AND WORKING DRAWINGS AND THAT ALL PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DESIGNATED EROSION AND SEDIMENT CONTROL 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.

CONTRACTOR'S CERTIFICATION: I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL PREPARED BY THE DESIGNER AND WORKING DRAWINGS AND THAT ALL PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DESIGNATED EROSION AND SEDIMENT CONTROL 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.

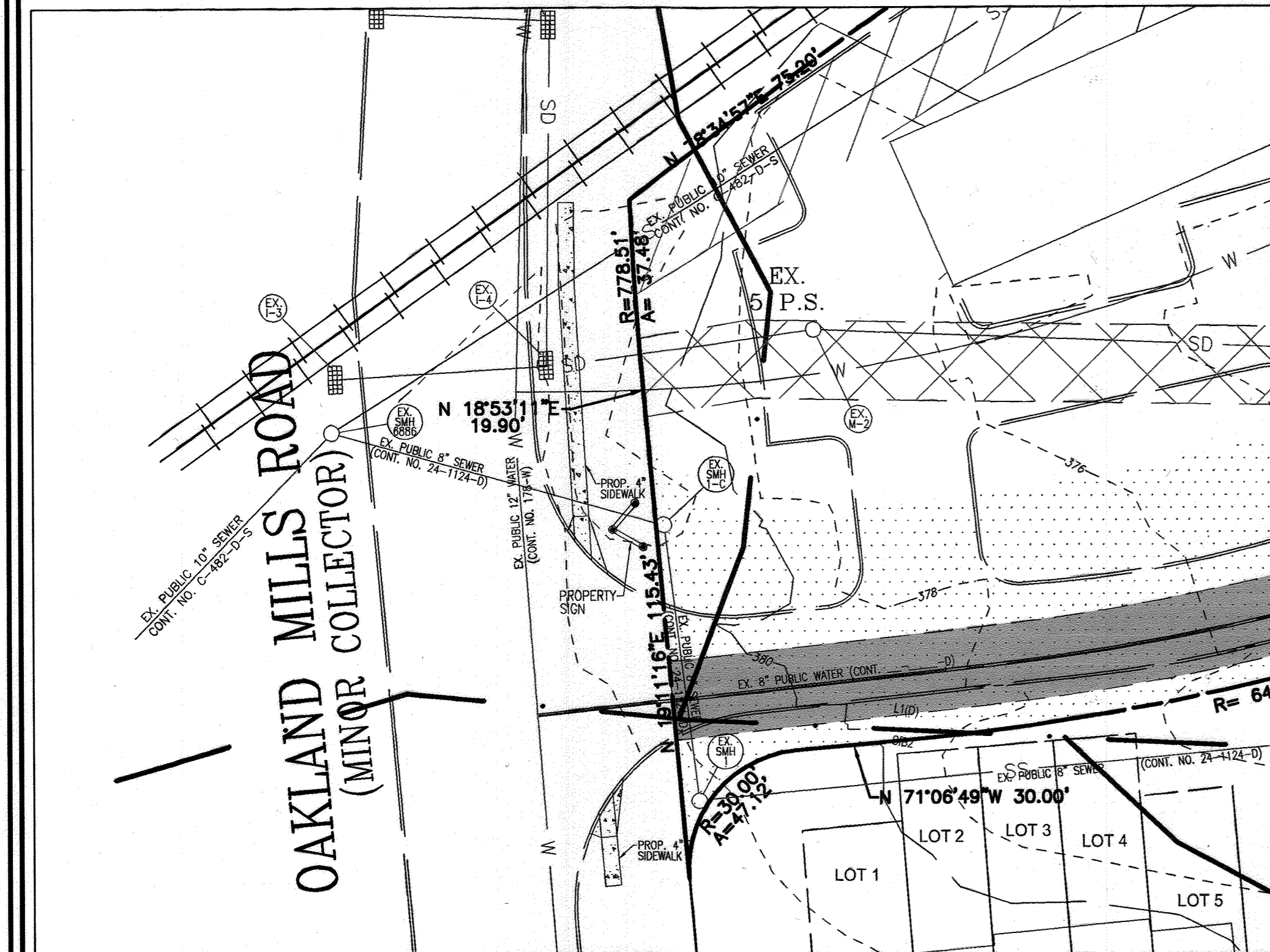
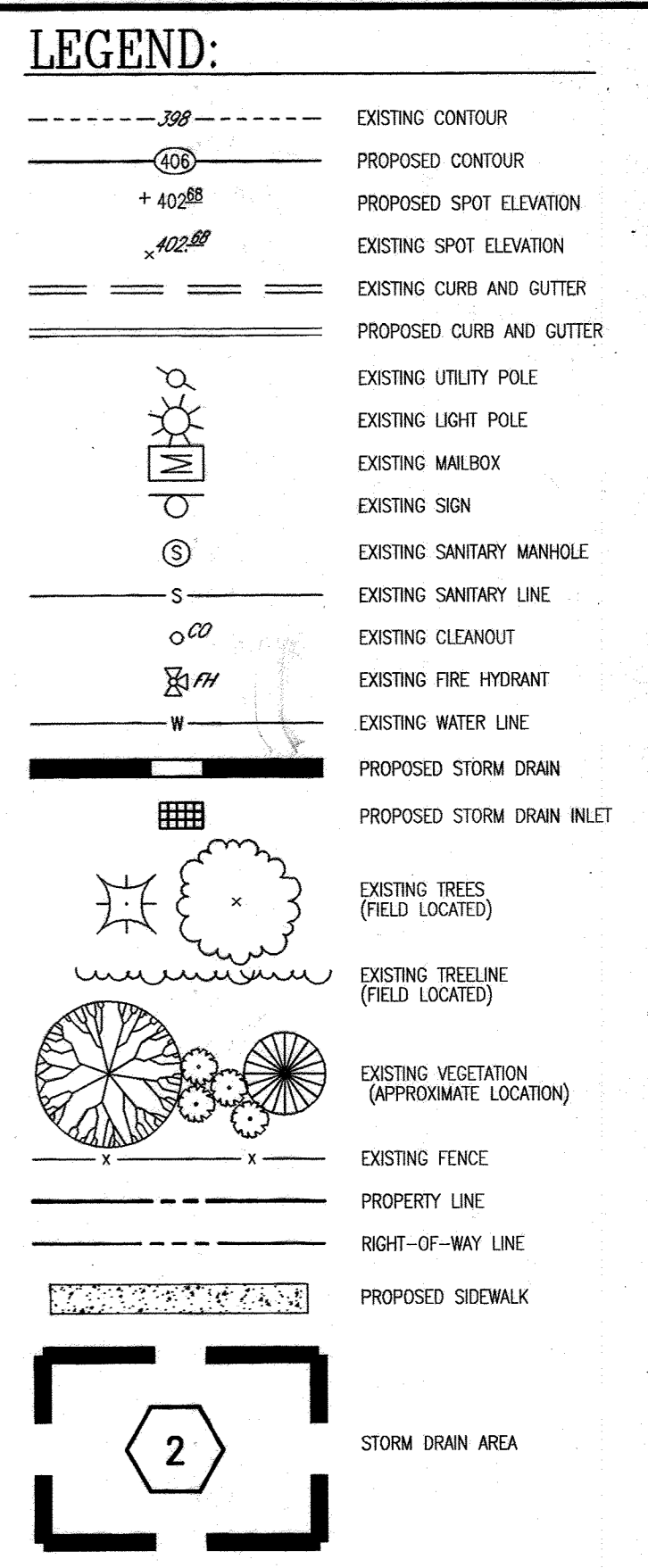
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DIRECTOR

DESIGN BY: WGS
DRAWN BY: DZ
CHECKED BY: WGS
DATE: FEB. 2007
SCALE: AS SHOWN
W.O. NO.: 04-90
6 SHEET OF **14**

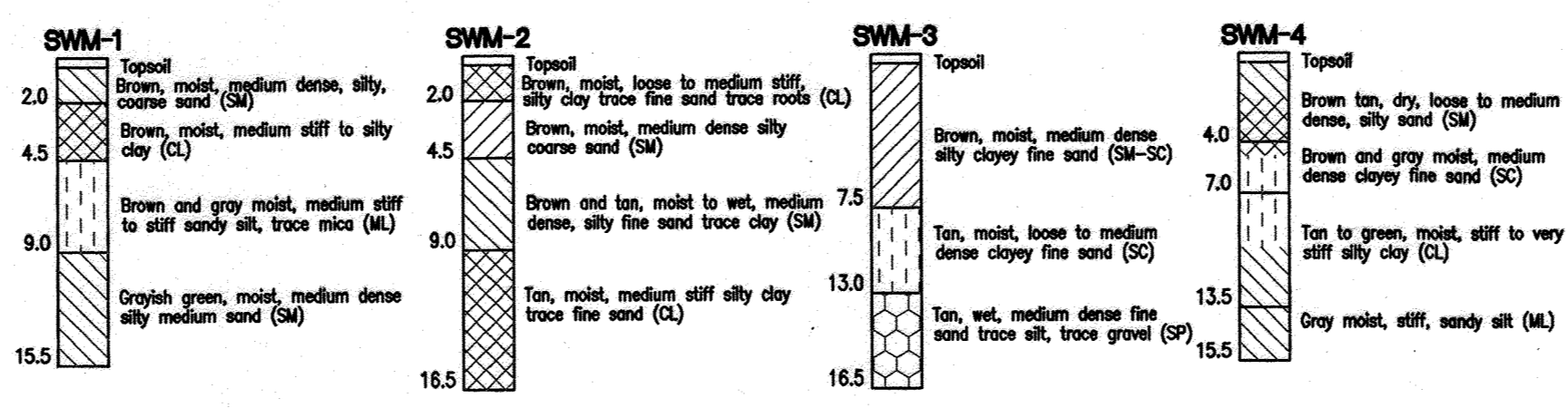
AS-BUILT 4-7-2010



STORMWATER MANAGEMENT FACILITY PRIVATELY OWNED AND MAINTAINED



PROPOSED SIDEWALK AT SITE ENTRANCE
SCALE: 1"=30'



TEST PIT DESIGNATION	EXISTING GROUND ELEVATION	DEPTH TO WATER/NO WATER
TPSWM-20	362.55	NO WATER @ 355.05*
TPSWM-21	361.83	WATER @ 356.13
TPSWM-22	366.99	NO WATER @ 354.19*
TPSWM-23	362.62	NO WATER @ 349.12*
TPSWM-24	363.00	NO WATER @ 350.25*
TPSWM-25	367.59	WATER @ 359.09, BOTTOM HOLE @ 358.26
TPSWM-26	368.88	NO WATER @ 353.88*
TPSWM-27	363.60	WATER @ 353.10

* BOTTOM OF TEST PIT

STORM WATER MANAGEMENT BORINGS AND TEST PITS

AREA AND 'C' FACTOR TABULATION

INLET	ZONING	SUBAREA	AREA(ac.)	'C' FACTOR	% IMPERVIOUS
I-1	NT	1	0.75	0.72	79
I-2	NT	2	1.14	0.78	89
I-3	NT	3	0.38	0.77	87
I-4	NT	4	0.49	0.66	72
I-5	NT	5	0.17	0.21	0
I-6	NT	6	0.07	0.21	0
I-7	NT	7	0.80	0.72	72
I-8	NT	8	1.91	0.86	72

SOIL DELINEATION

LABEL DESIGNATION	DESCRIPTION	CLASSIFICATION
BeB2	Beltsville Silt Loam, 1 to 5% slopes, moderately eroded	C
LI	Leonardtown Silt Loam	D
SIC2	Sassafras Loam, 5 to 10% slopes, moderately eroded	B

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE 12/07/06

PROJECT INFORMATION:
PROJECT NO. 04-90.00
PROJECT NAME: STONEWOOD BUSINESS CENTER
CLOSING DATE: 12/31/06
JOB SITE ADDRESS: 11628 OAKLAND MILLS ROAD
HOWARD CO., MARYLAND

CONSULTANT INFORMATION:
NAME: ROBERT H. VOGEL, P.E.
COMPANY: ROBERT H. VOGEL ENGINEERING
PHONE: 410-461-1000
FAX: 410-461-8961

OWNER INFORMATION (REQ. FOR MAINTENANCE):
THE SANFORD COMPANIES
SARY EVANS
2802 SANDHORN DRIVE, PKWY
CUMMERS, MD 21042
301-540-0222

LAND USE: COMMERCIAL

STORMCEPTOR INFORMATION:
STRUCTURE NO. SC-1
TOP OF GRATE ELEV.: 60.40
OUTLET INVERT ELEV.: 59.10
INLET INVERT ELEV.: 59.00
STORMCEPTOR MODEL REQUIRED:
IN-LINE SYSTEM
STC 900

OWNER/DEVELOPER
STONEWOOD BUSINESS CENTER
GULFORD I LIMITED PARTNERSHIP
11628 LOG JUMP TRAIL
ELLCOTT CITY, MARYLAND 21043

NO.	REVISION	DATE
30	AS-BUILT SWM WORK UNDER 3-4076, INSTALLATION OF STORMCEPTOR AND INLET	10/31/23
2	ADD STORMCEPTOR ORDER FORM	12/17/06

