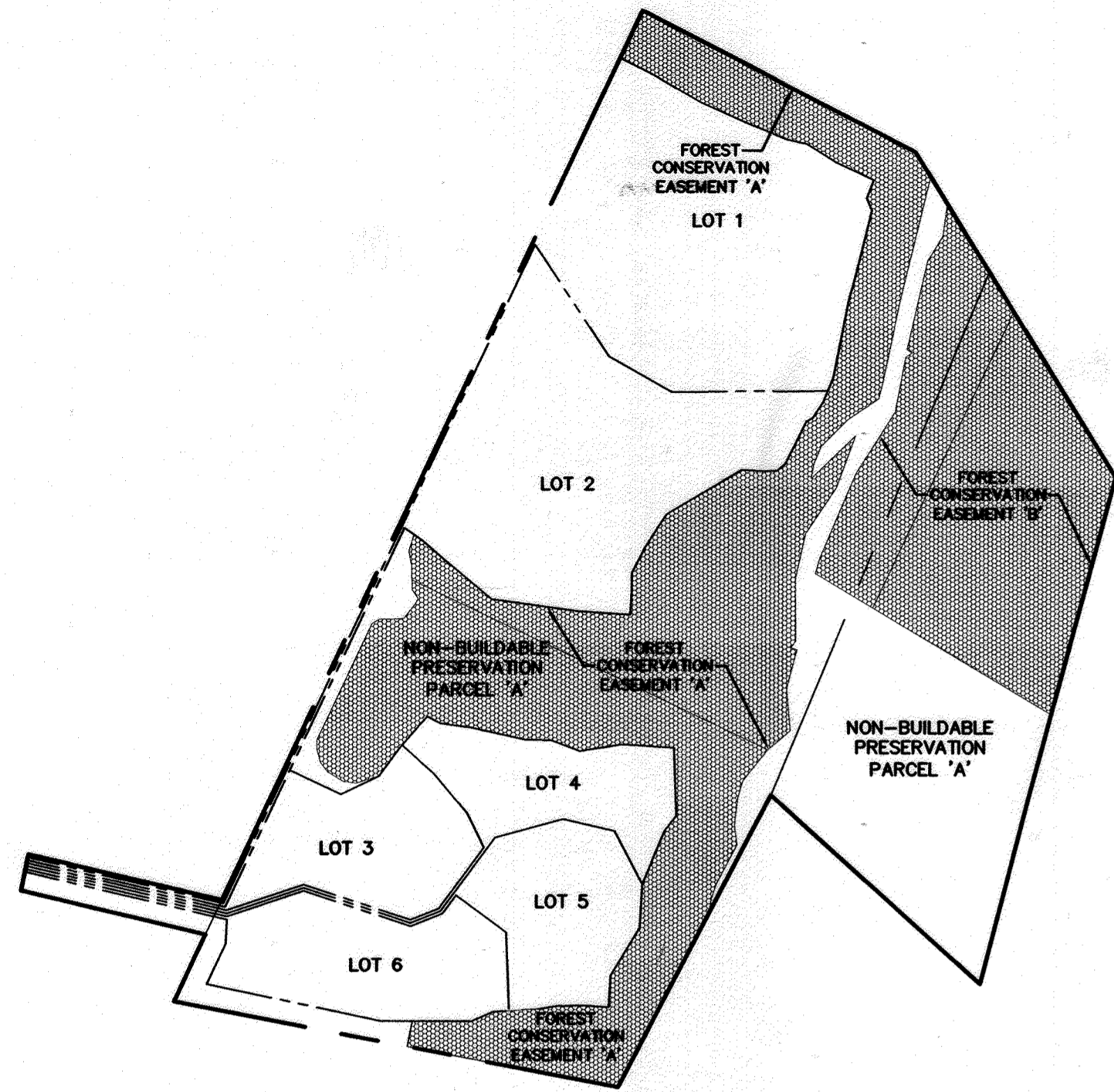
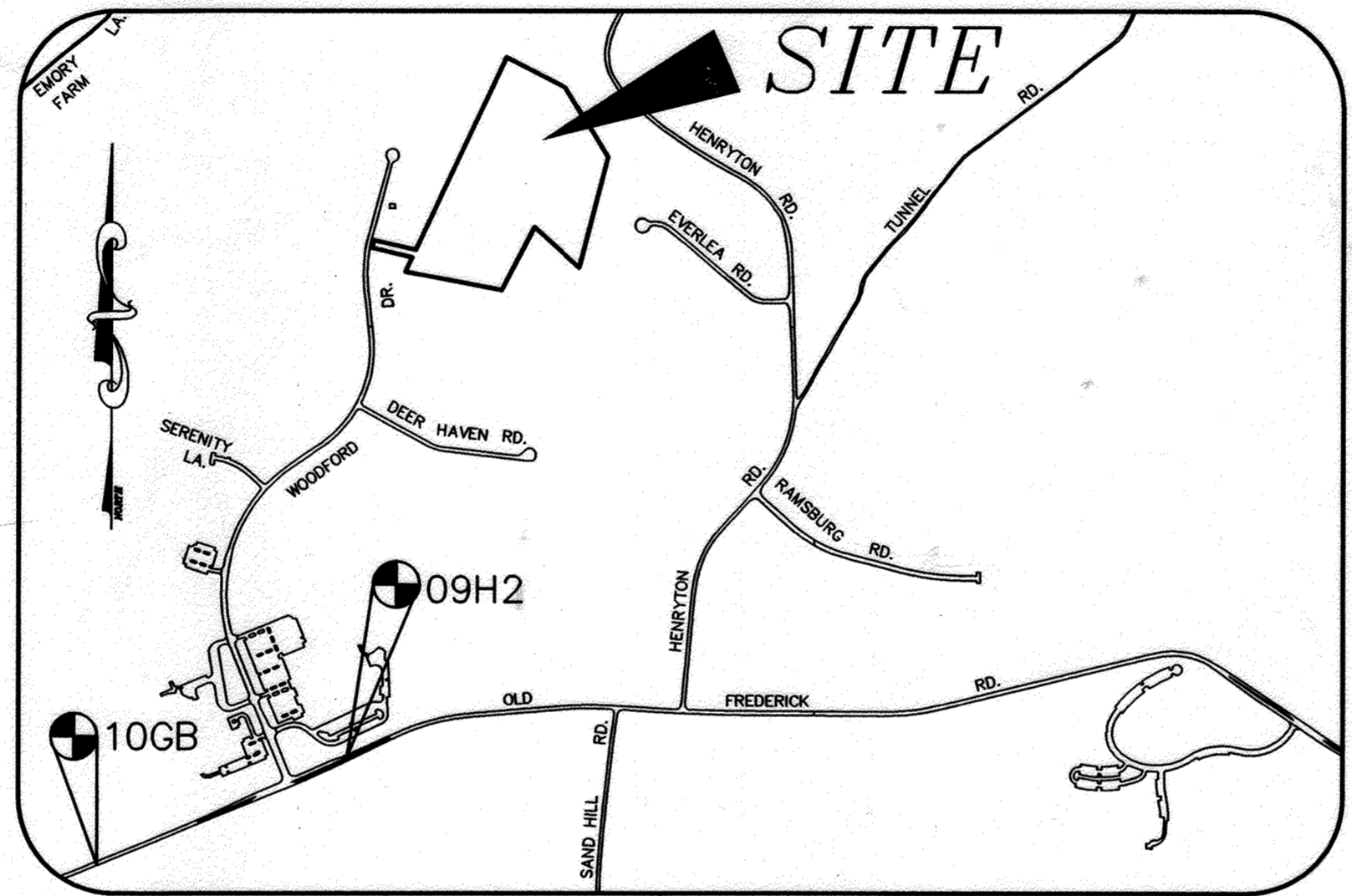


LOT NO.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
1	145,250 SF/3.33 Ac	5,003 SF/0.11 Ac	140,247 SF/3.22 Ac
2	134,180 SF/3.08 Ac	3,246 SF/0.08 Ac	130,934 SF/3.00 Ac
3	48,952 SF	1,096 SF	47,856 SF
4	44,097 SF	2,762 SF	41,335 SF
5	47,280 SF	2,462 SF	44,818 SF
6	53,972 SF	1,123 SF	52,849 SF

SUPPLEMENTAL PLANS MELCHIOR PROPERTY LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL 'A' THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND



LOT LAYOUT DETAIL
1" = 200'



VICINITY MAP
1" = 1000'
ADC MAP 11 GRID E7, F7

PROPOSED SUBDIVISION UNDER F-13-074
GROSS ACREAGE: 24.11 Ac
TOTAL AREA LOTS 1 & 2: 6.41 Ac
AREA AVAILABLE FOR FUTURE CLUSTER SUBDIVISION: 17.70 Ac

PROPOSED RESUBDIVISION UNDER F-13-075
17.70 / 4.25 = 4.16 CLUSTER LOTS
4 LOTS @ NET ACREAGE OF 50,000 SF PROPOSED
17.70 - 4.46 Ac (AREA OF CLUSTERED LOTS 3 THRU 6)
= 13.24 Ac (REQUIRED PRESERVATION PARCEL TO SUPPORT 4 CLUSTERED LOTS)

OWNER

DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

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.

Jeffrey S. Soman 12/13/13
SIGNATURE OF ENGINEER DATE
JEFFREY SLOMAN, PE
PRINTED NAME OF ENGINEER

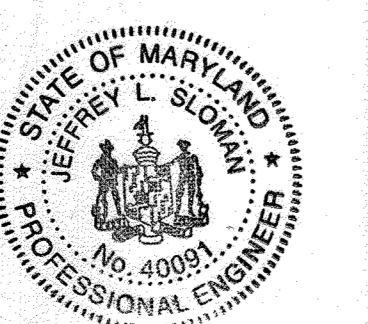
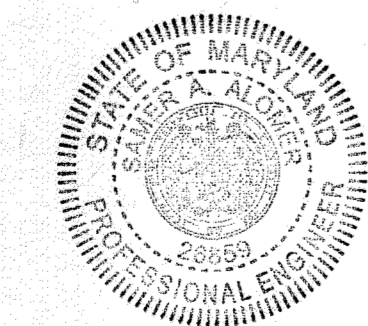
DEVELOPERS CERTIFICATE

I 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. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTION.

Robert Dorsey, Jr. 12-16-13
SIGNATURE OF DEVELOPER DATE
ROBERT DORSEY, JR., PRESIDENT, DORSEY FAMILY HOMES, INC.
PRINTED NAME OF DEVELOPER

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

John R. Robertson 12/16/13
SIGNATURE OF ENGINEER DATE
HOWARD SOIL CONSERVATION DISTRICT
Chad Edwards 1-9-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Kate Schaefer 1-13-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE



AS-BUILT CERTIFICATION FOR PSWM

I hereby certify that the facility shown on this plan was constructed as shown on the 'As-Built' plans and meets with the approved plans and specifications.

Jeffrey S. Soman 12/13/13
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 40091, EXP. DATE 2/13/15.
JEFFREY SLOMAN, P.E. DATE

SHEET NO.	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS AND LOT LAYOUT
3	SUPPLEMENTAL AND GRADING PLAN
4	SUPPLEMENTAL AND GRADING PLAN
5	SUPPLEMENTAL, LANDSCAPE, AND FOREST CONSERVATION PLAN
6	SUPPLEMENTAL, LANDSCAPE, AND FOREST CONSERVATION PLAN
7	SUPPLEMENTAL, LANDSCAPE, AND FOREST CONSERVATION PLAN
8	SUPPLEMENTAL, EROSION, AND SEDIMENT CONTROL PLAN
9	SUPPLEMENTAL, EROSION, AND SEDIMENT CONTROL PLAN
10	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
11	STORMWATER MANAGEMENT AND STORM DRAINAGE PLAN
12	STORMWATER MANAGEMENT AND STORM DRAINAGE PLAN
13	STORMWATER MANAGEMENT AND CONSTRUCTION DETAILS AND PROFILES
14	STORMWATER MANAGEMENT AND STREAM BANK RESTORATION DETAILS

STORMWATER MANAGEMENT PRACTICES

LOT #	ADDRESS	GREEN ROOF	PERMEABLE PAVEMENTS	REINFORCED TURF	DISCONNECTION OF ROOFTOP RUNOFF	DISCONNECTION OF NON-ROOFTOP RUNOFF	SHEETFLOW TO CONSERVATION AREAS	RAINFALL HARVESTING	SUBMERGED GRAVEL WETLANDS	LANDSCAPE INFILTRATION	INFILTRATION BERMS	DRY WELLS	MICRO-BIORETENTION	RAIN GARDENS	SWALES	ENHANCED FILTERS
		A-1 (Y/N)	A-2 (Y/N)	A-3 (Y/N)	N-1 (NUMBER)	N-2 (Y/N)	N-3 (Y/N)	M-1 (NUMBER)	M-2 (NUMBER)	M-3 (NUMBER)	M-4 (NUMBER)	M-5 (NUMBER)	M-6 (NUMBER)	M-7 (NUMBER)	M-8 (NUMBER)	M-9 (NUMBER)
1	WOODFORD DR.	N	Y	N	0	N	N	0	0	0	0	0	1	0	0	0
2	WOODFORD DR.	N	N	N	0	N	N	0	0	0	0	0	2	0	0	0
3	WOODFORD DR.	N	N	N	0	N	N	0	0	0	0	0	1	0	0	0
4	WOODFORD DR.	N	Y	N	0	N	N	0	0	0	0	0	1	0	0	0
5	WOODFORD DR.	N	Y	N	0	N	N	0	0	0	0	0	1	0	0	0
6	WOODFORD DR.	N	N	N	0	N	N	0	0	0	0	0	2	0	0	0
D/W		N	N	N	0	N	N	0	0	0	0	0	3	0	0	0

EROSION AND SEDIMENT CONTROL NOTES

- ALL SEDIMENT CONTROL OPERATIONS ARE TO BE DONE IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY VOLUME IV DESIGN MANUAL AND THE STANDARDS AND SPECIFICATIONS FOR SEDIMENT CONTROL IN DEVELOPING AREAS.
- ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS THE FIRST ORDER OF BUSINESS.
- ALL EXCAVATED MATERIALS SHALL BE STOCKPILED ON THE UPGRADE SIDE OF THE MAIN TRENCH.
- EXCAVATION AND BACKFILL SHALL BE LIMITED TO THAT WHICH CAN BE STABILIZED WITHIN ONE WORKING DAY.
- IMMEDIATELY FOLLOWING BACKFILL OF THE SEWER TRENCH, ALL DISTURBED AREAS ARE TO BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION AND SEEDING NOTES SHOWN ON THIS SHEET.
- THROUGHOUT THE PROJECT, THE CONTRACTOR SHALL REGULARLY INSPECT ALL SEDIMENT CONTROL DEVICES AND PROVIDE ALL NECESSARY MAINTENANCE TO INSURE THAT ALL DEVICES ARE IN OPERATIVE CONDITION.
- ALL SEDIMENT CONTROL FACILITIES SHALL REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

NOTES

- SITE ANALYSIS DATA:
LOCATION: TAX MAP: 10 PARCEL: 184 GRID 13
ELECTION DISTRICT: THIRD
ZONING: RR-DEO
TOTAL GROSS SITE AREA: 24.11 AC±
TOTAL NET SITE AREA: 24.11 AC±
AREA OF 15-24.9% SLOPES: 8.18 AC±
AREA OF >=25% SLOPES: 4.37 AC±
LIMIT OF DISTURBED AREA: 4.58 AC±
PROPOSED USE FOR SITE: RESIDENTIAL
TOTAL NUMBER OF UNITS: 2 (NOT INCL. EXIST. DWELLING TO BE REMOVED) SF LOTS BUILDABLE BULK PARCEL
TYPE OF PROPOSED UNIT: SFD
DEED REFERENCE: 4038 / 046
PREVIOUS DPZ NUMBERS: F-07-214 WP-06-132 WP-13-049 ECP-13-037 F-07-215 WP-08-039 WP-13-050 WP-13-168
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 09H2 & 10GB
STA. No. 09H2 N 601.6767084 E 1.528 520.9983 E. 640.22
STA. No. 10GB N 602.2759611 E 1.331 069.3672 E. 597.35
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (COUNCIL BILL 45-2003). DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION OR BUILDING/GRADING PERMIT.
- BOUNDARY SHOWN HEREON IS BASED ON FIELD RUN SURVEY BY MILDENBERG, BOENDER AND ASSOC. IN OCTOBER, 2012.
- ON-SITE TOPOGRAPHY SHOWN HEREON IS BASED ON FIELD RUN SURVEY BY CHRISTOPHER CONSULTANTS, INC. IN NOVEMBER, 2004. OFFSITE TOPOGRAPHY BASED ON HOWARD COUNTY GIS.
- FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1202 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT FOR THIS SUBDIVISION WILL BE FULFILLED BY ON-SITE FOREST CONSERVATION (RETENTION).
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
- FOREST STRAND DELINEATION WAS PERFORMED BY ECO-SCIENCE, INC. IN NOVEMBER, 2012. WETLAND DELINEATION WAS TAKEN FROM PREVIOUS PLANS F-07-214 AND F-07-215. A FIELD INVESTIGATION WAS PERFORMED IN NOVEMBER, 2012 AND IT WAS DETERMINED THAT THERE WERE NO SUBSTANTIAL DEVIATIONS FROM THE WETLAND DELINEATION SHOWN ON THOSE PLANS.
- FINANCIAL SURETY FOR PERIMETER LANDSCAPING AND TRASH PAD SCREENING IN THE AMOUNT OF \$10,000 FOR 35 SHADE TREES AND 10 SHRUBS SHALL BE POSTED WITH THE DEVELOPER'S AGREEMENT FOR THIS SUBDIVISION, F-13-074.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL.
- NO CEMETERIES EXIST ON SITE.
- THIS PROPOSED SUBDIVISION WILL CONSIST OF SINGLE FAMILY DETACHED DWELLINGS.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
A) WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE, A WIDER WIDTH MAY BE REQUIRED IN CERTAIN CASES-SEE NOTE BELOW).
B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2").
C) GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. OF 45 FOOT TURNING RADIUS.
D) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).
E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD PLAN WITH NO MORE THAN 1 FOOT OF DEPTH OVER DRIVEWAY SURFACE.
F) STRUCTURE CLEARANCES - MINIMUM 12 INCHES
G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT ONTO THE PIPESTEM LOT DRIVEWAY.
15. STORMWATER MANAGEMENT IS PROVIDED VIA PERVIOUS CONCRETE (M-2) DISCONNECTION AND MICRO-BIORETENTION FACILITIES IN ACCORDANCE WITH THE 2000 WDE STORMWATER DESIGN MANUAL. ALL ESD PRACTICES WILL BE PRIVATELY OWNED AND MAINTAINED. PRIOR TO SIGNATURE APPROVAL OF THE FINAL PLAN OR SITE DEVELOPMENT PLAN, THE DEVELOPER WILL BE REQUIRED TO EXECUTE THE DECLARATION OF COVENANT AND/OR A DEVELOPER'S AGREEMENT FOR THE CONSTRUCTION OF THE STORMWATER MANAGEMENT PRACTICES AND A MAINTENANCE AGREEMENT FOR THE PRIVATELY OWNED AND MAINTAINED ESD PRACTICES (DISCONNECTIONS, PERVIOUS CONCRETE AND MICRO-BIORETENTION FACILITIES).
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410)313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1202 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT FOR THIS SUBDIVISION WILL BE FULFILLED BY THE RETENTION OF 9.37 AC (408,157.2 LBS.) INTO FOREST CONSERVATION EASEMENTS A (6.08 AC) AND B (3.29 AC) WHICH IS SUFFICIENT TO MEET THE BREAK-EVEN POINT OF 9.37 AC OF REQUIRED RETENTION.
- FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1202 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT. NO GRADING, REMOVAL OF VEGETATIVE COVER OF TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR OTHER BUFFERS, FLOODPLAINS, OR FOREST CONSERVATION EASEMENT AREAS EXCEPT AS SHOWN ON THE APPROVED SUPPLEMENTAL PLANS.
- WATER WILL BE PUBLIC (CONTRACT NO. 44-4791-D) AND SEWER WILL BE PRIVATE FOR THIS SUBDIVISION.
- WATER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE WA CONNECTIONS TO EXISTING CONTRACT 44-3478.
- PUBLIC WATER ALLOCATION WILL BE GRANTED AT THE TIME OF THE ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE.
- THERE IS AN EXISTING DWELLING AND GRAVEL DRIVEWAY ON BUILDABLE BULK PARCEL A THAT WILL BE REMOVED.
- ENVIRONMENTAL CONCEPT PLAN, ECP-11-037, FOR THIS SUBDIVISION WAS APPROVED ON FEBRUARY 11, 2013.
- ANY PRIVATE WELL OR SEPTIC SYSTEM ENCOUNTERED SHALL BE PROPERLY ABANDONED AND THE HEALTH DEPARTMENT NOTIFIED OF SUCH.
- A USE-IN-COMMON ACCESS MAINTENANCE AGREEMENT FOR LOTS 1-6 SHALL BE RECORDED SIMULTANEOUSLY IN THE LAND RECORDS OFFICE OF HOWARD COUNTY, MARYLAND WITH THE RECORD PLAN.
- HORIZONTAL GEOMETRY OF THE MICRO-BIORETENTION FACILITIES MAY BE MODIFIED WHILE MAINTAINING SURFACE AREA.
- A PRIVATE RANGE OF ADDRESS SIGN SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPER'S/OWNER'S EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-2430 FOR DETAILS AND COST ESTIMATE.
- A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) PERMIT WILL BE OBTAINED (TRACKING NUMBER 201360983) FOR THE PROPOSED WATER MAIN AND DRIVEWAY CONSTRUCTION THROUGH THE WETLANDS AND STREAM BANK BUFFER.
- NO NOISE STUDY IS REQUIRED FOR THIS PROJECT.
- A TRAFFIC STUDY WAS PREPARED BY THE TRAFFIC GROUP, INC. IN JANUARY, 2013.
- NO GRADING OR DISTURBANCE IS ALLOWED IN THE STREAM, WETLANDS, OR THEIR BUFFER OR FLOODPLAIN AREA UNLESS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING.
- WAIVER PETITION WP-13-168 REQUESTING A WAIVER TO SECTION 16.1202(a)(7) TO ALLOW TO THE REMOVAL OF SIX (6) SPECIMEN TREES WAS GRANTED ON MAY 15, 2013.
- WAIVER PETITION WP-13-168 REQUESTING A WAIVER TO SECTION 16.116(a)(3) TO ALLOW A PORTION OF THE 100-FOOT STREAM BANK BUFFER TO BE INCLUDED WITHIN THE AREAS OF LOTS 1 AND 2 WAS GRANTED ON MAY 15, 2013.
- THE GRADING IN THE ENVIRONMENTAL FEATURES FOR INSTALLATION OF PUBLIC WATER, SEWER AND / OR UTILITIES ARE CONSIDERED ESSENTIAL DISTURBANCE BY DPZ.
- THIS PROJECT WILL BE SUBMITTED FOR FINAL SUBDIVISION APPROVAL IN TWO PHASES. THE FIRST PHASE WILL SUBDIVIDE THE PROPERTY INTO LOTS 1, 2, AND BUILDABLE BULK PARCEL 'A'. THE SECOND PHASE WILL CONSIST OF SUBDIVIDING BULK PARCEL 'A' INTO LOTS 3, 4, 5, 6 AND NON-BUILDABLE PRESERVATION PARCEL 'A'.
- FINAL PLANS F-07-214 AND F-07-215 WERE VOIDED ON JANUARY 26, 2009.
- WAIVER PETITIONS WP-13-49 AND WP-13-050 WERE APPLIED FOR TO REACTIVATE FINAL PLANS F-07-214 AND F-07-215. THESE WAIVER PETITIONS WERE DENIED ON OCTOBER 25, 2012.
- GRADING IN ENVIRONMENTAL FEATURES FOR THE SHARED DRIVEWAY AND/OR UTILITIES IS CONSIDERED ESSENTIAL DISTURBANCE BY DPZ.
- MARYLAND DEPARTMENT OF THE ENVIRONMENT PERMITS HAVE BEEN APPLIED FOR AND ISSUED TRACKING NUMBER 201360983.
- THERE ARE FLOODPLAIN, STEEP SLOPES, STREAMS, WETLANDS AND THEIR BUFFERS LOCATED ON THIS SITE.
- THE FLOODPLAIN STUDY APPROVED UNDER FINAL PLANS F-07-214 AND F-07-215 WAS SUBMITTED AS PART OF THIS FINAL PLAN.
- HOA DOCUMENTS ARE RECORDED WITH THE MARYLAND DEPARTMENT OF ASSESSMENTS AND TAXATION.
- HOA COVENANTS AND RESTRICTIONS ARE RECORDED IN THE LAND RECORDS OFFICE OF HOWARD COUNTY SIMULTANEOUSLY WITH RECORDED OF F-13-075.
- NON-BUILDABLE PRESERVATION PARCEL 'A' WILL BE OWNED BY THE HOMEOWNERS' ASSOCIATION WITH THE EASEMENT HOLDER BEING HOWARD COUNTY, MD.
- ON-LOT STORMWATER MANAGEMENT DEVICES ARE SUBJECT TO RECORDED DECLARATION OF COVENANTS (DOC).

MELCHIOR PROPERTY
LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL 'A'
TAX MAP 10 - GRID 13 PARCEL 184
HOWARD COUNTY, MARYLAND
3rd ELECTION DISTRICT
COVER SHEET

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
6800 Bertrams Road, Suite 150, Ellicott City, MD 21115
(410) 997-0298 Fax
(410) 997-0296

1 OF 15
F-13-074

SPECIMEN TREE TABLE

SPECIMEN TREE NO.	SPECIES	DIA. (IN)	CONDITION	TO BE REMOVED? (YES/NO)
1	TULIP POPLAR	30"	GOOD	YES
2	TULIP POPLAR	30"	GOOD	YES
3	TULIP POPLAR	32.5"	GOOD	NO
4	TULIP POPLAR	32.5"	GOOD	NO
5	TULIP POPLAR	32"	GOOD	NO
6	TULIP POPLAR	34"	GOOD	NO
7	TULIP POPLAR	31"	GOOD	YES
8	TULIP POPLAR	32.5"	GOOD	YES
9	TULIP POPLAR	30.5"	GOOD	YES
10	TULIP POPLAR	32"	GOOD	NO
11	TULIP POPLAR	32"	GOOD	NO
12	TULIP POPLAR	31"	GOOD	NO
13	TULIP POPLAR	31"	GOOD	NO
14	BLACK CHERRY	46"	POOR	YES

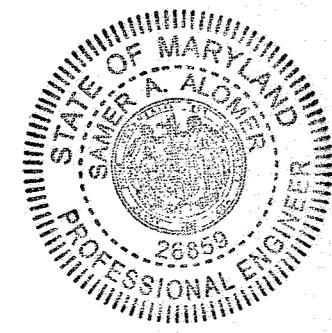
FOREST CONSERVATION EASEMENT HATCHING NOT SHOWN ON THIS PLAN FOR CLARITY.

LEGEND

- EXISTING SLOPES BETWEEN 15%-24.99%
- EXISTING SLOPES 25% AND GREATER
- EXISTING APPROVED SEPTIC EASEMENT AREA
- EXISTING SOIL AND SOIL DIVISION LINE
- EXISTING SPECIMEN TREE TO REMAIN
- EXISTING SPECIMEN TREE TO BE REMOVED
- LIMIT OF DISTURBANCE



THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET



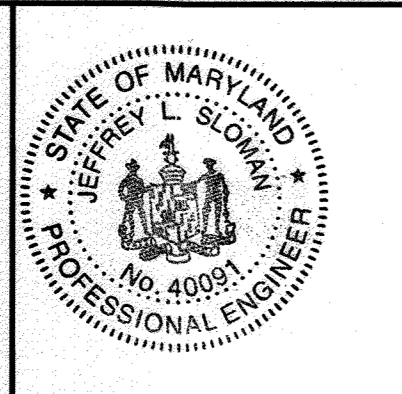
OWNER
DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410) 465-7200

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Jeffrey L. Sloman
JEFFREY L. SLOMAN
CHIEF, DEVELOPMENT ENGINEERING DIVISION

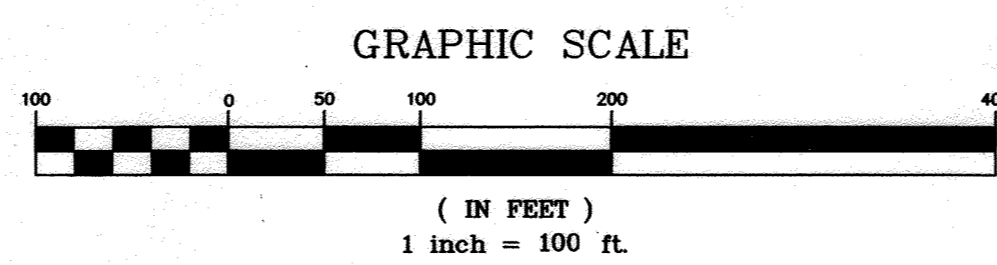
1-9-14
DATE

1-13-14
DATE



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 40081, EXP. DATE 2/13/15.

Jeffrey L. Sloman
JEFFREY L. SLOMAN, P.E.
11/18/13
DATE



date	NOV 2013	engineering	JLS	approval	RH
project	12-028	illustration	JLS	scale	1"=100'

no.	description	revisions	date

MELCHIOR PROPERTY
LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A
TAX MAP 10 - GRID 13 PARCEL 164
HOWARD COUNTY, MARYLAND
3rd ELECTION DISTRICT
EXISTING CONDITIONS AND LOT LAYOUT

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
6800 Deerpath Road, Suite 180, Elkridge, MD 21075
(410) 997-0286 Bait. (410) 997-0288 Fax.

GRADING LEGEND

- LOD --- LIMIT OF DISTURBANCE
- - - 100 --- EXISTING CONTOUR
- 100 --- PROPOSED CONTOUR
- 00x00 --- PROPOSED SPOT ELEVATION
- 100.00(TW) --- PROPOSED GROUND ELEVATION ON "HIGH" SIDE OF RETAINING WALL
- 100.00(BW) --- PROPOSED GROUND ELEVATION ON "LOW" SIDE OF RETAINING WALL
- [Hatched Box] --- EXISTING SLOPES 25% AND GREATER
- [Hatched Box] --- EXISTING APPROVED SEPTIC EASEMENT AREA
- [Hatched Box] --- EXISTING SOIL AND SOIL DIVISION LINE
- [Hatched Box] --- EXISTING WETLAND
- [Hatched Box] --- EXISTING 100-YEAR FLOODPLAIN
- [Hatched Box] --- SECTION LINE THROUGH MICRO-BIORETENTION FACILITY
- [Hatched Box] --- EXISTING TREELINE
- [Hatched Box] --- PROPOSED TREELINE
- [Hatched Box] --- PRIVATE USE-IN-COMMON ACCESS, DRAINAGE & UTILITY EASEMENT FOR THE USE AND BENEFIT OF LOTS 1, 2, AND BULK PARCEL 'A'
- [Hatched Box] --- PUBLIC WATER & UTILITY EASEMENT

GRADING PLAN KEY MAP
1" = 200'

SEE SHEETS 8 AND 9 FOR EROSION AND SEDIMENT CONTROL DEVICE LOCATIONS AND SHEET 10 FOR SEQUENCE OF CONSTRUCTION. ALL SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING.

OWNER
DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

ENGINEER'S CERTIFICATE

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

SIGNATURE OF ENGINEER: *[Signature]* DATE: 7/16/15
R. JACOB HIKMAT, P.E.
PRINTED NAME OF ENGINEER

DEVELOPERS CERTIFICATE

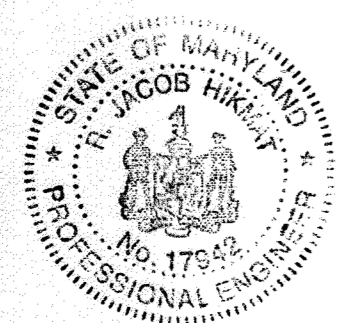
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE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

SIGNATURE OF DEVELOPER: *[Signature]* DATE: 7/16/15
ROBERT DORSEY, JR., PRESIDENT, DORSEY FAMILY HOMES, INC.
PRINTED NAME OF DEVELOPER

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

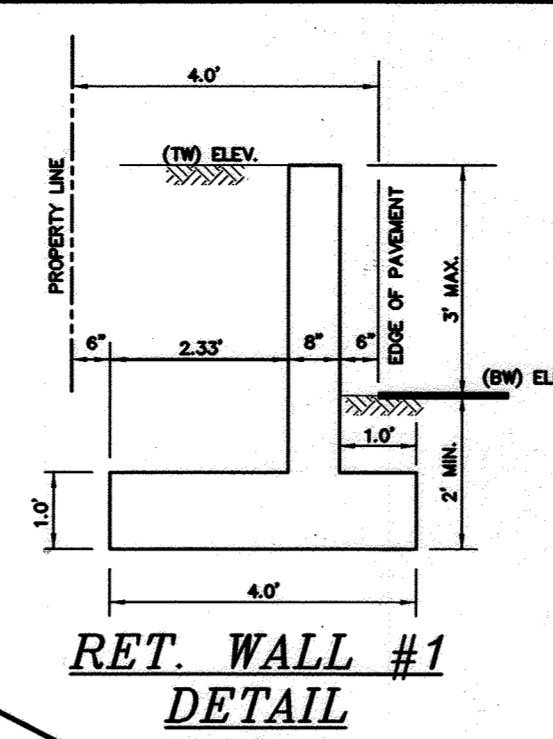
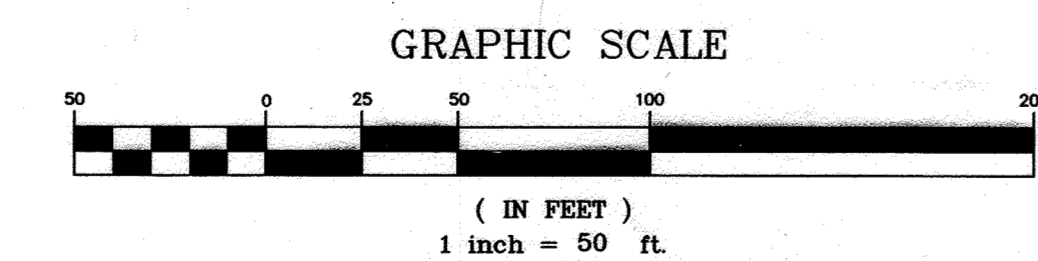
SIGNATURE OF APPROVED: *[Signature]* DATE: 7/22/15
HOWARD SOIL CONSERVATION DISTRICT
APPROVED: DEPARTMENT OF PLANNING AND ZONING

SIGNATURE OF CHIEF: *[Signature]* DATE: 7/29/15
CHIEF, DEVELOPMENT ENGINEERING DIVISION
SIGNATURE OF CHIEF: *[Signature]* DATE: 8/3/15
CHIEF, DIVISION OF LAND DEVELOPMENT



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP DATE 09/03/16.

R. JACOB HIKMAT, P.E. DATE: 7/16/15



THE DRIVEWAY OF LOTS 1, 4 AND 5 WILL UTILIZE PERVIOUS CONCRETE FOR THE DRIVEWAY. SEE SHEET 13 FOR DETAILS.

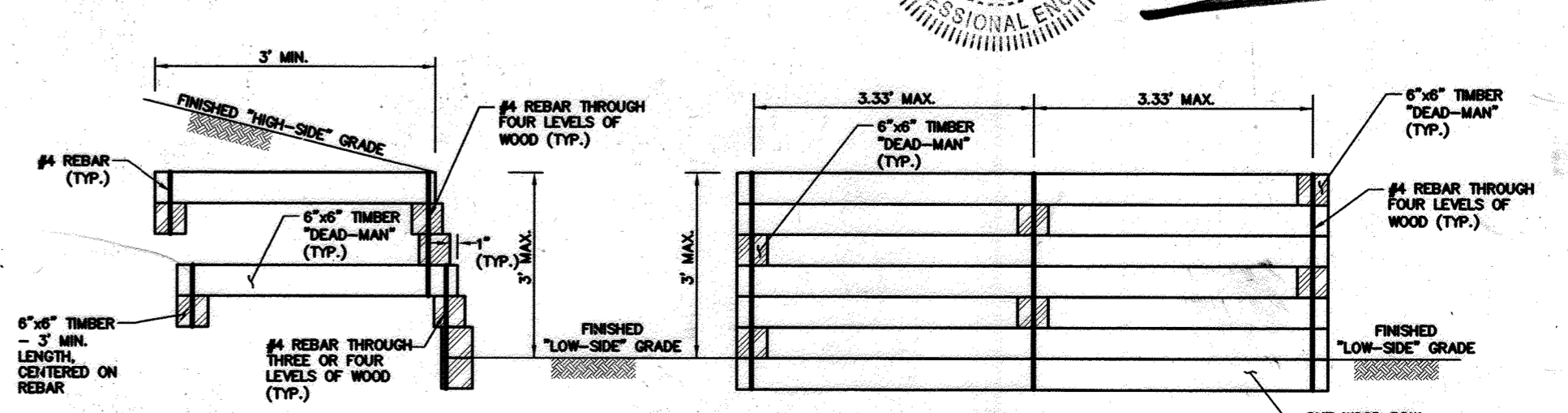
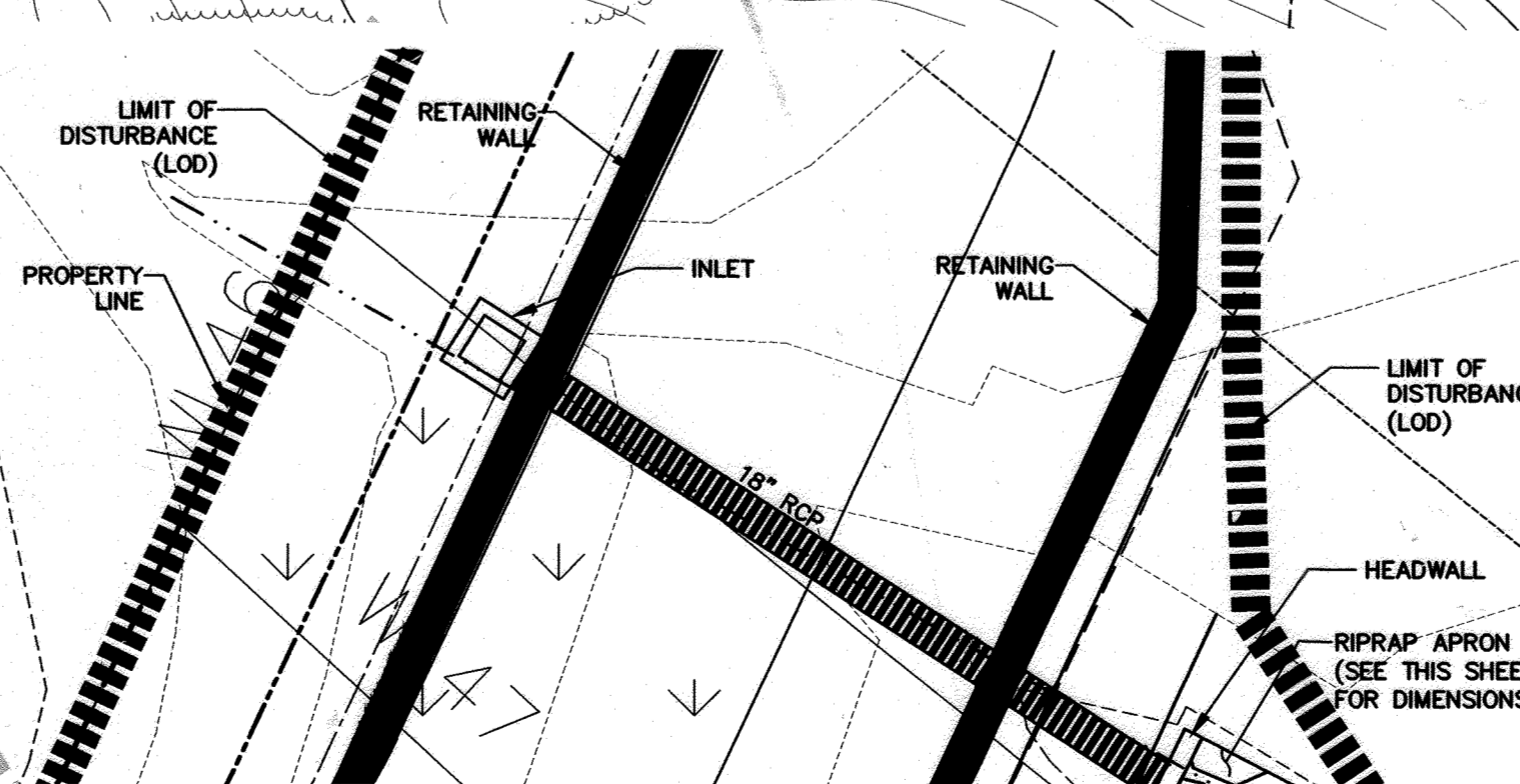
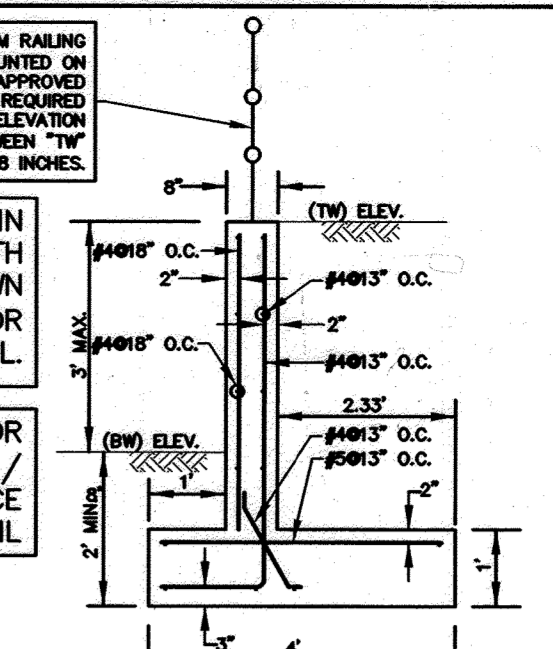
CONTRACTOR TO EXERCISE CAUTION TO ENSURE THAT NO CONSTRUCTION OR DISTURBANCE OCCURS OUTSIDE THE LIMIT OF DISTURBANCE SHOWN ON THESE PLANS.

SOIL FOR DEVELOPMENT OF THIS SITE TO BE LOCATED WITHIN THE LIMIT OF DISTURBANCE SOUTH OF THE STREAM BUFFER. NO STOCKPILING OF SOIL IS ALLOWED OUTSIDE OF LIMIT OF DISTURBANCE.

NO HOUSES ARE TO BE BUILT PER THESE PLANS.

WALL TO BE POURED IN PLACE CONCRETE WITH REINFORCEMENT SHOWN (3,500 PSI MIN.) OR APPROVED EQUAL.

SEE SHEET 13 FOR RETAINING WALL / ENDWALL INTERFACE DETAIL



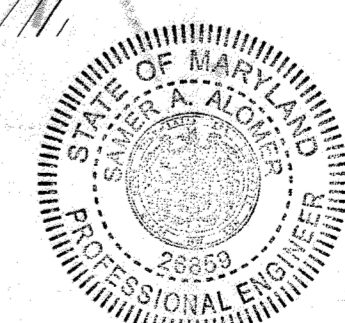
DETAIL - CONCRETE RETAINING WALL
(ALONG USE-IN-COMMON DRIVEWAY)
NOT TO SCALE

MATCHLINE SHEET 4

NOTE: SEE SHEET 15 OF 15 FOR FOR MS-DW-G DETAILS

AS-BUILT CERTIFICATION FOR PSMW

I hereby certify that the facility shown on this plan was constructed as shown on the 'As-Built' plans and meets with the approved plans and specifications.



date	JULY 2015	approval	RJH
project	12-028	scale	1"=50'
illustration	JIS	description	

ADD REFERENCE NOTE	DEC. 2022	date	
1. ELIMINATE RET. WALL #4 & #5. REPLACE WITH APPROVED RET. WALL #1. REVISE GRADING. LOD	7/16/15	description	
2. ELIMINATE RET. WALL #4 & #5. REPLACE WITH APPROVED RET. WALL #1. REVISE GRADING. LOD	7/16/15	revisions	

REVISED
MELCHIOR PROPERTY
LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A
TAX MAP 10 - GRID 13 PARCEL 184
3rd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SUPPLEMENTAL AND GRADING PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
6800 Deerpath Road, Suite 150, Beltsville, MD 21076
(410) 997-0286 Fax
(410) 997-0286 Bait

GRADING LEGEND

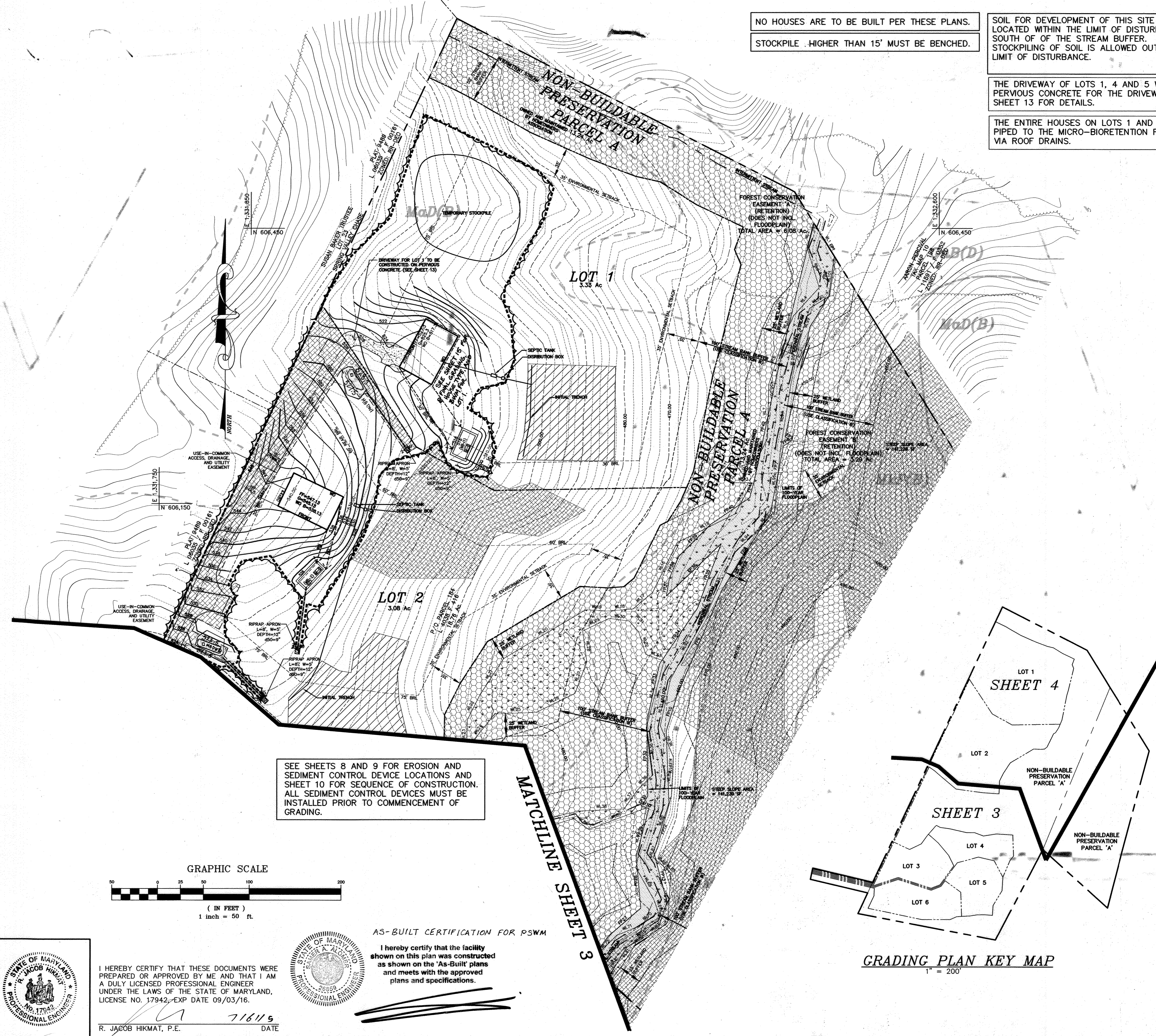
- LOD --- LIMIT OF DISTURBANCE
- - - 100 --- EXISTING CONTOUR
- 100 --- PROPOSED CONTOUR
- 00x00 PROPOSED SPOT ELEVATION
- 100.00(TW) PROPOSED GROUND ELEVATION ON "HIGH" SIDE OF RETAINING WALL
- 100.00(BW) PROPOSED GROUND ELEVATION ON "LOW" SIDE OF RETAINING WALL
- [Hatched Box] EXISTING SLOPES 25% AND GREATER
- [Hatched Box] EXISTING APPROVED SEPTIC EASEMENT AREA
- [Dashed Box] EXISTING SOIL AND SOIL DIVISION LINE
- [Dotted Box] EXISTING WETLAND
- [Dotted Box] EXISTING 100-YEAR FLOODPLAIN
- [Dashed Box] SECTION LINE THROUGH MICRO-BIORETENTION FACILITY
- [Dashed Box] EXISTING TREELINE
- [Dashed Box] PROPOSED TREELINE
- [Hatched Box] PRIVATE USE-IN-COMMON ACCESS, DRAINAGE & UTILITY EASEMENT FOR THE USE AND BENEFIT OF LOTS 1, 2, AND BULK PARCEL "A"
- [Hatched Box] PUBLIC WATER & UTILITY EASEMENT

NO HOUSES ARE TO BE BUILT PER THESE PLANS.
STOCKPILE . HIGHER THAN 15' MUST BE BENCHED.

SOIL FOR DEVELOPMENT OF THIS SITE TO BE LOCATED WITHIN THE LIMIT OF DISTURBANCE SOUTH OF THE STREAM BUFFER. NO STOCKPILING OF SOIL IS ALLOWED OUTSIDE OF LIMIT OF DISTURBANCE.

THE DRIVEWAY OF LOTS 1, 4 AND 5 WILL UTILIZE PERVIOUS CONCRETE FOR THE DRIVEWAY. SEE SHEET 13 FOR DETAILS.

THE ENTIRE HOUSES ON LOTS 1 AND 2 SHALL BE PIPED TO THE MICRO-BIORETENTION FACILITIES VIA ROOF DRAINS.



OWNER
DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

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

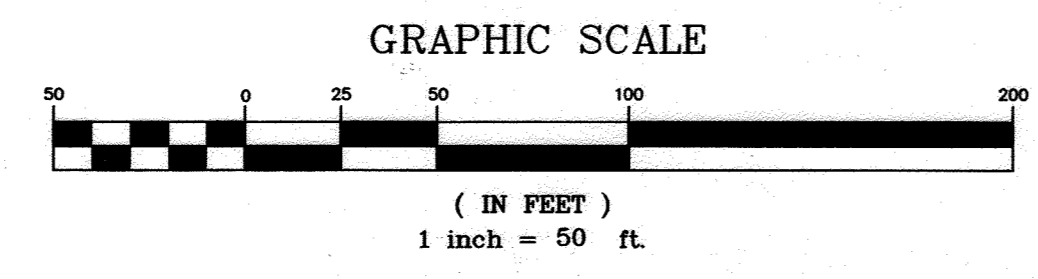
[Signature] 7/16/15
SIGNATURE OF ENGINEER DATE
R. JACOB HIKMAT, P.E.
PRINTED NAME OF ENGINEER

DEVELOPER'S CERTIFICATE
I 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. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTION.

[Signature] 7/16/15
SIGNATURE OF DEVELOPER DATE
ROBERT DORSEY, JR., PRESIDENT, DORSEY FAMILY HOMES, INC.
PRINTED NAME OF DEVELOPER

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

[Signature] 7/22/15
HOWARD SOIL CONSERVATION DISTRICT DATE
APPROVED: DEPARTMENT OF PLANNING AND ZONING



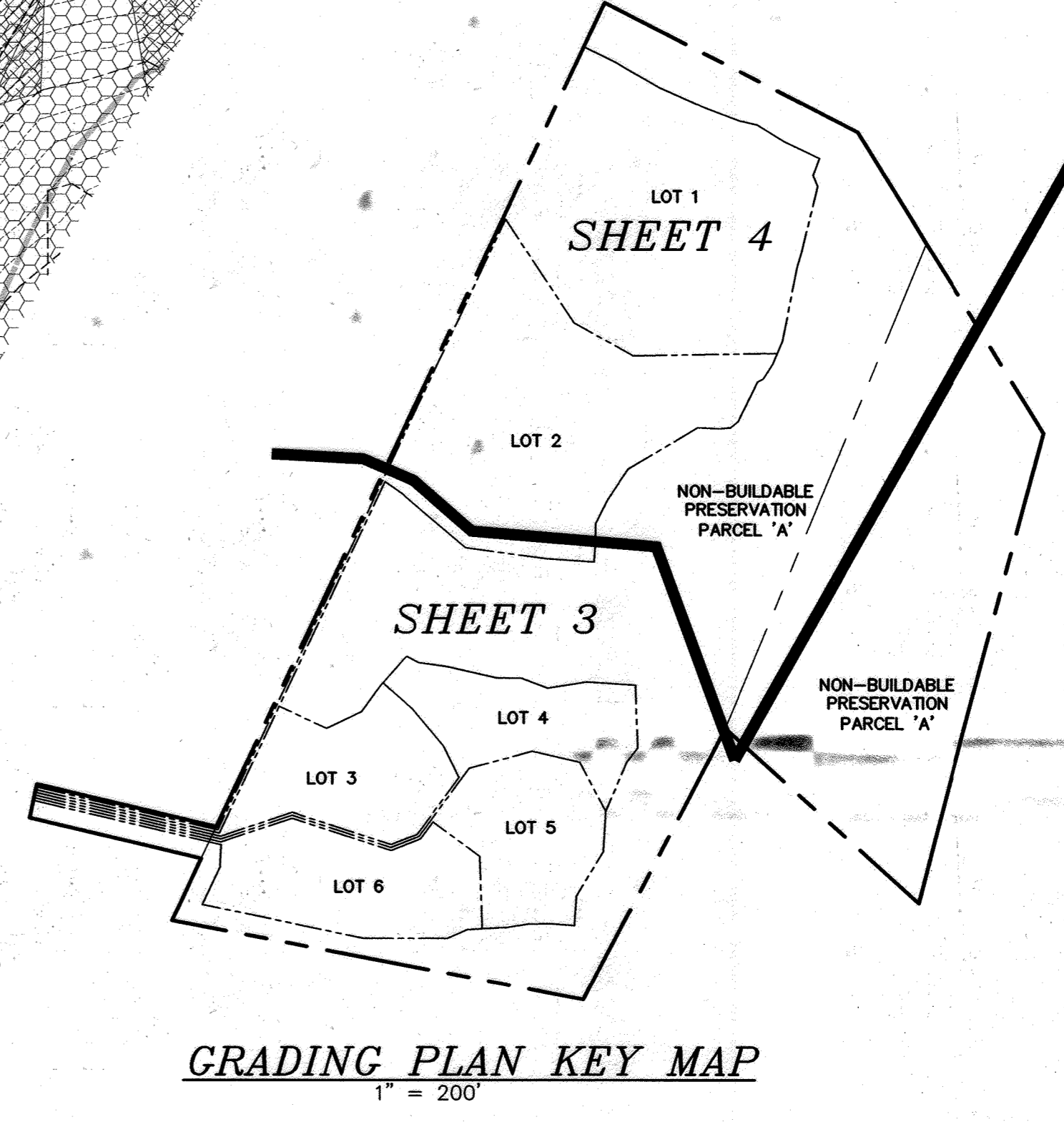
SEE SHEETS 8 AND 9 FOR EROSION AND SEDIMENT CONTROL DEVICE LOCATIONS AND SHEET 10 FOR SEQUENCE OF CONSTRUCTION. ALL SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING.