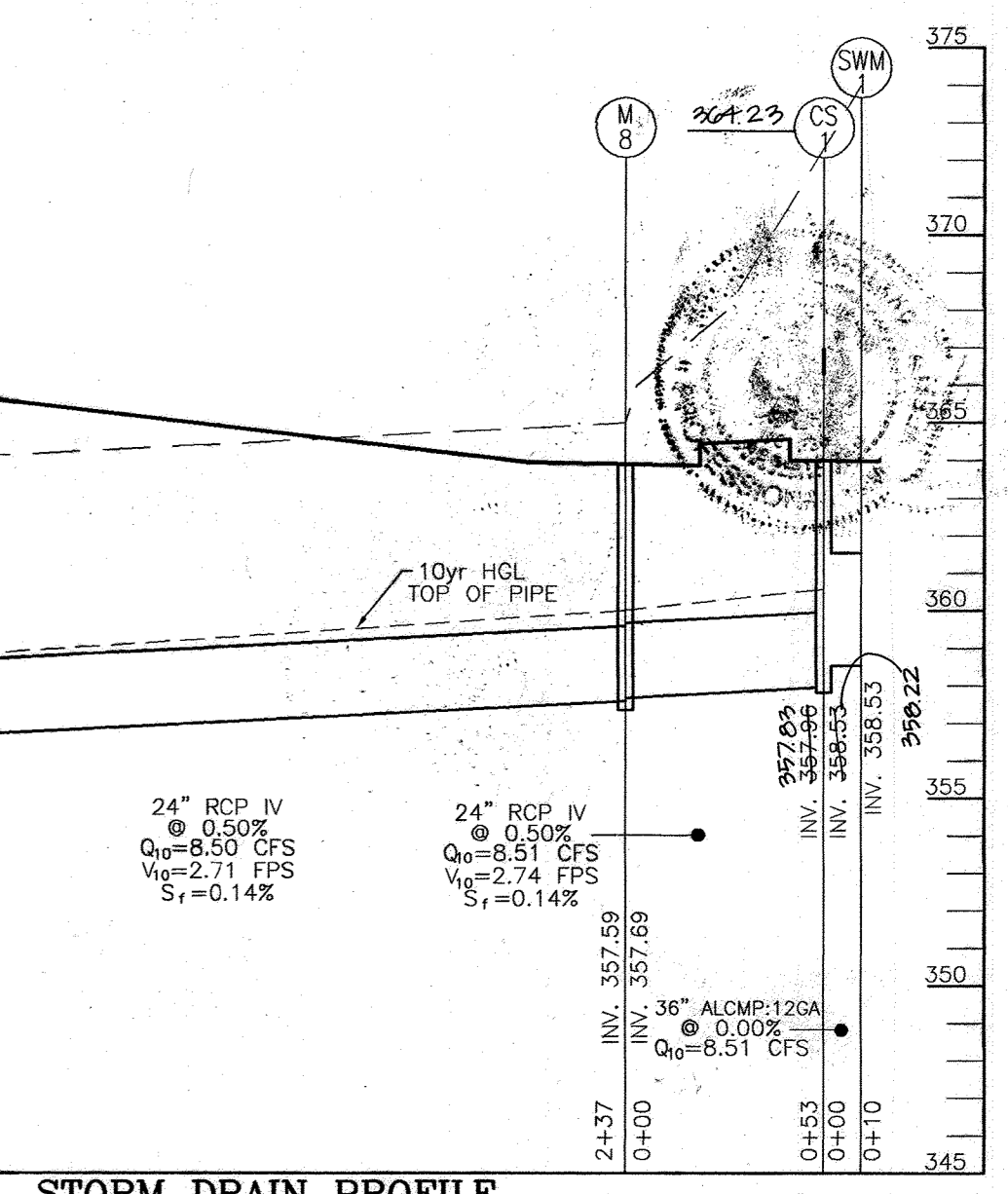
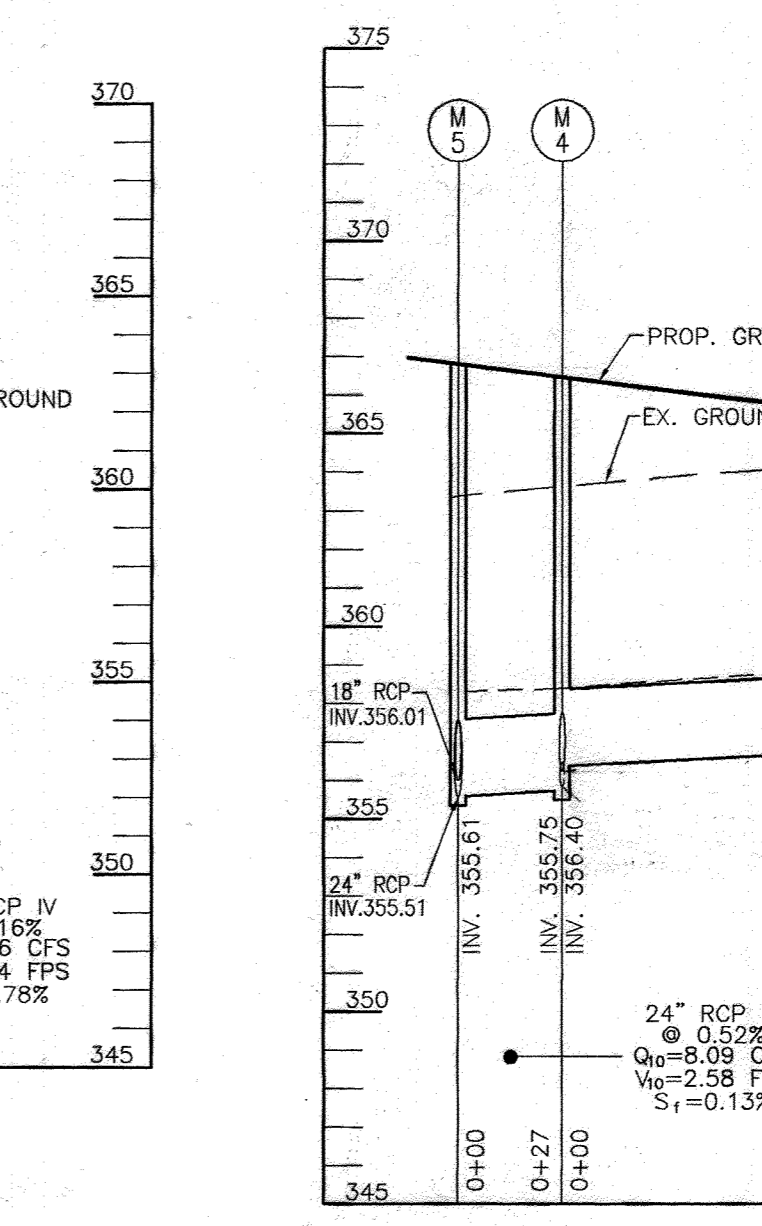
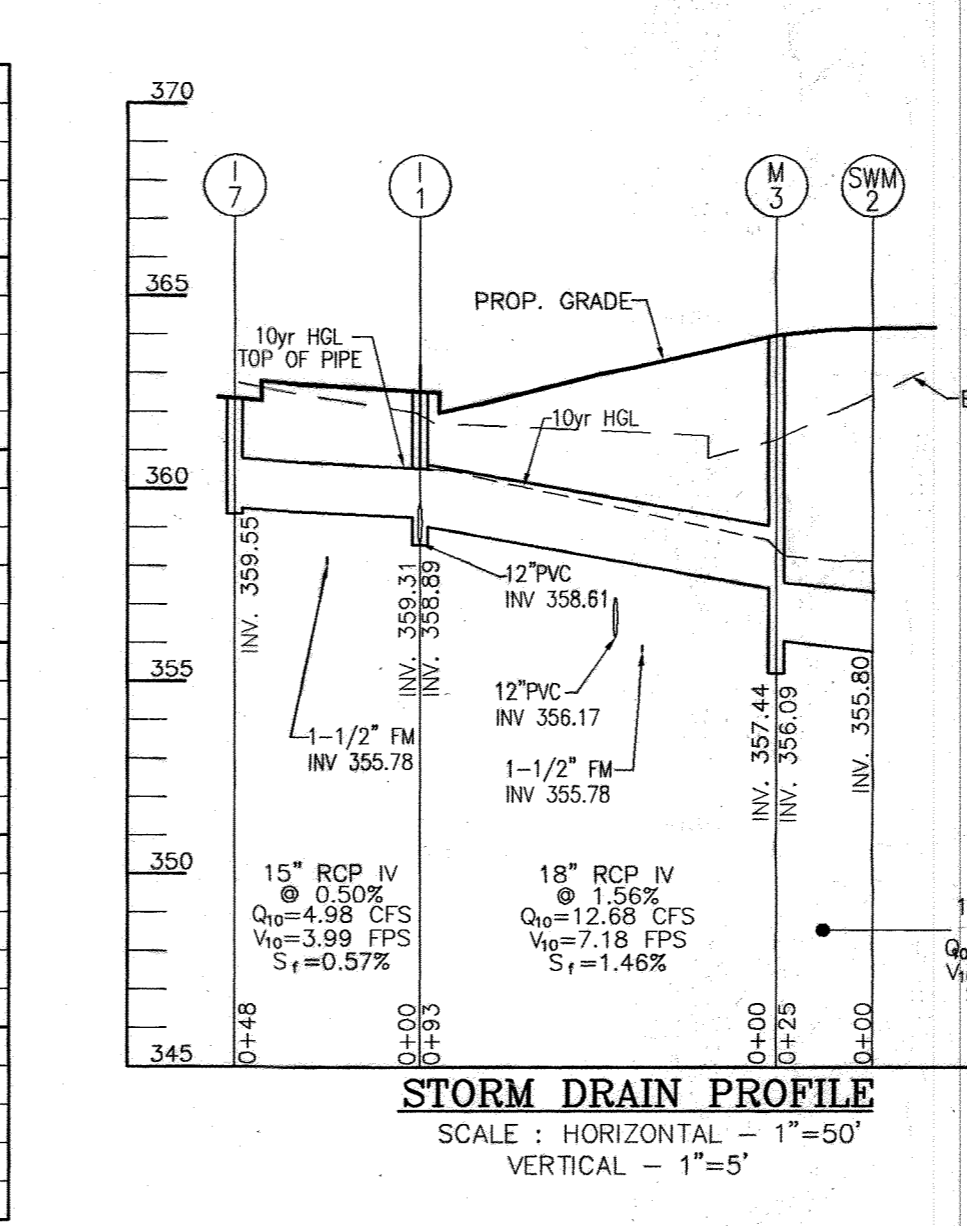
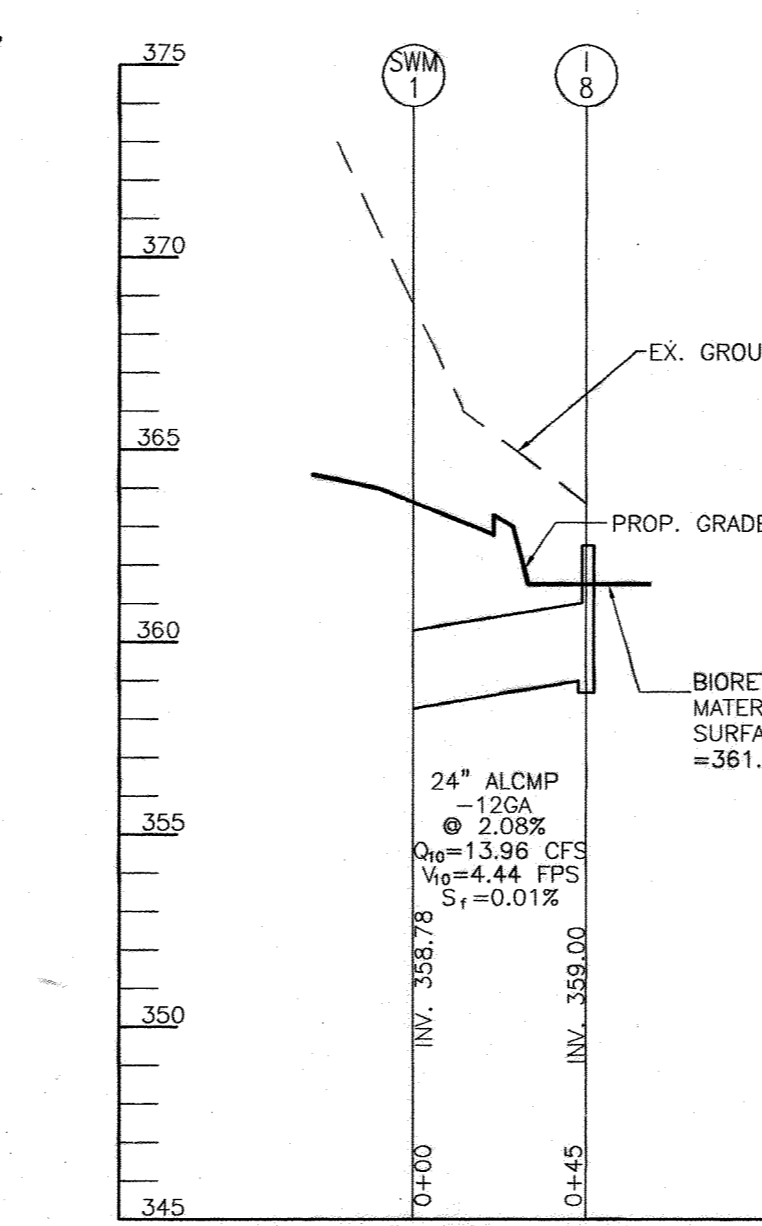
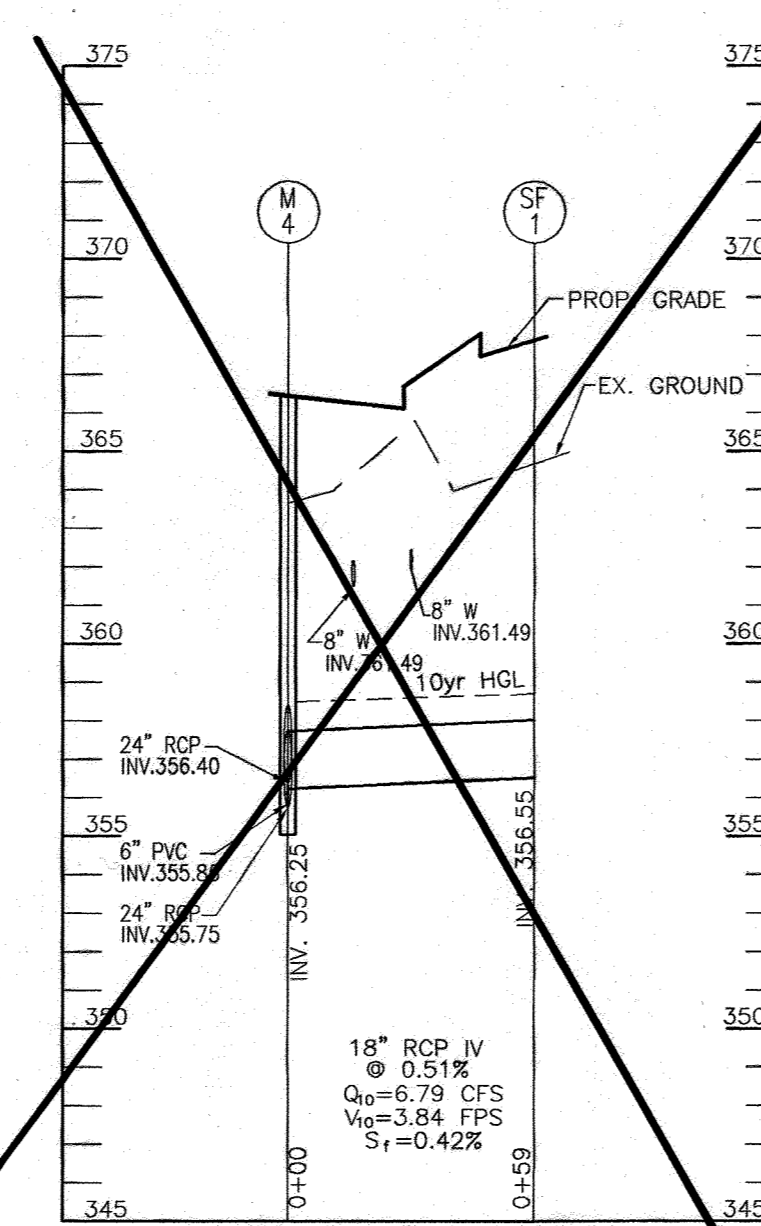
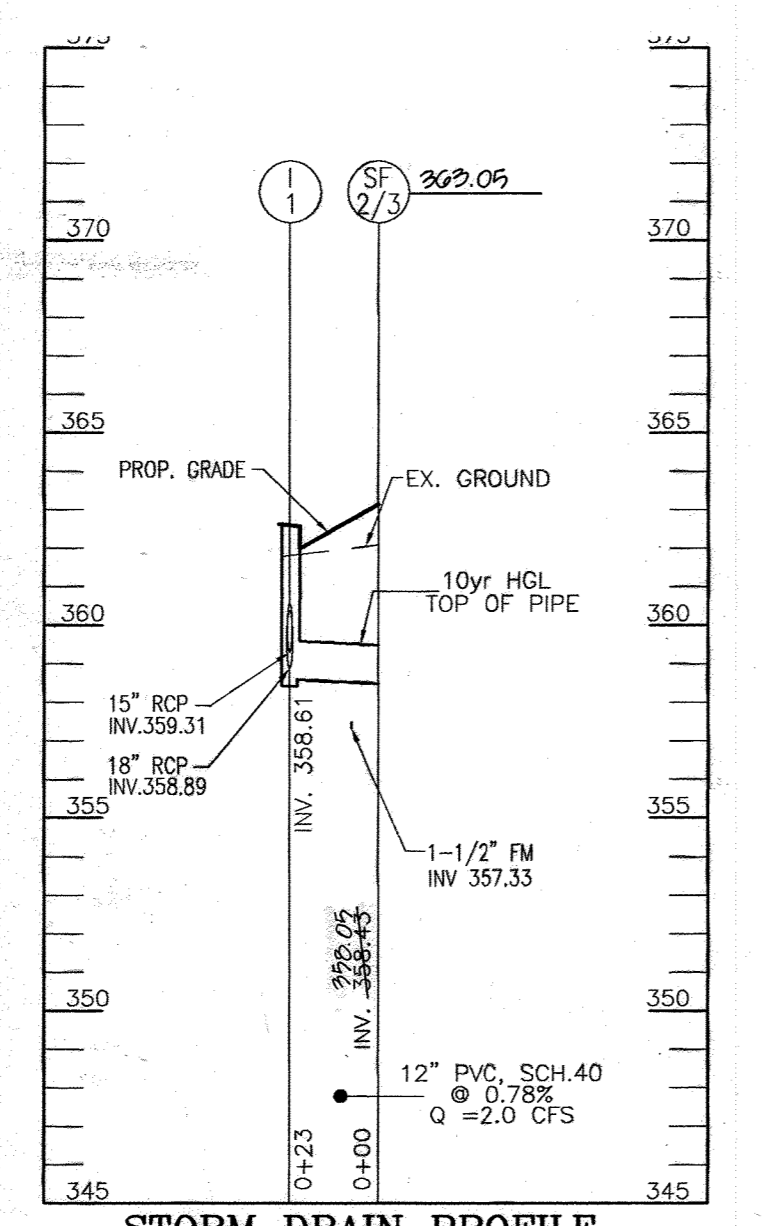
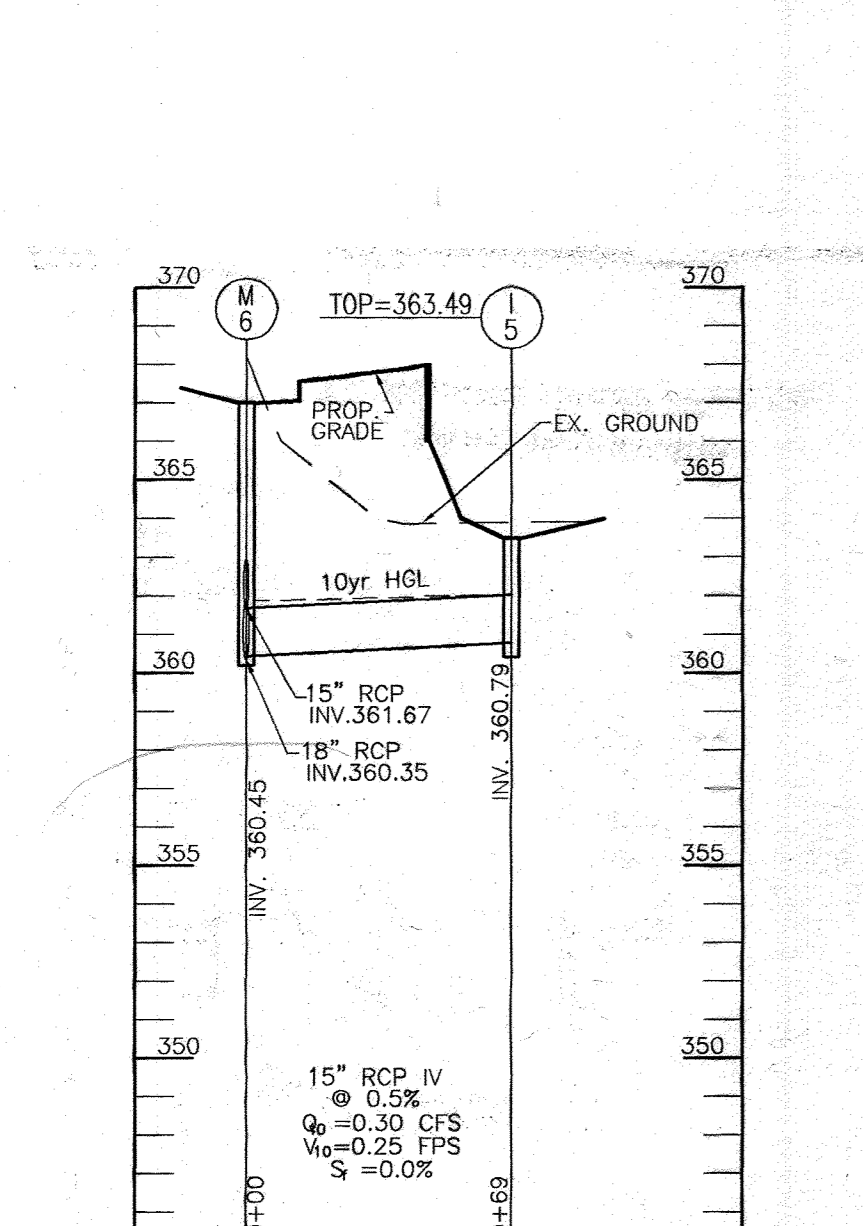
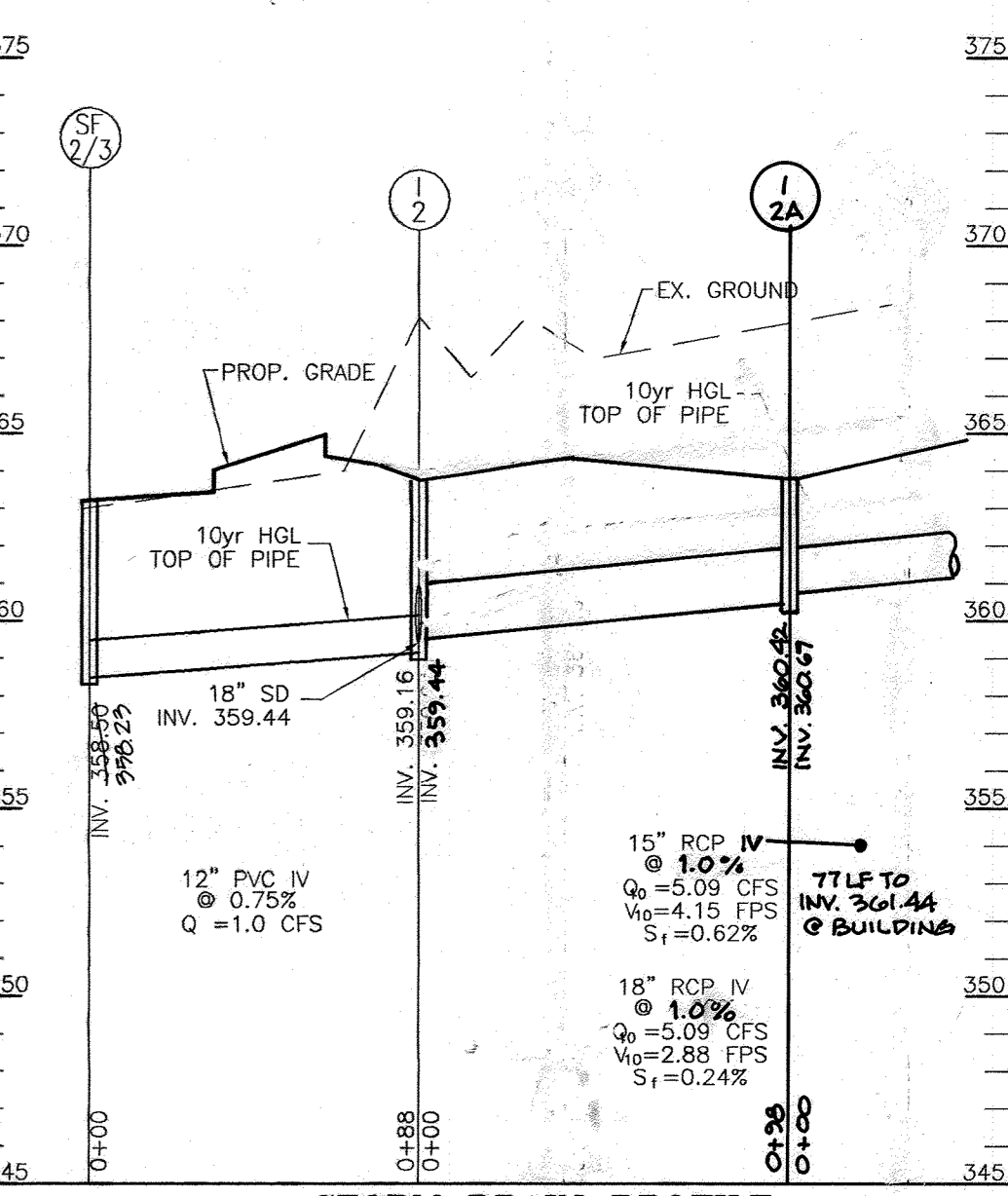
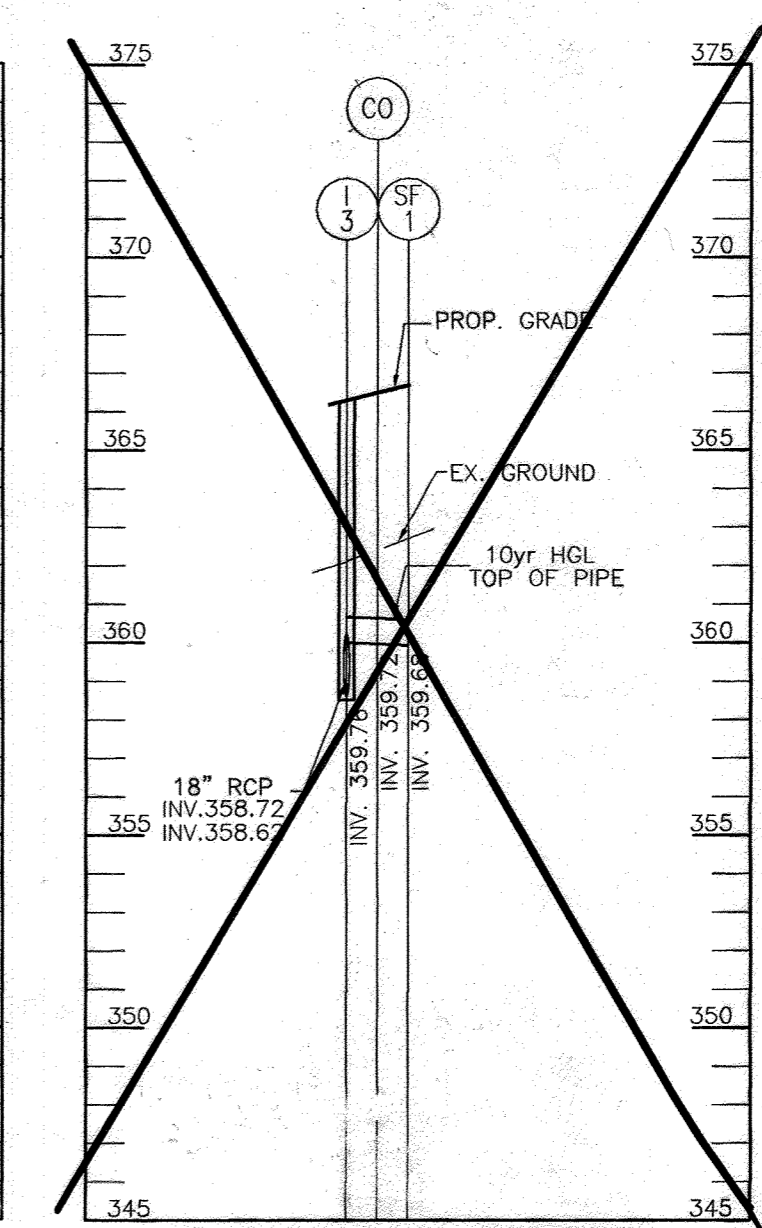
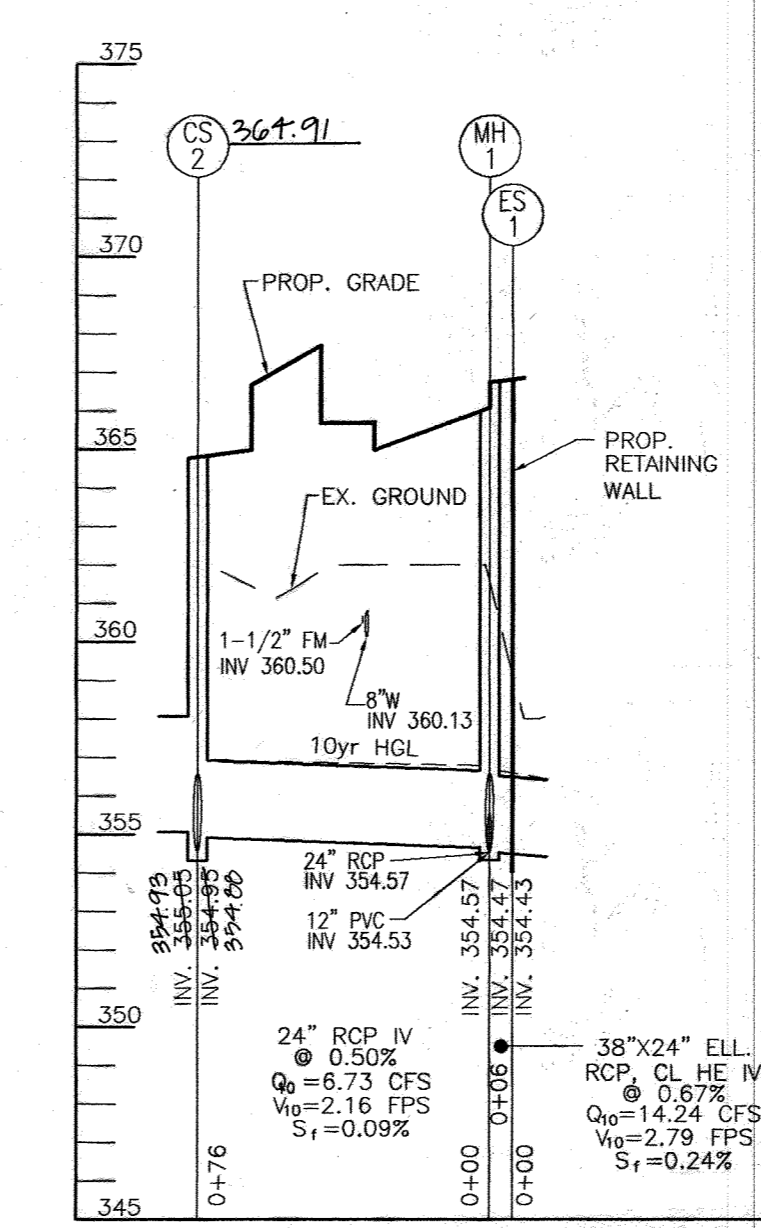
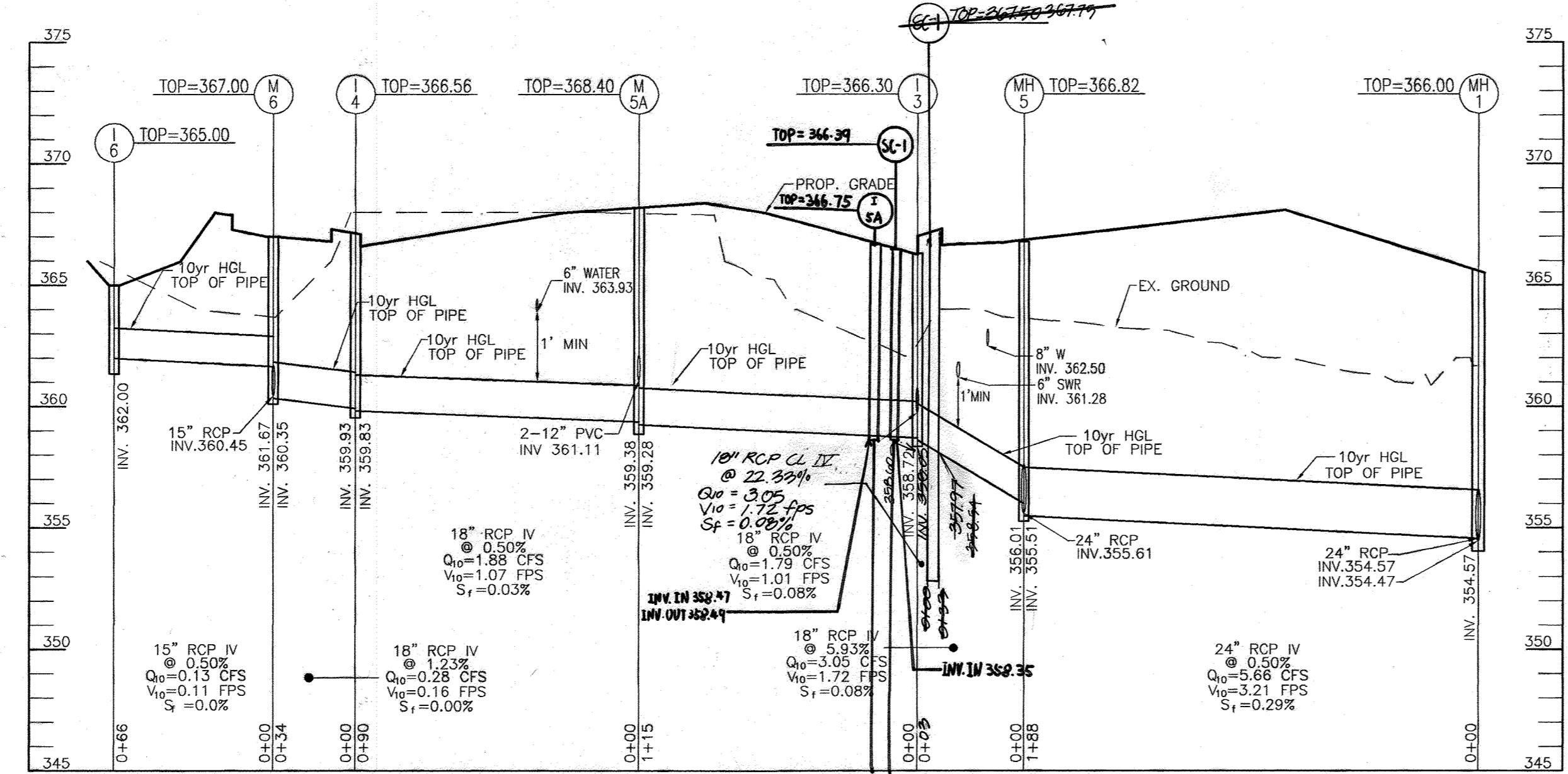
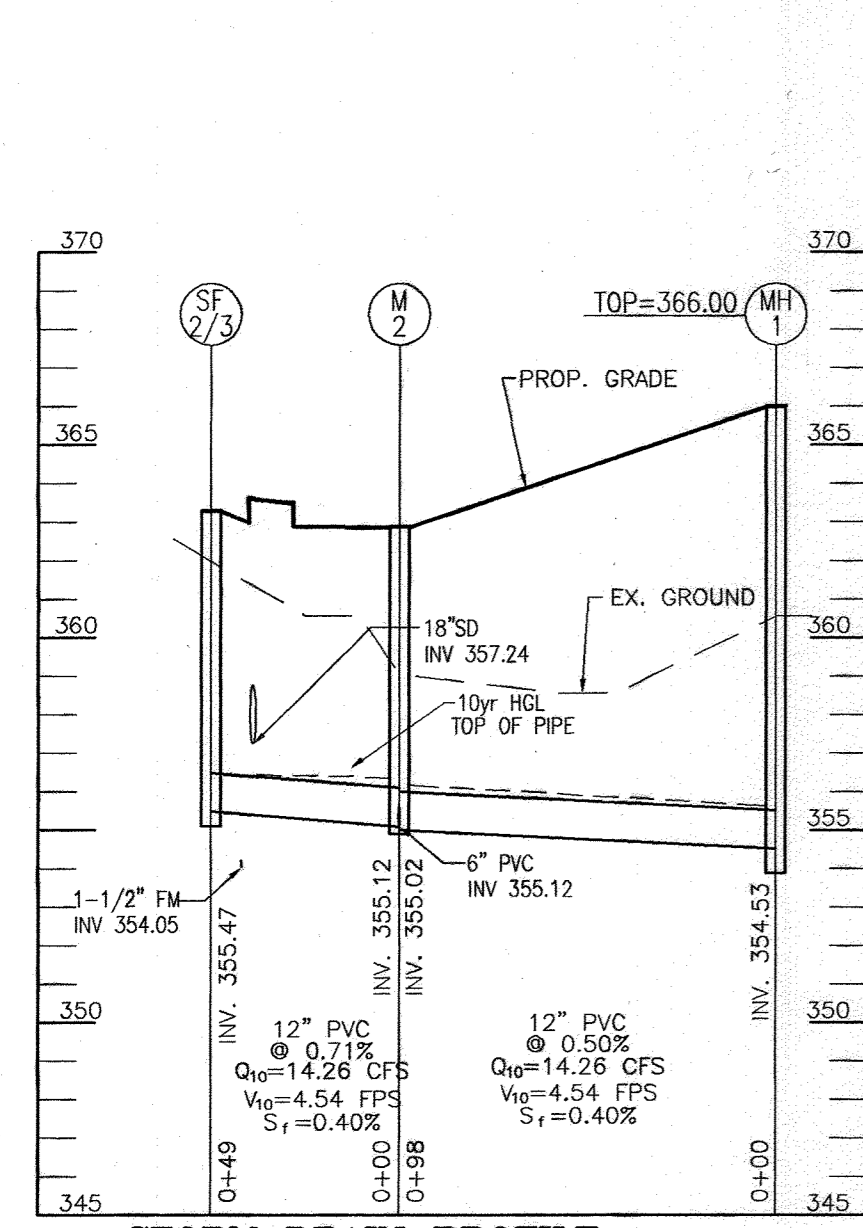
SITE DEVELOPMENT PLAN
STORMDRAIN DRAINAGE AREA MAP,
AND ENTRANCE SIDEWALK PLAN
STONEWOOD BUSINESS CENTER
PARCEL A-2 - E.G.U. SUBDIVISION
SECTION 2 / AREA 6
TAX MAP 42 BLOCK 11
6TH ELECTION DISTRICT
PARCEL 'A-2'
HOWARD COUNTY, MARYLAND

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

DESIGN BY: WGSZ
DRAWN BY: DZ
CHECKED BY: WGSZ
DATE: FEB. 2007
SCALE: 1"=50'
W.O. NO.: 04-90

7 SHEET OF 14

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION
CHIEF, DIVISION OF LAND DEVELOPMENT
DIRECTOR



APPENDIX B & C SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDEN, LANDSCAPE INFILTRATION & INFILTRATION BERMS

1. GENERAL SPECIFICATIONS

The ALLOWABLE MATERIALS TO BE USED IN THESE PRACTICES ARE DETAILED IN TABLE B.1.

2. FILTERING MEDIA OR PLANTING SOIL

Filtering media or planting soil shall be a minimum 18" thick and shall be composed of 50% clean, washed, #20 sand and 50% clean, washed, #40 sand. The sand shall be placed in a minimum 18" thick layer. The sand shall be placed in a minimum 18" thick layer. The sand shall be placed in a minimum 18" thick layer.

3. CONSTRUCTION

Construction shall be completed at the base of the bioretention facility before backfilling the optional sand layer. The sand layer shall be placed in a minimum 18" thick layer. The sand shall be placed in a minimum 18" thick layer.

4. PLANT INSTALLATION

Planting shall be completed at the base of the bioretention facility before backfilling the optional sand layer. The sand layer shall be placed in a minimum 18" thick layer. The sand shall be placed in a minimum 18" thick layer.

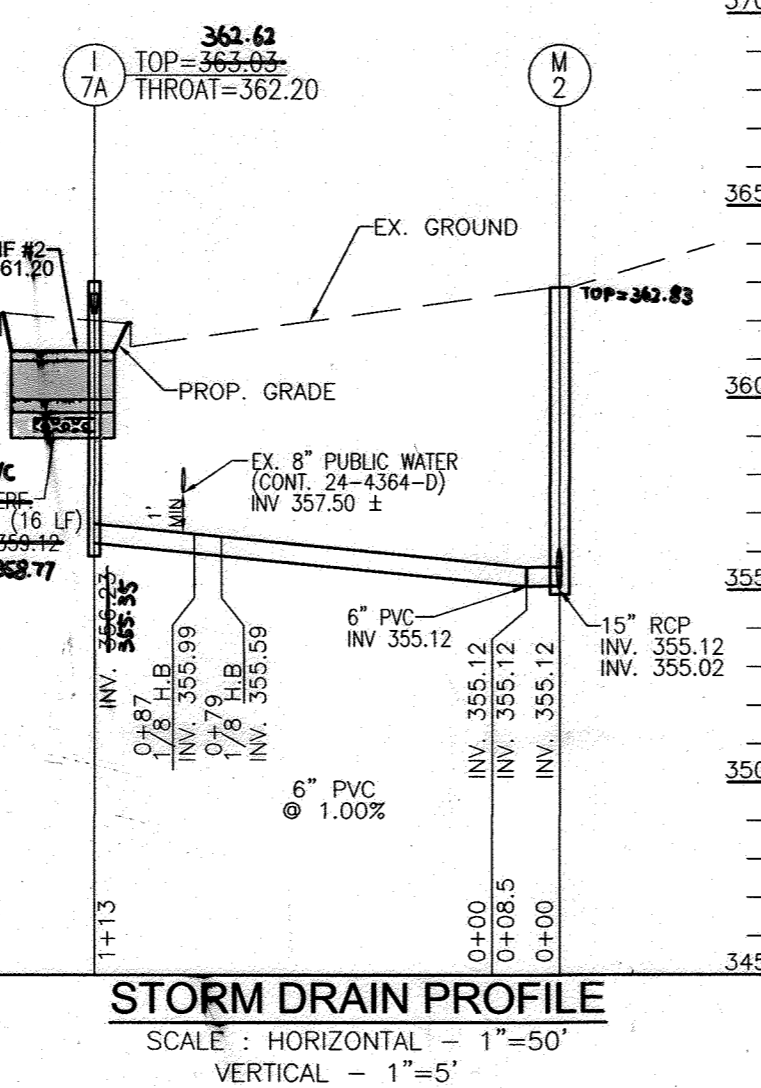
APPENDIX B & C SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDEN, LANDSCAPE INFILTRATION & INFILTRATION BERMS (CONTINUED)

5. UNDERDRAIN

The underdrain shall be composed of 1/2" diameter, slotted or perforated rigid plastic pipe (ASTM F291, Type 2) or 1/2" diameter, slotted or perforated rigid plastic pipe (ASTM F291, Type 2) or 1/2" diameter, slotted or perforated rigid plastic pipe (ASTM F291, Type 2).

6. MICRO-BIORETENTION (SWM #1)

Micro-bioretention (SWM #1) shall be constructed in accordance with the specifications for micro-bioretention, rain garden, landscape infiltration, and infiltration berms.



Appendix B.4. Materials Specifications for Micro-Bioretention, Rain Garden & Landscape Infiltration.

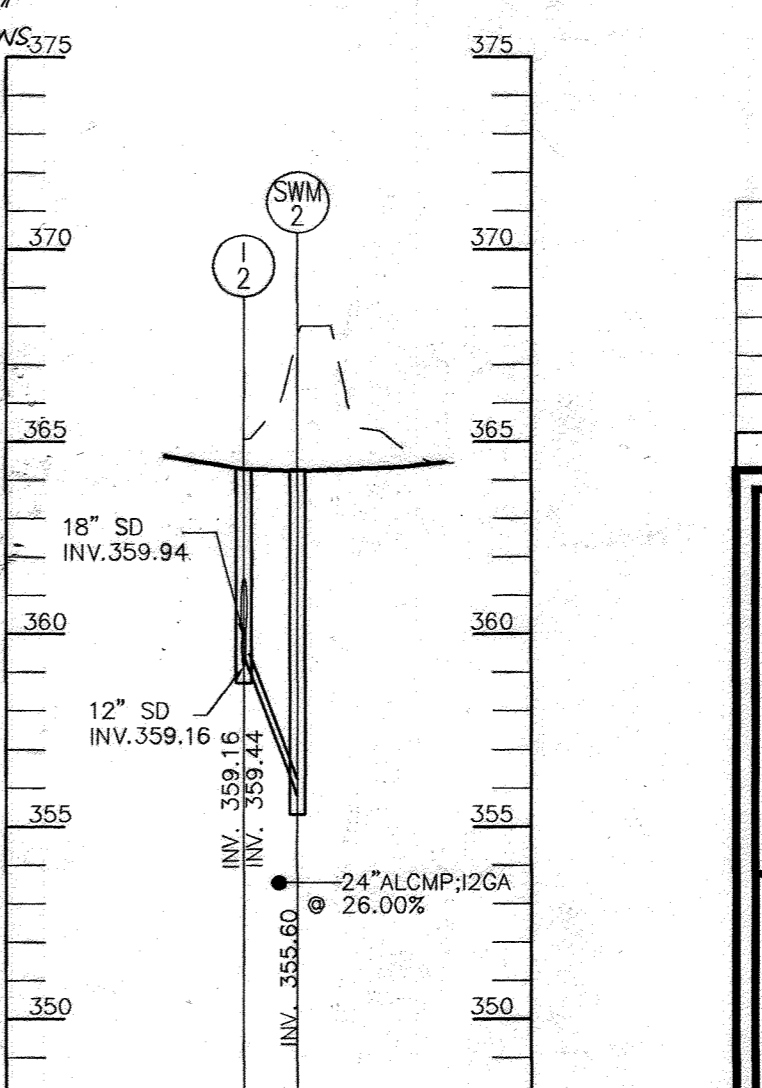
Item	Specification	Notes
1. Sand	ASTM No. 27, 2000	50% clean, washed, #20 sand and 50% clean, washed, #40 sand.
2. Gravel	ASTM No. 42, 2000	1/2" diameter, clean, washed, #40 gravel.
3. Underdrain	ASTM F291, Type 2	1/2" diameter, slotted or perforated rigid plastic pipe.
4. Filter fabric	ASTM F1619	1/2" x 1/2" x 1/2" mesh, non-woven, polypropylene.
5. Geotextile	ASTM F1619	1/2" x 1/2" x 1/2" mesh, non-woven, polypropylene.

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THESE AS-BUILT DRAWINGS WAS CONSTRUCTED AS SHOWN ON THE AS-BUILT DRAWINGS AND IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE: 12/07/06



OWNER/DEVELOPER

STONEWOOD BUSINESS CENTER
GULFORD I LIMITED PARTNERSHIP
11628 LOG JUMP, TRAIL
ELLCOTT CITY, MARYLAND 21043

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE: 12/07/06

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Jim Murr 5/16/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION

David Hantz 5/16/07
CHIEF, DIVISION OF LAND DEVELOPMENT

Paul M. Weger 5/16/07
DIRECTOR

REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.

Jim Murr 5-4-07
USDA-NATURAL RESOURCES CONSERVATION SERVICE

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

Heather W. Schmitz 5-4-07
HOWARD S.C.D.

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Robert H. Vogel, P.E. 4/24/07
SIGNATURE OF DEVELOPER

BY THE ENGINEER:

I/WE 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.

Robert H. Vogel, P.E. 4/24/07
SIGNATURE OF ENGINEER

OPERATION AND MAINTENANCE SCHEDULE FOR LANDSCAPE INFILTRATION (M-3), MICRO-BIORETENTION (M-6), RAIN GARDENS (M-7), BIRETENTION SWALE (M-8), AND ENHANCED FILTERS (M-9)

1. THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR MULCH LOSS. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND PEST INFESTATION AND MAINTENANCE WILL ADDRESS DEAD BRANCHES OR WEAK PLANTS. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STRIPPER DESIGN MANUAL, VOLUME 4, TABLE 4.1.1 AND 2.

2. THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR DURING THE INSPECTION. THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND REPAIR AND REPLACE WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL. WEEDS, DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.

3. THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO (2) TO THREE (3) YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.

4. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

5. SHOULD SYSTEM FAIL AND UPON DETERMINING FAILURE OF SYSTEM IS DUE TO PLANTING MEDIA, ALL PLANT MATERIAL WITHIN THE UNIT, INCLUDING TREES, SHALL BE REMOVED AND REPLACED.

STORM DRAIN PROFILE (12-SWM2)
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

SITE DEVELOPMENT PLAN

UTILITY PROFILES

STONEWOOD BUSINESS CENTER
PARCEL A-2 - E.G.U. SUBDIVISION
SECTION 2 / AREA 6

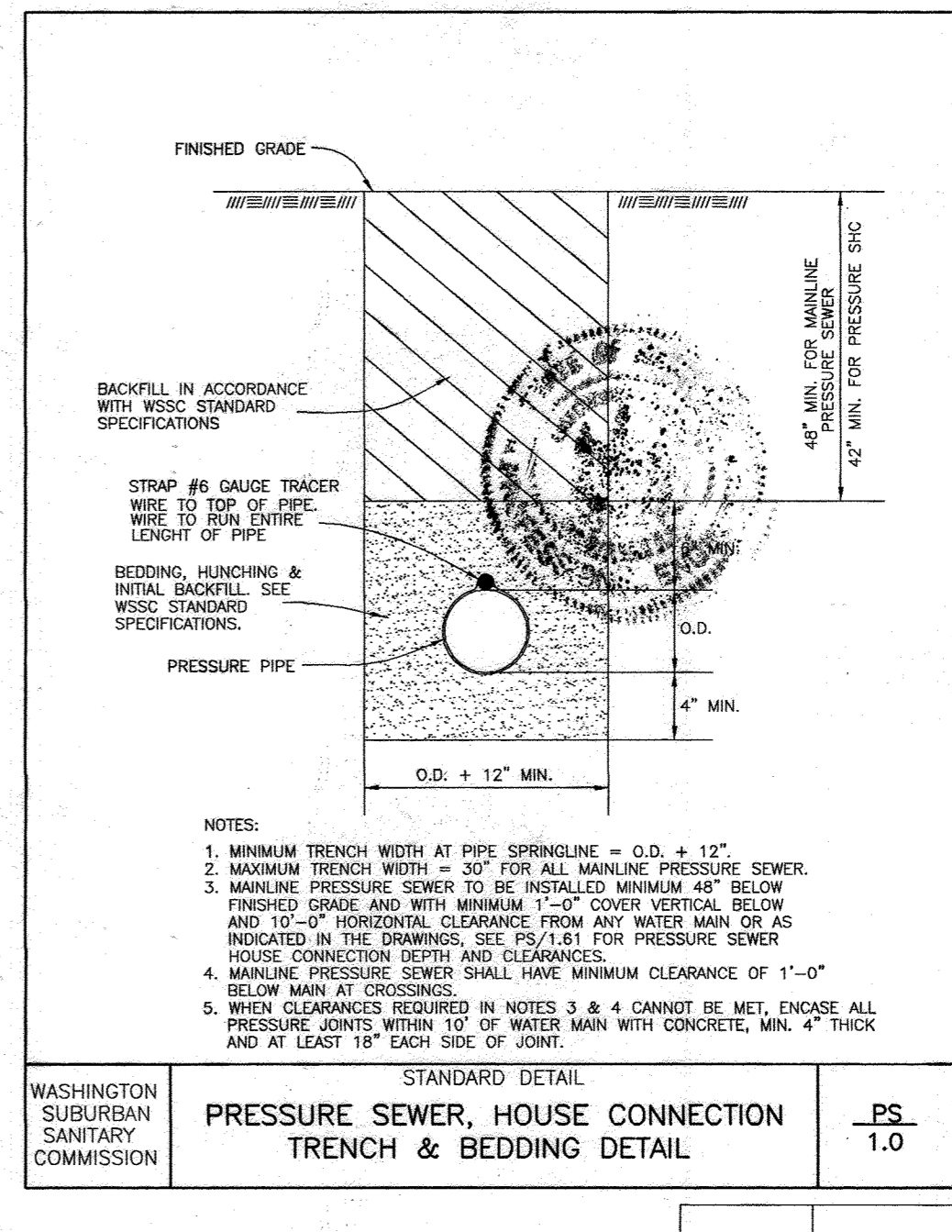
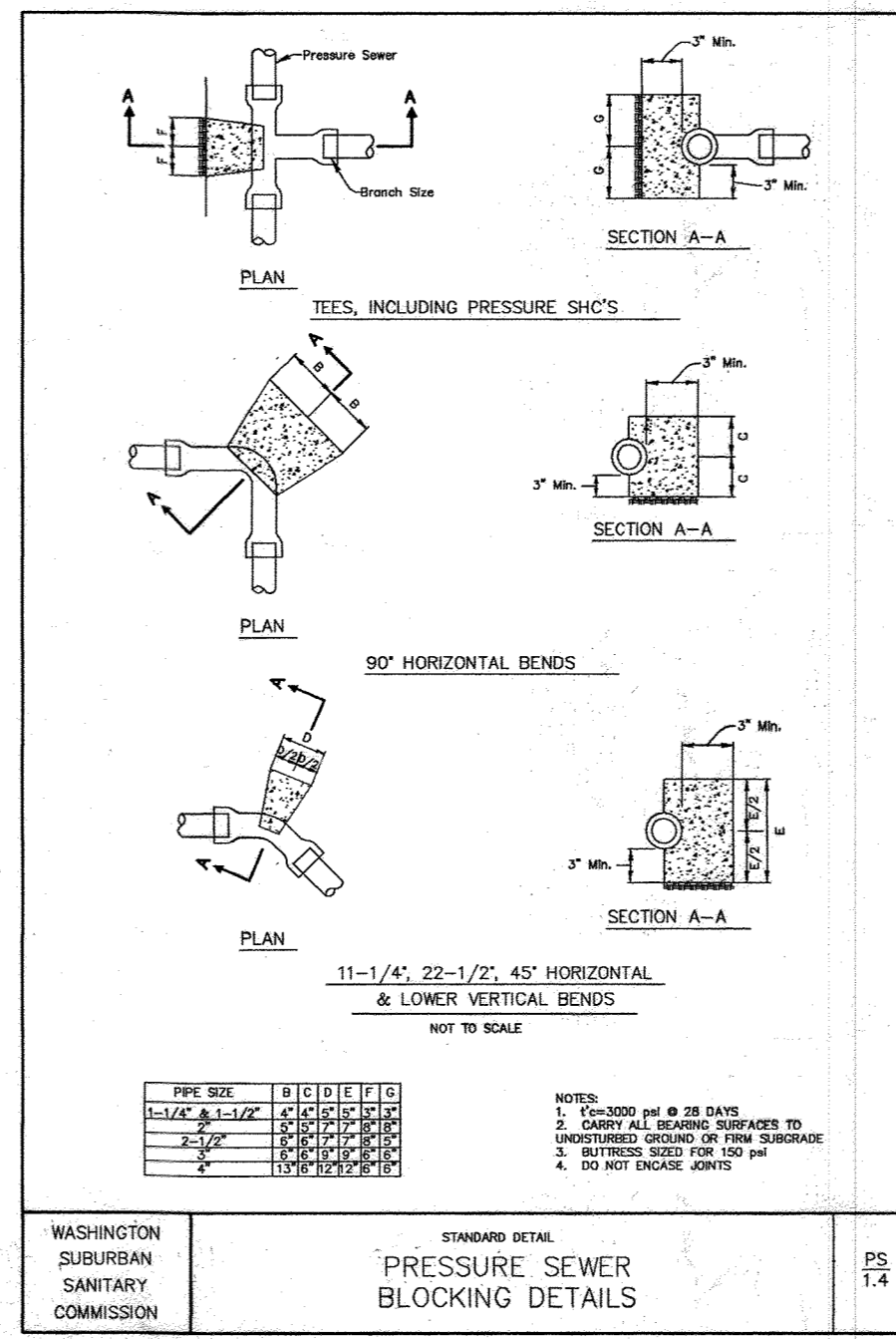
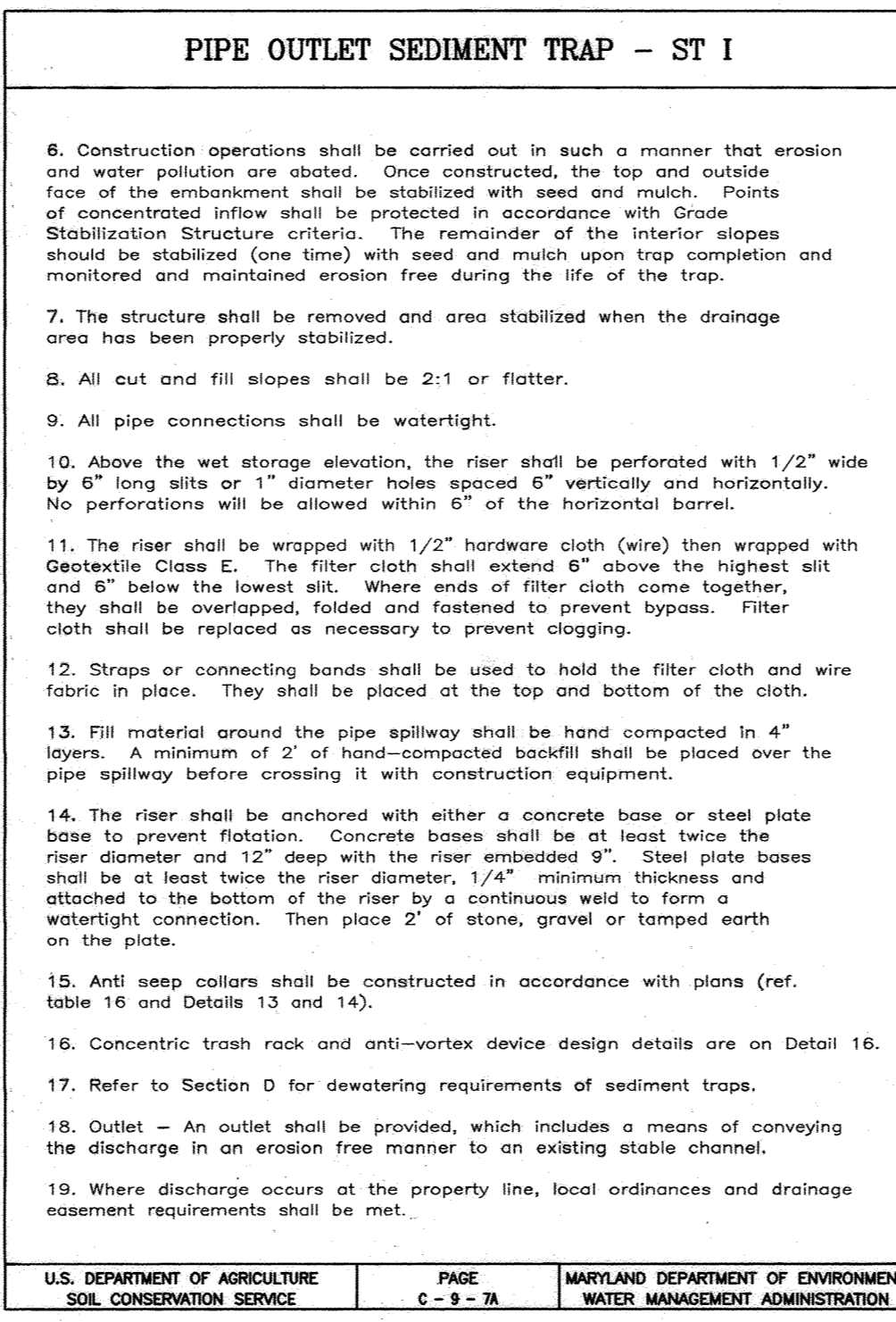
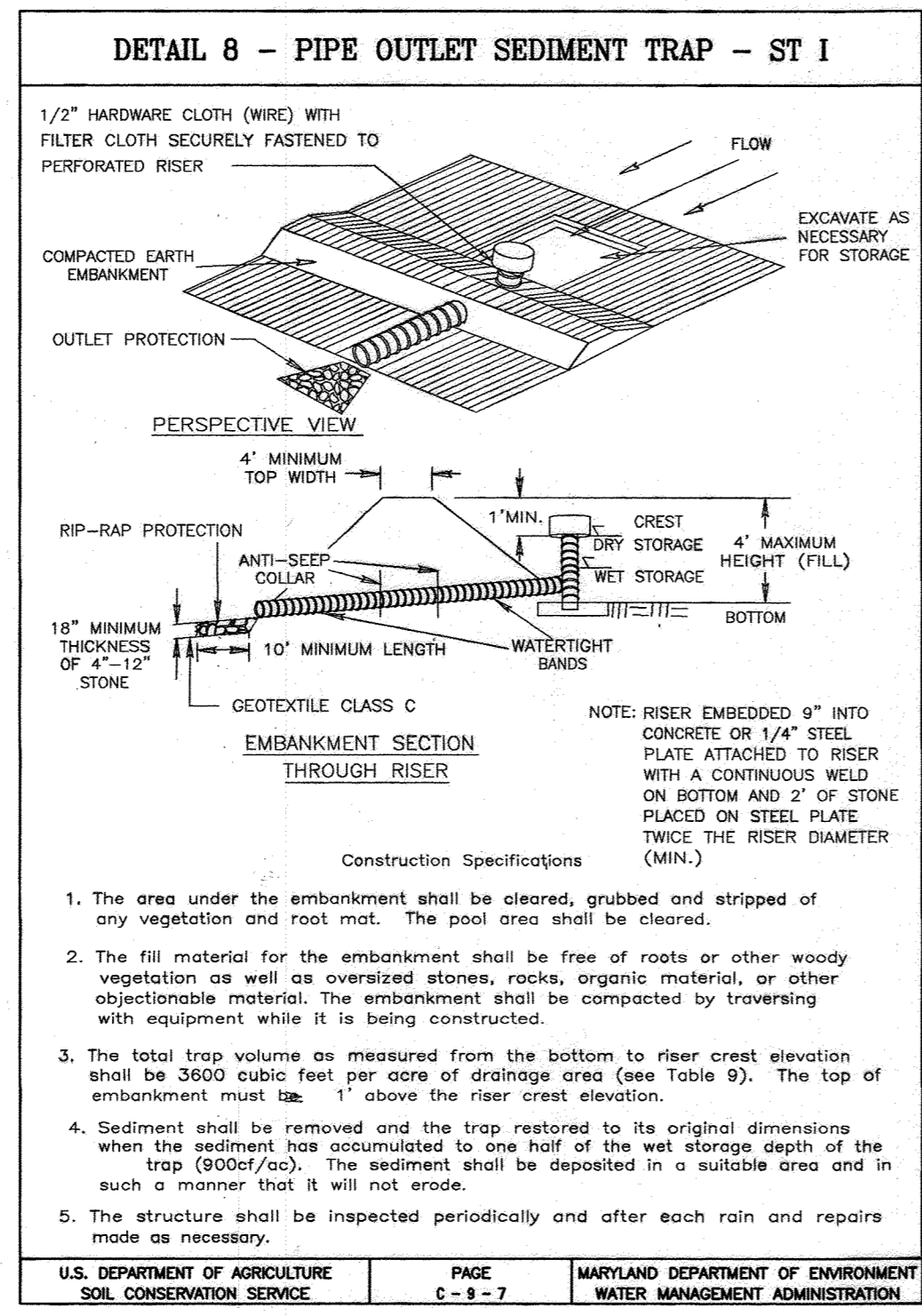
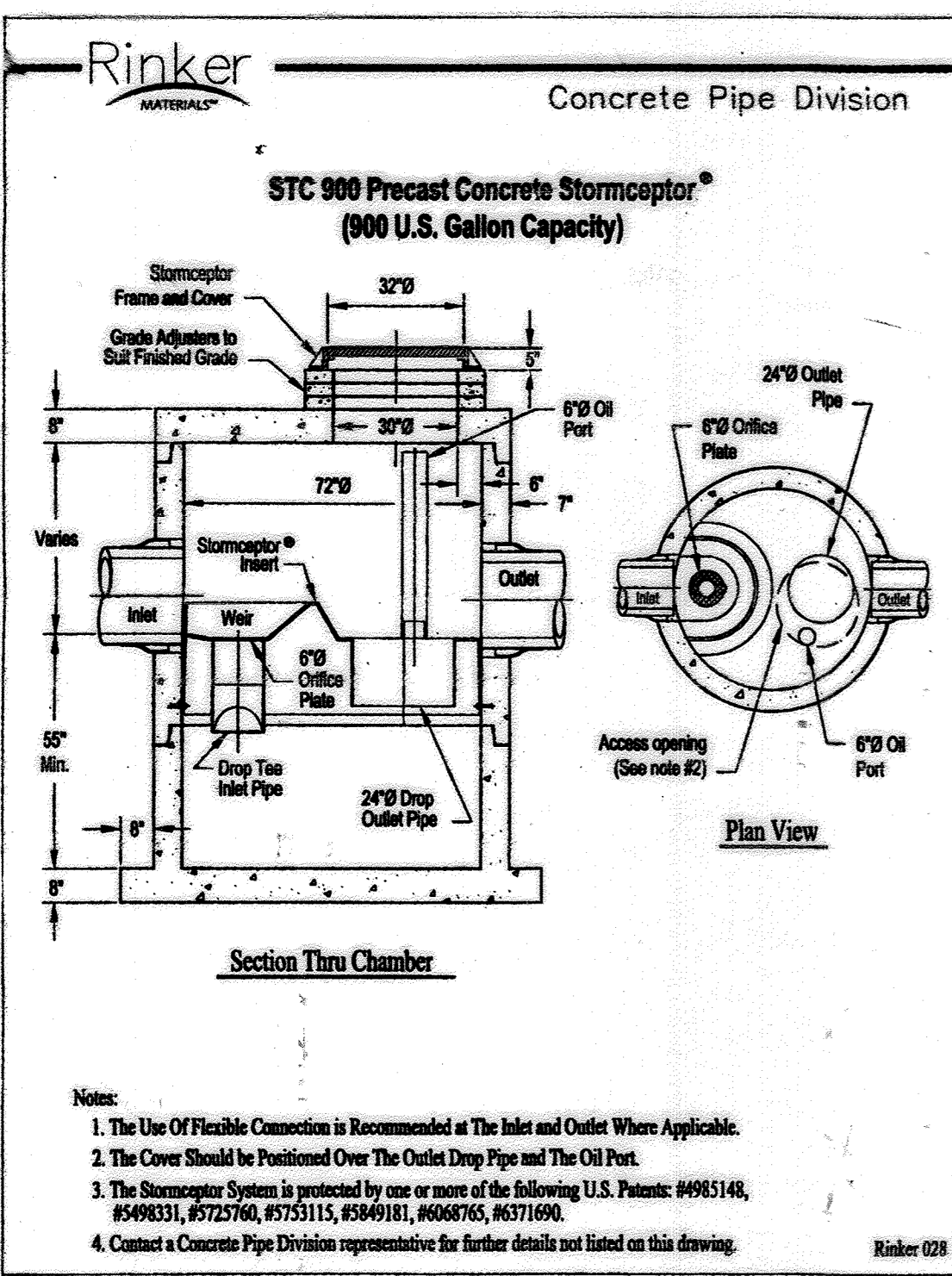
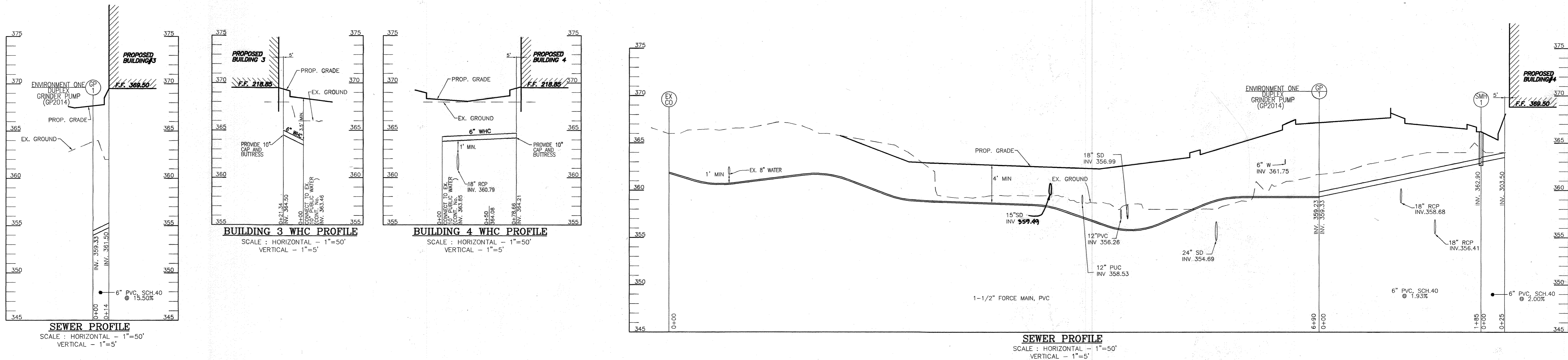
TAX MAP 42 BLOCK 11
6TH ELECTION DISTRICT