MATCHLINE SHEET 3

AS-BUILT CERTIFICATION FOR PSWM
I hereby certify that the facility shown on this plan was constructed as shown on the 'As-Built' plans and meets with the approved plans and specifications.

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942-EXP DATE 09/03/16.

[Signature] 7/16/15
R. JACOB HIKMAT, P.E. DATE



date	JULY 2015	approval	RJH
project	12-028	scale	1" = 50'
illustration	JLS	revision	

date	JULY 2015	revision	
description	ADDED NOTE TO SHEET 13 LOT 1 REV. GRADING # LOD, ADD STOCKPILE AREA	no.	1

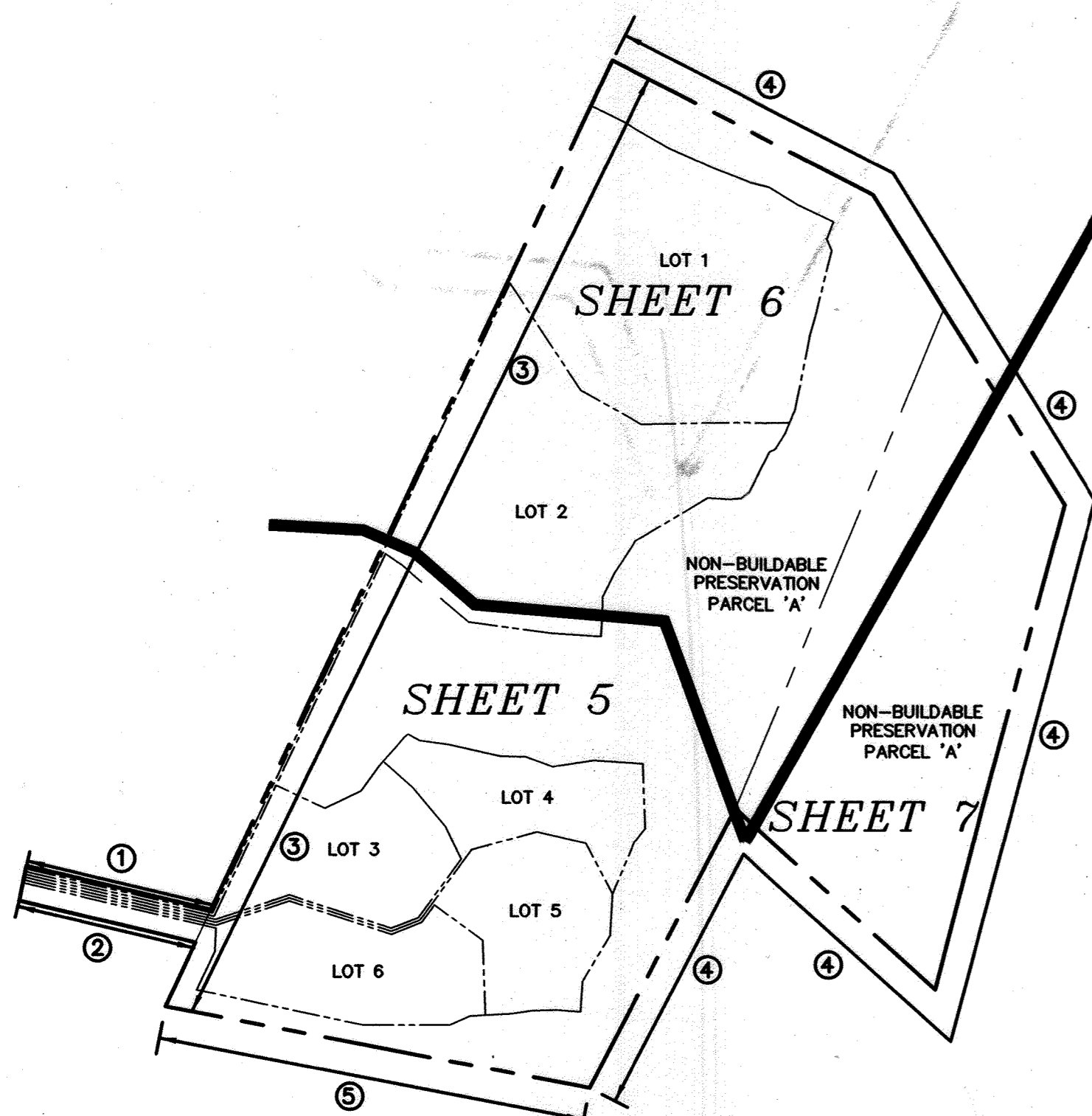
REVISED
MELCHIOR PROPERTY
LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A
TAX MAP 10 - GRID 13 PARCEL 184
3rd ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SUPPLEMENTAL AND GRADING PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
6800 Deerpath Road, Suite 150, Elkridge, MD 21075
(410) 997-0296 Fax

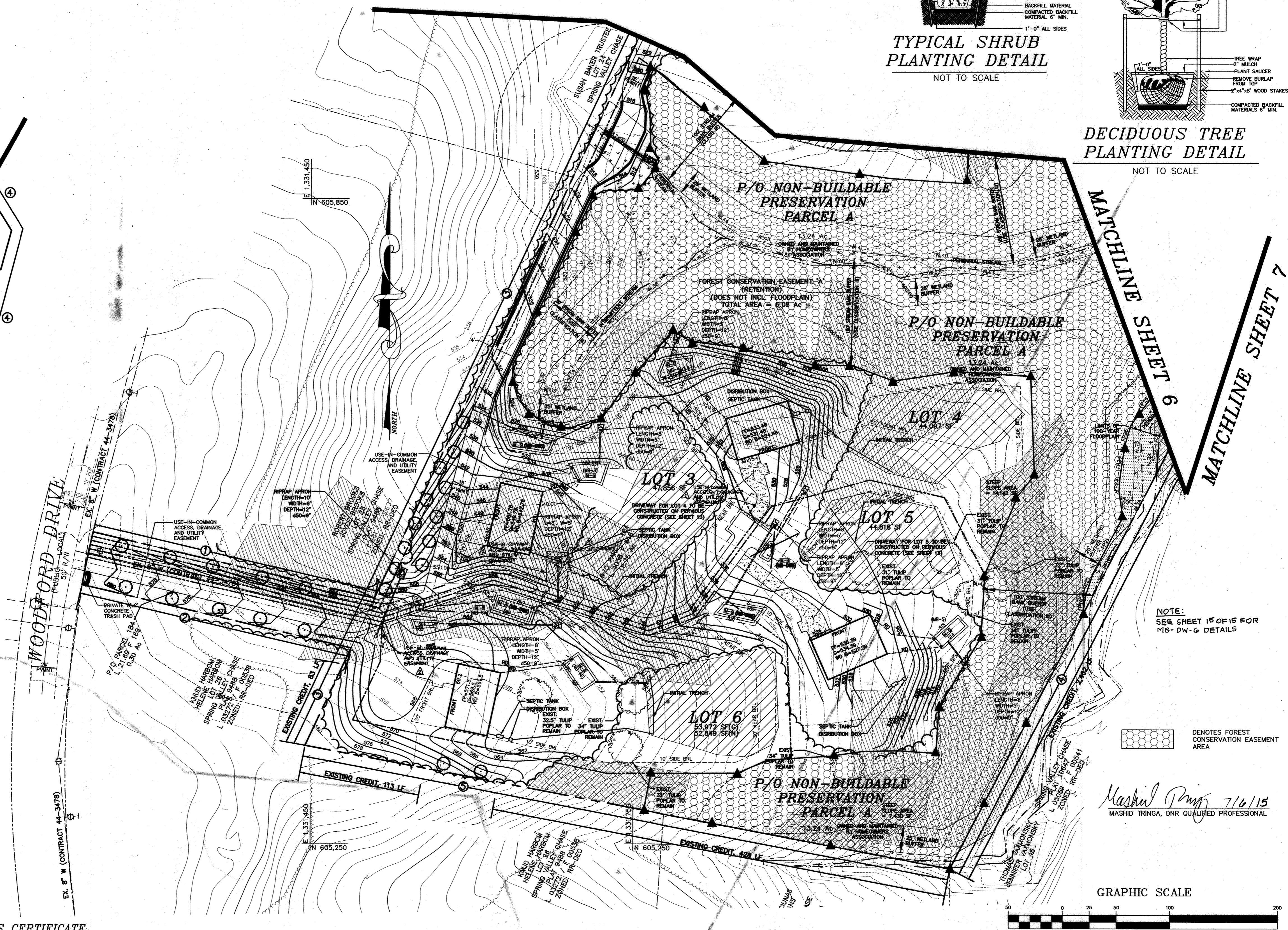
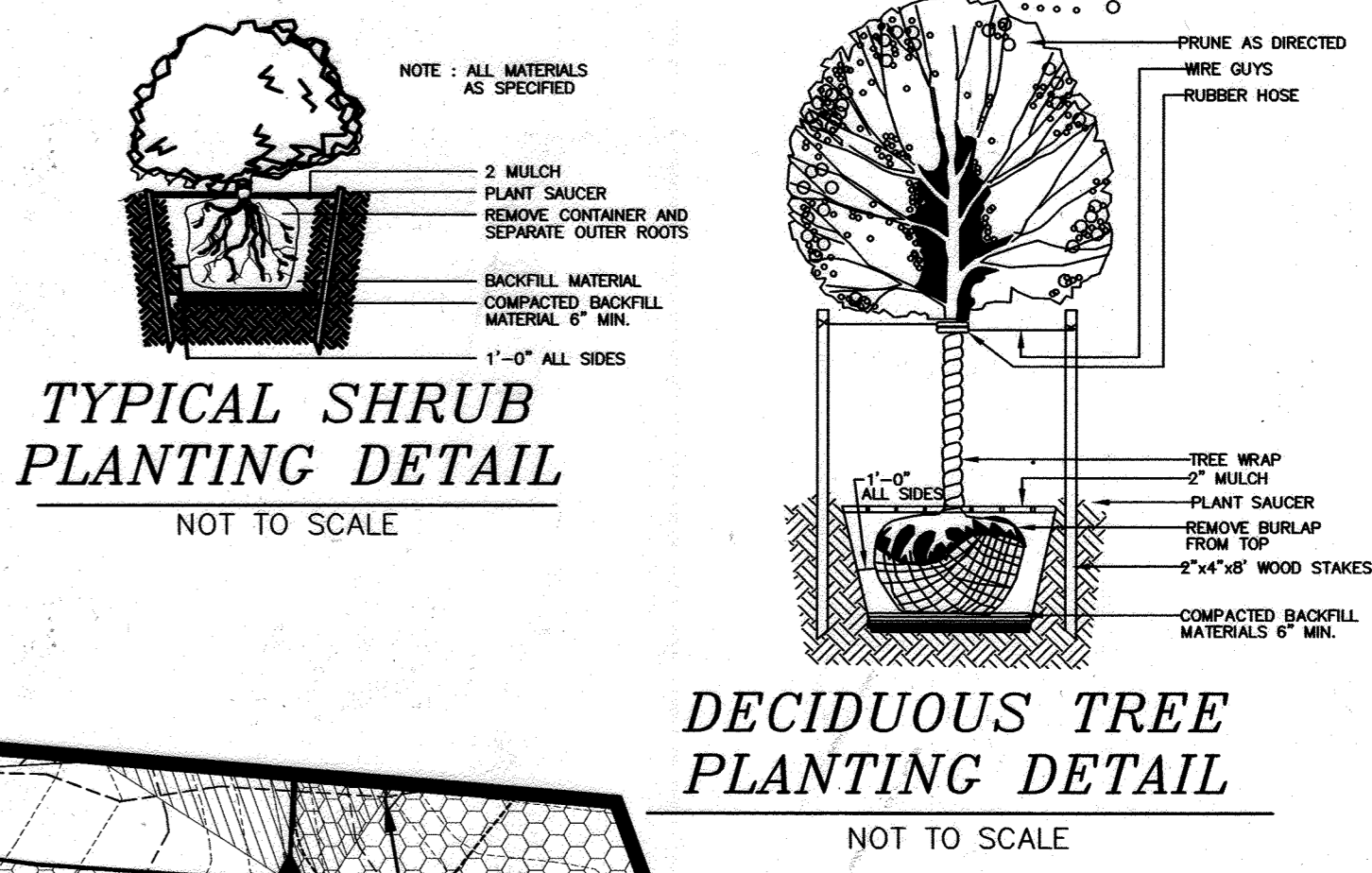
PERIMETER TREE PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
35	○	FAGUS GRANDIFOLIA	AMERICAN BEECH	2 1/2" - 3" CAL.
10	●	TAXUS MEDIA 'HICKSII'	HICKS YEW OR EQUIVALENT	2 1/2" - 3" HT.

TOTAL
36 SHADE TREES, 10 SHRUBS
(TREE PLANTINGS ALONG STREAM REQUIRED BY MDE ARE NOT INCLUDED. SEE DETAIL OF ON SHEET 14 FOR THOSE PLANTINGS)



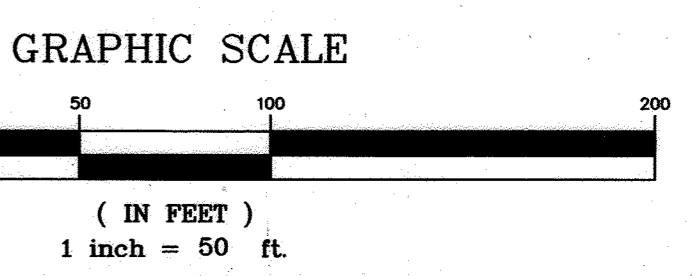
LANDSCAPE AND FOREST CONSERVATION PLAN KEY MAP
1" = 200'



NOTE: SEE SHEET 15 OF 16 FOR M16-DW-6 DETAILS

DENOTES FOREST CONSERVATION EASEMENT AREA

Mashid Tringa, DNR QUALIFIED PROFESSIONAL
7/6/15



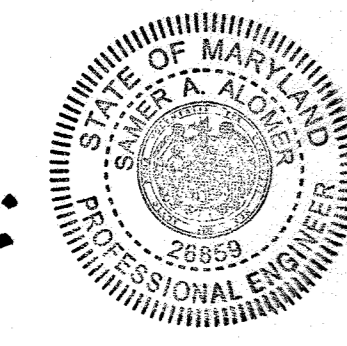
SCHEDULE A: PERIMETER LANDSCAPED EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES					TRASH PAD	TOTAL
	A (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	A (PERIMETER 5)		
LANDSCAPE TYPE	269 LF	257 LF	1,477 LF	2,462 LF ⁸	611 LF	16 LF	
LINEAR FEET OF PERIMETER	269 LF	257 LF	1,477 LF	2,462 LF	611 LF	16 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	NO	NO	YES, 421 LF	YES, 2,462 LF	YES, 541 LF	N/A	N/A
NUMBER OF PLANTS REQUIRED	5 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	5 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	18 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 1 EVERGREEN TREES 0 SHRUBS	30 SHADE TREES 1 EVERGREEN TREES 0 SHRUBS
CREDIT FOR EXISTING VEGETATION	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NUMBER OF PLANTS PROVIDED	5 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS (10:1 SUBSTITUTION)	5 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	23 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 10 SHRUBS	35 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 10 SHRUBS

NOTE: FIVE (5) ADDITIONAL SHADE TREES HAVE BEEN ADDED ALONG PERIMETER 3 AS ENHANCED LANDSCAPING TO PROVIDE A MORE ENHANCED BUFFER BETWEEN THE COMMON DRIVEWAY AND THE PROPERTY LINE

- LANDSCAPE NOTES**
- NO CLEARING OF EXISTING VEGETATION IS PERMITTED WITHIN THE LANDSCAPE EDGE FOR WHICH CREDIT IS BEING TAKEN; HOWEVER, LANDSCAPE MAINTENANCE IS AUTHORIZED.
 - THE OWNER, TENANT AND / OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERMS, 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 REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
 - AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREMITH LISTED AND APPROVED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS 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 APPLICABLE PLANS AND CERTIFICATES.
 - SHOULD ANY TREE DESIGNATED FOR PRESERVATION, FOR WHICH CREDIT IS GIVEN, BE REMOVED OR DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE LANDSCAPE MANUAL.

THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET



OWNER
DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

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

R. Jacob Hikmat 7/6/15
OWNER DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Edinger 7-29-15
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Walter Edwards 2-3-15
CHIEF, DIVISION OF LAND DEVELOPMENT DATE



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP DATE 09/03/16.

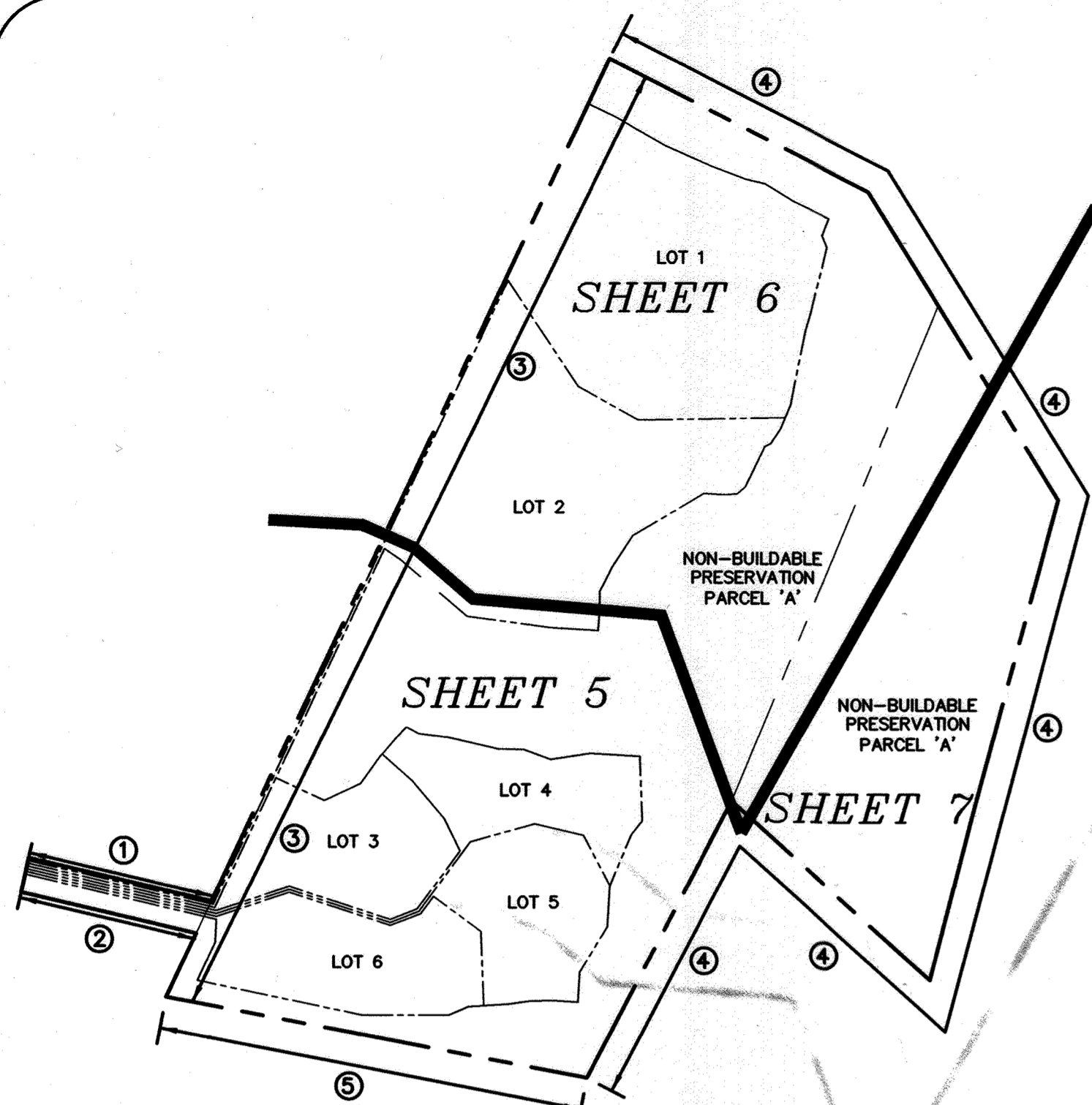
R. Jacob Hikmat 7/6/15
R. JACOB HIKMAT, P.E. DATE

date	JULY 2015	approval	RJH
project	12-028	illustration	JLS
project	12-028	scale	1"=50'

ADD REFERENCE NOTE	1. ALL FULL PIPE ON LOT 3	date	
	2. ALL FULL PIPE ON LOT 3	revisions	
	3. ALL FULL PIPE ON LOT 3		
	4. ALL FULL PIPE ON LOT 3		

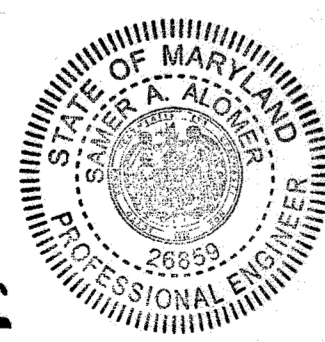
REVISED
MELCHIOR PROPERTY
LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A
TAX MAP 10 - GRID 13 PARCEL 184
3rd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SUPPLEMENTAL, LANDSCAPE, AND FOREST CONSERVATION PLAN

MILDENBERG & ASSOC., INC.
Engineers Planners Surveyors
6800 Deerpath Road, State 150, Elkridge, MD 21075
(410) 997-0296 Fax



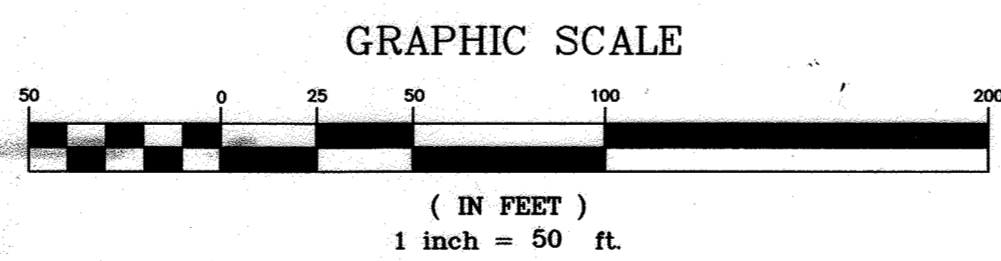
LANDSCAPE AND FOREST CONSERVATION PLAN KEY MAP
1" = 200'

OWNER
DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200



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

R. Jacob Hikmat 7/16/15
OWNER DATE



APPROVED: DEPARTMENT OF PLANNING AND ZONING

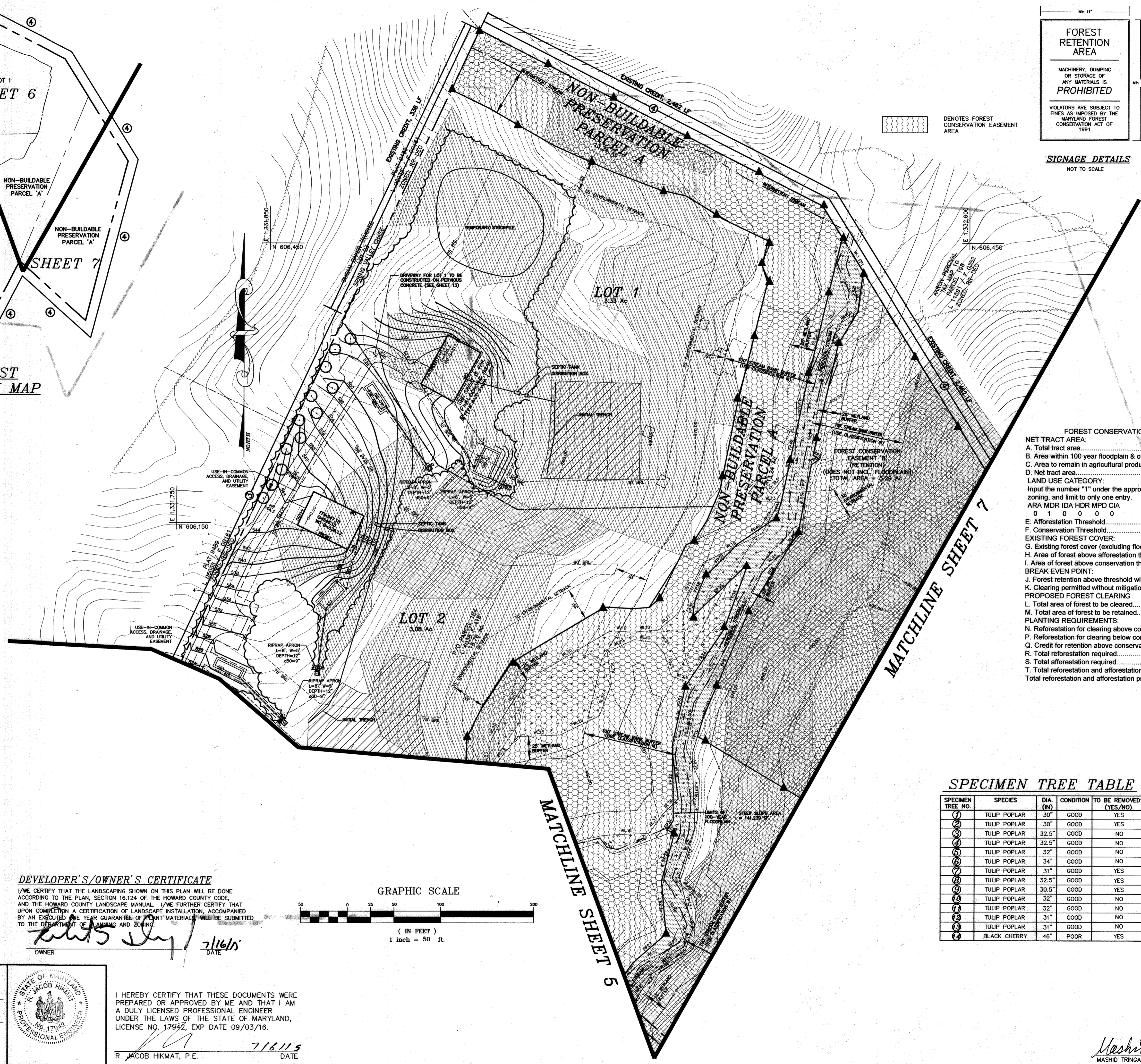
Paul Edwards 7-29-15
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kurtz 8-3-15
CHIEF, DIVISION OF LAND DEVELOPMENT DATE



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP DATE 09/03/16.

R. Jacob Hikmat 7/16/15
R. JACOB HIKMAT, P.E. DATE



FOREST RETENTION AREA

MACHINERY, DUMPING OR STORAGE OF ANY MATERIALS IS PROHIBITED

VIOLATORS ARE SUBJECT TO FINES AS IMPOSED BY THE MARYLAND FOREST CONSERVATION ACT OF 1991

SIGNAGE DETAILS
NOT TO SCALE

DENOTES FOREST CONSERVATION EASEMENT AREA

FOREST CONSERVATION WORKSHEET

NET TRACT AREA:

A. Total tract area..... = 24.11
B. Area within 100 year floodplain & overhead transmission line = 0.60
C. Area to remain in agricultural production..... = 0.00
D. Net tract area..... = 23.51

LAND USE CATEGORY:
Input the number "1" under the appropriate land use zoning, and limit to only one entry.
ARA MDR IDA HDR MPD CIA
0 1 0 0 0 0

E. Afforestation Threshold..... 15% x D = 4.70
F. Conservation Threshold..... 20% x D = 5.88

EXISTING FOREST COVER:

G. Existing forest cover (excluding floodplain)..... = 23.10
H. Area of forest above afforestation threshold..... = 18.40
I. Area of forest above conservation threshold..... = 17.22

BREAK EVEN POINT:

J. Forest retention above threshold with no mitigation..... = 9.32
K. Clearing permitted without mitigation..... = 13.78

PROPOSED FOREST CLEARING

L. Total area of forest to be cleared..... = 13.73
M. Total area of forest to be retained..... = 9.37

PLANTING REQUIREMENTS:

N. Reforestation for clearing above conservation threshold..... = 3.43
P. Reforestation for clearing below conservation threshold..... = 0.00
Q. Credit for retention above conservation threshold..... = 3.49
R. Total reforestation required..... = 0.00
S. Total afforestation required..... = 0.00
T. Total reforestation and afforestation required..... = 0.00
Total reforestation and afforestation provided..... = 0.00

SPECIMEN TREE TABLE

SPECIMEN TREE NO.	SPECIES	DIA. (IN)	CONDITION	TO BE REMOVED? (YES/NO)
1	TULIP POPLAR	30"	GOOD	YES
2	TULIP POPLAR	30"	GOOD	YES
3	TULIP POPLAR	32.5"	GOOD	NO
4	TULIP POPLAR	32.5"	GOOD	NO
5	TULIP POPLAR	32"	GOOD	NO
6	TULIP POPLAR	34"	GOOD	NO
7	TULIP POPLAR	31"	GOOD	YES
8	TULIP POPLAR	32.5"	GOOD	YES
9	TULIP POPLAR	30.5"	GOOD	YES
10	TULIP POPLAR	32"	GOOD	NO
11	TULIP POPLAR	32"	GOOD	NO
12	TULIP POPLAR	31"	GOOD	NO
13	TULIP POPLAR	31"	GOOD	NO
14	BLACK CHERRY	46"	POOR	YES

Mashid Tringa 7/16/15
MASHID TRINGA, DNR QUALIFIED PROFESSIONAL

P:\2004\12-028 MARIOTT'S PRESERVE (MELCHIOR)\DWG\028-RPT-SUPP-MAY 2013

date	JULY 2015
project	12-028
illustration	JLS
scale	1" = 60'
approval	RJH

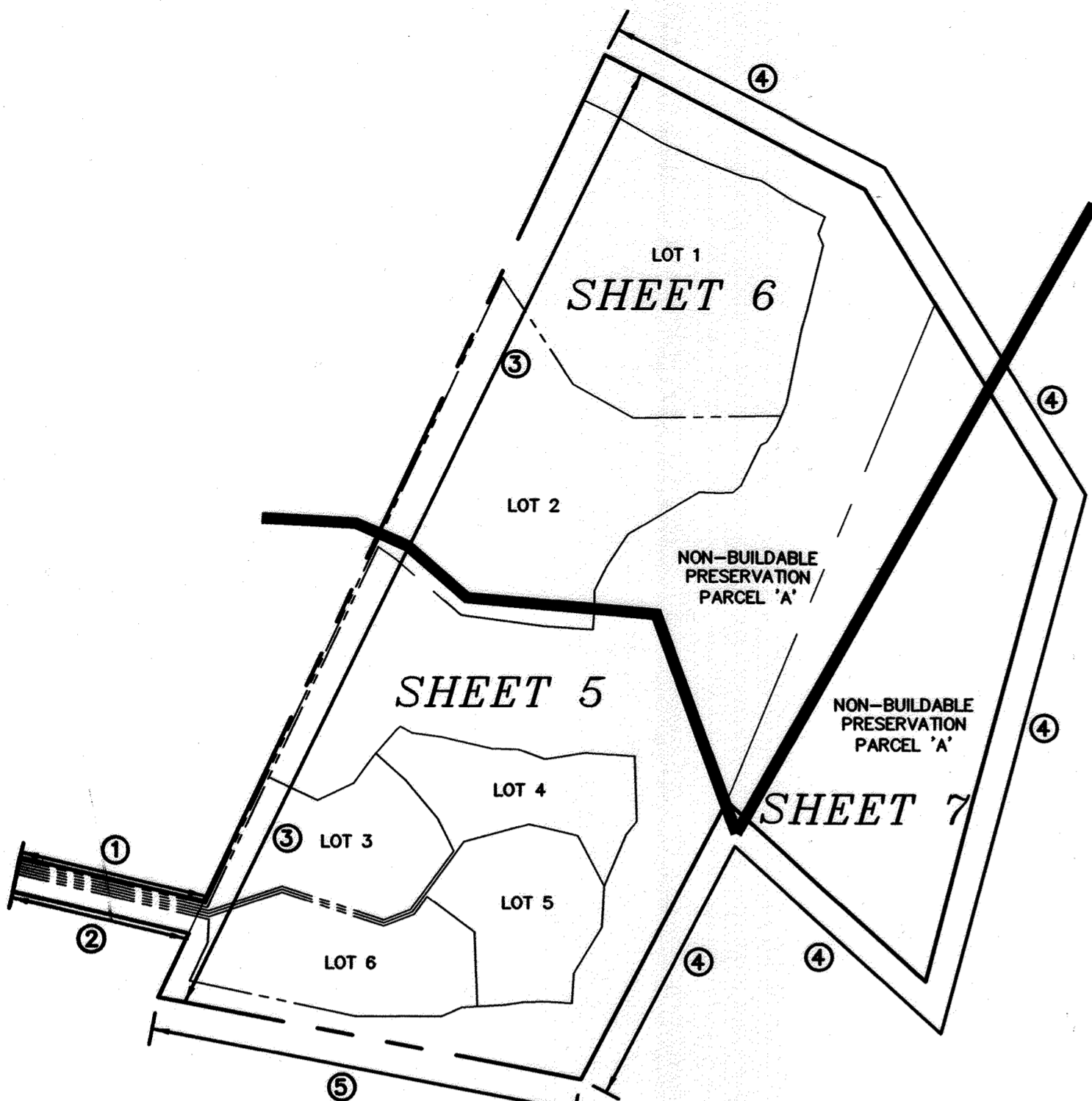
date	JULY 2015
description	ADD NOTE TO GEN. DET. LOT 1 REVISE GRADING & PROP. TREE LINE
revisions	1. n.c.

REVISED

MELCHIOR PROPERTY
LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A
TAX MAP 10 - GRID 13 PARCEL 184
3rd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SUPPLEMENTAL, LANDSCAPE, AND FOREST CONSERVATION PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Surveyors
Planners
Engineers
6800 Deepwater Road, Suite 150, Belridge, MD 211075
(410) 987-0298 Fax. (410) 987-0298



LANDSCAPE AND FOREST CONSERVATION PLAN KEY MAP
1" = 200'

FOREST RETENTION NOTES

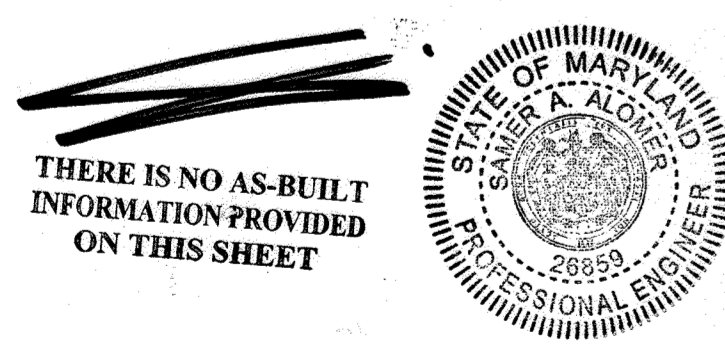
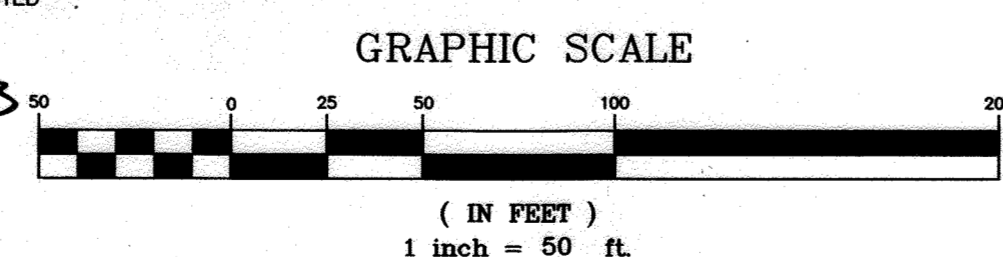
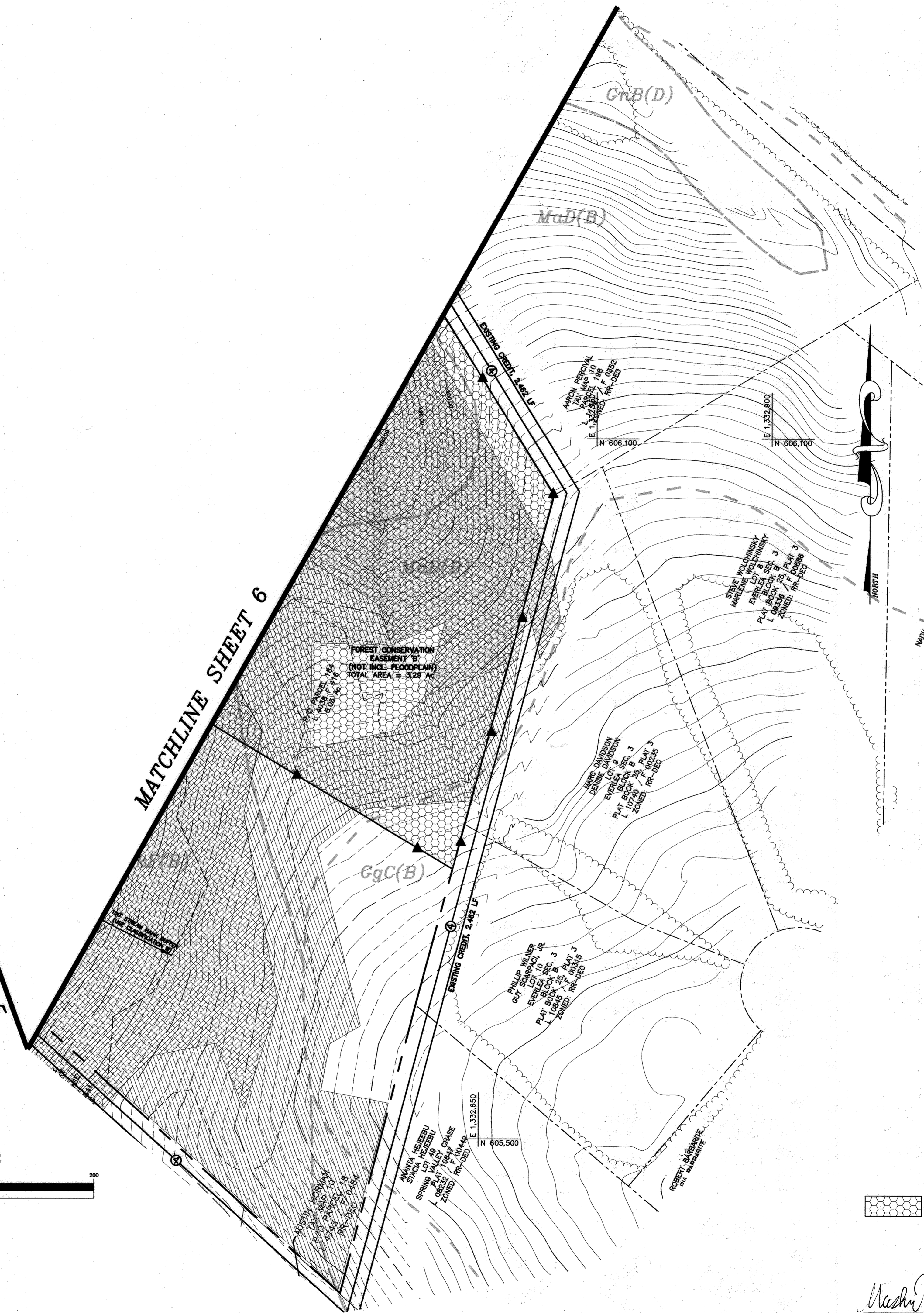
- FOREST PROTECTION**
- ALL FOREST RETENTION AREAS AND ISOLATED POTENTIAL SPECIMEN TREES SHALL BE TEMPORARILY PROTECTED BY WELL ANCHORED, BLAZE ORANGE PLASTIC MESH FENCING AND SIGNAGE AS INDICATED ON THE PLANS. THE DEVICES SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY AND AROUND ISOLATED POTENTIAL SPECIMEN TREES PRIOR TO ANY LAND CLEARING, GRUBBING, OR GRADING ACTIVITIES.
 - SUPER SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE PLAN. BLAZE ORANGE PLASTIC MESH FENCING SHALL BE INSTALLED ALONG THE REFORESTATION BOUNDARY WHERE THERE IS NO SUPER SILT FENCE PROPOSED. AFTER THE PLANTING OF THE EASEMENT.
 - THE FOREST PROTECTION DEVICES SHALL BE INSTALLED SUCH THAT THE CRITICAL ROOT ZONES OF ALL TREES WITHIN THE RETENTION AREA NOT OTHERWISE PROTECTED WILL BE WITHIN FOREST PROTECTION DEVICES. IT IS UNDERSTOOD THAT THE INSTALLATION OF THE FENCING IN THIS MANNER WILL CREATE AN IRREGULAR EDGE.
 - ALL PROTECTION DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. ALL DEVICES SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS CEASED IN THE IMMEDIATE VICINITY.
 - ATTACHMENT OF SIGNS, OR ANY OTHER OBJECTS TO TREES IS PROHIBITED. NO EQUIPMENT, MACHINERY, VEHICLES, MATERIALS OR EXCESSIVE PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THE PROTECTED AREAS.
 - INSTALLATION AND MAINTENANCE OF PROTECTIVE FENCING AND SIGNAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL TAKE THE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION ACTIVITIES. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOOTHERING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE AND DRIPPING OF MATERIALS THAT MAY BE HARMFUL TO TREES.
 - THE GENERAL CONTRACTOR SHALL PREVENT PARKING OF CONSTRUCTION VEHICLES AND EQUIPMENT AND THE STORING OF BUILDING SUPPLIES OR STOCKPIILING OF EARTH WITHIN FOREST CONSERVATION EASEMENTS.
 - REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED.
 - THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TREES DAMAGED OR DESTROYED WITHIN THE FOREST CONSERVATION EASEMENTS. ROOT PRUNING SHALL BE USED AT THE LIMIT OF DISTURBANCE OR LIMIT OF GRADING WITHIN AND ADJACENT TO ALL FORESTED AREAS. PLEASE REFER TO ROOT PRUNING DETAIL THIS SHEET.
 - AFTER THE BOUNDARIES OF THE FOREST RETENTION AREAS HAVE BEEN FIELD LOCATED AND MARKED, AND AFTER THE FOREST PROTECTION DEVICES HAVE BEEN INSTALLED, BUT BEFORE ANY OTHER DISTURBANCE HAS TAKEN PLACE ON SITE, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE ON SITE. THE DEVELOPER, CONTRACTOR OR PROJECT MANAGER, AND HOWARD COUNTY INSPECTORS SHALL ATTEND. THE PURPOSE OF THIS MEETING WILL BE:
 - TO IDENTIFY THE LOCATIONS OF THE FOREST RETENTION AREAS, SPECIMEN TREES WITHIN 50 FEET OF THE LIMIT OF DISTURBANCE, LIMITS OF CONSTRUCTION, EMPLOYEE PARKING AREAS AND EQUIPMENT STAGING AREAS;
 - INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES;
 - MAKE ALL NECESSARY ADJUSTMENTS;
 - ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.
- CONSTRUCTION MONITORING**
- THE SITE SHALL BE INSPECTED PERIODICALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR IDENTIFYING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY HAVE BEEN CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTION, ROOT NARROW, TRUNK WOUNDS, LIMB INJURY, OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS.
 - ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL ARBORIST.
- LIMITS OF WORK**
- THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

GENERAL NOTES :

- FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS FOR SECTION 16.1200 OF THE HOWARD COUNTY FOREST CONSERVATION ACT. NO GRADING, REMOVAL OF VEGETATIVE COVER OF TREES, OR PLANTING OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS EXCEPT AS SHOWN ON THE APPROVED PLAN. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1202 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL FOR THIS SUBDIVISION WILL BE FULFILLED BY THE RETENTION OF 9.37 AC. (408,157.2 SQ. FT.) INTO FOREST CONSERVATION EASEMENT. A FINANCIAL SURETY IN THE AMOUNT OF \$81,195.84 SHALL BE POSTED WITH THE DEVELOPER'S AGREEMENT FOR THIS FINAL PLAT.

MATCHLINE SHEET 5

MATCHLINE SHEET 6

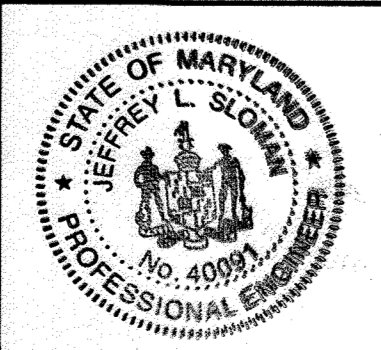


OWNER
DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

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

OWNER: *phs slg* DATE: 11-20-13



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 40091, EXP DATE 2/13/15.

Jeffrey L. Sloman DATE: 11/18/13
JEFFREY SLOMAN, P.E.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Elwood 1-9-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION

W. T. ... 1-12-14
CHIEF, DIVISION OF LAND DEVELOPMENT

■ DENOTES FOREST CONSERVATION EASEMENT AREA

Mashid Tringa
MASHID TRINGA, DNR QUALIFIED PROFESSIONAL

project	date	approval
12-028	NOV 2013	BJH
illustration	engineering	
JIS	JIS	
scale	1" = 50'	

no.	description	date
	revisions	

MELCHIOR PROPERTY
LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A
TAX MAP 10 - GRID 13 PARCEL 184
3rd ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SUPPLEMENTAL, LANDSCAPE, AND FOREST CONSERVATION PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
6800 Deerpark Road, Suite 150, Pikesville, MD 21075
(410) 997-0286 Ext. (410) 997-0286 Fax

EROSION AND SEDIMENT CONTROL LEGEND

- EARTH DIKE
- STANDARD INLET PROTECTION
- CHECK DAM (FOR EROSION CONTROL ONLY)
- SUPER SILT FENCE
- SILT DIVERSION FENCE
- AREA OF IMMEDIATE STABILIZATION
SEE PLAN FOR PERMANENT SEEDING OR ROAD BASE
- CLEAN WATER DIVERSION PIPE WITH DIA.
- LIMIT OF DISTURBANCE
- SCE** STABILIZED CONSTRUCTION ENTRANCE
- EXISTING WETLAND
- EXISTING 100-YEAR FLOODPLAIN
- PROP. DRY WELL

SOIL FOR DEVELOPMENT OF THIS SITE TO BE LOCATED WITHIN THE LIMIT OF DISTURBANCE SOUTH OF THE STREAM BUFFER. NO STOCKPILING OF SOIL IS ALLOWED OUTSIDE OF LIMIT OF DISTURBANCE.

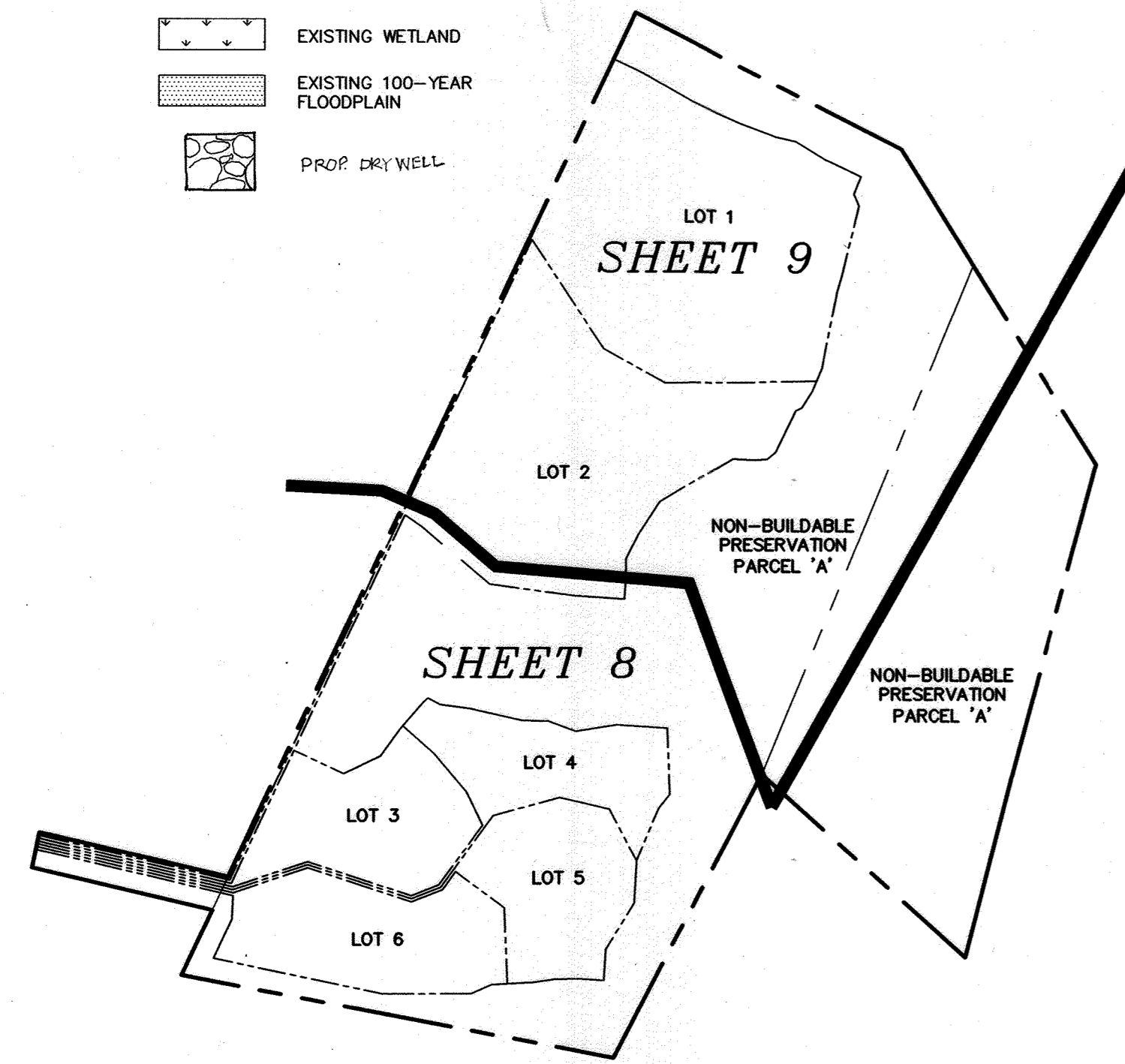
FOREST CONSERVATION EASEMENT HATCHING NOT SHOWN ON THIS PLAN FOR CLARITY.

LIMIT OF DISTURBANCE AND EROSION CONTROL SHOWN IN THESE PLANS REPRESENTS THE DISTURBANCE AND EROSION CONTROL FOR THE ULTIMATE DEVELOPMENT ON THE SITE. SEE SEQUENCE OF CONSTRUCTION.

NO HOUSES ARE TO BE BUILT PER THESE PLANS.

SEE SHEETS 3 AND 4 FOR MICRO-BIOTENTION FACILITIES, FACILITY OUTFALLS, AND OUTFALL PROTECTIONS.

CONTRACTOR TO EXERCISE CAUTION TO ENSURE THAT NO CONSTRUCTION OR DISTURBANCE OCCURS OUTSIDE THE LIMIT OF DISTURBANCE SHOWN ON THESE PLANS.



EROSION AND SEDIMENT CONTROL PLAN KEY MAP
1" = 200'

OWNER
DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

ENGINEER'S CERTIFICATE

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

SIGNATURE OF ENGINEER
R. JACOB HIKMAT, P.E.
PRINTED NAME OF ENGINEER
DATE: 7/16/15

DEVELOPERS CERTIFICATE

I 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. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTION.

SIGNATURE OF DEVELOPER
ROBERT DORSEY, JR., PRESIDENT, DORSEY FAMILY HOMES, INC.
PRINTED NAME OF DEVELOPER
DATE: 7/16/15

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

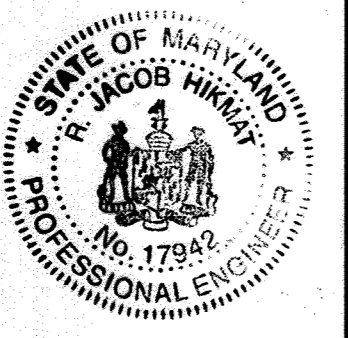
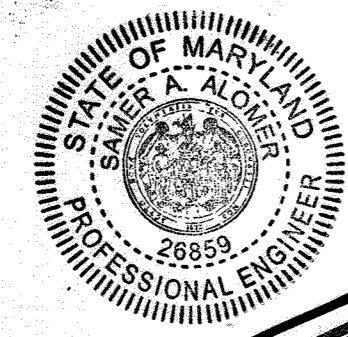
DATE: 7/22/15

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE: 7-29-15

DATE: 8-3-15

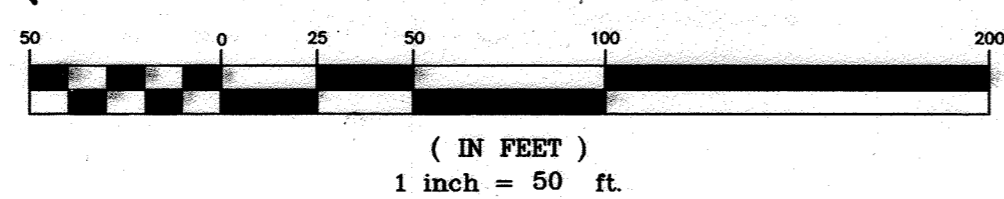
THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP. DATE 09/03/16.

R. JACOB HIKMAT, P.E.
DATE: 7/16/15

GRAPHIC SCALE



BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS AND 100-YEAR FLOODPLAINS

- NO EXCESS FILL, CONSTRUCTION MATERIAL, OR DEBRIS SHALL BE STOCKPILED OR STORED IN NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS OR 100-YEAR FLOODPLAIN.
- PLACE MATERIALS ON A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR 100-YEAR FLOODPLAIN.
- DO NOT USE EXCAVATED MATERIALS AS BACKFILL IF IT CONTAINS WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE. IF ADDITIONAL BACKFILL IS REQUIRED, USE CLEAN MATERIAL FREE OF WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIALS, OR OTHER DELETERIOUS SUBSTANCE.
- PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY OPERATE THE EQUIPMENT TO PREVENT DAMAGE TO NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR 100-YEAR FLOODPLAIN.
- 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 ORIGINALLY AUTHORIZED STRUCTURE OR FILL.
- RECTIFY ANY NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, OR 100-YEAR FLOODPLAIN TEMPORARILY IMPACTED BY ANY CONSTRUCTION.

- ALL STABILIZATION IN THE NONTIDAL WETLANDS AND NONTIDAL WETLAND BUFFER SHALL CONSIST OF THE FOLLOWING SPECIES: ANNUAL RYEGRASS (CLOUIM MULTIFLORUM), MILLET (SETARIA ITALICA), BARLEY (HORDEUM SP.), OATS (UNIOILA SP.), OR RYE (SECALE CEREALE). THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF NATURAL WETLAND SPECIES. OTHER NON-PERSISTENT VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE NONTIDAL WETLANDS AND WATERWAYS DIVISION. KENTUCKY 31 FESCUE SHALL NOT BE UTILIZED IN WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDING AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
- AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST-CONSTRUCTION GRADES AND ELEVATIONS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS IN TEMPORARILY IMPACTED AREAS.
- TO PROTECT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM:
 - USE I WATERS: IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH JUNE 15, INCLUSIVE, DURING ANY YEAR.
 - USE III WATERS: IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD OCTOBER 1 THROUGH APRIL 30, INCLUSIVE, DURING ANY YEAR.
 - USE IV WATERS: IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH MAY 31, INCLUSIVE, DURING ANY YEAR.
- STORMWATER RUNOFF FROM IMPERVIOUS SURFACE SHALL BE CONTROLLED TO PREVENT THE WASHING OF DEBRIS INTO THE WATERWAY.
- CULVERTS SHALL BE CONSTRUCTED AND ANY RIP RAP PLACED SO AS NOT TO OBSTRUCT THE MOVEMENT OF AQUATIC SPECIES, UNLESS THE PURPOSE OF ACTIVITY IS TO IMPOUND WATER. THIS TRIBUTARY IS A USE III PERENNIAL STREAM

REVISED

MELCHIOR PROPERTY
LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A
TAX MAP 10 - GRID 13 PARCEL 184
3rd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SUPPLEMENTAL, EROSION AND SEDIMENT CONTROL PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
6800 Deepwater Road, Suite 150, Ellicott City, MD 21075
(410) 997-0296 Fax: (410) 997-0298 Fax

date	JULY 2015	approval	RJH
project	12-028	scale	1"=50'
illustration	JLS	description	
no.	1	revision	

P:\2004\12-028 MAROOTS PRESERVE (MELCHIOR)\DWG\028-RPT-SUPP-MAY 2013

EROSION AND SEDIMENT CONTROL LEGEND

- EARTH DIKE
- STANDARD INLET PROTECTION
- CHECK DAM (FOR EROSION CONTROL ONLY)
- SUPER SILT FENCE
- SILT DIVERSION FENCE
- AREA OF IMMEDIATE STABILIZATION
SEE PLAN FOR PERMANENT SEEDING OR ROAD BASE
- CLEAN WATER DIVERSION PIPE WITH DIA.
- LIMIT OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- EXISTING WETLAND
- EXISTING 100-YEAR FLOODPLAIN

FOREST CONSERVATION EASEMENT HATCHING NOT SHOWN ON THIS PLAN FOR CLARITY.