PARCEL 'A-2'
HOWARD COUNTY, MARYLAND

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

DESIGN BY: W.G.Z.
DRAWN BY: D.V.
CHECKED BY: R.H.Z.
DATE: FEB. 2007
SCALE: 1"=30'
W.O. NO.: 04-90

8 SHEET OF 14



FOR REVISION #10004
1/02/23
STATE OF MARYLAND PROFESSIONAL ENGINEER
ROBERT H. VOGEL, P.E.
No. 18193
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.
APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE 12/07/06

OWNER/DEVELOPER
STONEWOOD BUSINESS CENTER
GUILFORD I LIMITED PARTNERSHIP
11628 LOG JUMP TRAIL
ELLCOTT CITY, MARYLAND 21043

10	AS-BUILT SMH WORK UNDER 1-4016, INSTALLATION OF SEDIMENT TRAP AND ADDITIONAL INLET	10/31/23
7	REVISE PLAN TO ADD PARKING IN FRONT OF BLDG. 2 AND ASSOCIATED SMH, SHOW AS-BUILT SIDEWALK OF BLDG. 2, SHOW AS-BUILT STORM DRAIN OF BLDG. 3.	04/30/15
2	REMOVE SAND FILTER SP-1 REFLECT W/STORMCEPTOR	12/17/08

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED STORMCEPTOR WATER QUALITY DEVICE

a. The Stormceptor water quality structure shall be periodically inspected and cleaned to maintain operation and function. The owner shall inspect the Stormceptor unit yearly at a minimum, utilizing the Stormceptor Inspection/Monitoring Form. Inspections shall be done by using a clear Plexiglas tube ("sludge judge") to extract a water column sample. When the sediment depths exceed the level specified in Table 6 of the Stormceptor Technical Manual, the unit must be cleaned.

b. The Stormceptor water quality structure shall be checked and cleaned immediately after petroleum spills. The owner shall contact the appropriate regulatory agencies.

c. The maintenance of the Stormceptor unit shall be done using a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons and other materials in the unit. Proper cleaning and disposal of the removed materials and liquid must be followed by the owner.

d. The inlet and outlet pipes shall be checked for any obstructions at least once every six months. If obstructions are found the owner shall have them removed. Structural parts of the Stormceptor unit shall be repaired as needed.

e. The owner shall retain and make the Stormceptor Inspection/Monitoring Forms available to the Howard County officials upon their request.

*SEE SHEET 7 FOR COMPLETED STORMCEPTOR ORDER FORM.

NO.	TYPE	LOCATION	TOP ELEV.	INV. IN	INV. OUT	COMMENTS
I-2A	DOUBLE 'S' INLET	N 5489337 E 1361474	363.75	360.67	360.67	HO. CO. STD SD-4.23
I-7A	YARD INLET	N 5488007 E 1361302	363.53	363.11	363.53	HO. CO. STD SD-4.14
I-5A	DOUBLE 'S' INLET		366.75	362.47	362.47	HO. CO. STD SD-4.22

SIZE	TYPE	LENGTH
1-1/2"	PVC, FORCE MAIN	690 LF
6"	PVC (SEWER)	224 LF
15"	RCP, CL IV	265 LF
18"	RCP, CL IV	499 LF
24"	RCP, CL IV	581 LF
38"x24"	HORZ. ELLIPT. RCP, CL. HE IV	6 LF
6"	PVC (SOLID)	165 LF
6"	PVC (PERFORATED)	264 LF
12"	PVC	264 LF
8"	PVC	35 LF

NO.	TYPE	LOCATION	TOP ELEV.	INV. IN	INV. OUT	COMMENTS
I-1	TYPE "A-10" INLET (TWO-SIDED OPENINGS)	N 548785 E 1361329	362.00	359.31	358.88	HO. CO. STD SD-4.02
I-2	DOUBLE TYPE "S" INLET	N 548846 E 1361433	364.00	359.94	359.14	HO. CO. STD SD-4.23
I-3	TYPE "S" DBL. COMB. INLET (PARALLEL)	N 548662 E 1361661	366.30	358.72	358.62	HO. CO. STD SD-4.34
I-4	TYPE "S" DBL. COMB. INLET (PARALLEL)	N 548847 E 1361744	366.56	359.93	359.83	HO. CO. STD SD-4.34
I-5	TYPE "S" INLET	N 548835 E 1361828	363.49	---	360.79	HO. CO. STD SD-4.22
I-6	TYPE "S" INLET	N 548918 E 1361718	365.00	---	362.00	HO. CO. STD SD-4.22
I-7	TYPE "S" INLET	N 548824 E 1361300	362.30	---	359.00	HO. CO. STD SD-4.22
I-8	TYPE "S" INLET	N 548551 E 1361984	363.33	---	359.00	HO. CO. STD SD-4.11
MH-1	72" DIAM. PRECAST MANHOLE	N 548701 E 1361464	366.00	---	354.47	MD 384.05
MH-2	4'-0" STANDARD PRECAST MANHOLE	N 548744 E 1361374	363.35	---	355.02	HO. CO. STD. G-5.12
MH-3	4'-0" STANDARD PRECAST MANHOLE	N 548775 E 1361421	363.80	---	357.44	HO. CO. STD. G-5.12
MH-4	60" DIAM. PRECAST MANHOLE	N 548612 E 1361661	366.47	---	355.75	MD 384.03
MH-5	4'-0" STANDARD PRECAST MANHOLE	N 548623 E 1361636	366.82	---	355.51	MD 384.03
MH-5A	4'-0" STANDARD PRECAST MANHOLE	N 548762 E 1361719	368.40	---	359.28	HO. CO. STD. G-5.12
MH-6	4'-0" STANDARD PRECAST MANHOLE	N 548873 E 1361767	367.00	---	360.35	HO. CO. STD. G-5.12
MH-7	4'-0" STANDARD PRECAST MANHOLE	N 548661 E 1361419	364.32	---	361.30	HO. CO. STD. G-5.12
MH-8	4'-0" STANDARD PRECAST MANHOLE	N 548515 E 1361878	363.65	---	357.69	HO. CO. STD. G-5.12
EW-1	TYPE "C" ENDWALL (USE 12" SPECS)	N 548476 E 1362086	359.52	---	357.77	HO. CO. STD SD-5.21
GP-1	GP 2014 ENVIRONMENT ONE, DUPLEX GRINDER PUMP	N 548690 E 1361561	368.10	---	359.23	---
CS-1	CASI-IN-PLACE CONTROL STRUCTURE (SEE SHEET 11)	N 548564 E 1361900	364.31	---	357.39	MD 384.03 (SEE SHT 11)
CS-2	CASI-IN-PLACE CONTROL STRUCTURE (SEE SHEET 11)	N 548776 E 1361458	364.21	---	356.05	MD 384.03 (SEE SHT 11)
SMH-1	4'-0" STD PRECAST MANHOLE	N 548614 E 1361731	365.73	---	362.90	HO. CO. STD. G. 5. 12

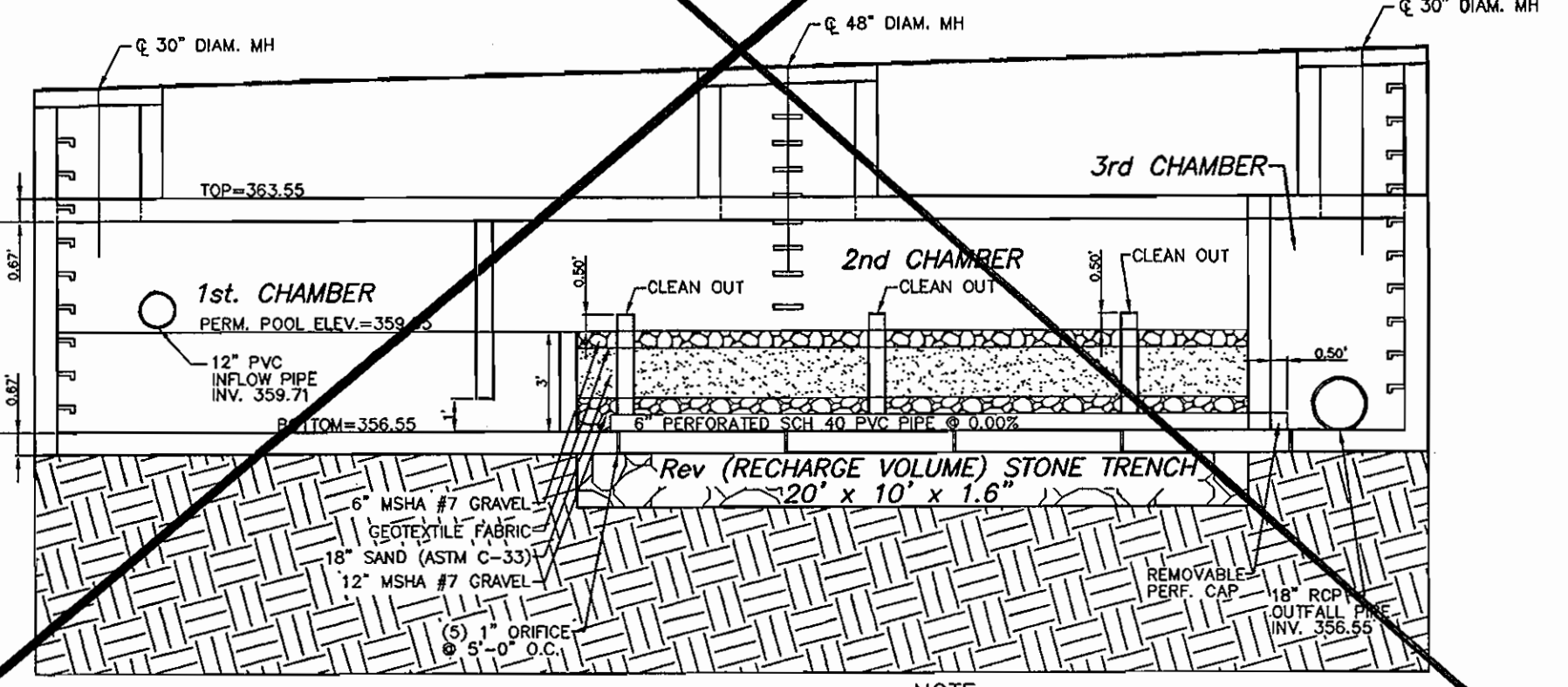
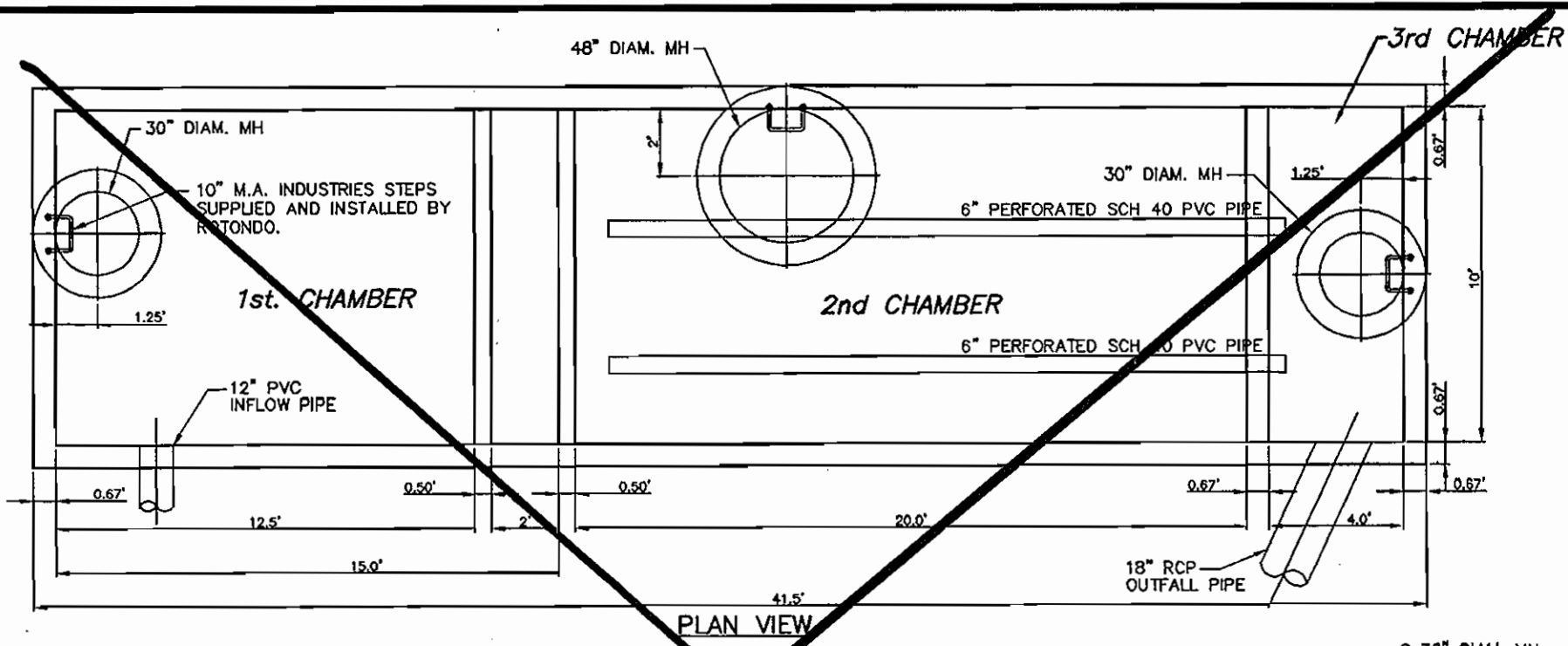
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.
 BY THE DEVELOPER:
 Signature of Developer
 DATE 5-4-07

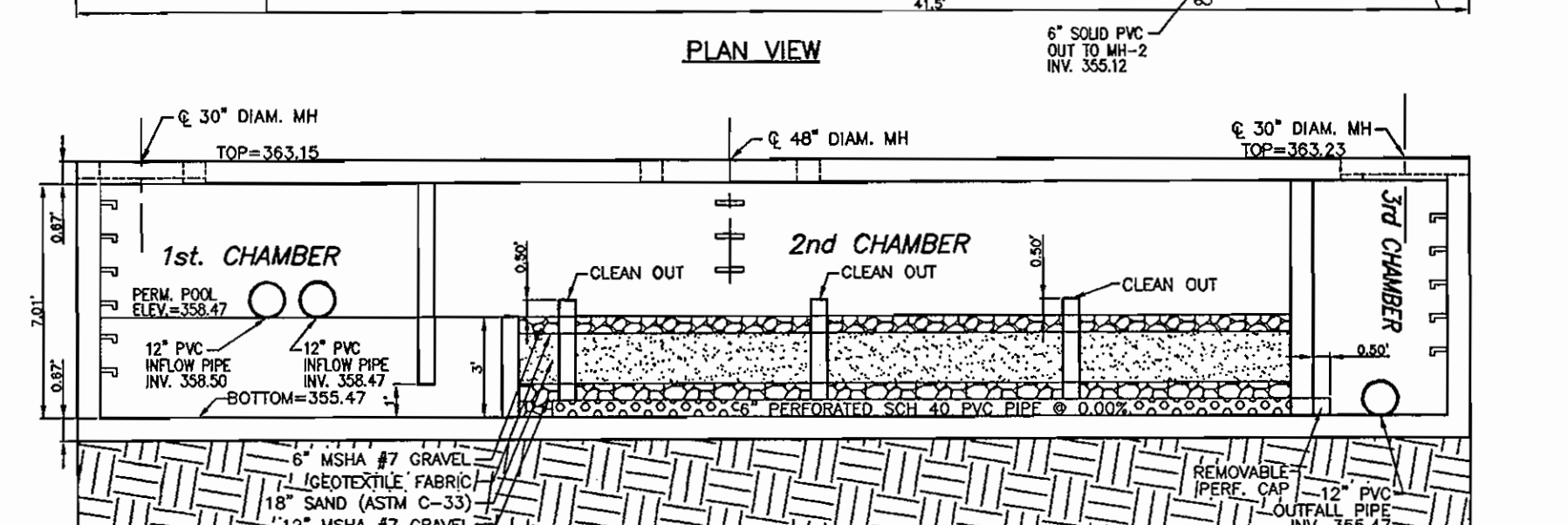
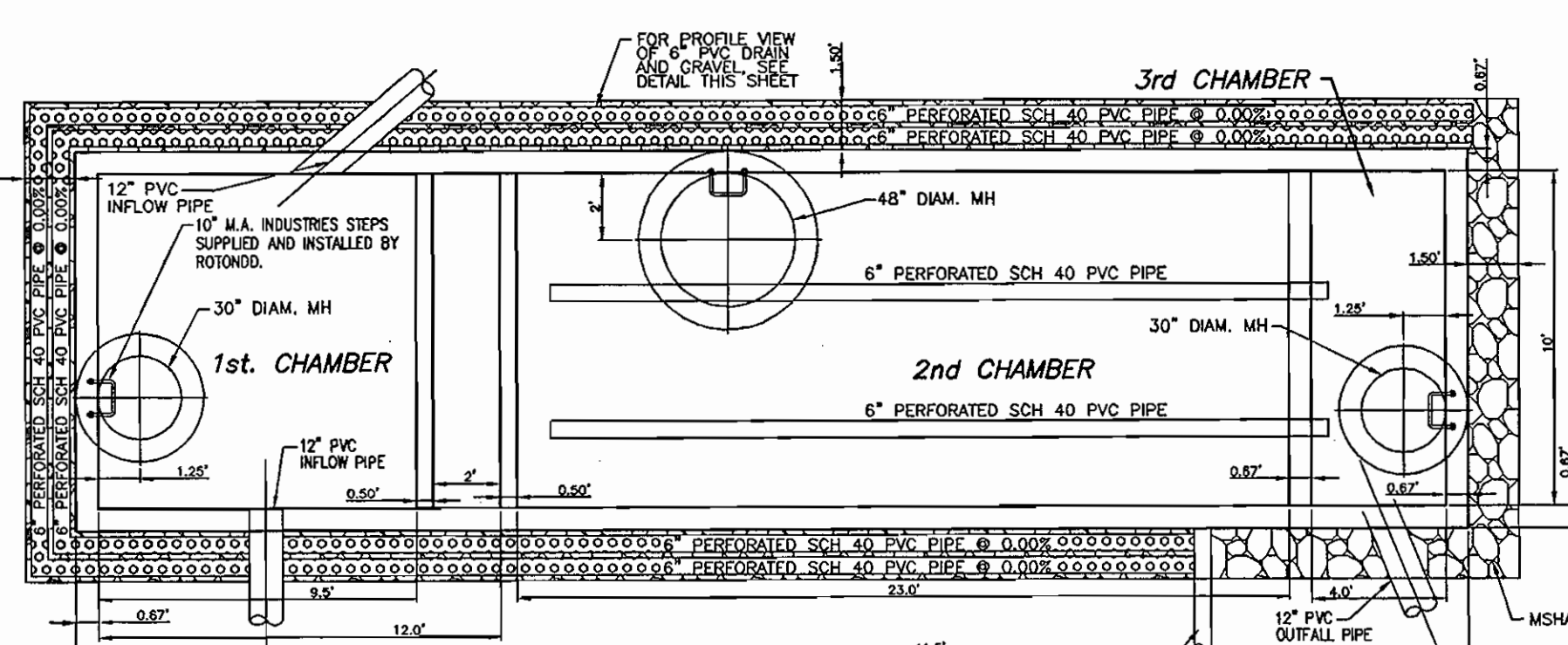
BY THE ENGINEER:
 Signature of Engineer
 DATE 5-4-07

I, THE ENGINEER, 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 COUNTY DEPARTMENT OF PLANNING AND ZONING.

DESIGN BY: W.G.Z.
 DRAWN BY: D.Z.
 CHECKED BY: R.H.V.
 DATE: FEB. 2007
 SCALE: 1"=30'
 W.O. NO.: 04-90
 9 SHEET OF 14



NOTE: SAND FILTER STRUCTURE MUST BE DESIGNED BY A STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.



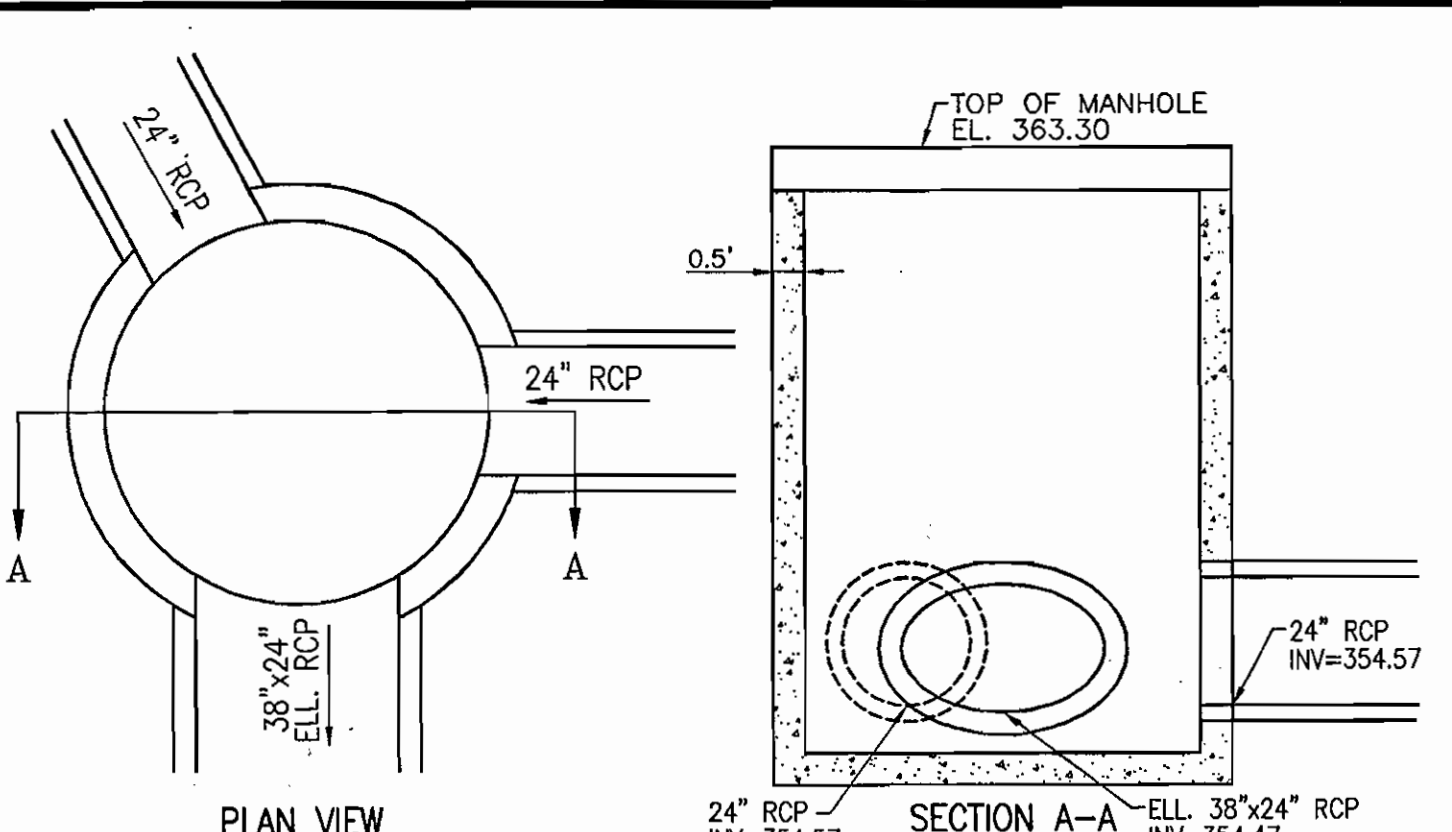
NOTE: SAND FILTER STRUCTURE MUST BE DESIGNED BY A STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED UNDERGROUND FACILITIES

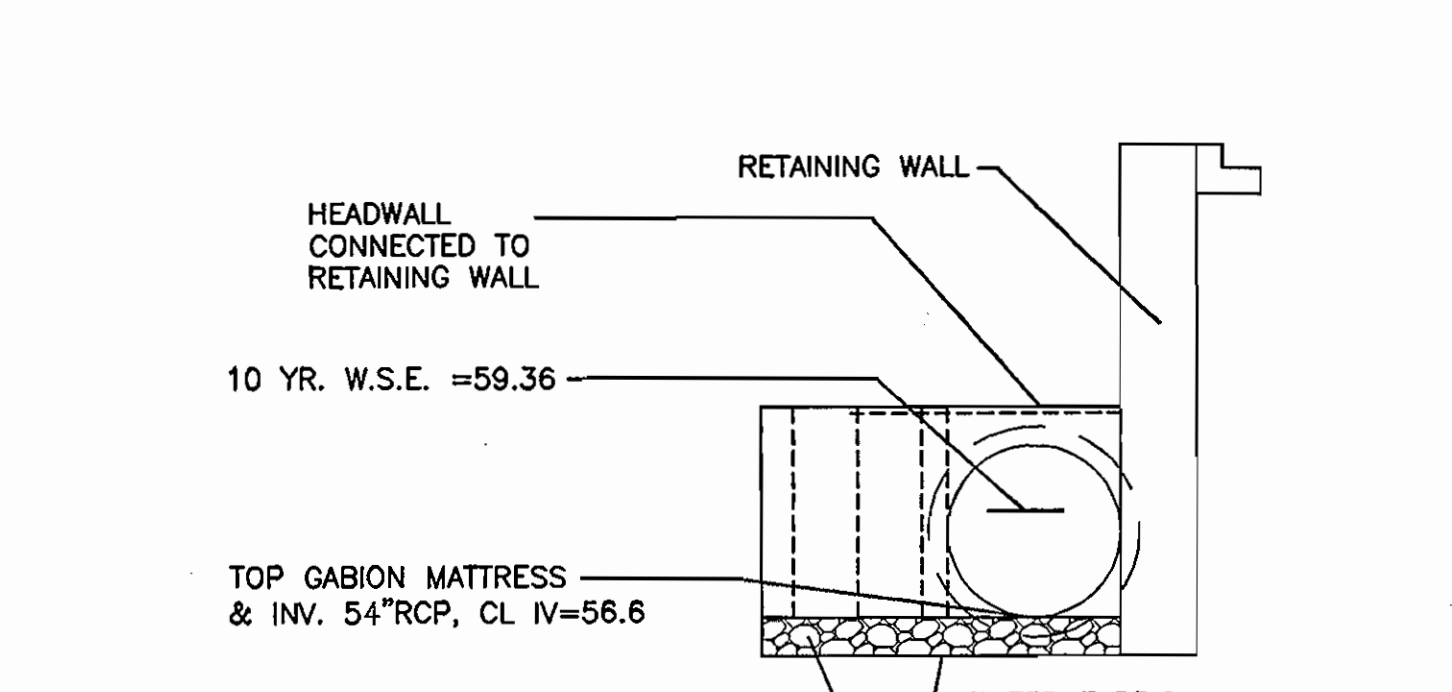
- THE UNDERGROUND STORMWATER MANAGEMENT FACILITY IS PRIVATELY OWNED AND IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO PERIODICALLY INSPECT AND CLEAN THE FACILITY TO MAINTAIN ITS OPERATION AND FUNCTION.
- THE UNDERGROUND STORMWATER MANAGEMENT FACILITY SHALL BE INSPECTED YEARLY AT A MINIMUM AND AFTER ESPECIALLY SEVERE STORM EVENTS.
- WHEN SEDIMENT ACCUMULATION OF MORE THAN 2" IS OBSERVED OR ANY DEBRIS THAT MIGHT OBSTRUCT THE OUTFALL IS OBSERVED, THE FACILITY SHALL BE CLEANED.
- THE FACILITY SHALL BE CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES NOTIFYING THEM OF THE SPILL AND CLEANUP OPERATION.
- THE SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND STORMWATER MANAGEMENT FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL FOLLOW PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIAL AND LIQUID.
- THE INLET AND OUTLET PIPES SHALL BE CHECKED FOR ANY OBSTRUCTIONS AT LEAST ONCE EVERY 18 MONTHS. IF OBSTRUCTIONS ARE FOUND, THE OWNER SHALL HAVE THEM REMOVED AND PROPERLY DISPOSED OF.

SCHEDULE FOR BIO-RETENTION AREAS

- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSEST. INVESTIGATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISSESSED VEGETATION CONSIDERED BEYOND TREATMENT. TREATMENT OF ALL DEAD STAKES AND WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

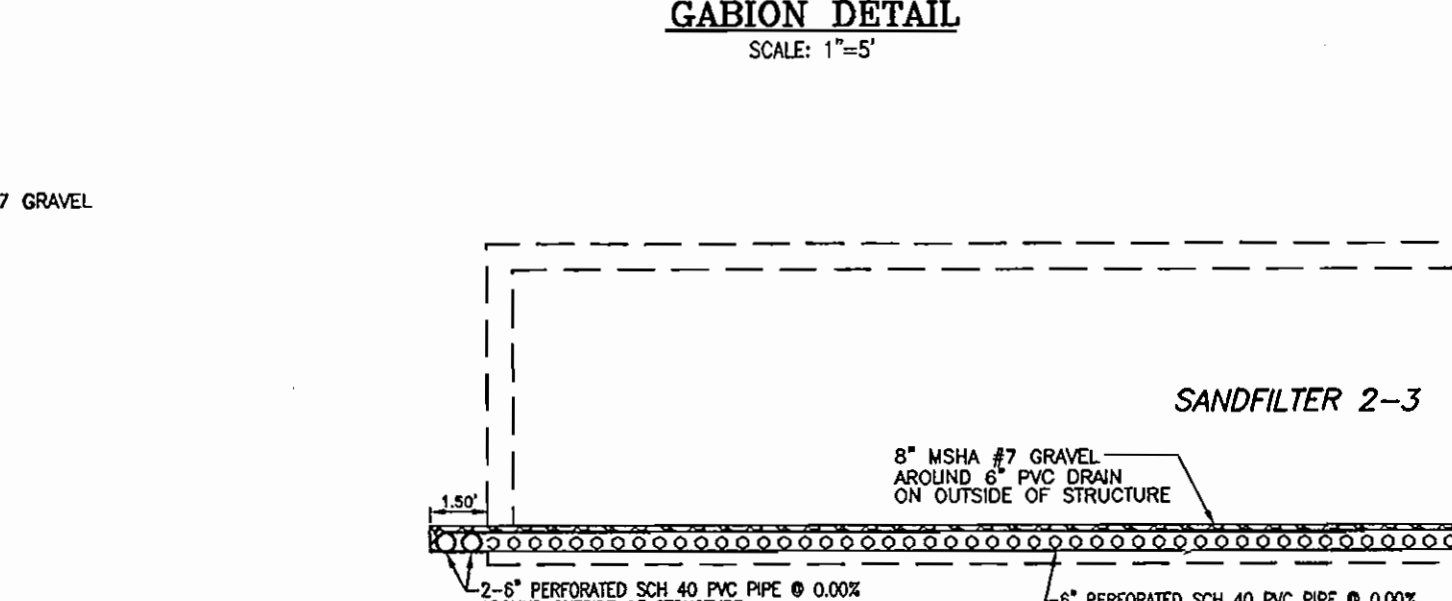


MH-1 (5'-0" STD PRECAST MANHOLE) SCALE: 1"=3'



GABION DETAIL SCALE: 1"=5'

- 3-GABION MATTRESSES TO BE CONSTRUCTED SIDE BY SIDE, @ 1.75% SLOPE, CONNECTED PER MANUFACTURER'S SPECIFICATIONS, AT 38" x 24" OUTFALL.
- 4-GABION MATTRESSES TO BE CONSTRUCTED SIDE BY SIDE, @ 1.75% SLOPE, CONNECTED PER MANUFACTURER'S SPECIFICATIONS, BEGINNING AT EX. 54" HEADWALL.
- CHAMFER ALL EXPOSED EDGES 1"x1"
- FOR CONNECTION AND RETAINING WALL DESIGN, SEE RETAINING WALL SPECIFICATIONS.

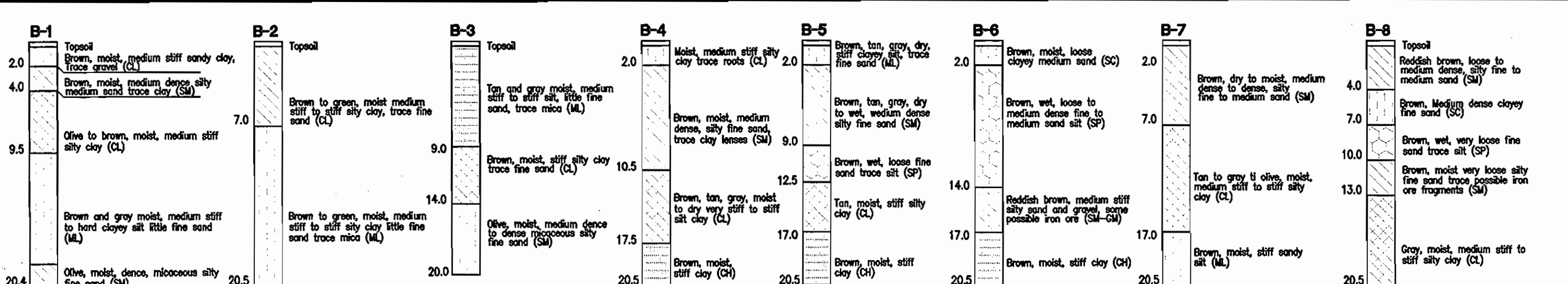


SECTION THROUGH SAND FILTER SCALE: 1/2" = 1'

OWNER/DEVELOPER
 STONEWOOD BUSINESS CENTER
 GUILFORD I LIMITED PARTNERSHIP
 8600 SNOONEN RIVER PARKWAY, #207
 COLUMBIA, MARYLAND 21045
 301-576-0222

BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

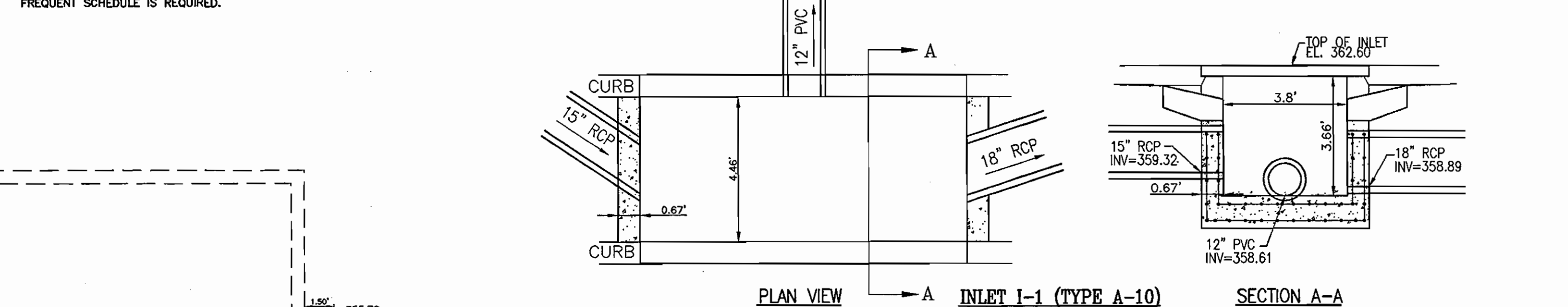


UNDERGROUND SAND FILTER CONSTRUCTION SPECIFICATIONS

- PROVIDE MANHOLE AND/OR GRATES TO ALL UNDERGROUND AND BELOW GRADE STRUCTURES. MANHOLES SHALL BE IN COMPLIANCE WITH STANDARD SPECIFICATIONS FOR EACH COUNTY, BUT DIAMETERS SHOULD BE 30" MINIMUM (TO COMPLY WITH OSHA CONFINED SPACE REQUIREMENTS). ALUMINUM AND STEEL LOUVERED DOORS ARE ALSO ACCEPTABLE. TEN INCH WIDE (MINIMUM) MANHOLE STEPS (12" O.C.) SHALL BE CAST IN PLACE OR DRILLED AND MORTARED INTO THE WALL BELOW EACH MANHOLE. A 5" MINIMUM HEIGHT CLEARANCE (FROM THE TOP OF THE SAND LAYER TO THE BOTTOM OF THE UPPER/SURFACE SLAB) IS REQUIRED FOR ALL PERMANENT UNDERGROUND STRUCTURES. LIFT RINGS ARE TO BE SUPPLIED TO REMOVE/REPLACE TOP SLABS ON PRE-FABRICATED STRUCTURES. MANHOLE COVERS SHOULD ALLOW FOR PROPER VENTILATION.
- UNDERGROUND SAND FILTERS SHOULD BE CONSTRUCTED WITH A GATE VALVE LOCATED JUST ABOVE THE TOP OF THE FILTER BED FOR DEWATERING IN THE EVENT THAT CLOGGING OCCURS.
- UNDERGROUND SAND BEDS SHALL BE PROTECTED FROM TRASH ACCUMULATION BY A WIDE MESH GEOTEXTILE SCREEN TO BE PLACED ON THE SURFACE OF THE SAND BED. SCREEN IS TO BE ROLLED UP, REMOVED, CLEANED AND RE-INSTALLED DURING MAINTENANCE OPERATIONS.

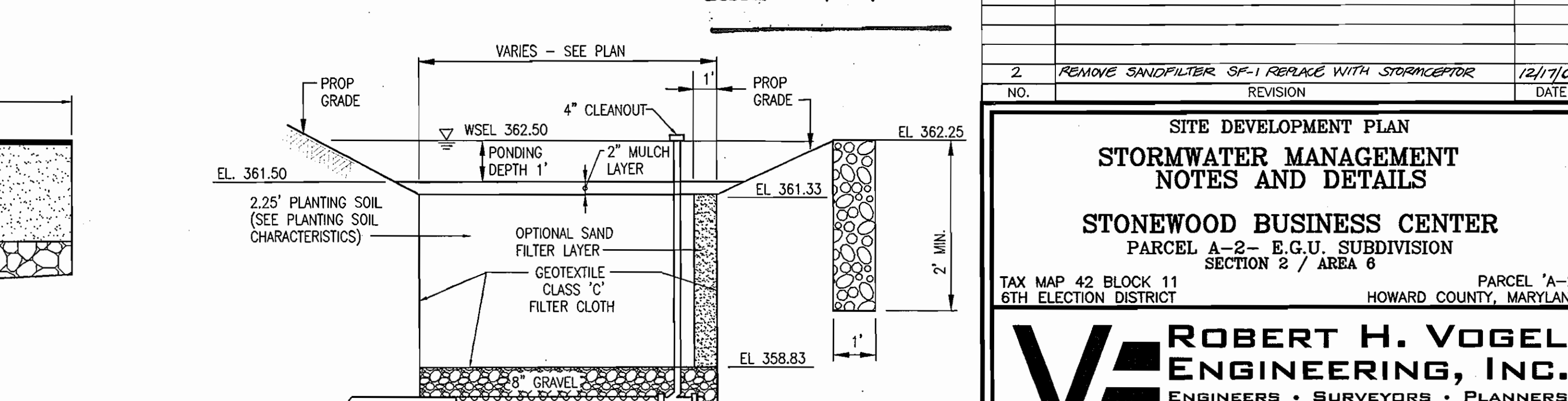
OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED UNDERGROUND STORMWATER FILTRATION SYSTEM (F-2)

- THE SEDIMENT CHAMBER OUTLET DEVICES SHALL BE CLEANED AND/OR REPAIRED WHEN DRAW-DOWN TIMES WITHIN THE CHAMBER EXCEED 36 HOURS.
- DEBRIS AND LITTER SHALL BE REMOVED AS NECESSARY TO ENSURE PROPER OPERATION OF THE SYSTEM.
- SEDIMENT SHALL BE CLEANED OUT OF THE SEDIMENTATION CHAMBER WHEN IT ACCUMULATES TO A DEPTH OF 6 INCHES. VEGETATION WITHIN THE SEDIMENT CHAMBER SHALL BE LIMITED TO A HEIGHT OF 18 INCHES.
- WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 72 HOURS, THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REPLACED WITH FRESH MATERIAL. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
- A LOG BOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO ENSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION SYSTEM HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.



APPROVED PLANNING BOARD OF HOWARD COUNTY DATE 12/07/06

NOTE: DEBRIS IS TO BE KEPT OUT OF STORMWATER MANAGEMENT FACILITIES DURING AND AFTER CONSTRUCTION.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 3/22/07
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.
 [Signature] 5/16/07
 CHIEF, DIVISION OF LAND DEVELOPMENT

USDA-NATURAL RESOURCES CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 5/17/07
 DIRECTOR