LIMIT OF DISTURBANCE AND EROSION CONTROL SHOWN IN THESE PLANS REPRESENTS THE DISTURBANCE AND EROSION CONTROL FOR THE ULTIMATE DEVELOPMENT ON THE SITE. SEE SEQUENCE OF CONSTRUCTION.

SOIL FOR DEVELOPMENT OF THIS SITE TO BE LOCATED WITHIN THE LIMIT OF DISTURBANCE SOUTH OF THE STREAM BUFFER. NO STOCKPILING OF SOIL IS ALLOWED OUTSIDE OF LIMIT OF DISTURBANCE.

SEE SHEETS 3 AND 4 FOR MICRO-BIORETENTION FACILITIES, FACILITY OUTFALLS, AND OUTFALL PROTECTIONS.

NO HOUSES ARE TO BE BUILT PER THESE PLANS.

STOCKPILE HIGHER THAN 15' MUST BE BENCHED.

AREA TO DIKE = 0.87 AC
 $T_c = 20$ MINS. (ASSUMED)
 $C = 0.30$
 $I = 3.1$ IN/HR (2-YR)
 $I = 4.8$ IN/HR (10-YR)
 $Q = CIA = 0.8$ CFS (2-YEAR)
 $Q = CIA = 1.3$ CFS (10-YEAR)

OWNER
 DORSEY FAMILY HOMES, INC.
 10717-B BIRMINGHAM WAY
 WOODSTOCK, MARYLAND 21163
 (410)465-7200

ENGINEER'S CERTIFICATE

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

SIGNATURE OF ENGINEER DATE 7/16/15
 R. JACOB HIKMAT, P.E.
 PRINTED NAME OF ENGINEER

DEVELOPERS CERTIFICATE

I 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. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTION.

SIGNATURE OF DEVELOPER DATE 7/16/15
 ROBERT DORSEY, JR., PRESIDENT, DORSEY FAMILY HOMES, INC.
 PRINTED NAME OF DEVELOPER

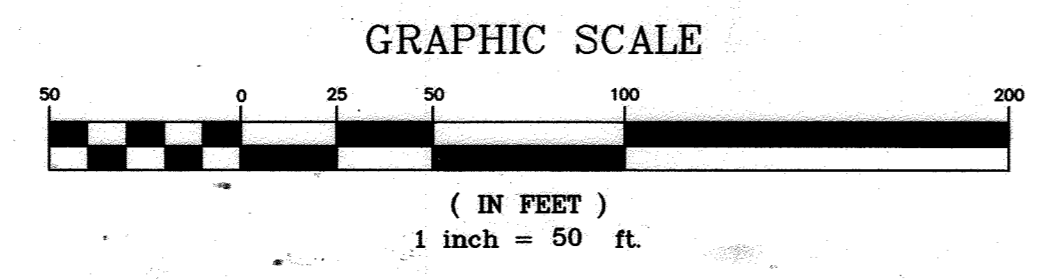
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF APPROVED DATE 7/22/15
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PLANNING AND ZONING

SIGNATURE OF CHIEF DATE 7-29-15
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

 SIGNATURE OF CHIEF DATE 8-3-15
 CHIEF, DIVISION OF LAND DEVELOPMENT

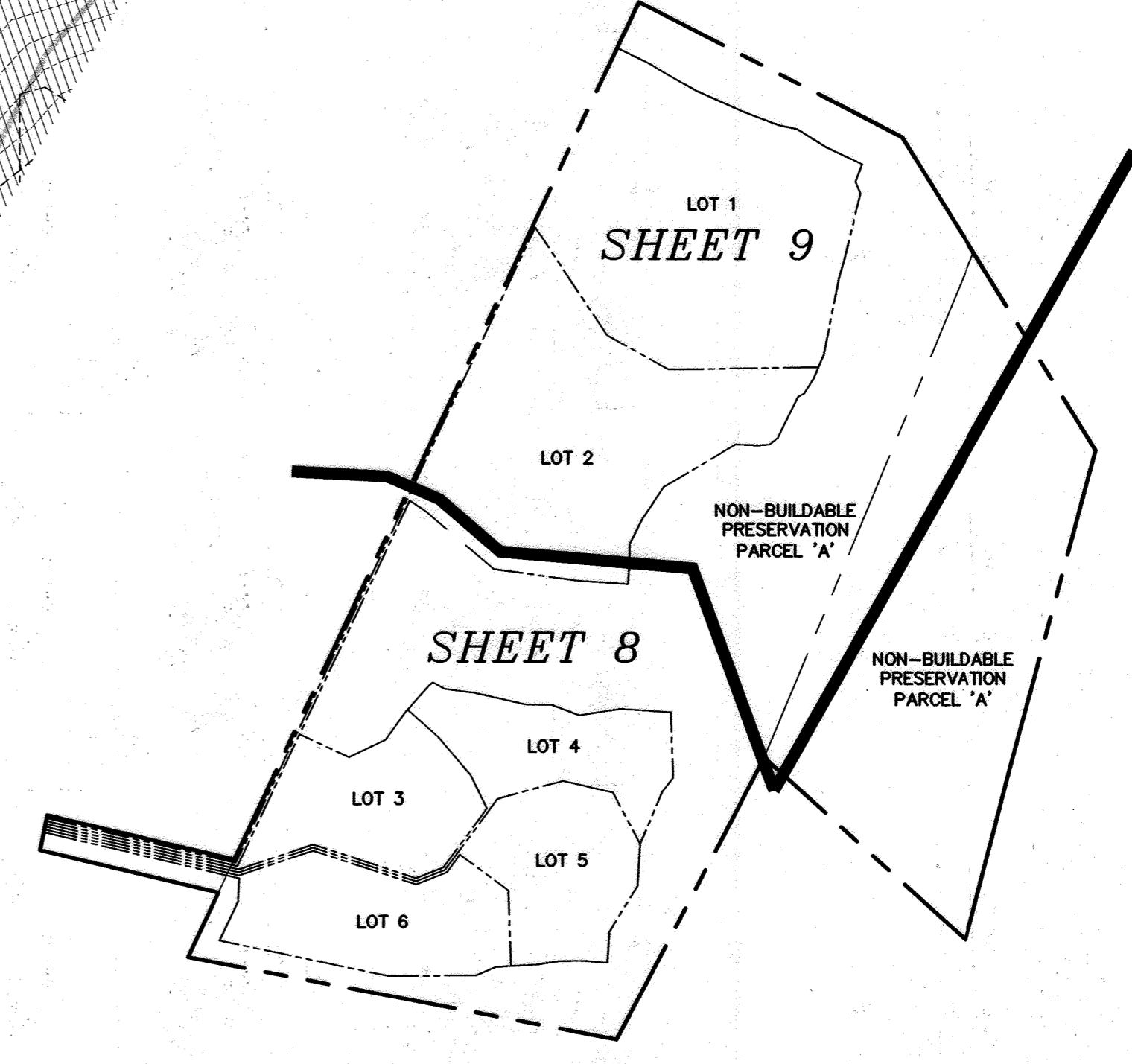
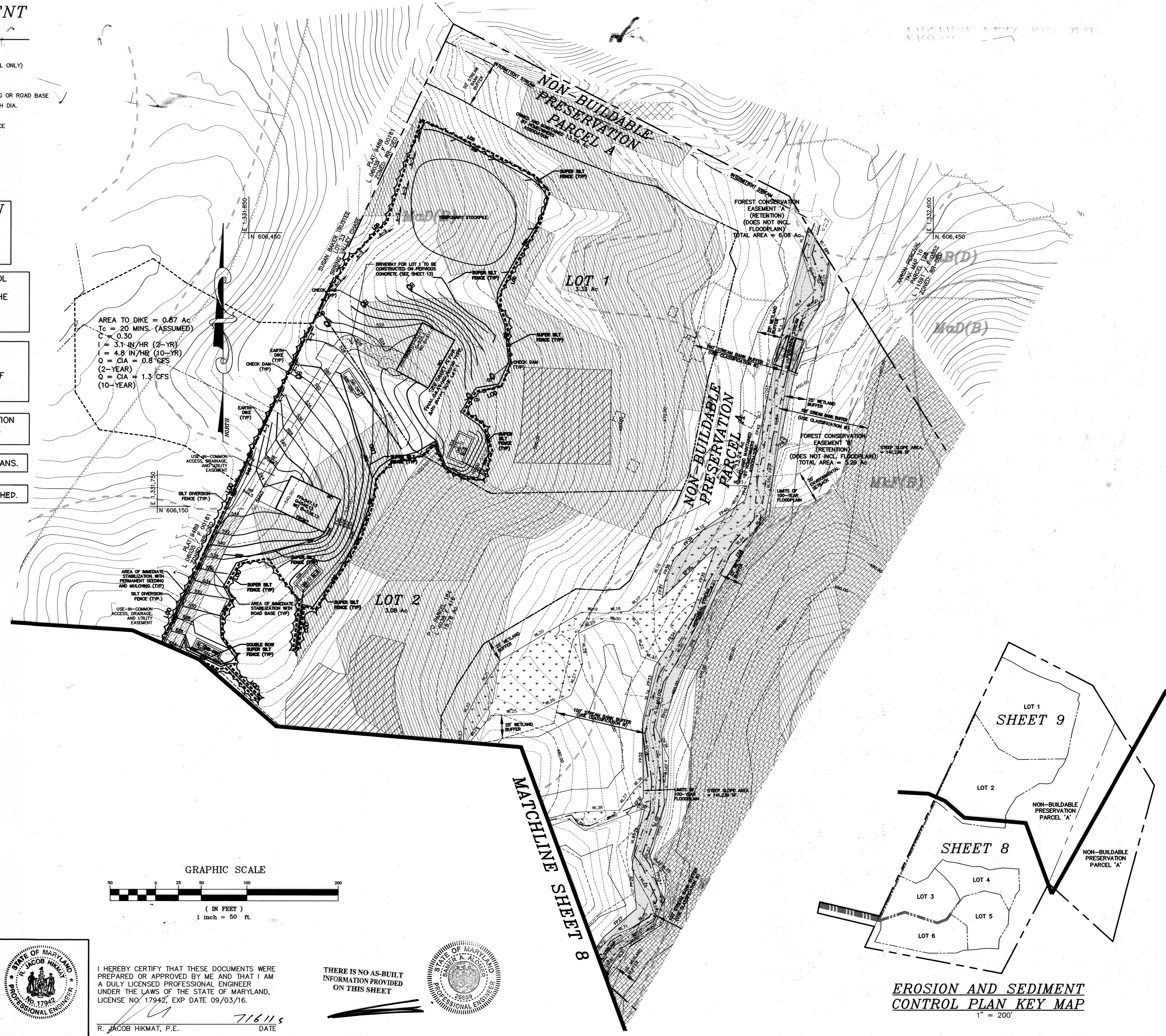


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THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET



SIGNATURE OF ENGINEER DATE 7/16/15
 R. JACOB HIKMAT, P.E.



EROSION AND SEDIMENT CONTROL PLAN KEY MAP
 1" = 200'

P:\2004\12-028 MARIOTT'S PRESERVE (MELCHIOR)\DWG\028-RPT-SUPP-MAY 2013

date	JULY 2015
project	12-028
illustration	JLS
scale	1" = 50'
approval	RJH

date	JULY 2015
description	REV. GRADING, SEDIMENT CONTROLS & LOD
revisions	1. REV. GRADING, SEDIMENT CONTROLS & LOD
no.	1

REVISED
MELCHIOR PROPERTY
 LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A
 TAX MAP 10 - GRID 13 PARCEL 184
 HOWARD COUNTY, MARYLAND
 3rd ELECTION DISTRICT
 SUPPLEMENTAL, EROSION AND SEDIMENT CONTROL PLAN

MILDENBERG, BOENDER & ASSOC., INC.
 Surveyors
 Engineers Planners
 6800 Deerpath Road, Suite 150, Elkridge, MD 21075
 (410) 987-0296 Fax: (410) 987-0298 Fax

ESD NARRATIVE

- NO DISTURBANCE TO THE ONSITE FLOODPLAIN, STREAMS, WETLANDS, OR WETLAND BUFFERS IS PROPOSED AS PART OF THIS PROJECT. ALTHOUGH NO DISTURBANCE IS PROPOSED WITHIN 100 FEET OF A PERENNIAL STREAM, A WAIVER WILL BE APPLIED FOR TO ALLOW A MINIMUM STREAM BANK BUFFER OF 75 FEET. THE PROPOSED GRASSED SWALES, MICRO-BIORETENTION FACILITIES, AND PERVIOUS SURFACES WILL PROVIDE STORMWATER QUALITY TREATMENT FOR THE NEW DEVELOPMENT, WHICH WILL BE AN IMPROVEMENT OVER EXISTING CONDITIONS.
- THE IMPROVEMENTS AND DEVELOPED AREA WILL MAINTAIN THE EXISTING DRAINAGE PATTERNS AS CLOSELY AS POSSIBLE. NO IMPACT IS PROPOSED THAT WOULD ALTER ANY NATURAL FLOW PATTERNS.
- THE USE OF NON-STRUCTURAL PRACTICES (ROOFTOP AND NON-ROOFTOP DISCONNECTION) WAS EXPLORED. A PORTION OF THE PROPOSED USE-IN-COMMON DRIVEWAY WILL BE TREATED VIA NON-ROOFTOP DISCONNECTION, HOWEVER, DUE TO THE STEEPNESS OF THE EXISTING TOPOGRAPHY, ROOFTOP DISCONNECTION IS NOT FEASIBLE.
- THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES WILL BE IN ACCORDANCE WITH THE LATEST MDE STANDARDS AND SPECIFICATIONS UTILIZING SILT FENCES AND SUPER SILT FENCES. AREAS OF CONCENTRATED FLOW WILL BE MITIGATED THROUGH THE USE OF CHECK DAMS (TEMPORARY).
- TABLE 5.2, SUMMARY OF SITE DEVELOPMENT STRATEGIES WAS UTILIZED TO THE EXTENT ALLOWABLE BY THE CURRENT HOWARD COUNTY ZONING AND LAND DEVELOPMENT REGULATIONS BY UTILIZING NON-STRUCTURAL PRACTICES WHERE REASONABLE AND MINIMIZING DISTURBANCE TO EXISTING FOREST, AND HAVING NO DISTURBANCE IN THE STREAM, WETLAND, FLOODPLAIN, OR THEIR ASSOCIATED BUFFERS.
- IN DESIGNING THIS PROJECT, AND AFTER WE PLANNED THE PROJECT TO MINIMIZE IMPERVIOUS AREAS, WE UTILIZED ESD MEASURES IN THE FOLLOWING ORDER OF PREFERENCE:
 - NON-ROOFTOP DISCONNECTION (N-2)
 - ALTERNATIVE SURFACES (A-2)
 - MICRO-SCALE PRACTICES (M-6)

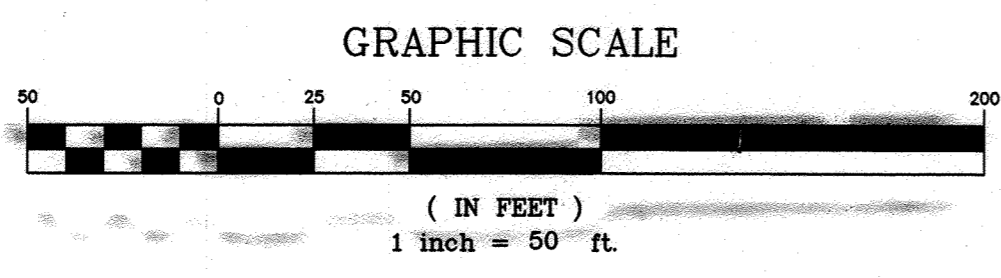
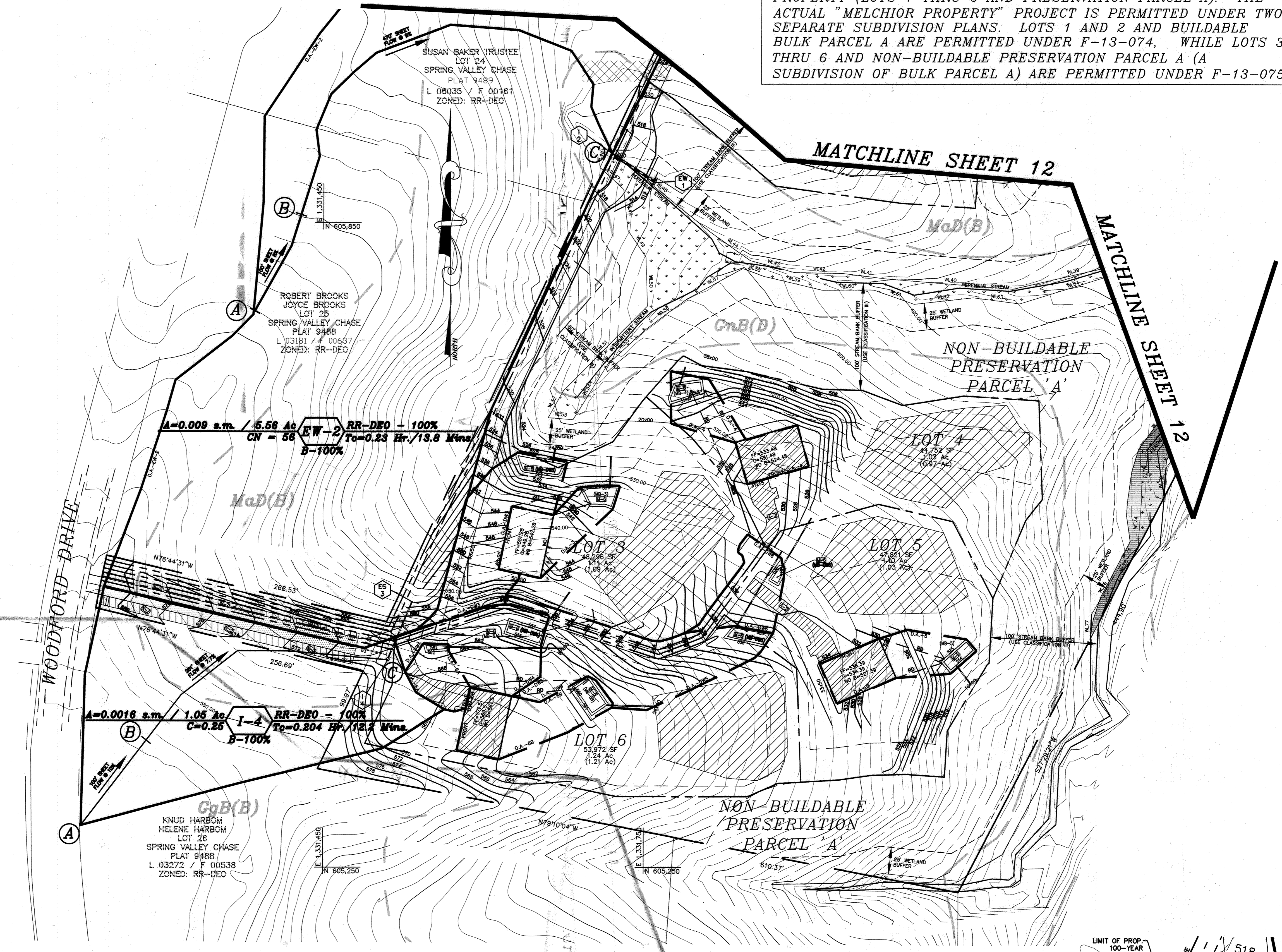
SOILS DESCRIPTION

SYMBOL	HYDROLOGICAL GROUP	DESCRIPTION
U3B	B	GLENNDA LOAM, 3 TO 8% SLOPE
U3D	D	GLENNVILLE-BAILEY SILT LOAM, 0 TO 8% SLOPE
M3D	D	MANOR LOAM, 15 TO 25% SLOPE
M3E	E	MANOR-BRINKLOW COMPLEX (ROCKY) - 25 TO 65% SLOPE

LEGEND

- IMPERVIOUS AREA TREATED BY A-2, PERVIOUS CONCRETE, (ALSO INCLUDES AREAS OF PERVIOUS CONCRETE). THIS SHADING ALSO DELINEATES THE DRAINAGE AREAS TO THE PERVIOUS CONCRETE.
- IMPERVIOUS AREA TREATED BY M-6, MICRO-BIORETENTION
- IMPERVIOUS AREA TREATED BY N-2, NON-ROOFTOP DISCONNECTION
- TREATMENT AREA OF NON-ROOFTOP DISCONNECTION (N-2)
- DRAINAGE AREA TO MICRO-BIORETENTION (M-6) WITH FACILITY LABEL
- ROOF DRAIN LEADER

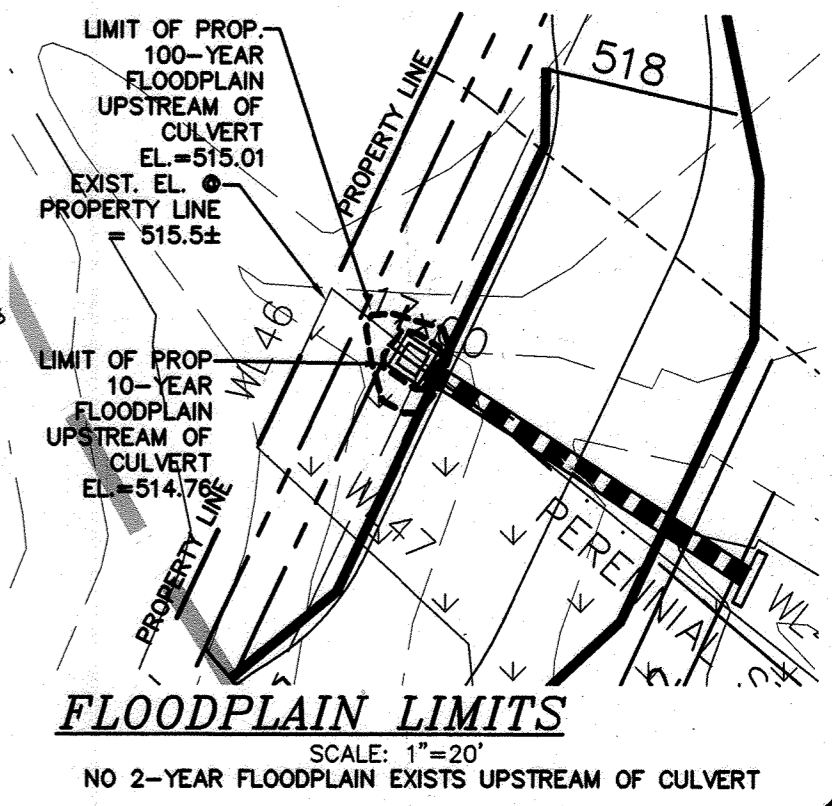
THIS PLAN IS TO BE USED FOR DRAINAGE INFORMATION PURPOSES ONLY. IT IS INTENDED TO SHOW THE STORMWATER MANAGEMENT PLAN FOR THE UTMIMATE DEVELOPMENT OF THE MELCHIOR PROPERTY (LOTS 1 THRU 6 AND PRESERVATION PARCEL A). THE ACTUAL "MELCHIOR PROPERTY" PROJECT IS PERMITTED UNDER TWO SEPARATE SUBDIVISION PLANS. LOTS 1 AND 2 AND BUILDABLE BULK PARCEL A ARE PERMITTED UNDER F-13-074, WHILE LOTS 3 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A (A SUBDIVISION OF BULK PARCEL A) ARE PERMITTED UNDER F-13-075.



SWM PRACTICES SCHEDULE

AREA	ESD METHOD	TREATED AREA TYPE	ESDv (REQ)* (PROVIDED)	Pe (REQ)	Pe (PROVIDED)
LOT 1	PERVIOUS CONCRETE (A-2), MICRO-BIORETENTION (M-6) FACILITY MB-1	HOUSE, DRIVEWAY (PERVIOUS & IMPERVIOUS)	1,316 CF		
LOT 2	MICRO-BIORETENTION (M-6) FACILITY MB-2	HOUSE, DRIVEWAY (IMPERVIOUS)	525 CF		
LOT 3	MICRO-BIORETENTION (M-6) FACILITIES MB-3	HOUSE, DRIVEWAY (IMPERVIOUS)	540 CF		
LOT 4	PERVIOUS CONCRETE (A-2), MICRO-BIORETENTION (M-6) FACILITY MB-4	HOUSE, DRIVEWAY (PERVIOUS & IMPERVIOUS)	1,138 CF		
LOT 5	PERVIOUS CONCRETE (A-2), MICRO-BIORETENTION (M-6) FACILITY MB-5	HOUSE, DRIVEWAY (PERVIOUS & IMPERVIOUS)	1,320 CF		
LOT 6	MICRO-BIORETENTION (M-6) FACILITIES MB-6A AND MB-6B	HOUSE, DRIVEWAY (IMPERVIOUS)	838 CF		
USE-IN-COMMON DW	NON-ROOFTOP DISC. (N-2)	ROADWAY (IMPERVIOUS)	2,943 CF		
TOTAL	MICRO-BIORETENTION (M-6) FACILITIES MB-DWI THRU MB-DW6		8,386 CF	8,778 CF	1.58"

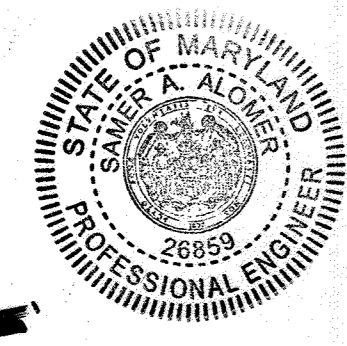
* INCLUDES THE REQUIRED STORAGE FOR THE CONVERSION OF WOODS TO GRASS WITHIN THE LIMIT OF DISTURBANCE



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP DATE 09/03/16.