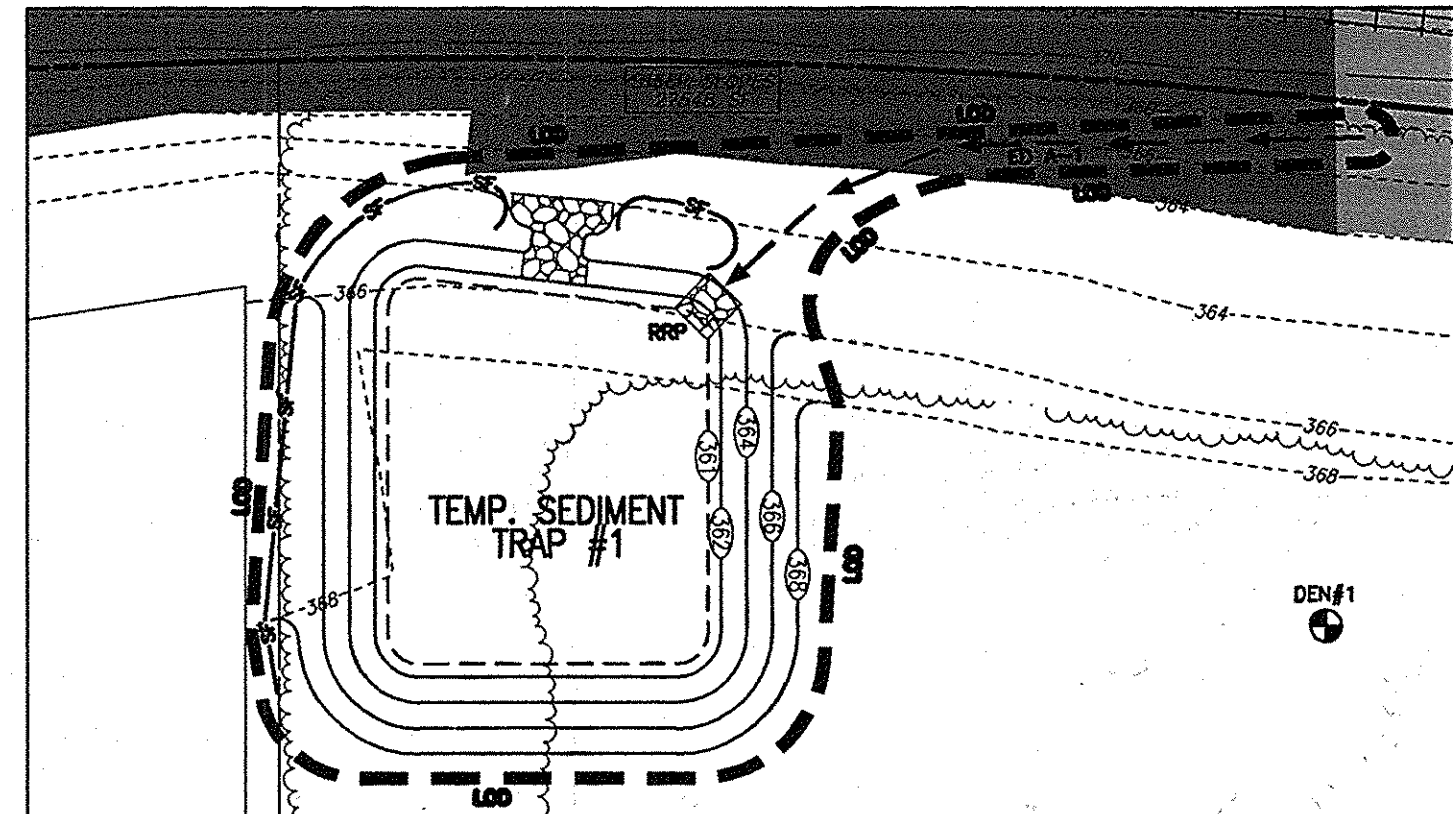
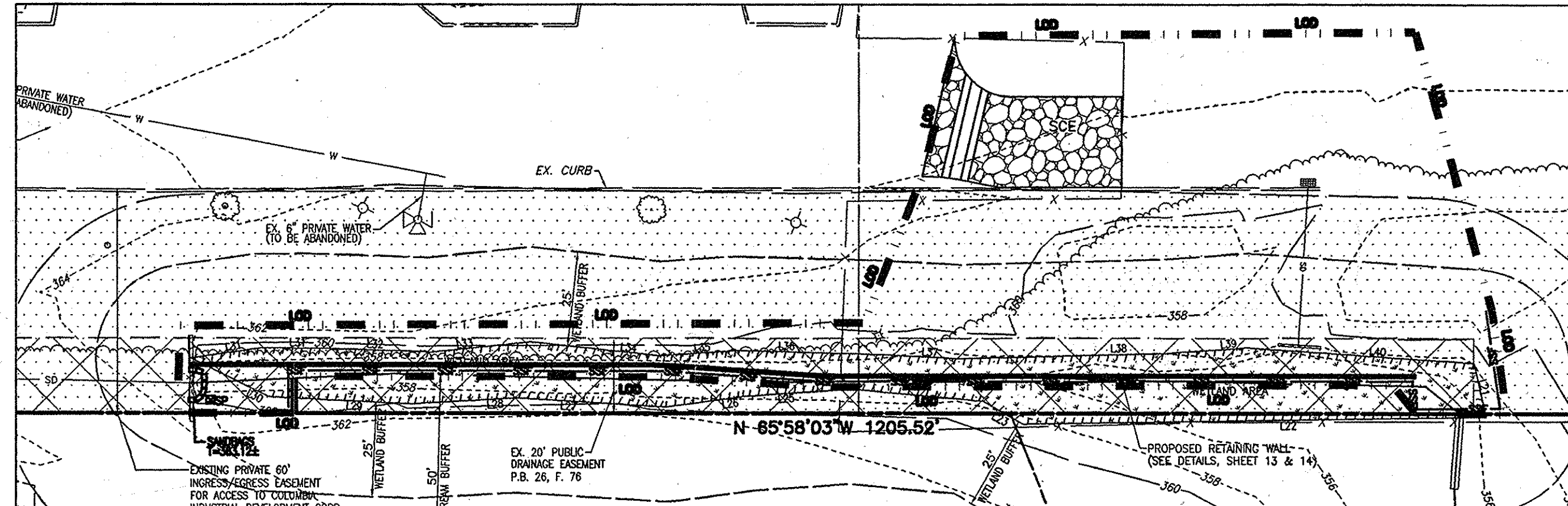
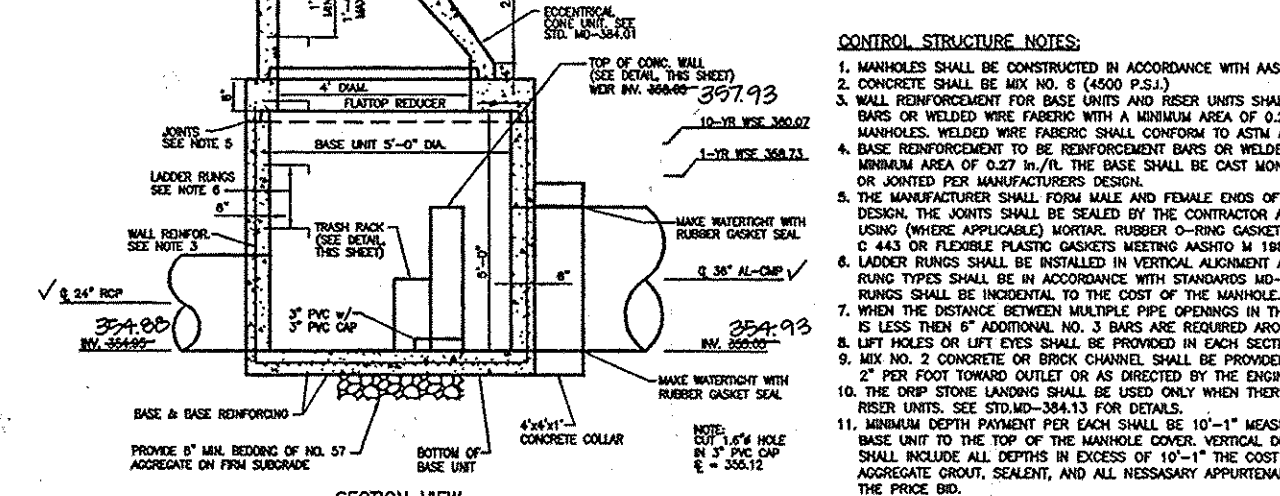
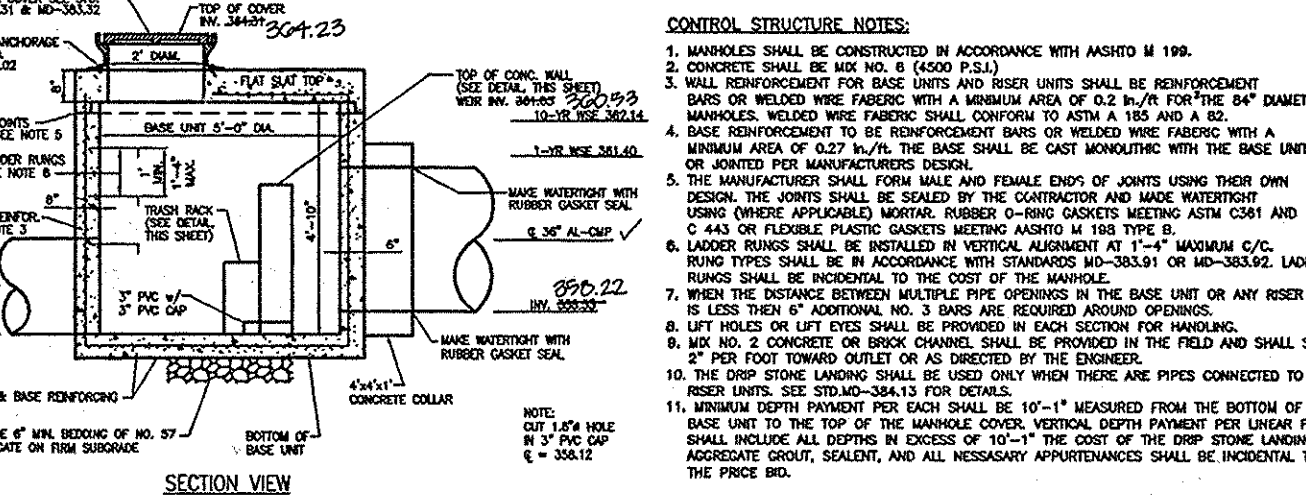
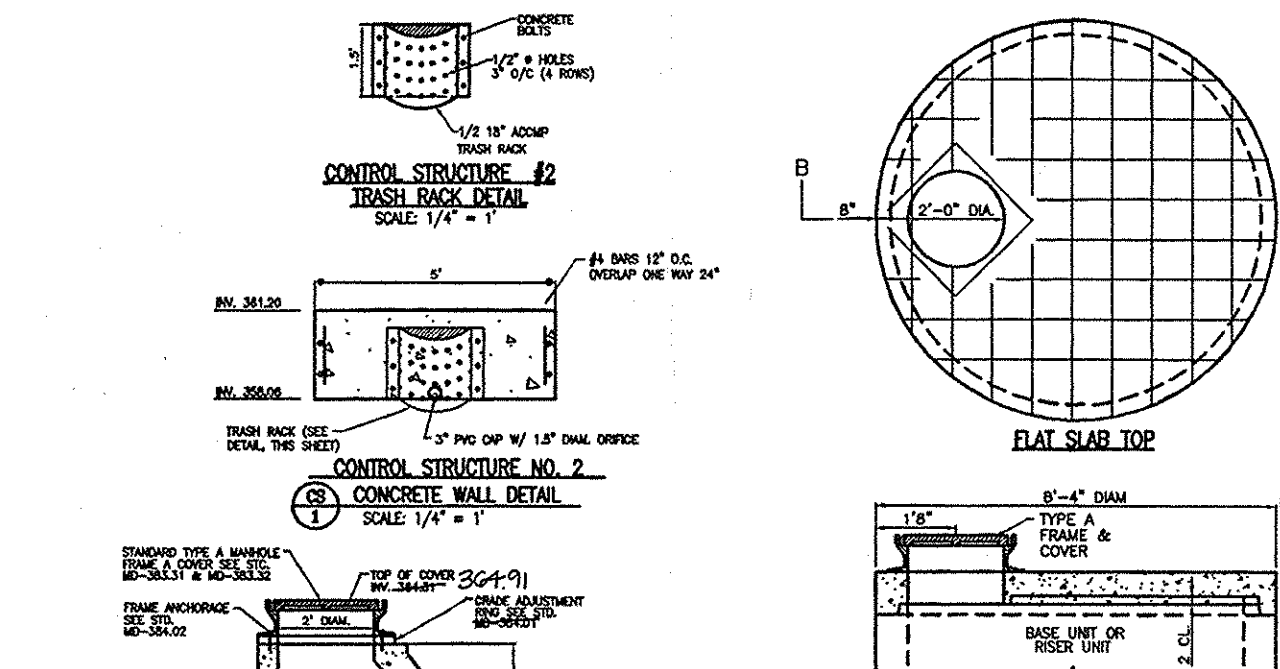
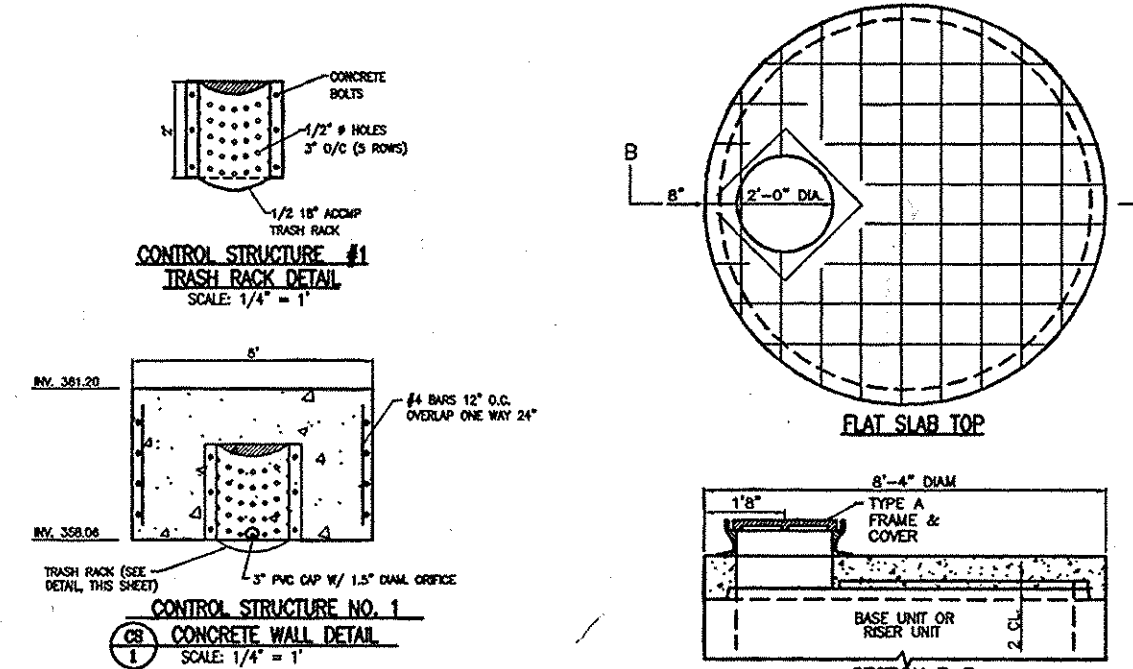
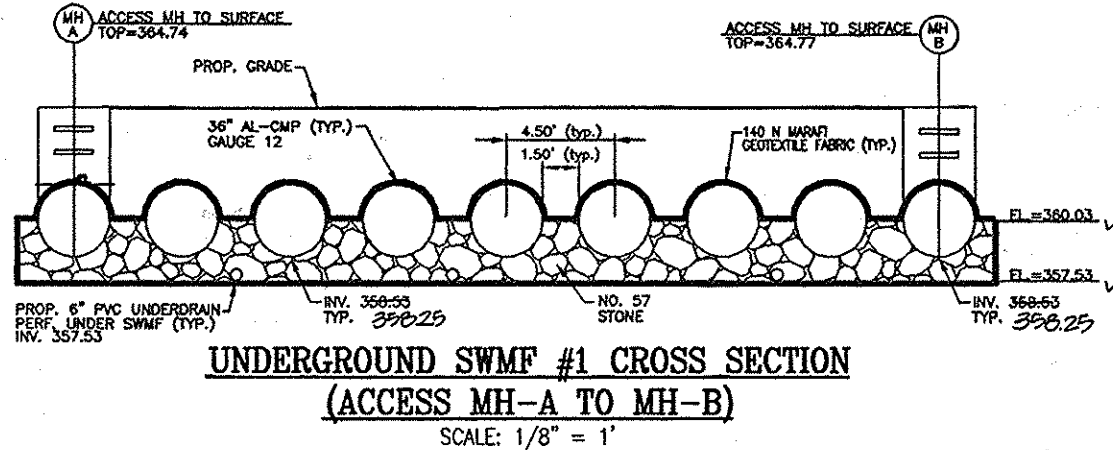
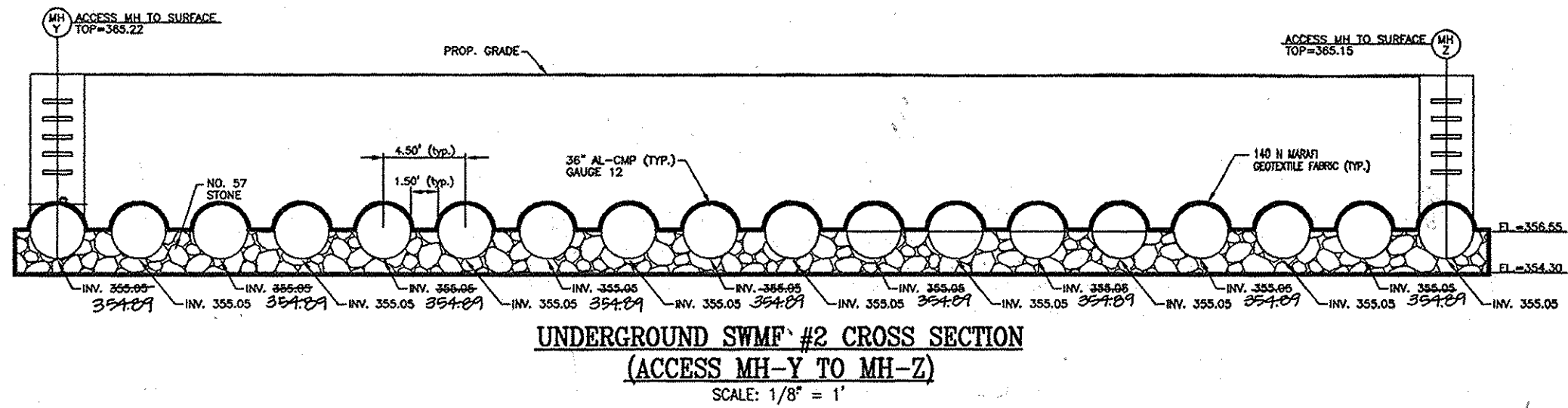
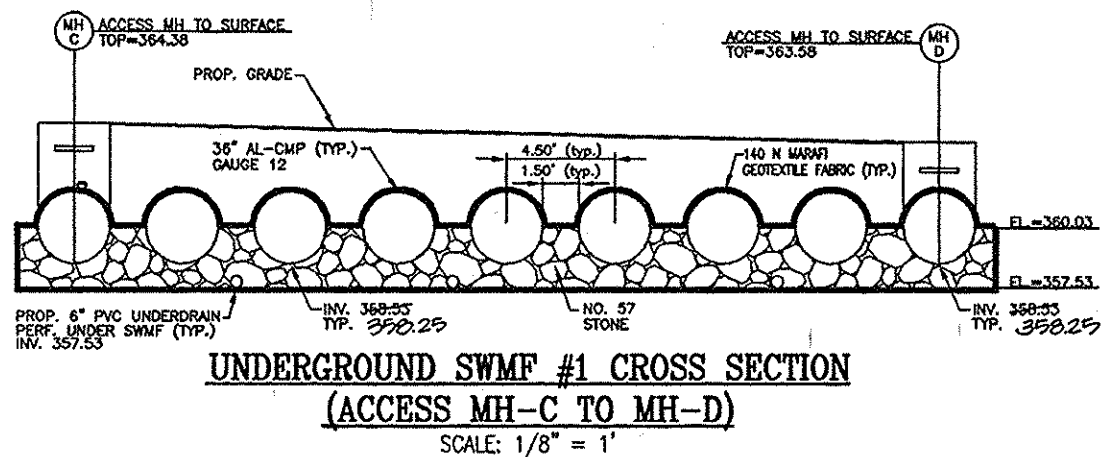
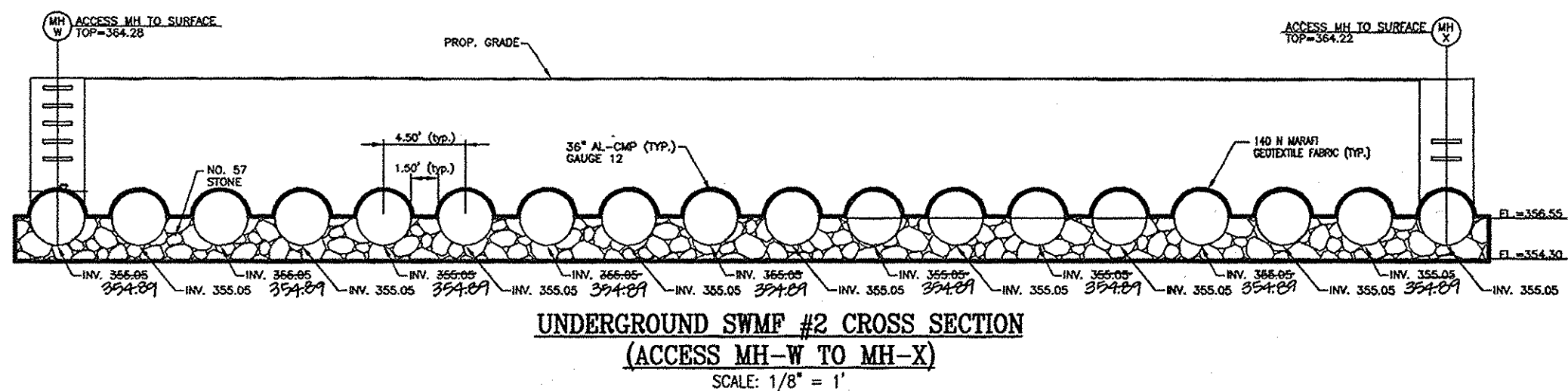
BY THE DEVELOPER:
 [Signature] DATE

BY THE ENGINEER:
 [Signature] 3/22/07
 SIGNATURE OF ENGINEER
 WALTER G. ZAWISLAK, P.E. DATE

SITE DEVELOPMENT PLAN STORMWATER MANAGEMENT NOTES AND DETAILS
STONEWOOD BUSINESS CENTER
 PARCEL A-2- E.G.U. SUBDIVISION SECTION 2 / AREA 6
 TAX MAP 42 BLOCK 11 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8961

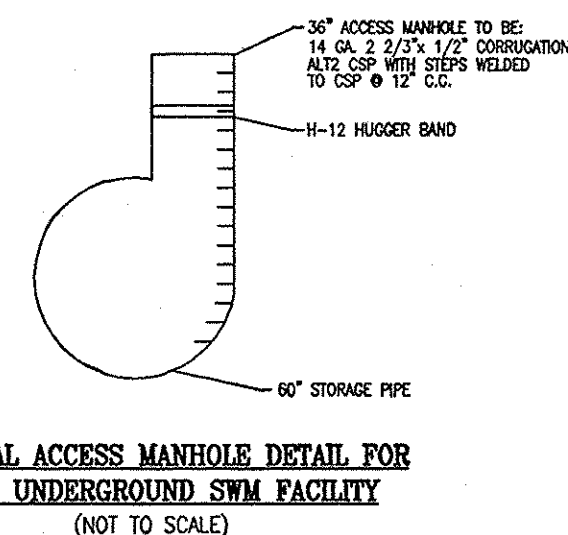
DESIGN BY: WGW
DRAWN BY: DZ
CHECKED BY: WGW
DATE: FEB. 2007
SCALE: AS SHOWN
W.D. NO.: 04-90

STATE OF MARYLAND
 WATER GEORGE ZAWISLAK
 PROFESSIONAL ENGINEER
 NO. 32021



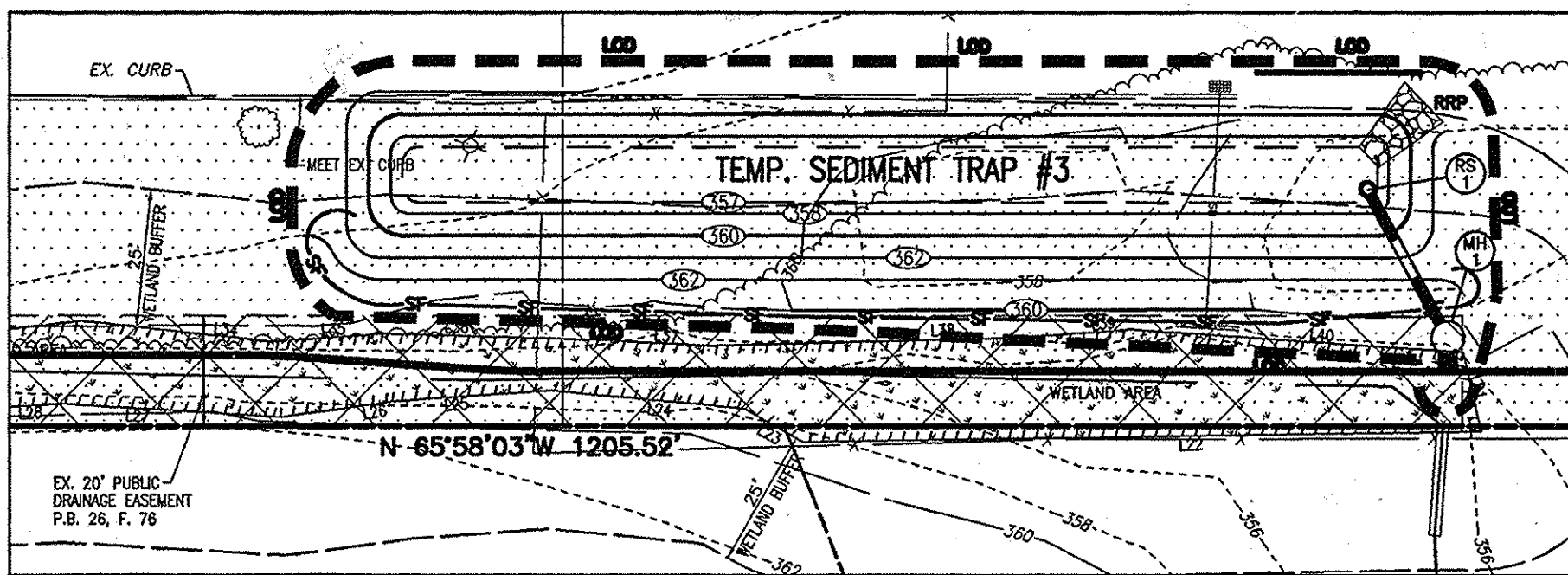
TEMP STONE OUTLET SEDIMENT TRAP #1

D.A. =	1.76 AC.
WET STORAGE REQUIRED =	3168 CF.
WET STORAGE PROVIDED =	3168 CF.
WET STORAGE EL. =	362.03
DRY STORAGE REQUIRED =	3168 CF.
DRY STORAGE PROVIDED =	7458 CF.
WEIR WIDTH =	6'
TOP OF DAM =	365.00
BOTTOM TRAP DIM. =	50'x60'
BOTTOM OF TRAP EL. =	361.00
WEIR CREST EL. =	364.00
TOTAL STORAGE DEPTH =	3'
SIDE SLOPES =	2:1
C/O EL. =	361.51



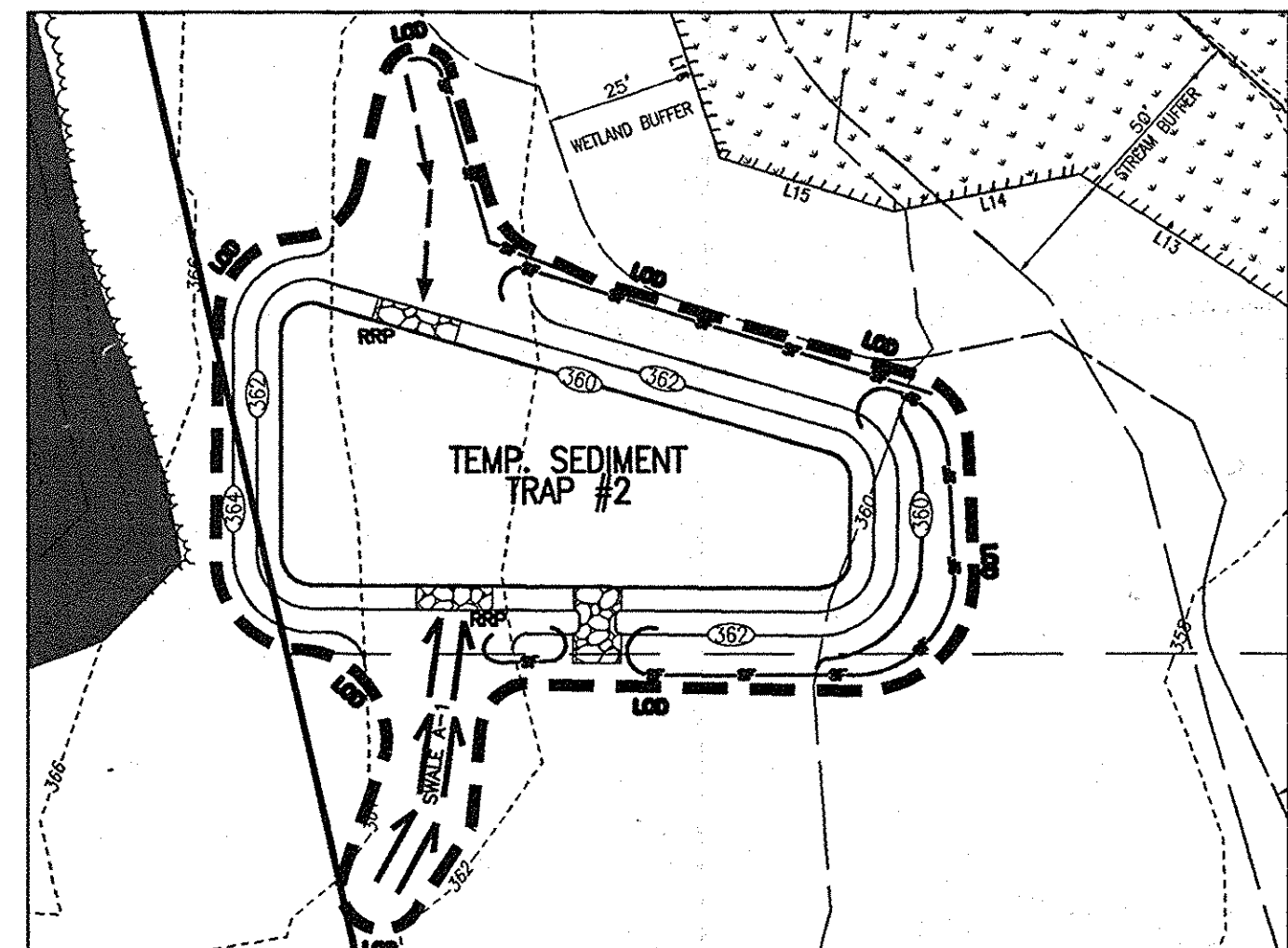
TEMP. SEEDING NOTES:

- 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.
- Seeding rates listed above are for temporary seedings when planted alone. When planted as a nurse crop with permanent seed mixes, 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. Control type 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. Consult the seed supplier's literature for information on the germination and growth of other plants. If it must be used as a nurse crop, root at 1/3 of the rate listed above.
- Oats are the recommended nurse crop for warm-season grasses.
- For sandy soils, plant seeds at twice the depth listed above.
- The planting dates listed are averages for each Zone and may require adjustment to reflect local conditions, especially near the boundaries of the zone.



TEMP PIPE OUTLET SEDIMENT TRAP #3

D.A. =	3.25 AC.
WET STORAGE REQUIRED =	5850 CF.
WET STORAGE PROVIDED =	5850 CF.
WET STORAGE EL. =	359.12
DRY STORAGE REQUIRED =	5850 CF.
DRY STORAGE PROVIDED =	7940 CF.
TOP OF DAM =	362.00
BOTTOM TRAP DIM. =	10'x17.5'
BOTTOM OF TRAP EL. =	357.00
TOTAL STORAGE DEPTH =	5'
SIDE SLOPES =	2:1
RISER DIAM. (RS-1) =	24"
TRASH RACK DIAM. =	36"
BARREL DIAM. =	21"
INV. OF BARREL @ RS-1 =	357.37
INV. @ MH-1 =	354.57

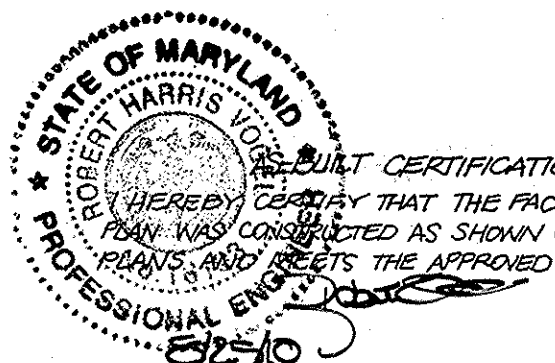


TEMP STONE OUTLET SEDIMENT TRAP #2

D.A. =	1.28 AC.
WET STORAGE REQUIRED =	2304 CF.
WET STORAGE PROVIDED =	2304 CF.
WET STORAGE EL. =	360.59
DRY STORAGE REQUIRED =	2304 CF.
DRY STORAGE PROVIDED =	5491 CF.
WEIR WIDTH =	8'
TOP OF DAM =	362.50
BOTTOM TRAP DIM. =	95'x35'
BOTTOM OF TRAP EL. =	360.00
WEIR CREST EL. =	361.50
TOTAL STORAGE DEPTH =	2'
SIDE SLOPES =	2:1
C/O EL. =	360.30

Table B.1: Temporary Seeding for Site Stabilization

Plant Species	Seeding Rate ¹		Seeding Depth (inches)	Recommended Seeding Dates by Plant Hardiness Zone ²			
	b/ac	lb/1000 ft ²		5b and 6a	6b	7a and 7b	8a
<i>Annual Ryegrass (Lolium perenne ssp. 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 1 to Oct 15	
<i>Barley (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 1 to Oct 15	
<i>Oats (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 1 to Oct 15	
<i>Wheat (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 1 to Oct 15	
<i>Common Ryegrass (Lolium perenne)</i>	112	2.8	1.0	Mar 15 to May 31; Aug 1 to Oct 31	Mar 1 to May 15; Aug 1 to Oct 31	Feb 15 to Apr 30; Aug 1 to Oct 31	
<i>Flaxseed (Linum catharticum)</i>	30	0.7	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14	
<i>Pearl Millet (Pennisetum glaucum)</i>	20	0.5	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14	



APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE: 12/07/06

LEGEND:

- - - - - PROPOSED CONTOUR
- - - - - PROPOSED SPOT ELEVATION
- - - - - EXISTING SPOT ELEVATION
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- - - - - EXISTING UTILITY POLE
- - - - - EXISTING LIGHT POLE
- - - - - EXISTING MAILBOX
- - - - - EXISTING SIGN
- - - - - EXISTING SANITARY MANHOLE
- - - - - EXISTING SANITARY LINE
- - - - - EXISTING CLEANOUT
- - - - - EXISTING FIRE HYDRANT
- - - - - EXISTING WATER LINE
- - - - - PROPOSED STORM DRAIN
- - - - - PROPOSED STORM DRAIN INLET
- (Tree symbols) EXISTING TREES (FIELD LOCATED)
- (Tree symbols) EXISTING TREELINE (FIELD LOCATED)
- (Plant symbols) EXISTING VEGETATION (APPROXIMATE LOCATION)
- - - - - EXISTING FENCE
- - - - - PROPERTY LINE
- - - - - RIGHT-OF-WAY LINE
- - - - - SOILS BOUNDARY
- - - - - SUPER SILT FENCE
- - - - - PHASE 1 LIMIT OF DISTURBANCE
- - - - - PHASE 2 LIMIT OF DISTURBANCE
- (Door symbol) STABILIZED CONSTRUCTION ENTRANCE

NOTE: DEBRIS IS TO BE KEPT OUT OF STORMWATER MANAGEMENT FACILITIES DURING AND AFTER CONSTRUCTION.

NO.	REVISION	DATE
T	REVISE PLAN TO ADD PARKING IN FRONT OF BLDG. 2 AND ASSOCIATED SWM, SHOW AS-BUILT SIDEWALK OF BLDG. 2, SHOW AS-BUILT STORM DRAIN OF BLDG. 3.	04-30-15

SITE DEVELOPMENT PLAN
STORMWATER MANAGEMENT NOTES AND DETAILS, PHASE 1 CONSTRUCTION, AND PHASE 2 SEDIMENT TRAPS
STONEWOOD BUSINESS CENTER
PARCEL A-2 - E.G.U. SUBDIVISION
SECTION 2 / AREA 6

TAX MAP 42 BLOCK 11 6TH ELECTION DISTRICT
ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET ELLICOTT CITY, MD 21043
TEL: 410.461.7666
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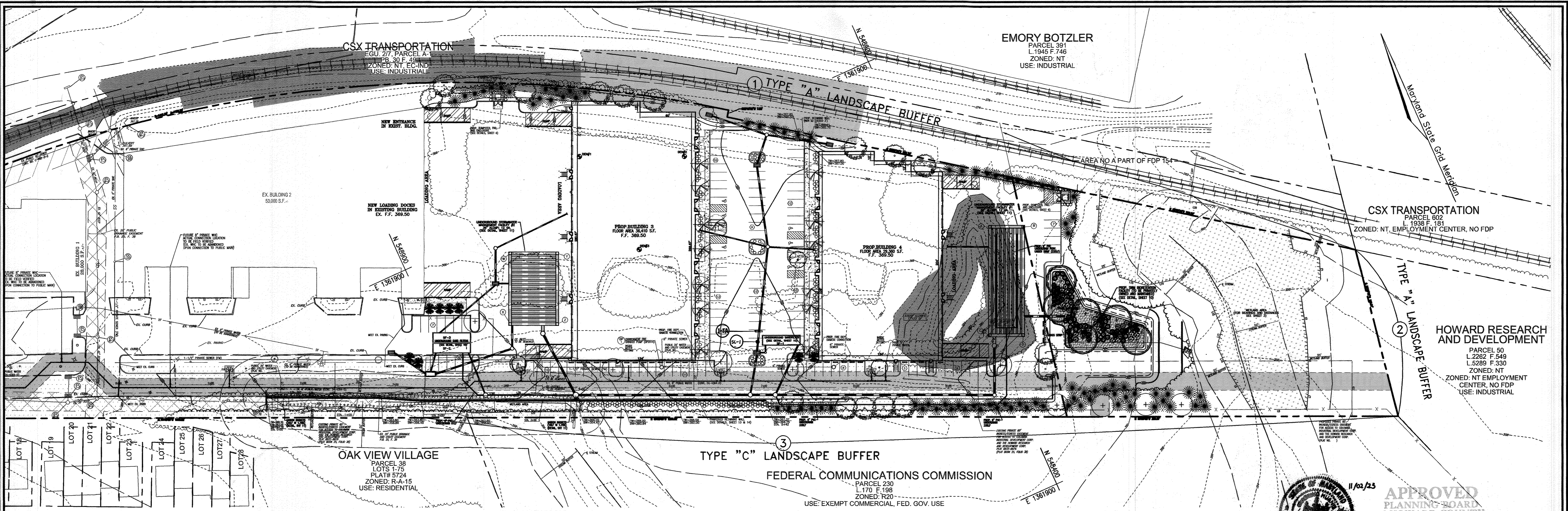
DESIGN BY: [Signature]
DRAWN BY: [Signature]
CHECKED BY: [Signature]
DATE: FEB. 2007
SCALE: AS SHOWN
W.O. NO.: [Number]
STATE OF MARYLAND PROFESSIONAL ENGINEER

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature]
CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature]
DIRECTOR

REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.
[Signature]
[Signature]
DATE: 3/12/07
DATE: 5/12/07

BY THE DEVELOPER:
[Signature]
[Signature]
DATE: 3/12/07
DATE: 3/12/07

BY THE ENGINEER:
[Signature]
[Signature]
DATE: 3/12/07
DATE: 3/12/07



LANDSCAPE SCHEDULE NOTE:

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

KEY	QUAN.	BOTANICAL NAME	SIZE	REM.
AR	15	Acer rubrum 'October Glory' October Glory Red Maple	2 1/2" - 3" Cal.	B & B
PS	84	Pinus strobus Eastern White Pine	6' - 8' Ht.	B & B
QP	9	Quercus Phellos Willow Oak	2 1/2" - 3" Cal.	B & B
TD	219	Taxus media 'Densiformis' Densiformis Yew	2 1/2" - 3" Ht.	B & B
PA	8	Picea abies Norway Spruce	6' - 8' Ht.	B & B
CH	14	Prunus Sargentii Sargent Cherry (Flowering Tree)	2 1/2" - 3" Ht.	B & B
PC	2	Prunus Cerasifera Atropurea Thunderclod Purpleleaf Plum (Flowering Tree)	1 1/2" - 2" Cal.	B & B

KEY	QUAN.	BOTANICAL NAME	SIZE	REMARKS
1	1	DIAPYCNEMA LUTEA 'SWITCHGRASS' SWITCHGRASS TERNSTROM	1 1/2" - 2" Cal.	B & B
2	1	HEX ALARIA COMPACTA SWAMP IRIS	3 GALLON	CONT.
3	1	YUCCA FILIFERA AMERICAN YUCCA	5 GALLON	CONT.
4	1	HEX ALARIA COMPACTA SWAMP IRIS	5 GALLON	CONT.
5	1	HEX ALARIA COMPACTA SWAMP IRIS	3 GALLON	CONT.
6	1	HEX ALARIA COMPACTA SWAMP IRIS	2" POT	1" O.C.

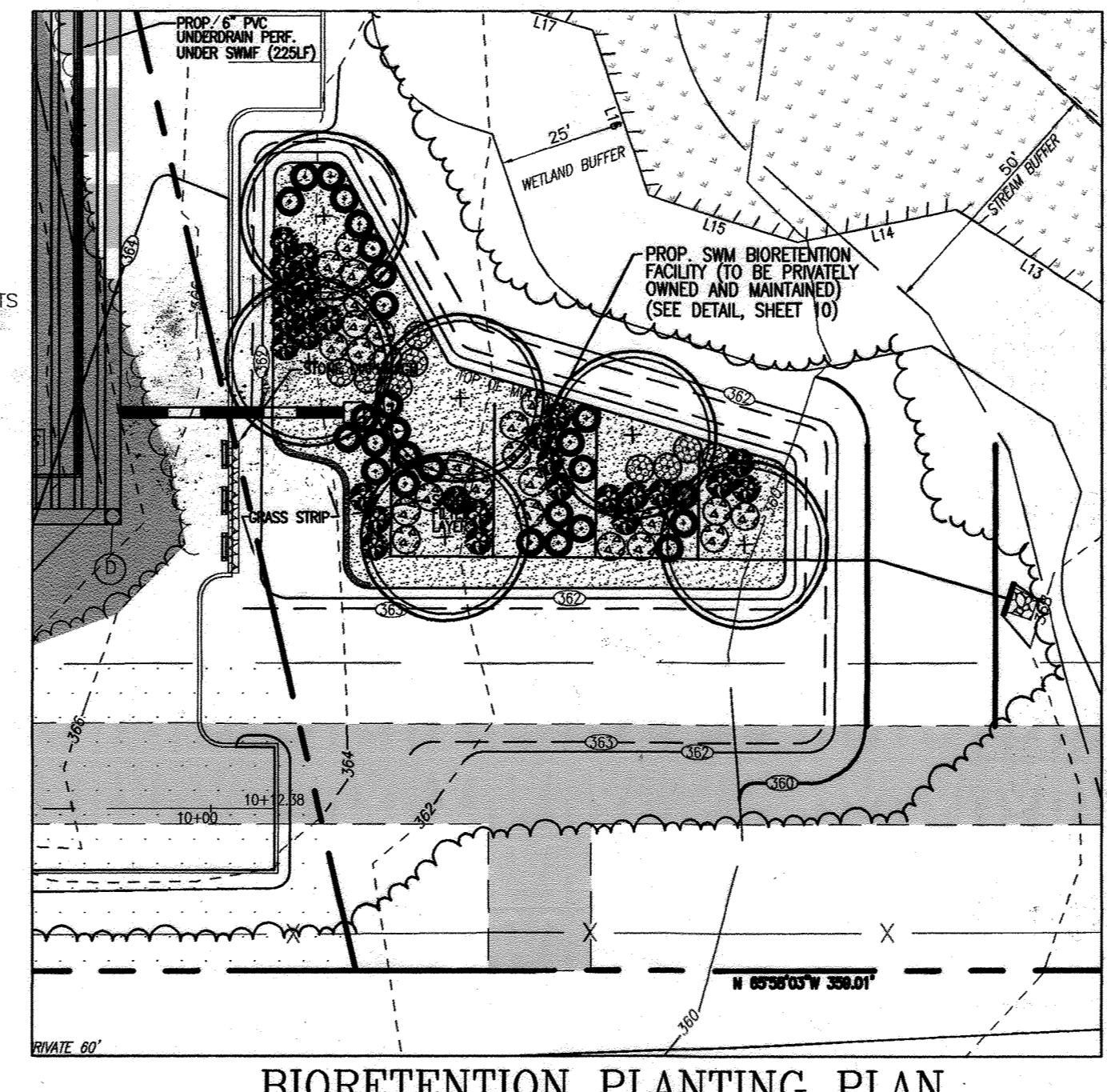
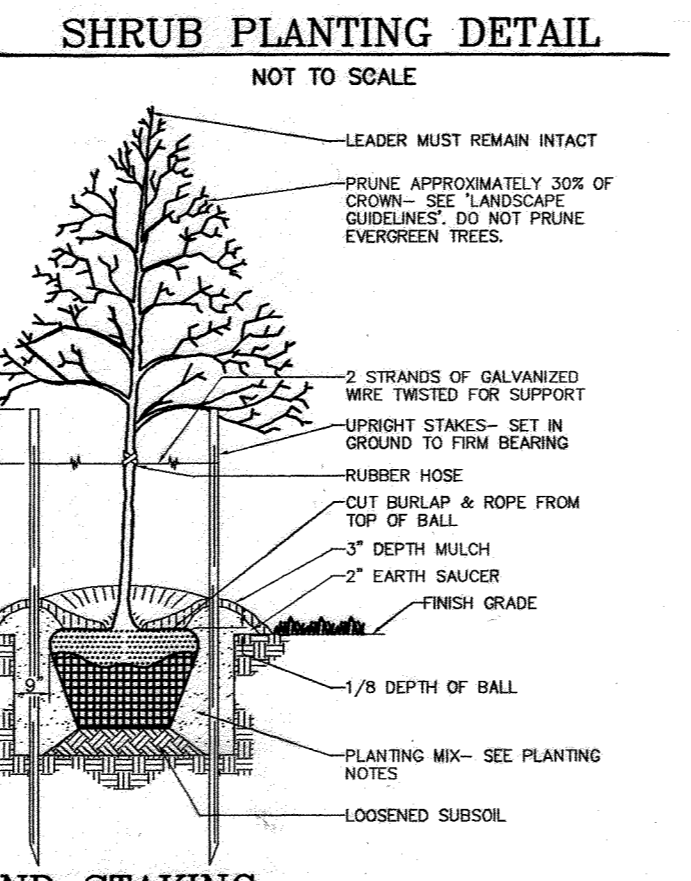
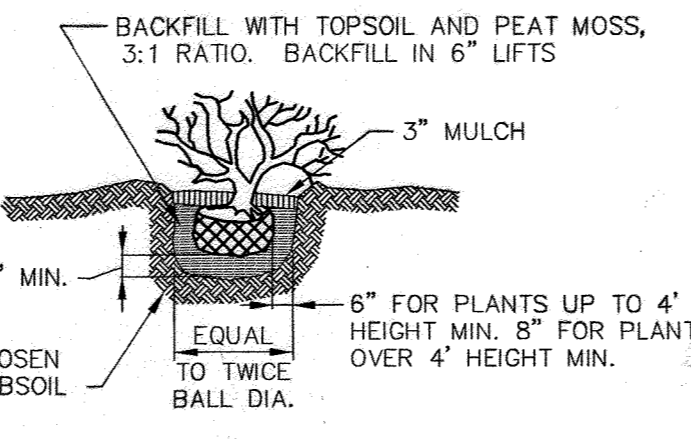
NBR	AREA	STEMS REQUIRED	STEMS PROVIDED
1	4282 SF	98	98

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
Number of parking spaces	130
Number of trees and islands required	7
Number of trees and islands provided	
Shade Trees	4*
Other Trees (2:1 Substitution)	0
Shrubs (10:1 Substitution)	30*

SCHEDULE D - STORMWATER MANAGEMENT AREA LANDSCAPING	
LINEAR FEET OF PERIMETER	191 LF
CREDIT FOR EXISTING VEGETATION (NO, YES AND LINEAR FEET)	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	YES, 100%*
NUMBER OF TREES REQUIRED (OR BUFFER)	0 SHADE TREES 0 EVERGREEN TREES
NUMBER OF TREES PROVIDED	4*
NUMBER OF TREES PROVIDED	0 EVERGREEN TREES

CATEGORY	SCHEDULE A PERIMETER LANDSCAPE EDGE			
	1	2	3	DUMPMSTER DUMPSTER
Perimeter/Frontage Designation	A	A	C	C
Linear Feet of Roadway Frontage/Perimeter	1029'	186'	1049'	34'
Credit for Existing Vegetation (Yes, No, Linear Feet)	Yes	Yes	No	No
Credit for Wall, Fence or Berm (Yes, No, Linear Feet)	No	No	No	No
Number of Plants Required	1:80 12*	1:60 0	1:40 21**	1:40 1***
Shade Trees	1	1	1	1
Evergreen Trees	1	1	1	1
Shrubs	1	1	1	1
Number of Plants Provided	8*	0	9**	9***
Shade Trees	30*	0	48**	1
Other Trees (2:1 Substitution)	1	1	1	1
Shrubs (10:1 Substitution)	1	1	10**	10***

- GENERAL NOTES:**
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE REQUIRED PARKING AND PERIMETER LANDSCAPING WILL BE BONDED PER THIS SUBMISSION.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$19,200.00 FOR THE REQUIRED 42 SHADE TREES AND 44 EVERGREEN TREE.



DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

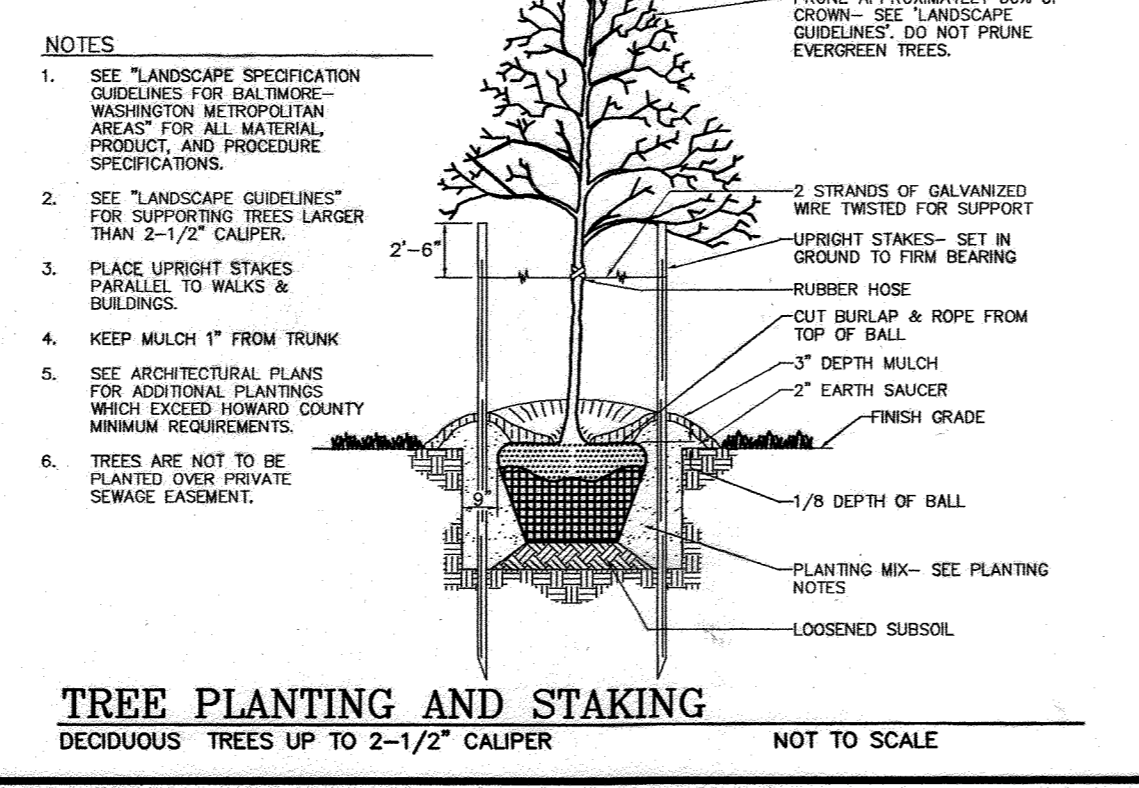
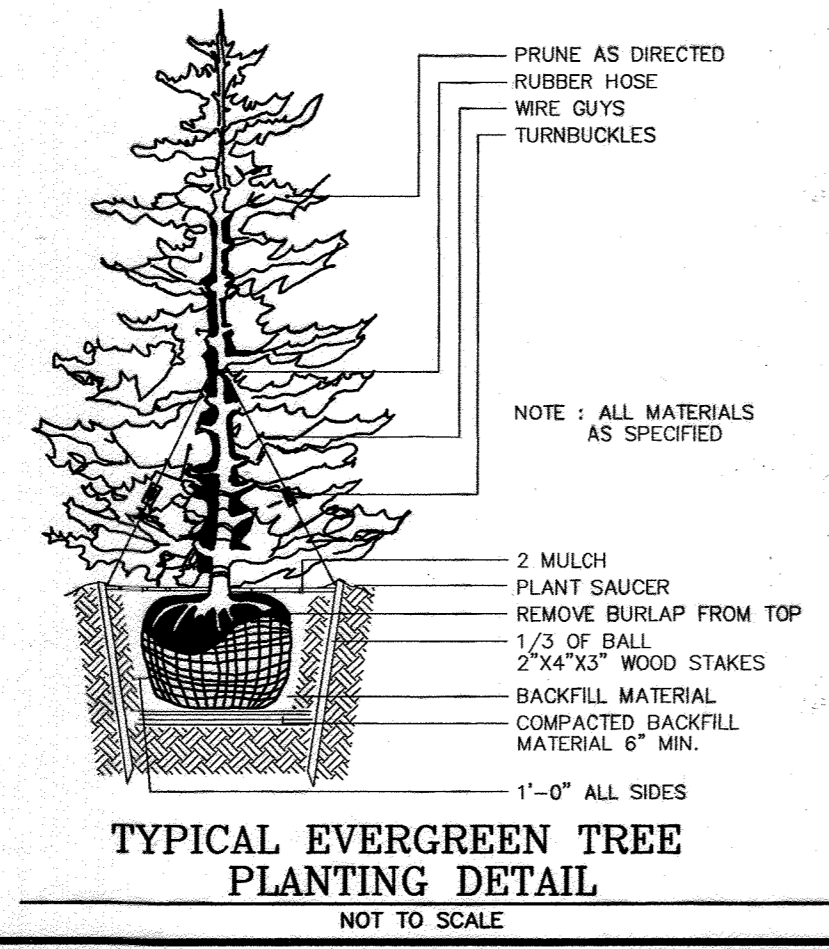
Signature: *[Signature]* DATE: *5/16/07*

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Signature: *[Signature]* DATE: *5/16/07*
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

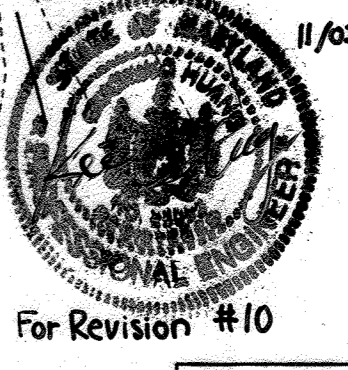
Signature: *[Signature]* DATE: *5/16/07*
 CHIEF, DIVISION OF LAND DEVELOPMENT

Signature: *[Signature]* DATE: *5/16/07*
 DIRECTOR



LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- PROPOSED STORM DRAIN
- PROPOSED STORM DRAIN INLET
- EXISTING TREES (FIELD LOCATED)
- EXISTING TREELINE (FIELD LOCATED)
- EXISTING VEGETATION (APPROXIMATE LOCATION)
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- PROPOSED SIDEWALK
- STEEP SLOPES
- MODERATE SLOPES
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SHRUB
- LANDSCAPE PERIMETER
- PROPOSED TREELINE



APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE: 12/07/06

STORMWATER MANAGEMENT FACILITY PRIVATELY OWNED AND MAINTAINED

OWNER/DEVELOPER
 STONEWOOD BUSINESS CENTER
 GUILFORD I LIMITED PARTNERSHIP
 11628 LOG JUMP TRAIL
 ELLICOTT CITY, MARYLAND 21043