R. JACOB HIKMAT, P.E. DATE 7/16/15

THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET



OWNER
DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Pender 7-29-15
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Robert J. Hikat 8-3-15
CHIEF, DIVISION OF LAND DEVELOPMENT DATE



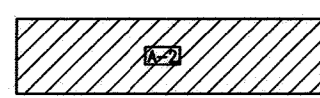
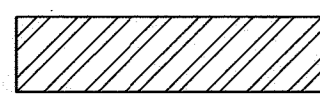
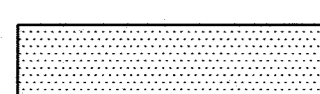
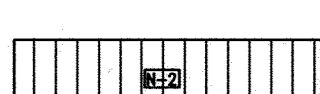
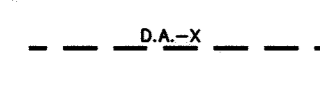
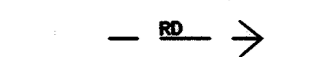
date	JULY 2015	approval	RJH
project	12-028	scale	1"=50'
illustration	JLS	description	

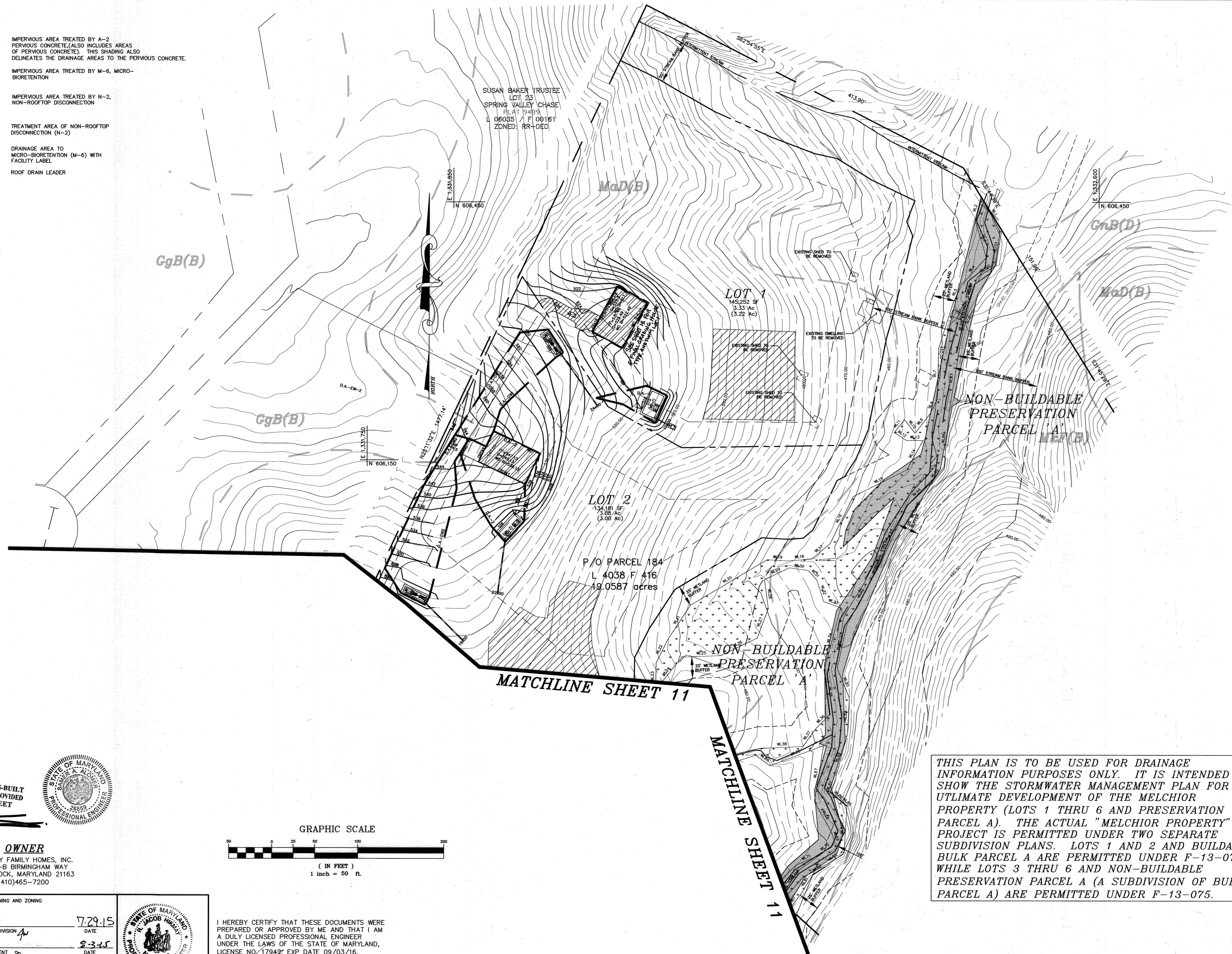
date	JULY 2015	revision	
description	1. ELIMINATE RET. WALL # 4 & 5, REDUCE LENGTH OF RET. WALL # 1, REV. GRADING & L&D		

REVISED
MELCHIOR PROPERTY
LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A
TAX MAP 10 - GRID 13 PARCEL 184
3rd ELECTION DISTRICT HOWARD COUNTY, MARYLAND
STORMWATER MANAGEMENT AND STORM DRAINAGE PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
6800 Deerpath Road, Suite 150, Elkridge, MD 21075
(410) 987-0286 Fax (410) 987-0286 Fax

LEGEND

-  IMPERVIOUS AREA TREATED BY A-2 PERVIOUS CONCRETE (ALSO INCLUDES AREAS OF PERVIOUS CONCRETE). THIS SHADING ALSO DELINEATES THE DRAINAGE AREAS TO THE PERVIOUS CONCRETE.
-  IMPERVIOUS AREA TREATED BY M-6, MICRO-BIORETENTION
-  IMPERVIOUS AREA TREATED BY N-2, NON-ROOFTOP DISCONNECTION
-  TREATMENT AREA OF NON-ROOFTOP DISCONNECTION (N-2)
-  D.A.-X DRAINAGE AREA TO MICRO-BIORETENTION (M-6) WITH FACILITY LABEL
-  \rightarrow ROOF DRAIN LEADER



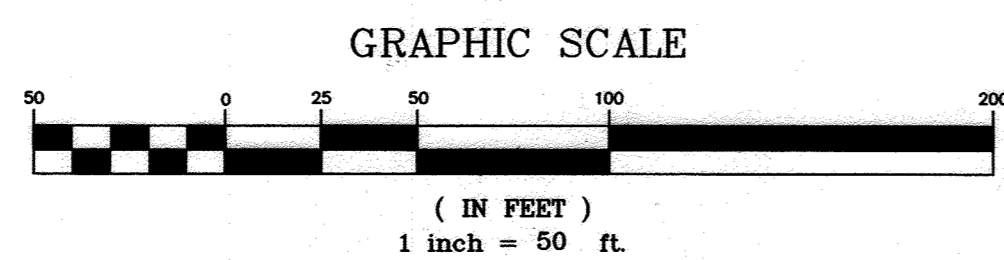
SUSAN BAKER TRUSTEE
 LOT 33
 SPRING VALLEY CHASE
 PLAT 194B9
 L 06035 / F 00161
 ZONED: RR-DEO

THIS PLAN IS TO BE USED FOR DRAINAGE INFORMATION PURPOSES ONLY. IT IS INTENDED TO SHOW THE STORMWATER MANAGEMENT PLAN FOR THE ULTIMATE DEVELOPMENT OF THE MELCHIOR PROPERTY (LOTS 1 THRU 6 AND PRESERVATION PARCEL A). THE ACTUAL "MELCHIOR PROPERTY" SUBJECT IS PERMITTED UNDER TWO SEPARATE SUBDIVISION PLANS. LOTS 1 AND 2 AND BUILDABLE BULK PARCEL A ARE PERMITTED UNDER F-13-074, WHILE LOTS 3 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A (A SUBDIVISION OF BULK PARCEL A) ARE PERMITTED UNDER F-13-075.

THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET

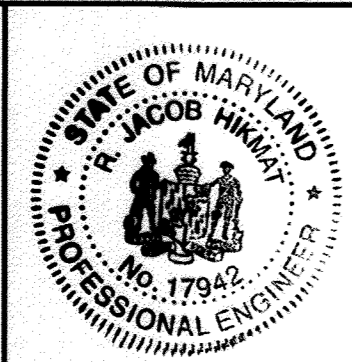


OWNER
 DORSEY FAMILY HOMES, INC.
 10717-B BIRMINGHAM WAY
 WOODSTOCK, MARYLAND 21163
 (410)465-7200



APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad E. Dunbar 7-29-15
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Keith Helms 2-3-15
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP DATE 09/03/16.

R. JACOB HIKMAT 7/16/15
 R. JACOB HIKMAT, P.E. DATE

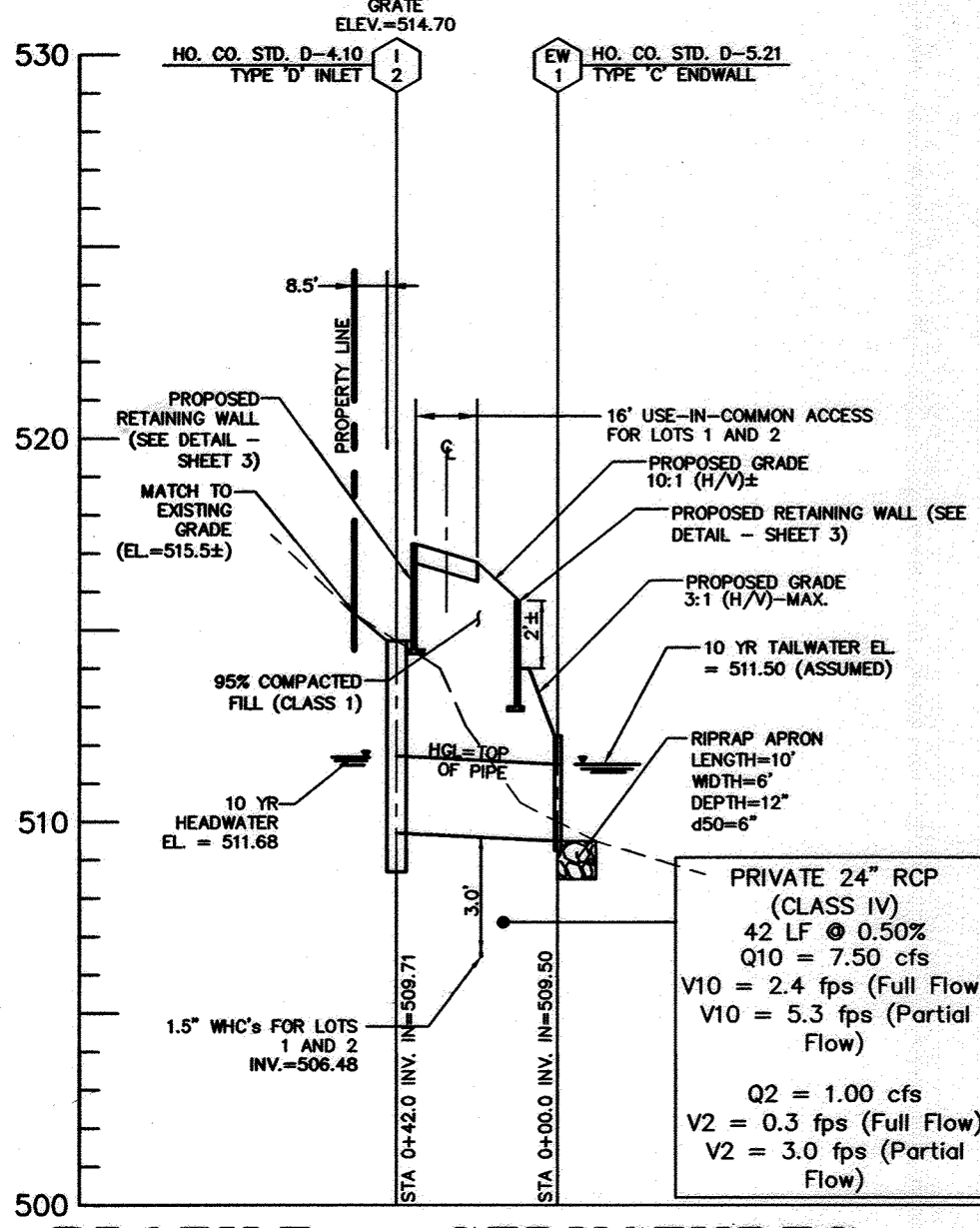
p:\2004\12-028 MARIOTT'S PRESERVE (MELCHIOR)\DWG\028-RPT-SUPP-FEB-2013

date	July 2015	approval	RJH
project	12-028	engineering	JLS
illustration	JLS	scale	1" = 50'

no.	description	date
1	REVISED TO GEN. BOOK LOT 1	JULY 2015
2	REVISED TO GEN. BOOK LOT 1	JULY 2015
3	REVISED TO GEN. BOOK LOT 1	JULY 2015

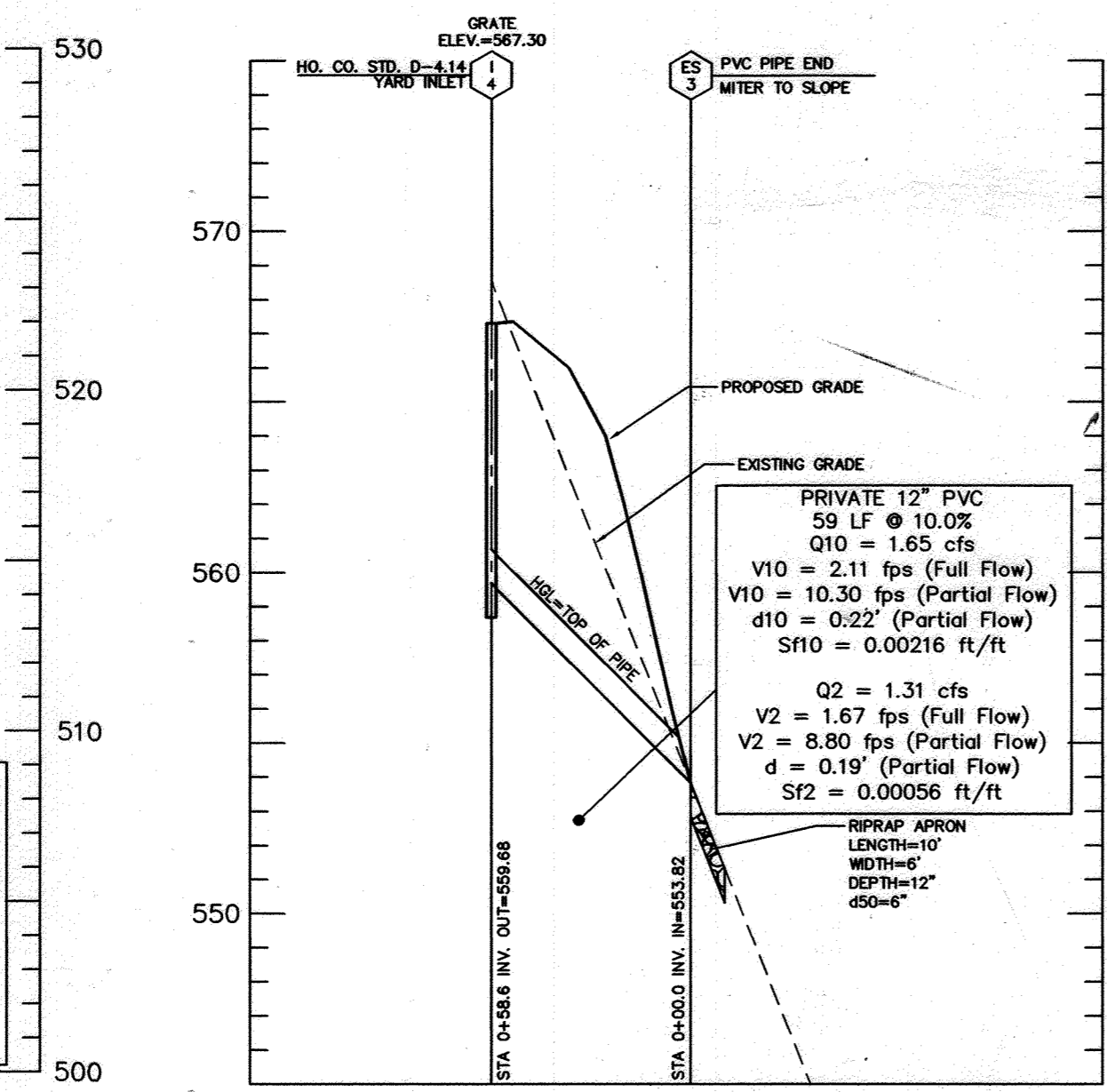
REVISED
MELCHIOR PROPERTY
 LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A
 TAX MAP 10 - GRID 13 PARCEL 184
 3rd ELECTION DISTRICT HOWARD COUNTY, MARYLAND
STORMWATER MANAGEMENT AND STORM DRAINAGE PLAN

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 6800 Deepwater Road, Suite 150, Ellicott City, MD 21075
 (410) 987-0266 Fax: (410) 987-0268 Fax



PROFILE - STRUCTURES
I-2 TO EW-1

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



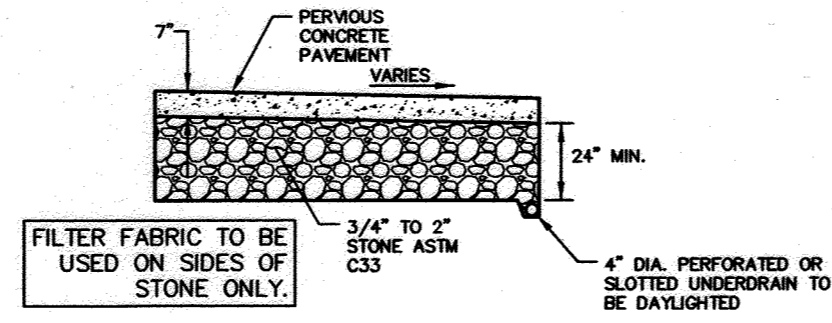
PROFILE - STRUCTURES
I-4 TO ES-3

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

STRUCTURE	TYPE	LOCATION	COORDINATES	TOP/RIM/ GRATE EL.	INV. IN	INV. OUT
EW-1	HO. CO. STD. D-5.21 TYPE 'C' ENDWALL (SEE DETAIL - THIS SHEET)		N 605,887.8940 E 1,331,759.7418	N/A	509.50	N/A
I-2	HO. CO. STD. D-4.10 TYPE 'D' INLET		N 605,910.5640 E 1,331,724.4963	N/A	N/A	509.71
ES-3	PVC PIPE MITERED TO CONFORM TO SLOPE		N 605,496.9402 E 1,331,533.3366	N/A	553.82	N/A
I-4	HO. CO. STD. D-4.14 YARD INLET		N 605,442.9356 E 1,331,510.6247	567.30 (GRATE)	N/A	559.68

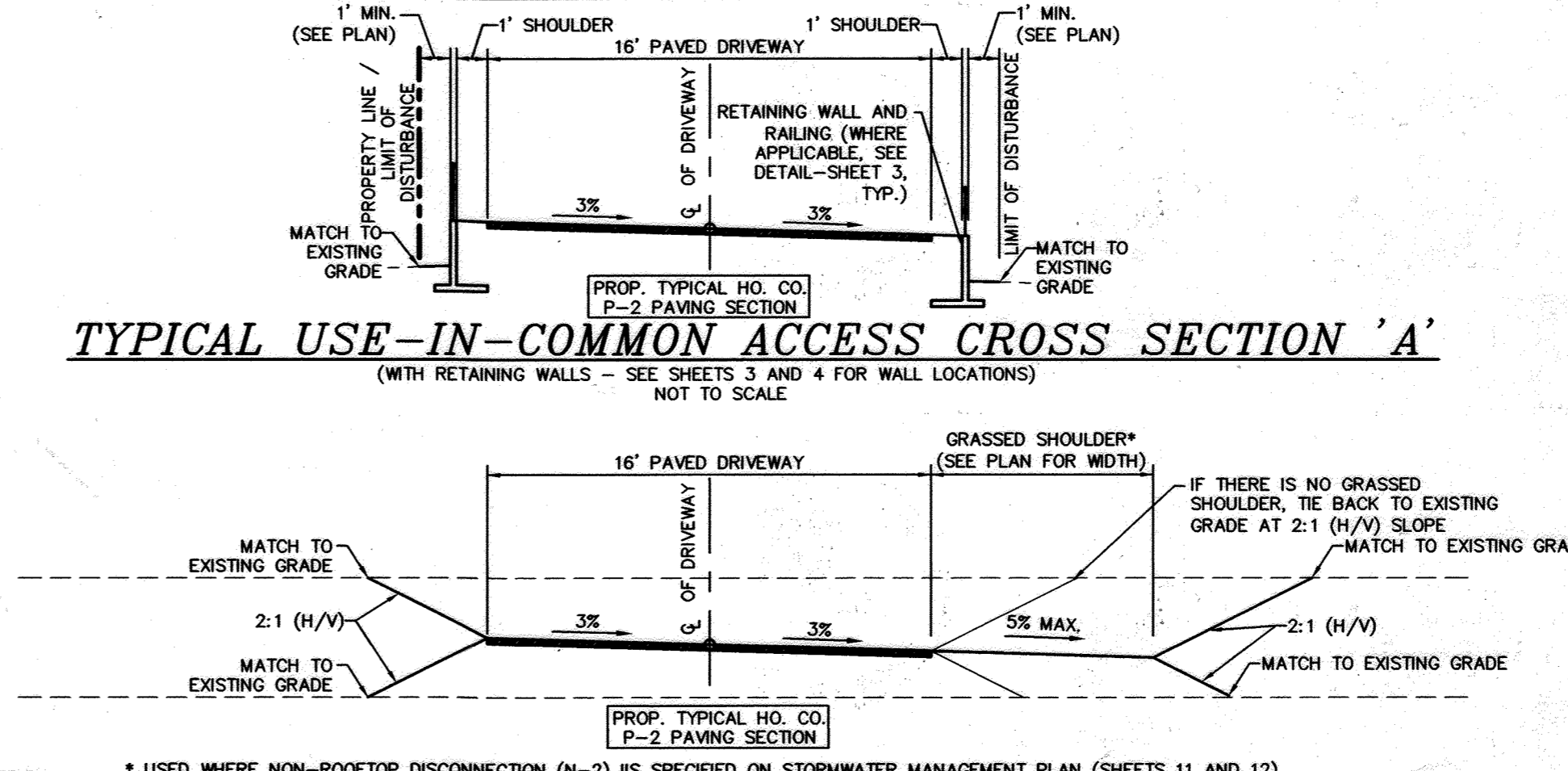
PIPE SCHEDULE

SIZE	LENGTH	TYPE / CLASS
12"	59 LF	PVC
18"	42 LF	RCP



PERVIOUS CONCRETE
DRIVEWAY (A-2) DETAIL

NOT TO SCALE



TYPICAL USE-IN-COMMON ACCESS CROSS SECTION 'A'

(WITH RETAINING WALLS - SEE SHEETS 3 AND 4 FOR WALL LOCATIONS)

TYPICAL USE-IN-COMMON ACCESS CROSS SECTION 'B'

(WITHOUT RETAINING WALLS)

NOT TO SCALE

* USED WHERE NON-ROOFTOP DISCONNECTION (N-2) IS SPECIFIED ON STORMWATER MANAGEMENT PLAN (SHEETS 11 AND 12)

OWNER
DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

ENGINEER'S CERTIFICATE

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

Signature: Jeffrey SLOMAN, PE
DATE: 11/19/13
PRINTED NAME OF ENGINEER

DEVELOPER'S CERTIFICATE

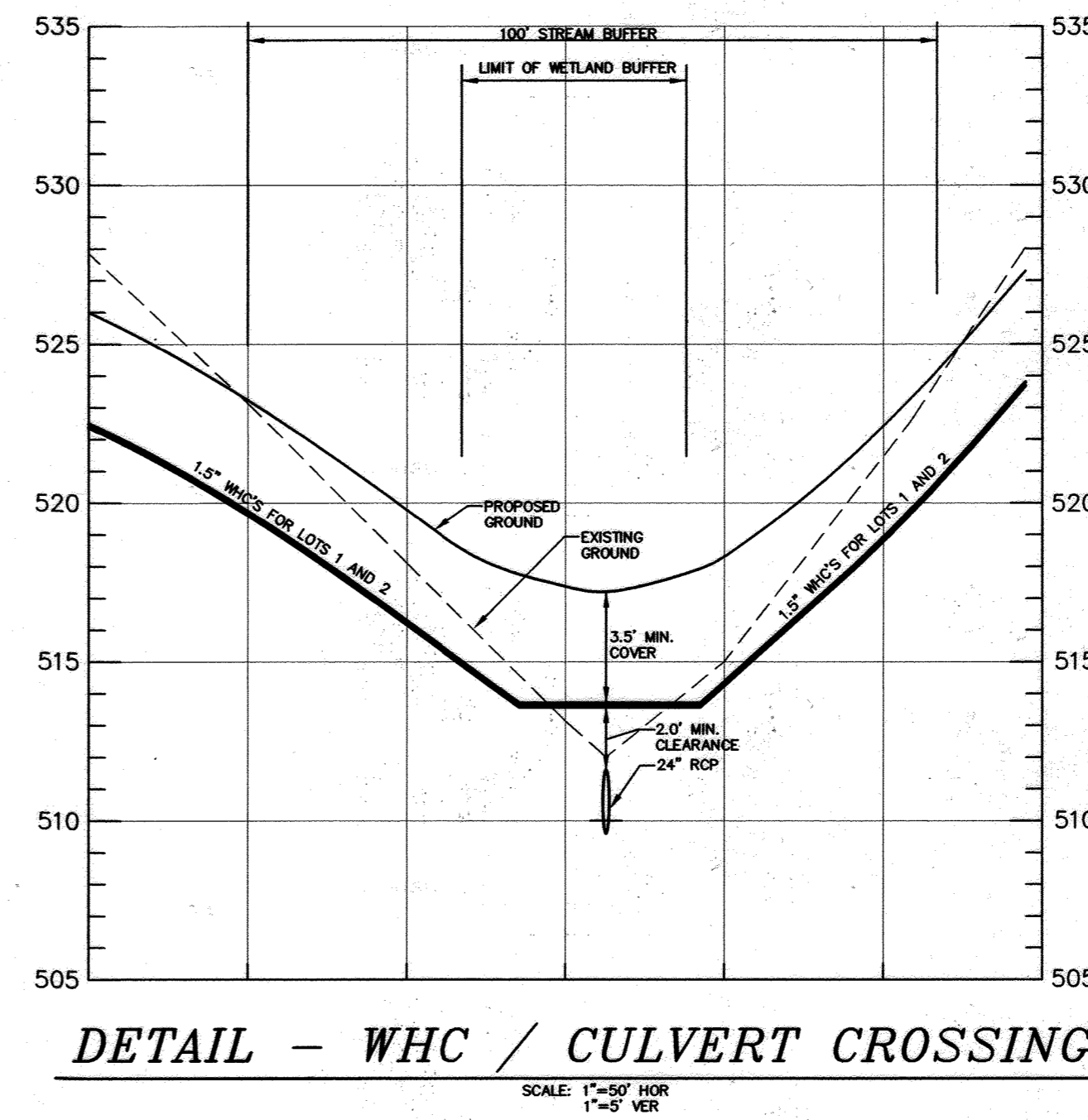
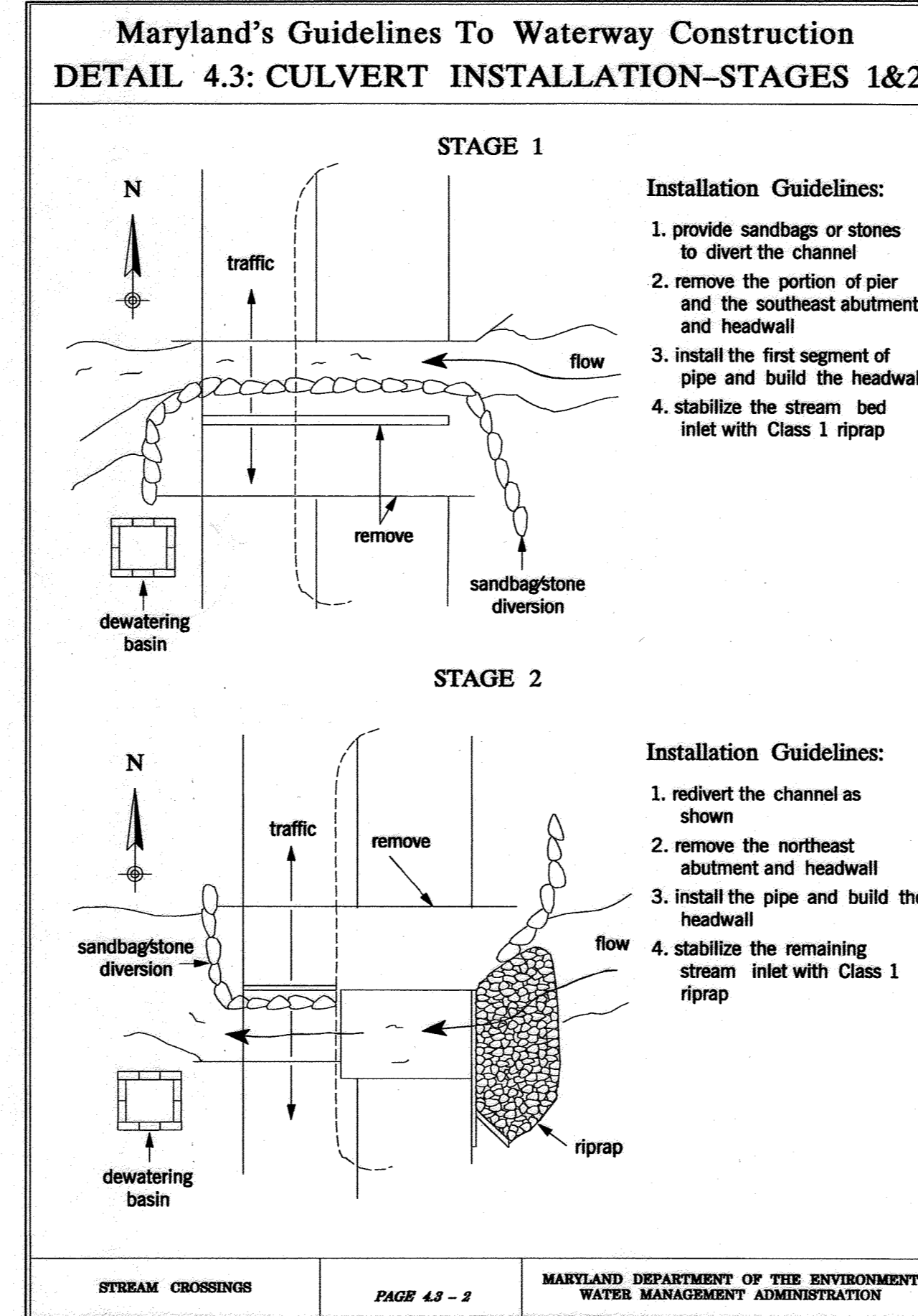
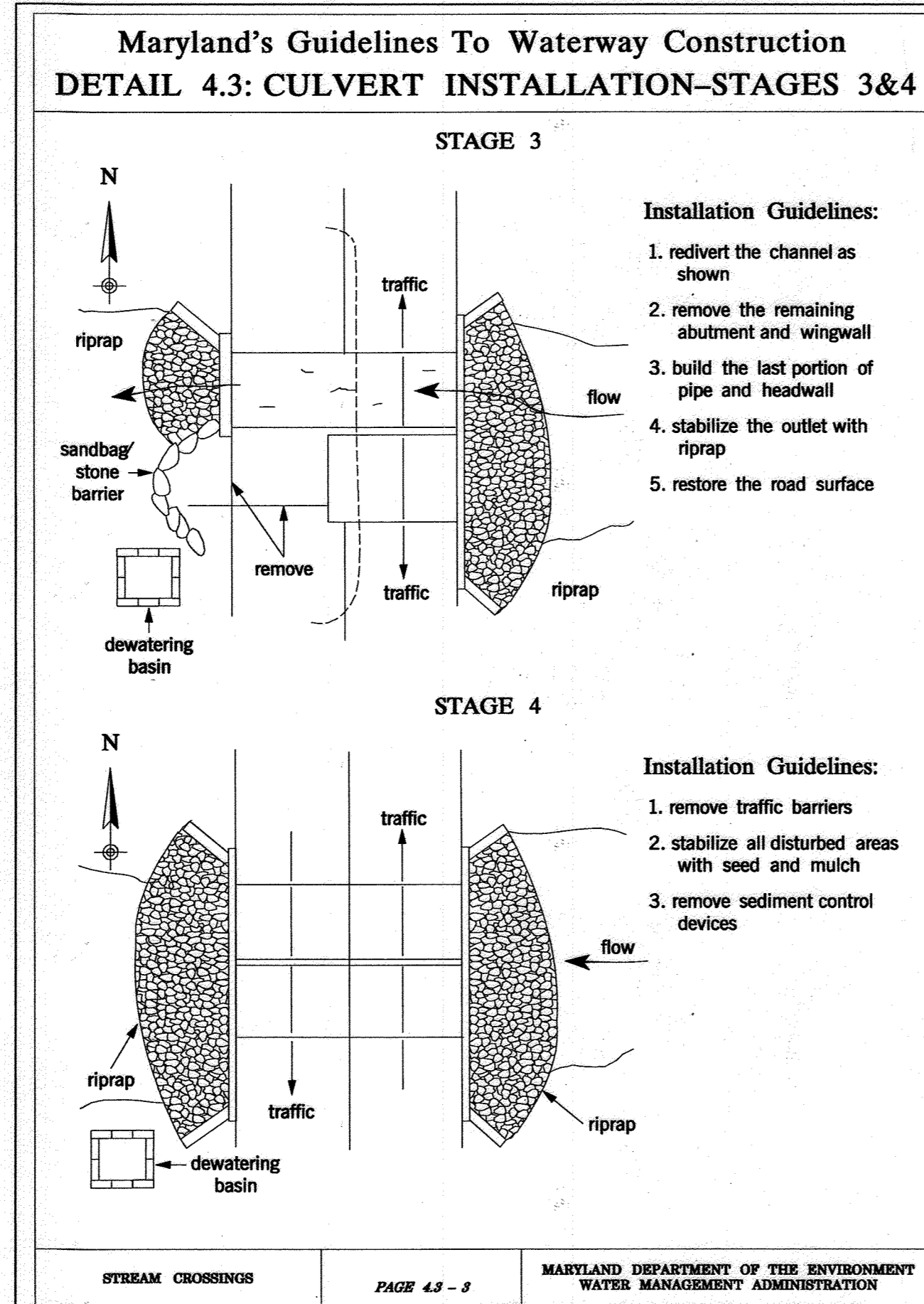
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE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

Signature: Robert DORSEY, JR., PRESIDENT, DORSEY FAMILY HOMES, INC.
DATE: 11-20-13
PRINTED NAME OF DEVELOPER

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

Signature: Howard SOIL CONSERVATION DISTRICT
DATE: 11/14/14

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Signature: Chief, Development Engineering Division
DATE: 1-9-14
Signature: Chief, Division of Land Development
DATE: 1-13-14



DETAIL - WHC / CULVERT CROSSING

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

OPERATION AND MAINTENANCE
SCHEDULE FOR PRIVATELY OWNED
AND MAINTAINED DISCONNECTION
OF ROOFTOP RUNOFF (N-1),
DISCONNECTION OF NON-ROOFTOP
RUNOFF (N-2)

A. MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE OWNER SHALL ENSURE THE AREAS RECEIVING RUNOFF ARE PROTECTED FROM FUTURE COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

OPERATION AND MAINTENANCE
SCHEDULE FOR
MICRO-BIORETENTION (M-6)

A. 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 INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2.
B. SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
C. 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 BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

OPERATION AND MAINTENANCE
SCHEDULE FOR PERVIOUS
CONCRETE (A-2)

A. THE OWNER SHALL PERIODICALLY SWEEP (OR VACUUM PERVIOUS CONCRETE PAVEMENT) THE PAVEMENT SURFACES TO REDUCE SEDIMENT ACCUMULATION AND ENSURE CONTINUED SURFACE POROSITY. SWEEPING SHOULD BE PERFORMED AT LEAST TWICE ANNUALLY WITH A COMMERCIAL CLEANING UNIT. WASHING OR COMPRESSED AIR UNITS SHOULD NOT BE USED TO PERFORM SURFACE CLEANING.
B. THE OWNER SHALL PERIODICALLY CLEAN DRAINAGE PIPES, INLETS, STONE EDGE DRAINS AND OTHER STRUCTURES WITHIN OR DRAINING TO THE SUBBASE.
C. THE OWNER SHALL USE DEICERS IN MODERATION. DEICERS SHOULD BE NON-TOXIC AND BE APPLIED EITHER AS CALCIUM MAGNESIUM ACETATE OR AS PRETREATED SALT.
D. THE OWNER SHALL ENSURE SNOW PLOWING IS PERFORMED CAREFULLY WITH BLADES SET ONE INCH ABOVE THE SURFACE. PLOWED SNOW PILES AND SNOWMELT SHOULD NOT BE DIRECTED TO PERMEABLE PAVEMENT.

project	NOV 2013	date	JLS	approval	RJH
12-028	illustration	JLS	scale	1"=50'	

description	revisions
no.	date

MELCHIOR PROPERTY
LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A
TAX MAP 10 - GRID 13 PARCEL 184
HOWARD COUNTY, MARYLAND
3rd ELECTION DISTRICT
STORMWATER MANAGEMENT AND CONSTRUCTION DETAILS AND PROFILES

MILDENBERG,
BOENDER & ASSOC., INC.
Engineers Planners Surveyors
6800 Deerpath Road, Suite 150, Elkridge, MD 21075
(410) 987-0286 Fax: (410) 987-0286

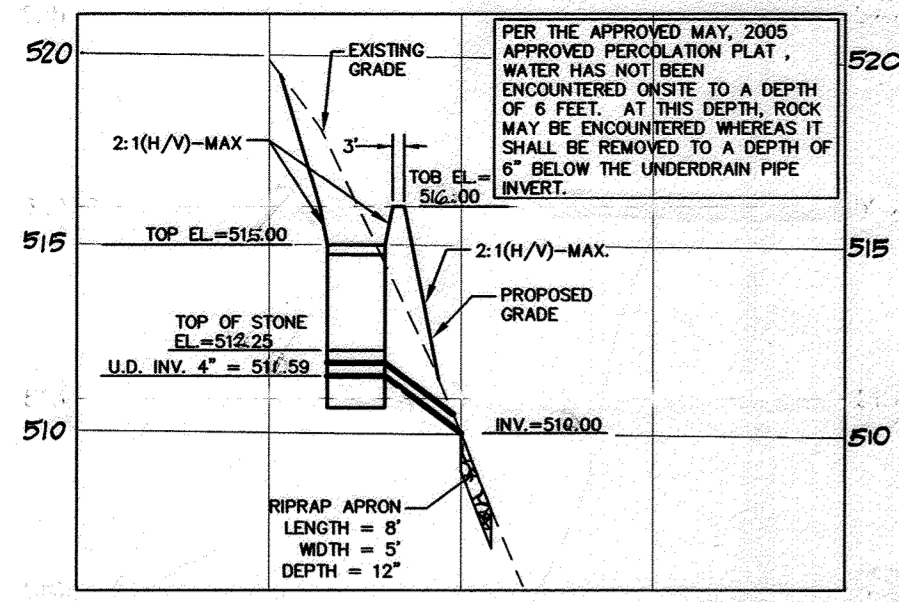
P: 2004A12-028 MARDOTS PRESERVE (MELCHIOR) DWG 028-RP1-SUPP-MAY 2013

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 40091, EXP DATE 2/13/15.

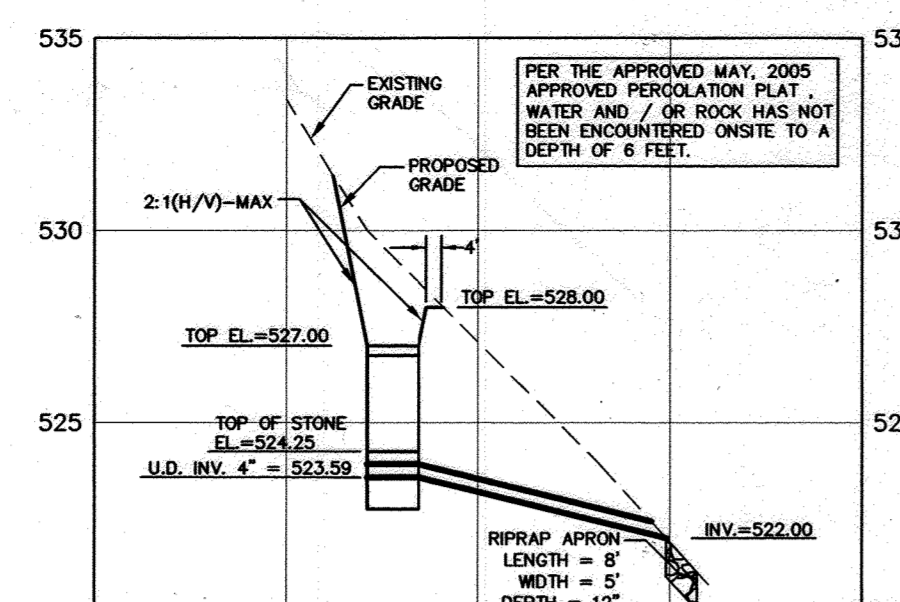
THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET



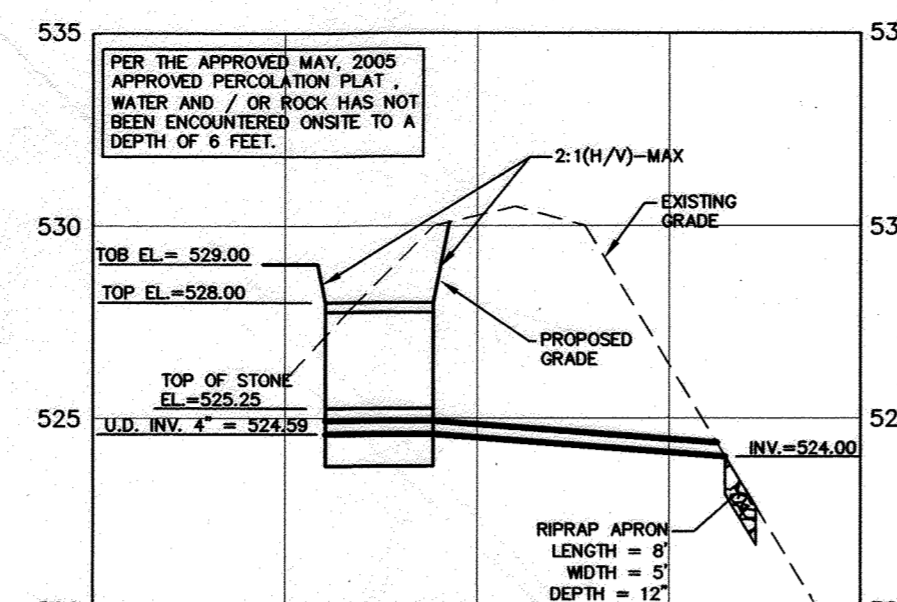
Signature: Jeffrey SLOMAN, P.E.
DATE: 11/18/13



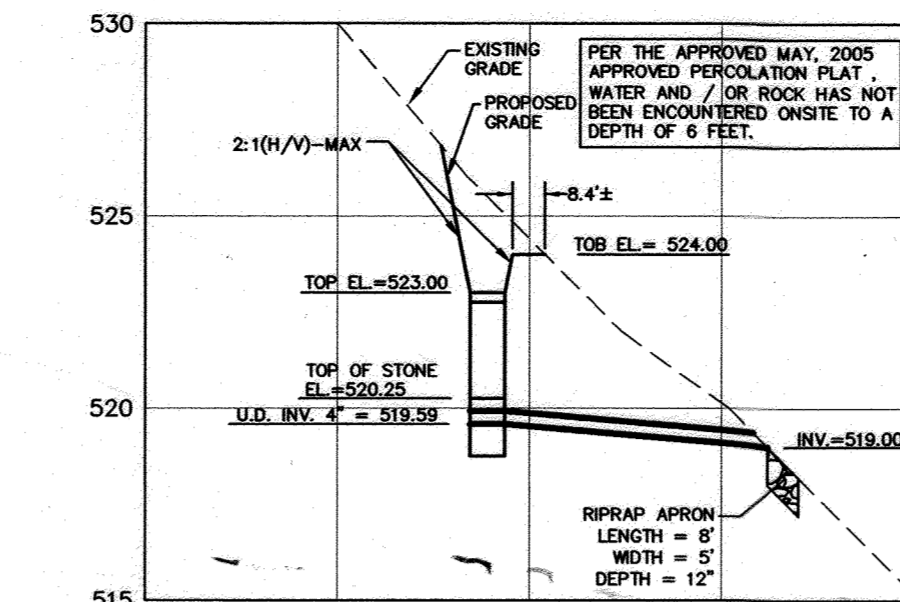
SECTION - FACILITY MB-1 (LOT 1)
SCALE: 1"=50' HOR
1"=5' VER



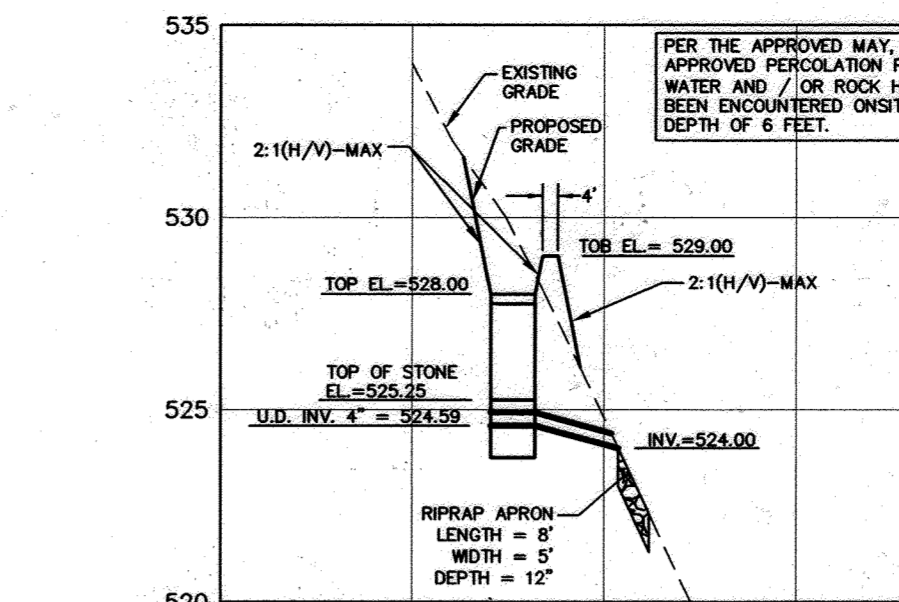
SECTION - FACILITY MB-2 (LOT 2)
SCALE: 1"=50' HOR
1"=5' VER



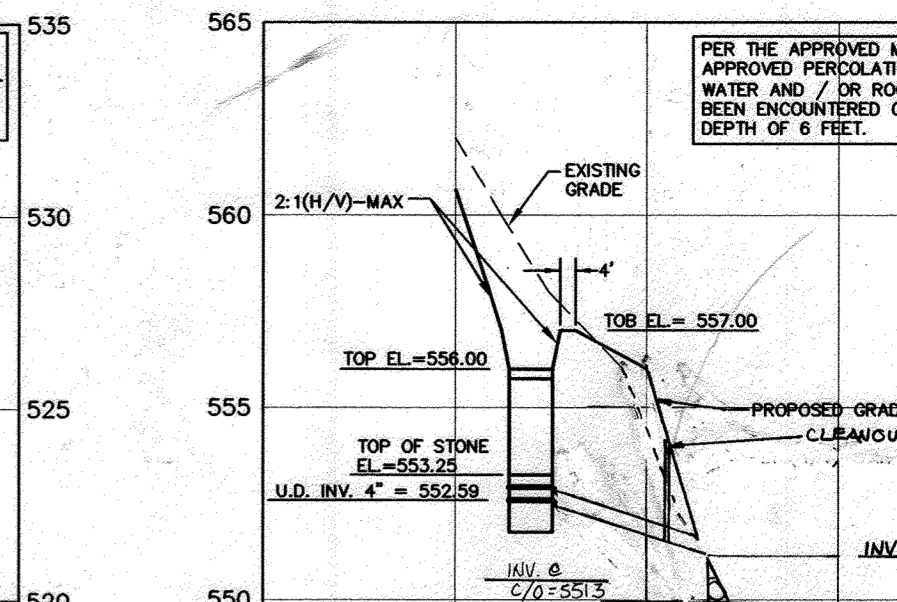
SECTION - FACILITY DW-1 (USE-IN-COMMON ACCESS)
SCALE: 1"=50' HOR
1"=5' VER



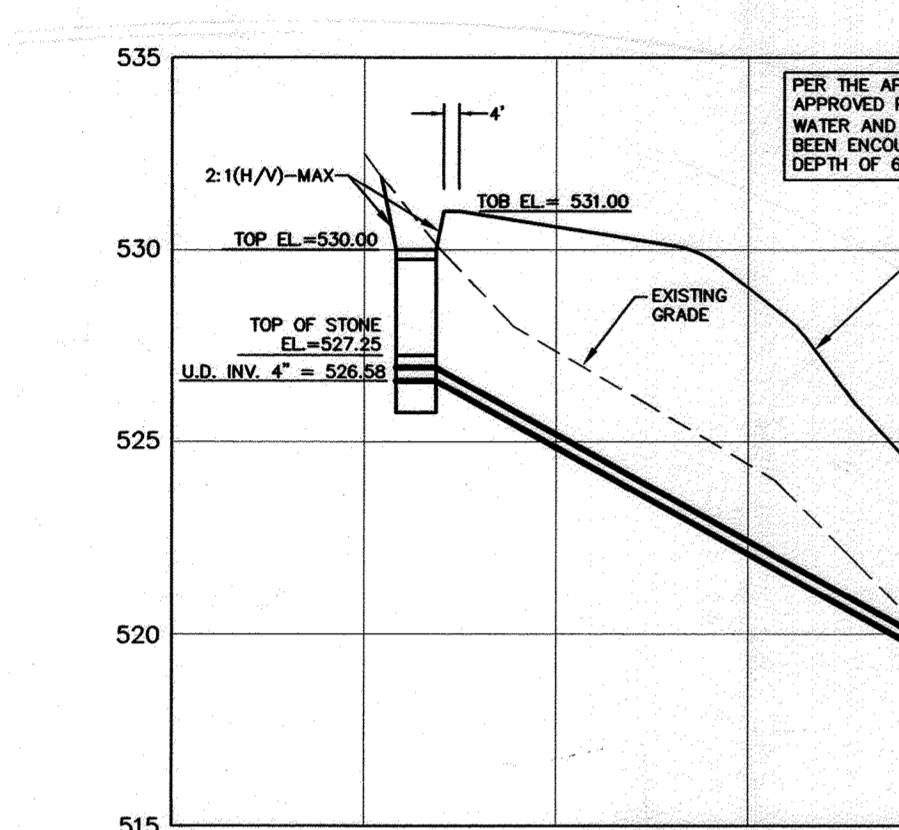
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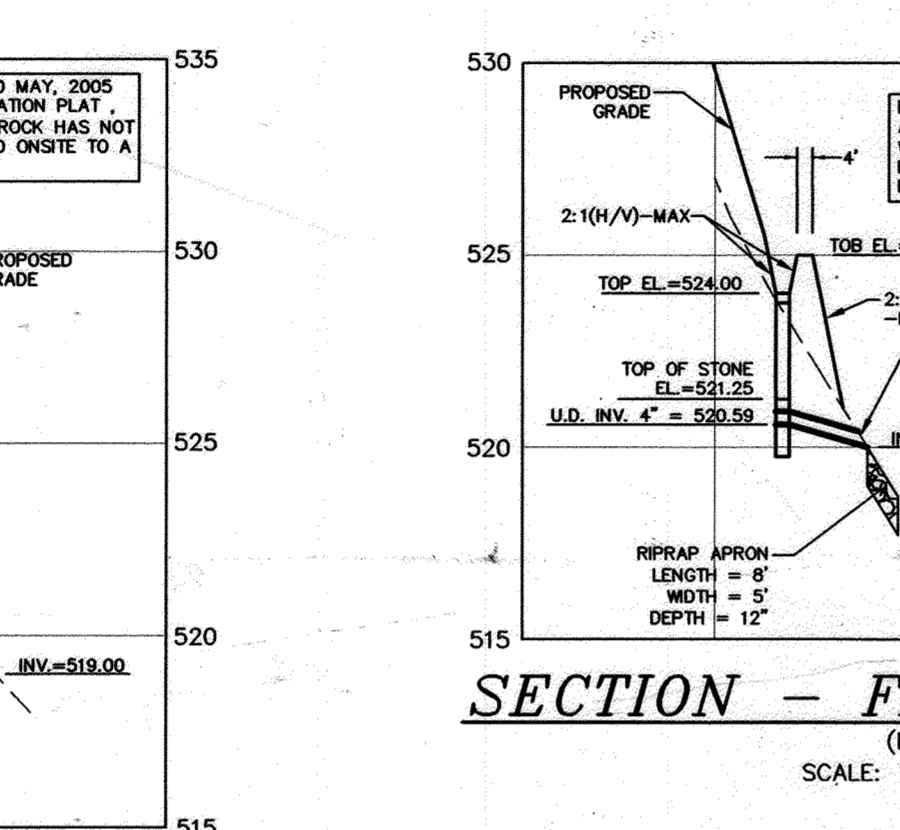
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SCALE: 1"=50' HOR
1"=5' VER



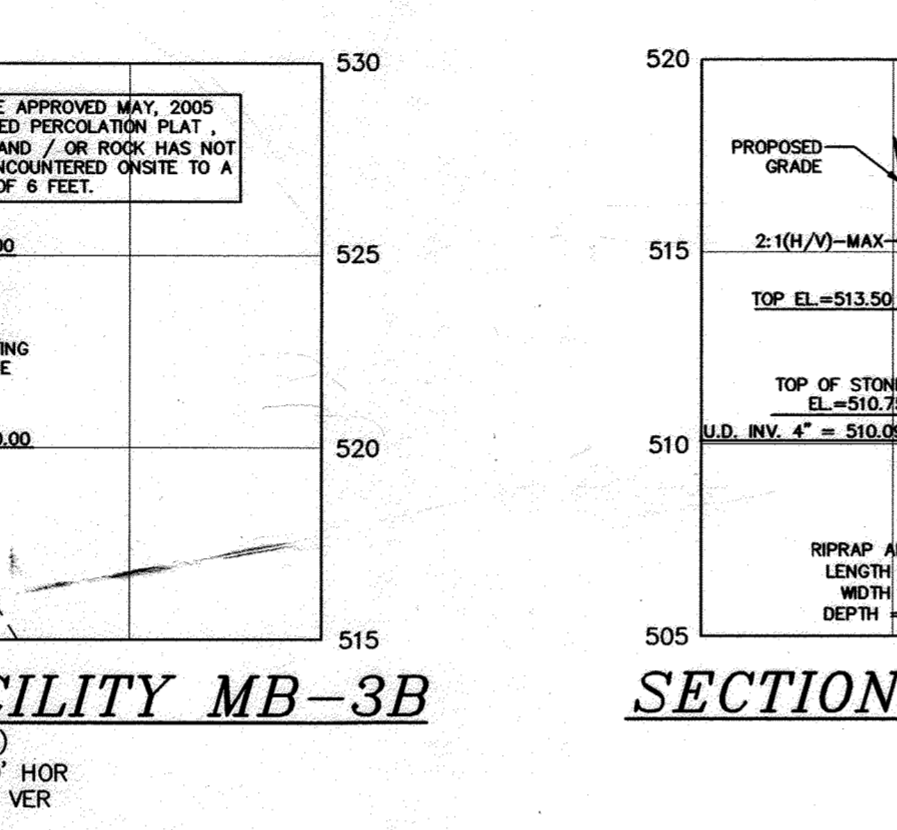
SECTION - FACILITY DW-4 (USE-IN-COMMON ACCESS)
SCALE: 1"=50' HOR
1"=5' VER