NO.	REVISION	DATE
10	AS-BUILT SWM WORK UNDER 3-10-06, INSTALLATION OF STORM DRAIN AND INLET	10/31/06

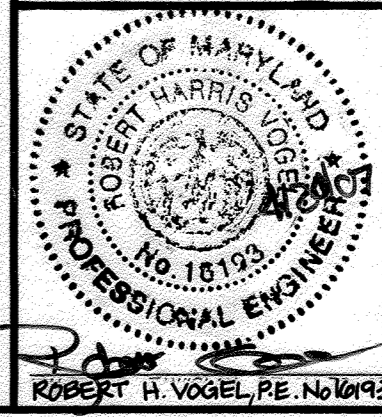
**SITE DEVELOPMENT PLAN
 LANDSCAPE PLAN**

STONEWOOD BUSINESS CENTER
 PARCEL A-2- E.G.U. SUBDIVISION
 SECTION 2 / AREA 6

TAX MAP 42 BLOCK 11
 6TH ELECTION DISTRICT

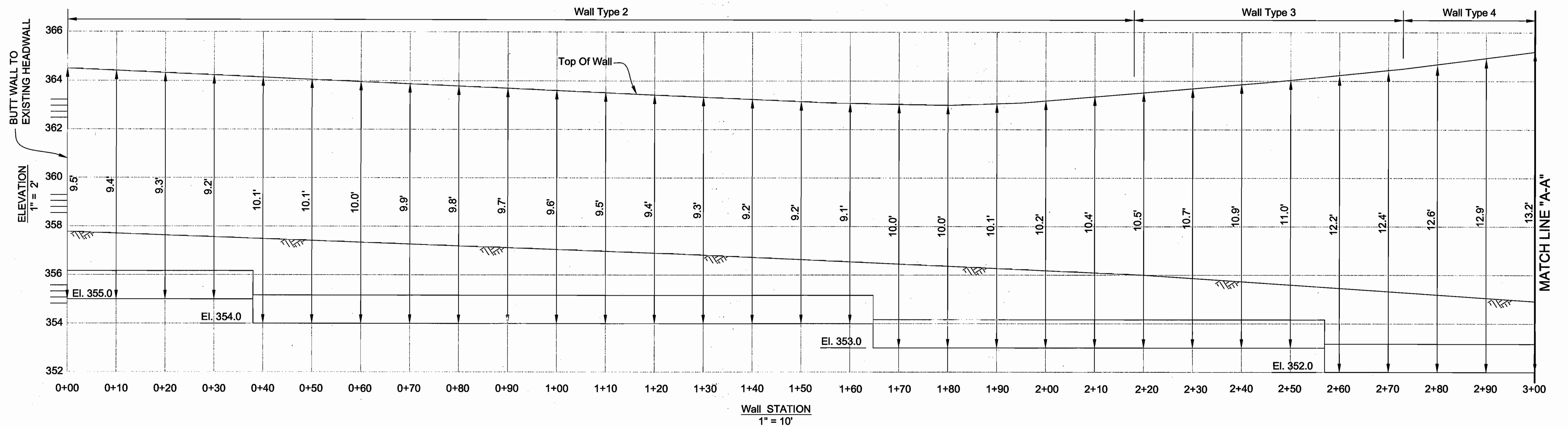
PARCEL 'A-2'
 HOWARD COUNTY, MARYLAND

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

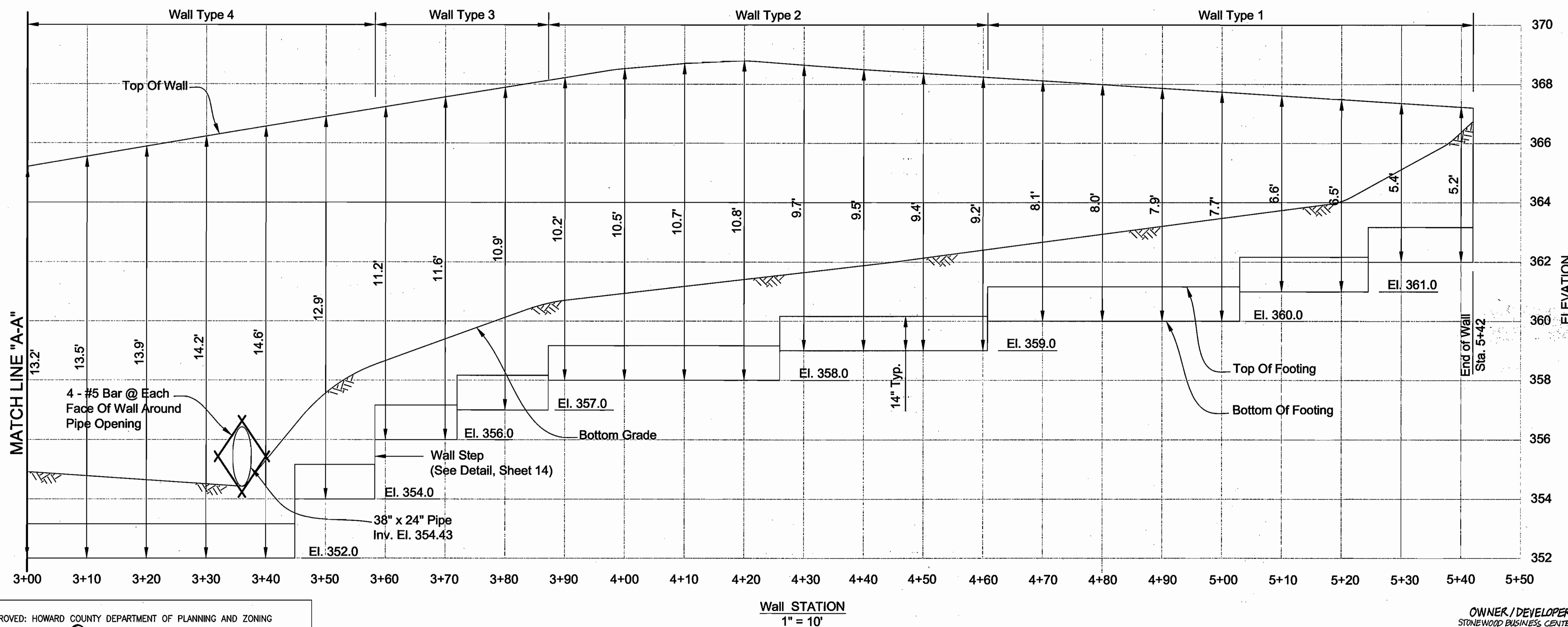


DESIGN BY: *WGZ*
 DRAWN BY: *DZ*
 CHECKED BY: *WGZ*
 DATE: FEB. 2007
 SCALE: 1"=50'
 W.O. NO.: 04-90

12 SHEET OF 14



Note: Verify Top Of Retaining Wall Elevation Prior To Construction



APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 12/07/06

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
RETAINING WALL PLAN AND ELEVATION
STONEWOOD BUSINESS CENTER
PARCEL 'A-2' - E.G.U. SUBDIVISION
SECTION 2 / AREA 6
TAX MAP 42 BLOCK 11 PARCEL 'A-2'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL
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ELLCOTT CITY, MD 21043 FAX: 410.461.8961

HILLIS-CARNES
ENGINEERING ASSOCIATES, INC.
12011 Guilford Road Suite 106 Annapolis Junction, Maryland 20701
Baltimore, (410) 880-4788 D.C. (301) 470-4239 Fax (410) 880-4098



DESIGN BY: HM
DRAWN BY: HM
CHECKED BY: RWS
DATE: SEPTEMBER 2006
SCALE: AS SHOWN
HCEA NO.: 03127-C

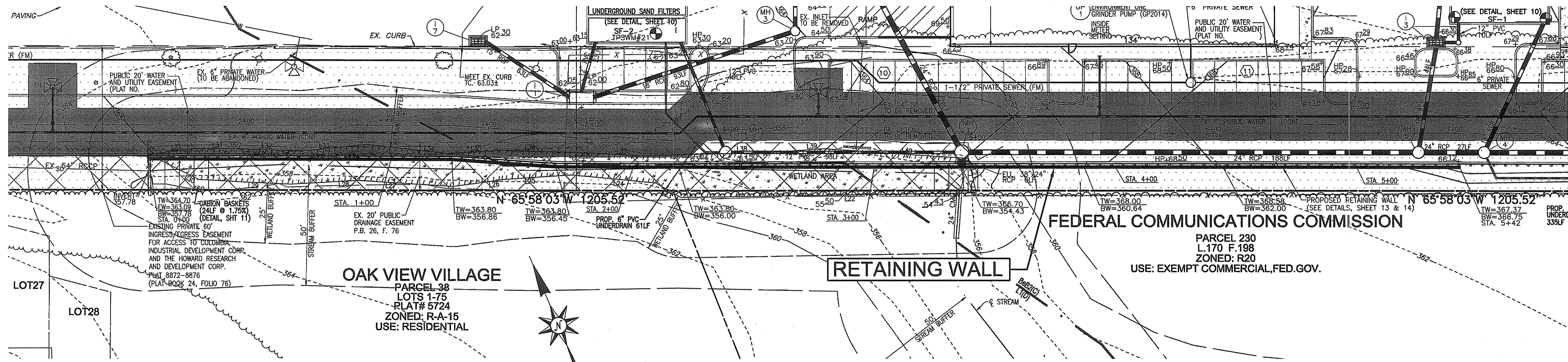
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 3/22/07

 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 5/16/06

 DIRECTOR DATE 5/11/07

OWNER / DEVELOPER
STONEWOOD BUSINESS CENTER
GUILFORD I LIMITED PARTNERSHIP
8600 SNOWDEN RIVER PARKWAY, #201
COLUMBIA, MARYLAND 21045
301-596-0222



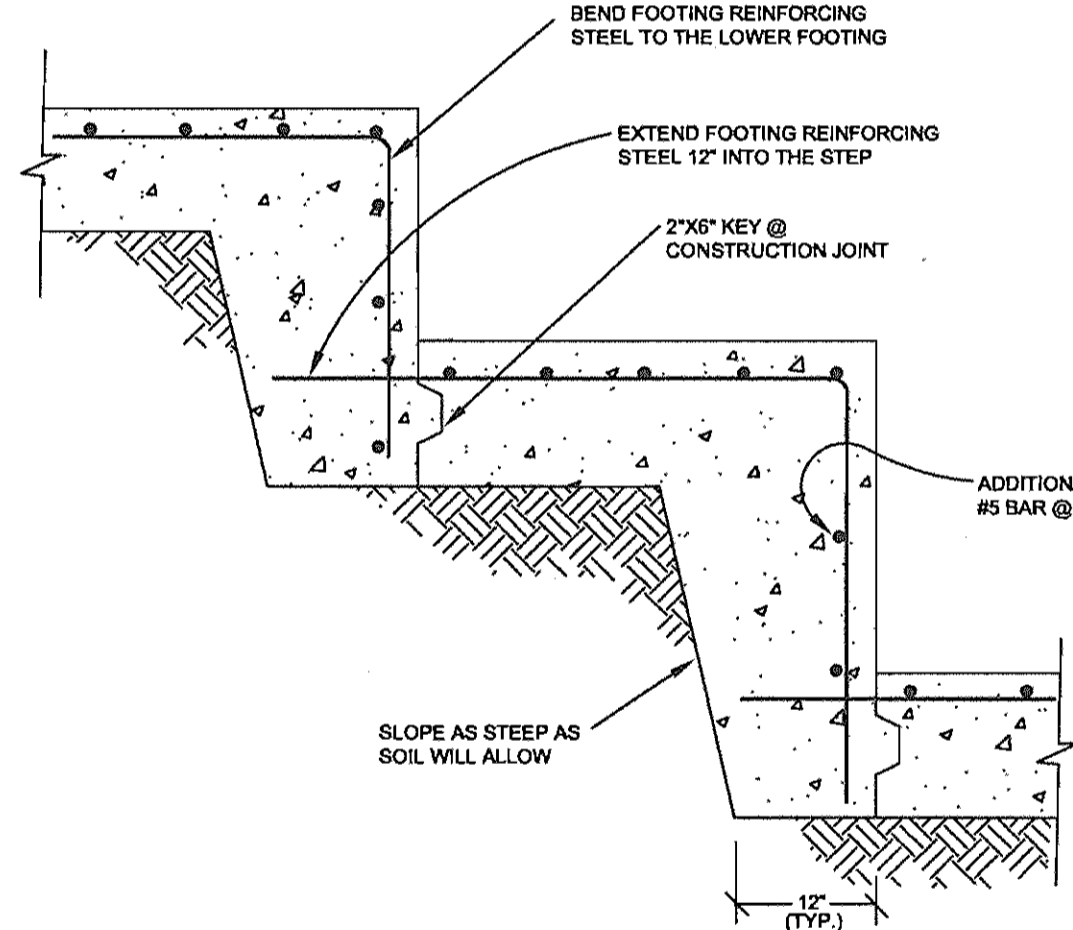
RETAINING WALL LOCATION PLAN

1" = 20'

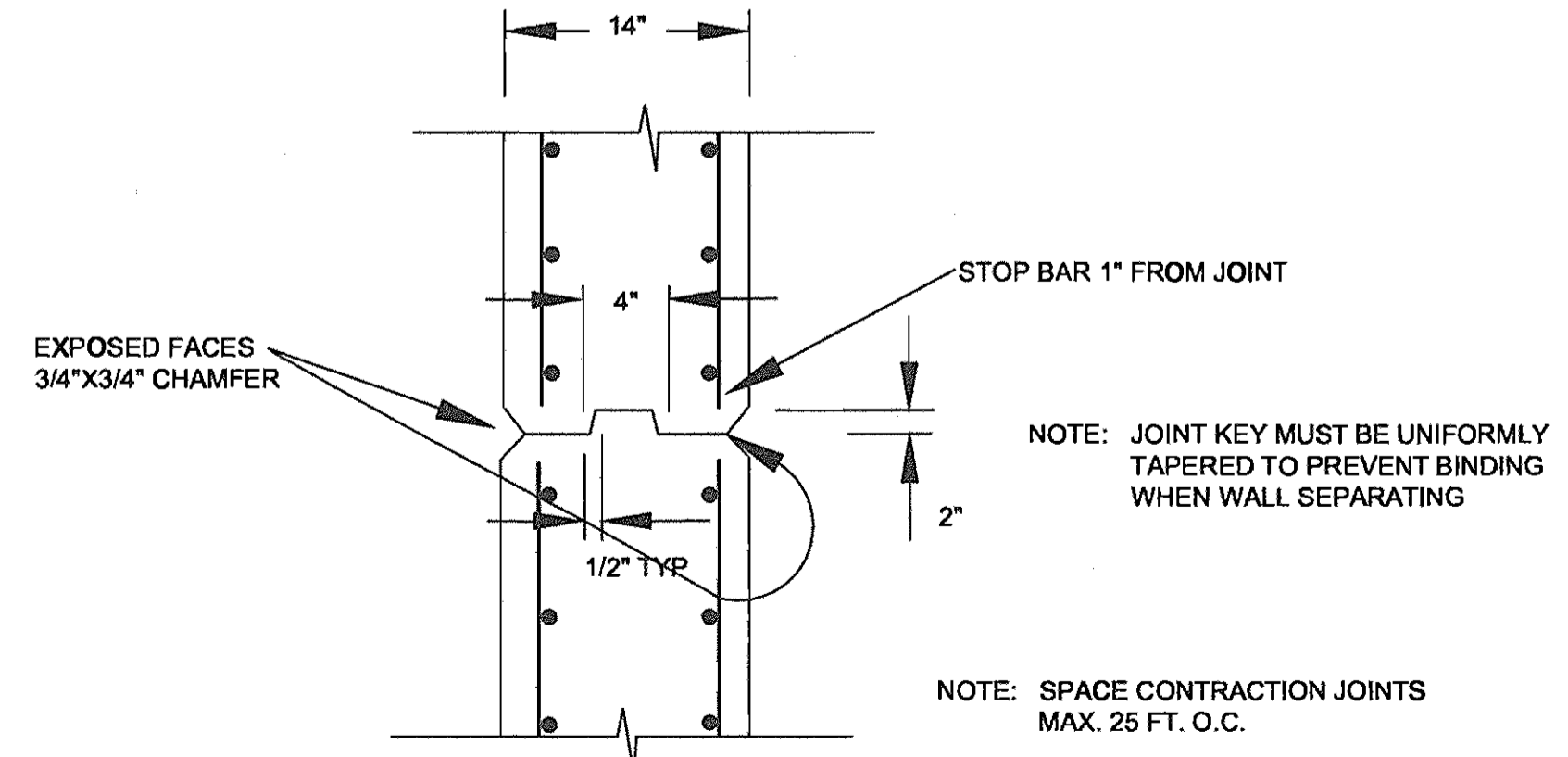
NOTES:

- 1.) Retaining walls shall only be constructed under the observation of a registered professional engineer and a (NICET, WACEL, or equiv.) certified soils technician.
- 2.) The required bearing pressure and suitable bearing soils beneath the wall system shall be verified in the field by a certified soils technician. Testing documentation must be provided to the Howard County Inspector prior to start of construction. The required bearing test shall be the Dynamic Cone Penetrometer test ASTM STP-399.
- 3.) The suitability of fill material shall be confirmed by the on-site soils technician. Each 8" lift must be compacted to a minimum 95% standard proctor density unless otherwise directed by site engineer and the testing report shall be made available to the Howard County Inspector upon completion of construction.

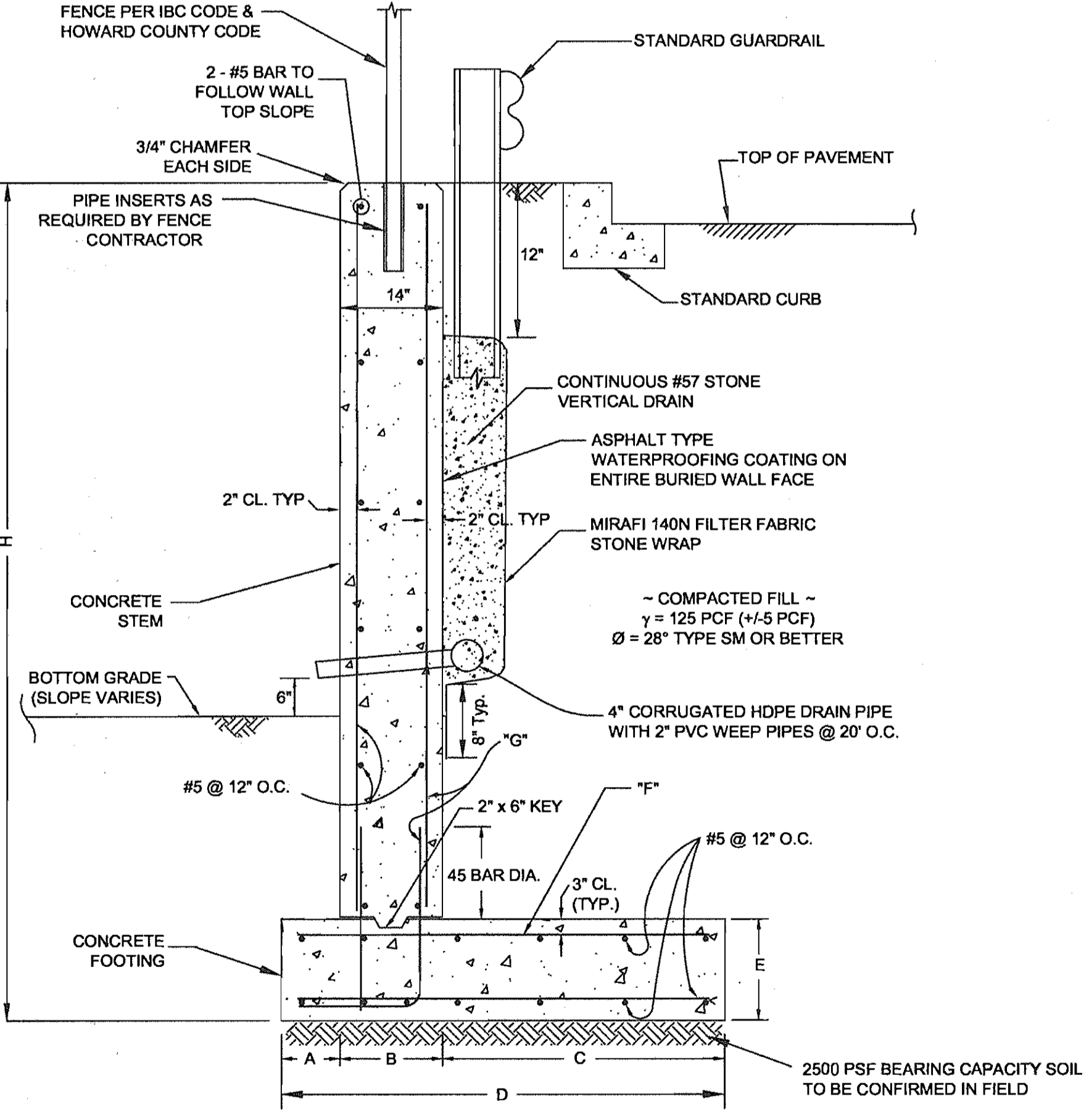
- Notes:
1. All Retaining Wall Concrete Shall Be 4000 PSI With Air Entrainment.
 2. Reinforcing Steel Shall Conform To ASTM Grade 60
 3. Wall Backfill Shall Be Compacted In Accordance With Howard Co. Specifications
 4. Concrete Work Shall Comply With The Latest ACI 318 Building Code For Concrete Structures
 5. All Rebar Splices Not Shown Shall Be A Minimum 40 Bar Diam.
 6. All Wall Exposed Surfaces Shall Be Mortar Patched And Sack-Rubbed Finished With Grout And Burlap. Any Flashings Shall Be Ground Flush.



WALL STEP DETAIL
NOT TO SCALE



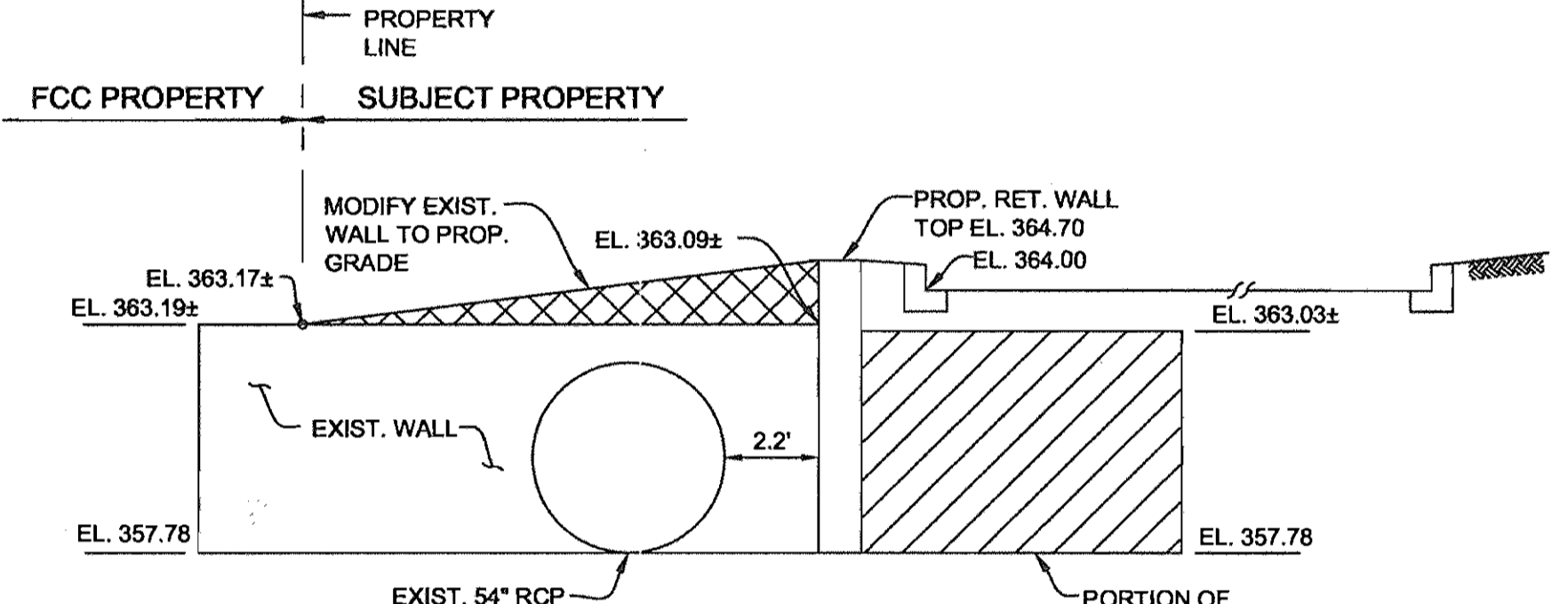
WALL STEM VERTICAL CONTRACTION JOINT C.J. DETAIL
NOT TO SCALE



WALL SECTION
NOT TO SCALE

Wall Type	A	B	C	D	E	Max. H	Footing Reinf	Stem Reinf
1	1'-10"	14"	2'-0"	5'-0"	14"	8'-6"	#5 @ 12"	#5 @ 12"
2	1'-10"	14"	3'-0"	6'-0"	14"	10'-6"	#5 @ 12"	#5 @ 12"
3	2'-4"	14"	3'-10"	7'-4"	14"	12'-6"	#6 @ 12"	#6 @ 12"
4	2'-8"	14"	4'-8"	8'-6"	14"	14'-6"	#7 @ 10"	#7 @ 10"

WALL DIMENSION CHART



SCHEMATIC HEADWALL DETAIL
N.T.S.

(FOR REFERENCE ONLY, NOT TO BE USED FOR CONSTRUCTION)

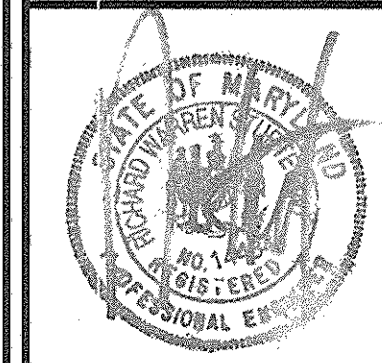
APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 12/07/06

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
RETAINING WALL DETAILS AND NOTES
STONEWOOD BUSINESS CENTER
PARCEL 'A-2' - E.G.U. SUBDIVISION
SECTION 2 / AREA 6
TAX MAP 42 BLOCK 11 PARCEL 'A-2'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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DESIGN BY: _____ HM
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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

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