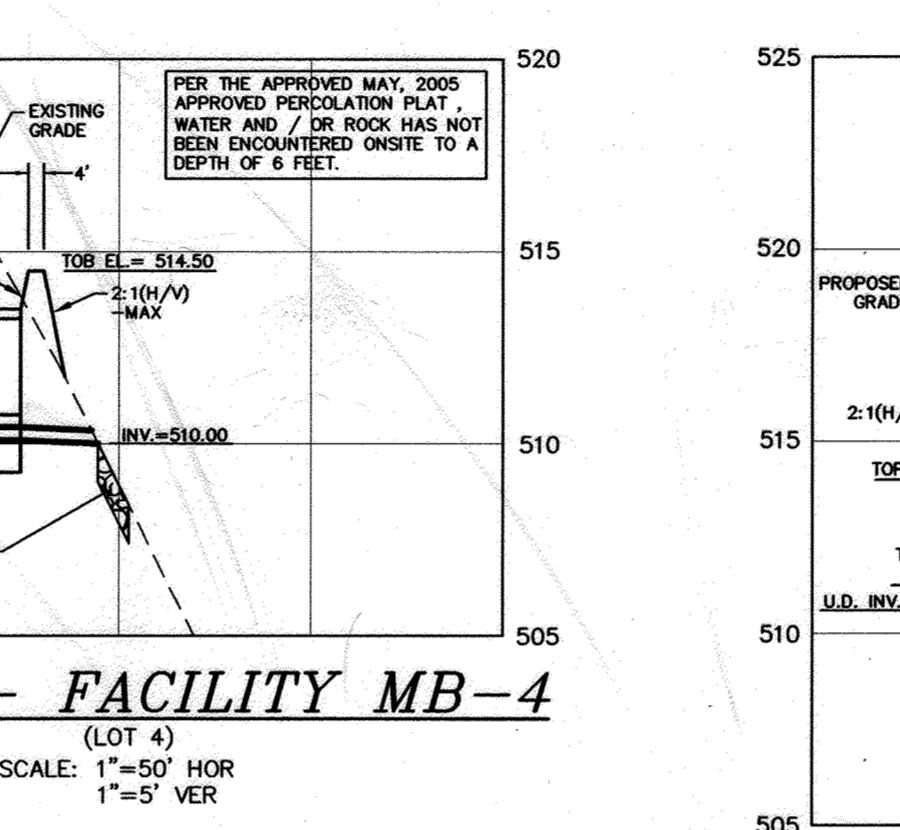
SECTION - FACILITY MB-3A (LOT 3)
SCALE: 1"=50' HOR
1"=5' VER



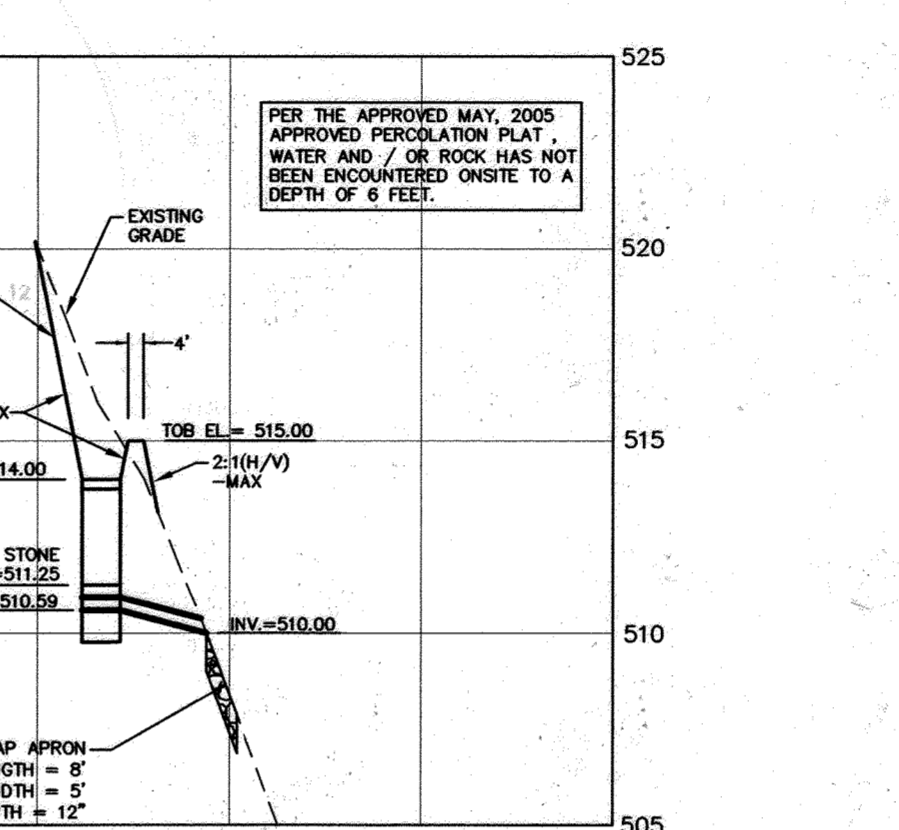
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SCALE: 1"=50' HOR
1"=5' VER



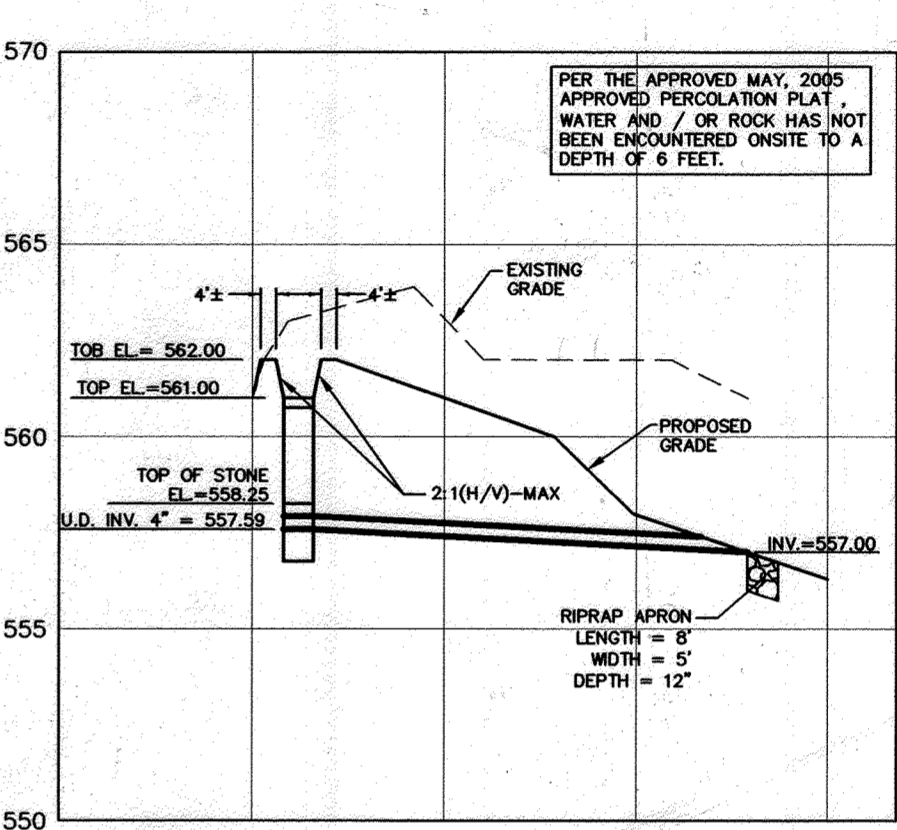
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SCALE: 1"=50' HOR
1"=5' VER



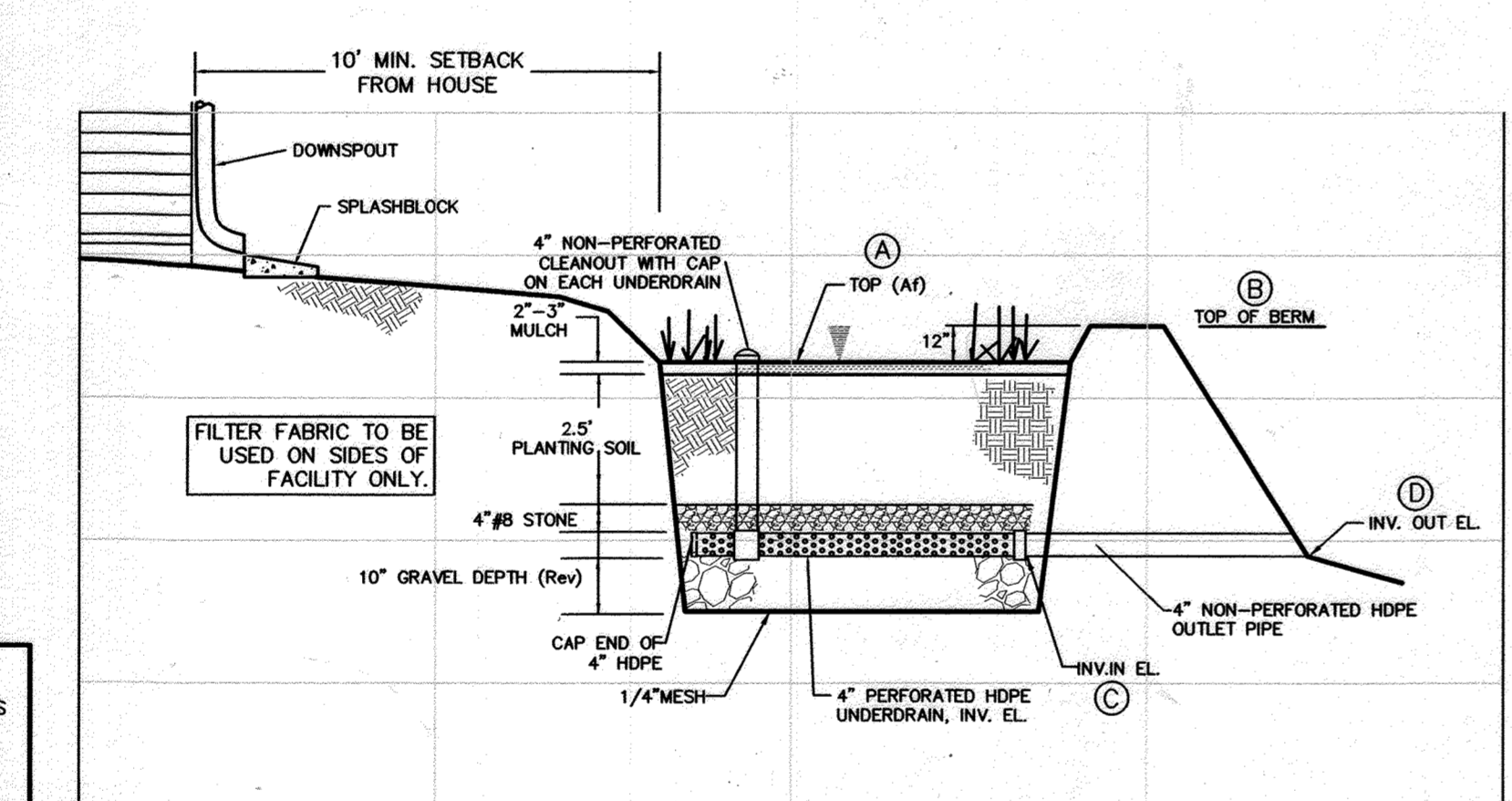
SECTION - FACILITY MB-5 (LOT 5)
SCALE: 1"=50' HOR
1"=5' VER



SECTION - FACILITY MB-6A (LOT 6)
SCALE: 1"=50' HOR
1"=5' VER



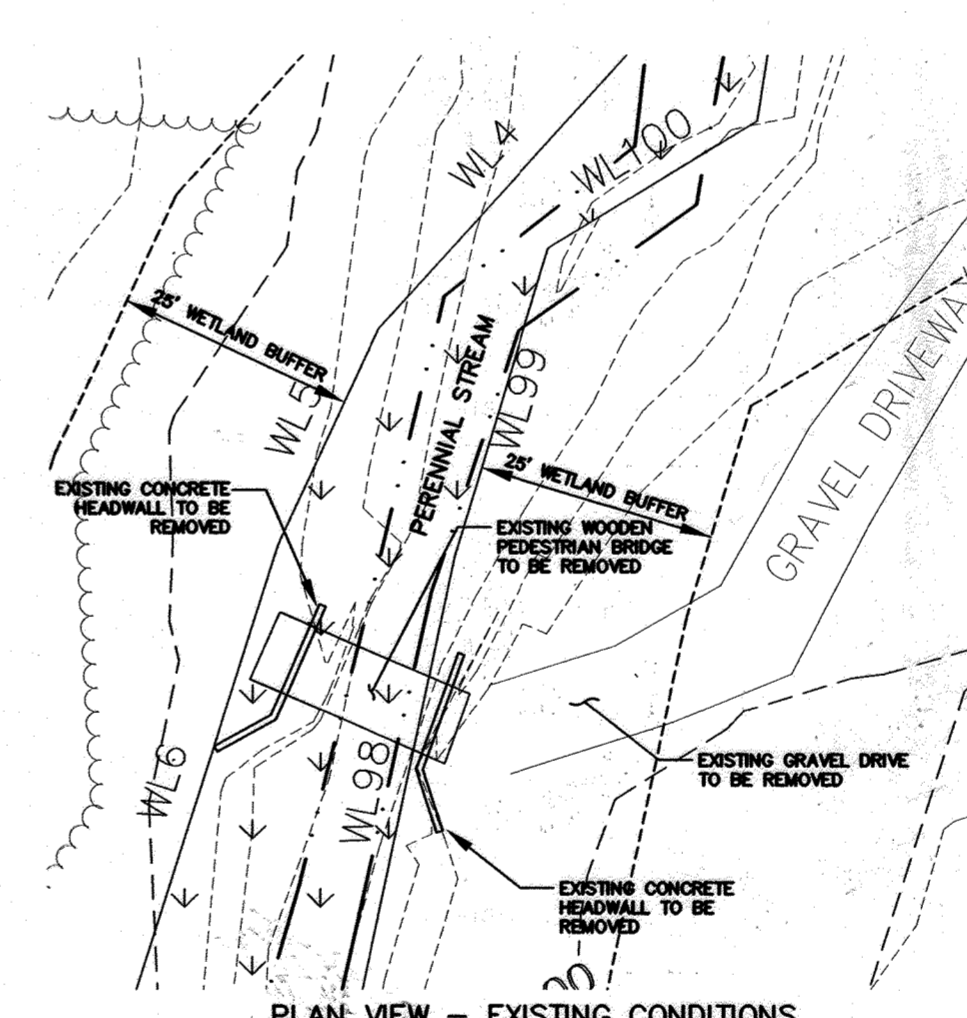
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SCALE: 1"=50' HOR
1"=5' VER



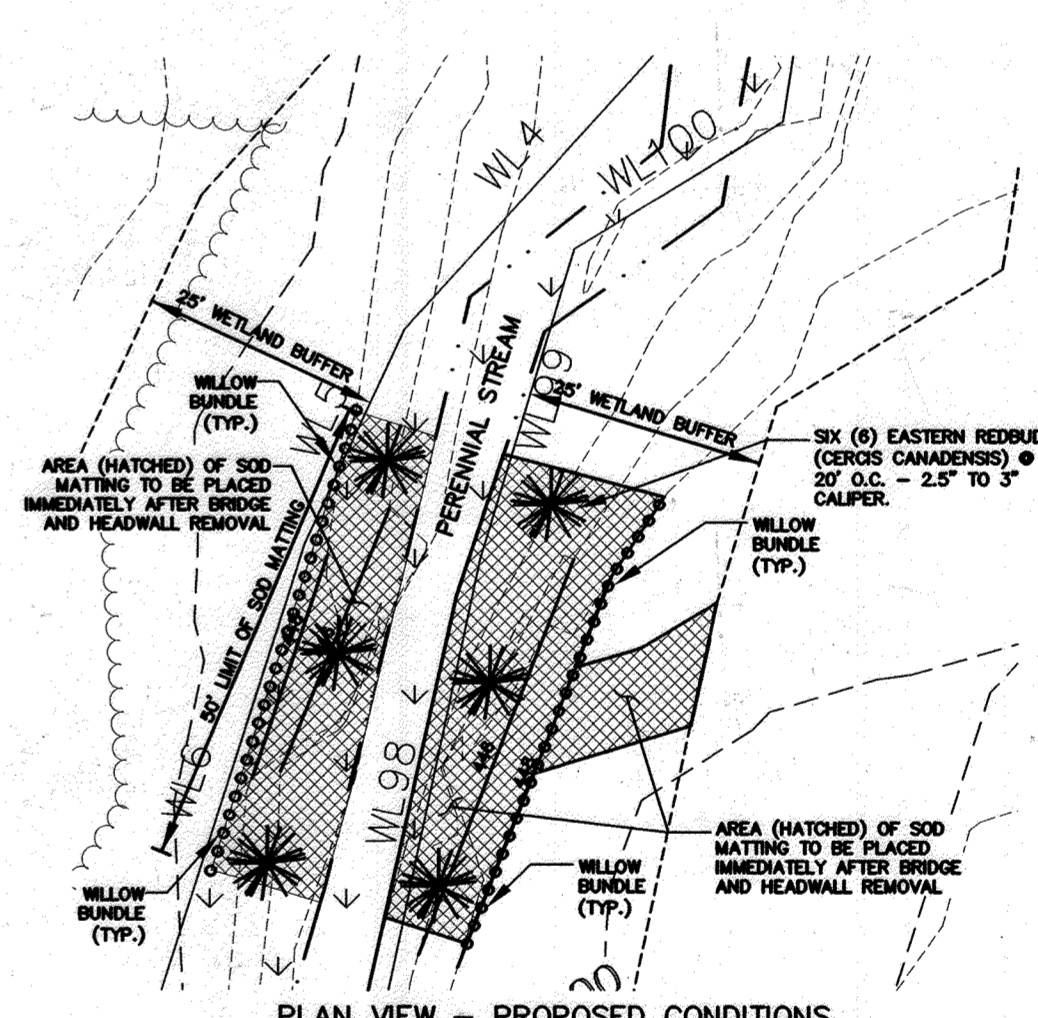
MICRO-BIORETENTION (M-6) DETAIL
NOT TO SCALE

MICRO-BIORETENTION SCHEDULE

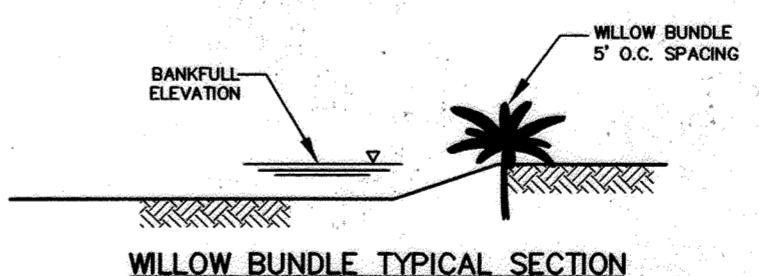
FACILITY	TOP EL. (A)	TOP OF BERM (B)	INV. IN (C)	INV. OUT (D)	AREA AT TOP EL. (A) (SF)
MB-1	516.00	516.00	514.59	510.00	420 SF
MB-2	527.00	528.00	523.59	522.00	308 SF
MB-3A	530.00	531.00	526.58	519.00	37 SF
MB-3B	524.00	525.00	520.59	520.00	185 SF
MB-4	513.50	514.50	510.09	510.00	336 SF
MB-5	514.00	515.00	510.59	510.00	280 SF
MB-6A	561.00	562.00	557.59	557.00	63 SF
MB-6B	560.00	561.00	556.59	556.00	420 SF
DW-1	528.00	529.00	524.59	524.00	196 SF
DW-2	523.00	524.00	519.59	519.00	196 SF
DW-3	528.00	529.00	524.59	524.00	408 SF
DW-4	556.00	557.00	552.59	548.00	352 SF
DW-5	535.00	536.00	531.59	530.00	363 SF
DW-6	529.00	530.00	525.59	525.00	47 SF



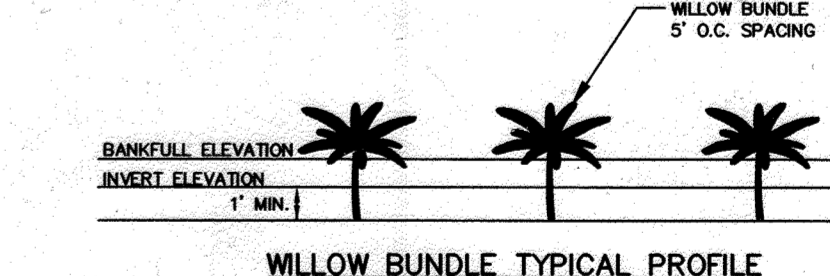
PLAN VIEW - EXISTING CONDITIONS
1"=20'



PLAN VIEW - PROPOSED CONDITIONS
1"=20'

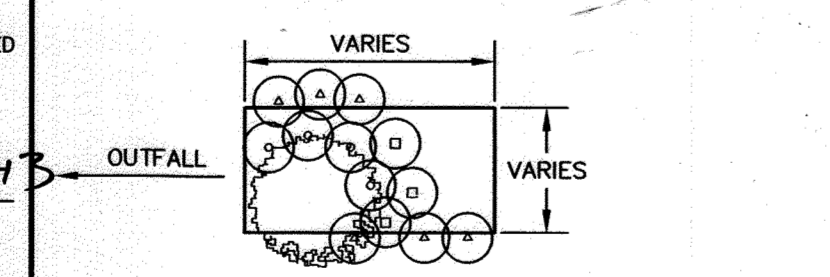


WILLOW BUNDLE TYPICAL SECTION
NOT TO SCALE



WILLOW BUNDLE TYPICAL PROFILE
NOT TO SCALE

STREAM BANK RESTORATION DETAILS



MICRO-BIORETENTION PLANTING DETAIL
N.T.S.

MICRO-BIORETENTION FACILITY (M-6) PLANT LIST

QUANTITY REQUIRED	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY REQUIRED FOR EACH FACILITY	PROVIDED
1 PER 60 SF	○	ILEX GLABRA	INK BERRY	2' - 3' HT.	MB-1: 20 SF / 60 = 0.33	MB-1: 20 SF / 60 = 0.33
1 PER 20 SF	○	LOBELIA SIPHILITICA	GREAT BLUE LOBELIA	1 GAL. CONTAINER	MB-1: 20 SF / 20 = 1	MB-1: 20 SF / 20 = 1
1 PER 30 SF	○	ONOCLEA SENSIBILIS	SENSITIVE FERN	1 GAL. CONTAINER	MB-1: 30 SF / 30 = 1	MB-1: 30 SF / 30 = 1
1 PER 40 SF	○	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	1 GAL. CONTAINER	MB-1: 40 SF / 40 = 1	MB-1: 40 SF / 40 = 1
TOTAL:					433 PERENNIALS, 70 SHRUBS	

OWNER
DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

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

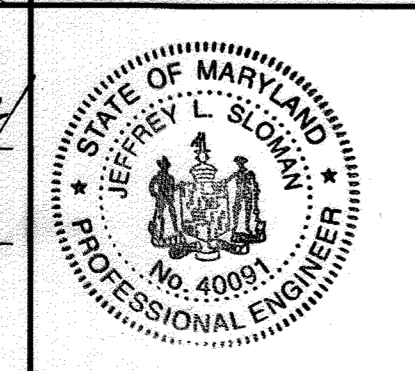
Signature of Engineer: *Jeffrey Sloman*
DATE: 12/13/13
JEFFREY SLOMAN, PE
PRINTED NAME OF ENGINEER

DEVELOPERS CERTIFICATE
I 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. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTION.

Signature of Developer: *Robert Dorsey, Jr.*
DATE: 12-13-13
ROBERT DORSEY, JR., PRESIDENT, DORSEY FAMILY HOMES, INC.
PRINTED NAME OF DEVELOPER

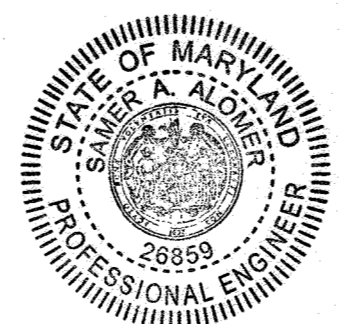
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Signature: *Charles Edmund*
DATE: 1-9-14
Signature: *Kate Schuchman*
DATE: 1-13-14
CHIEF, DIVISION OF LAND DEVELOPMENT



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 40091, EXP. DATE 2/13/15.
Signature: *Jeffrey Sloman*
DATE: 12/13/13
JEFFREY SLOMAN, P.E.

THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET

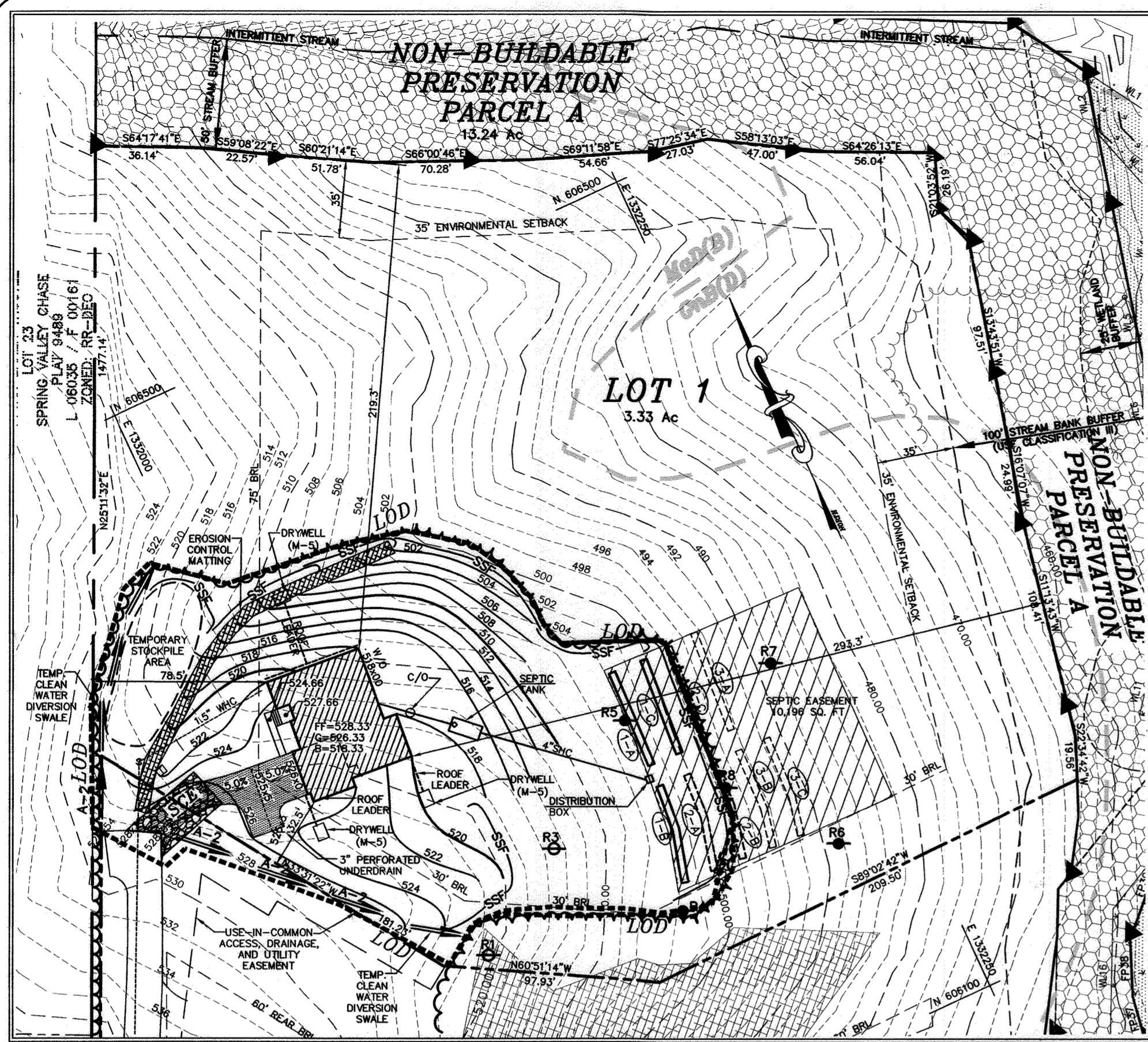


Project	NOV 2013	date	engineering
Illustration	12-028	illustration	JIS
Scale	1"=50'	scale	JIS
Approval	JIS	approval	RH

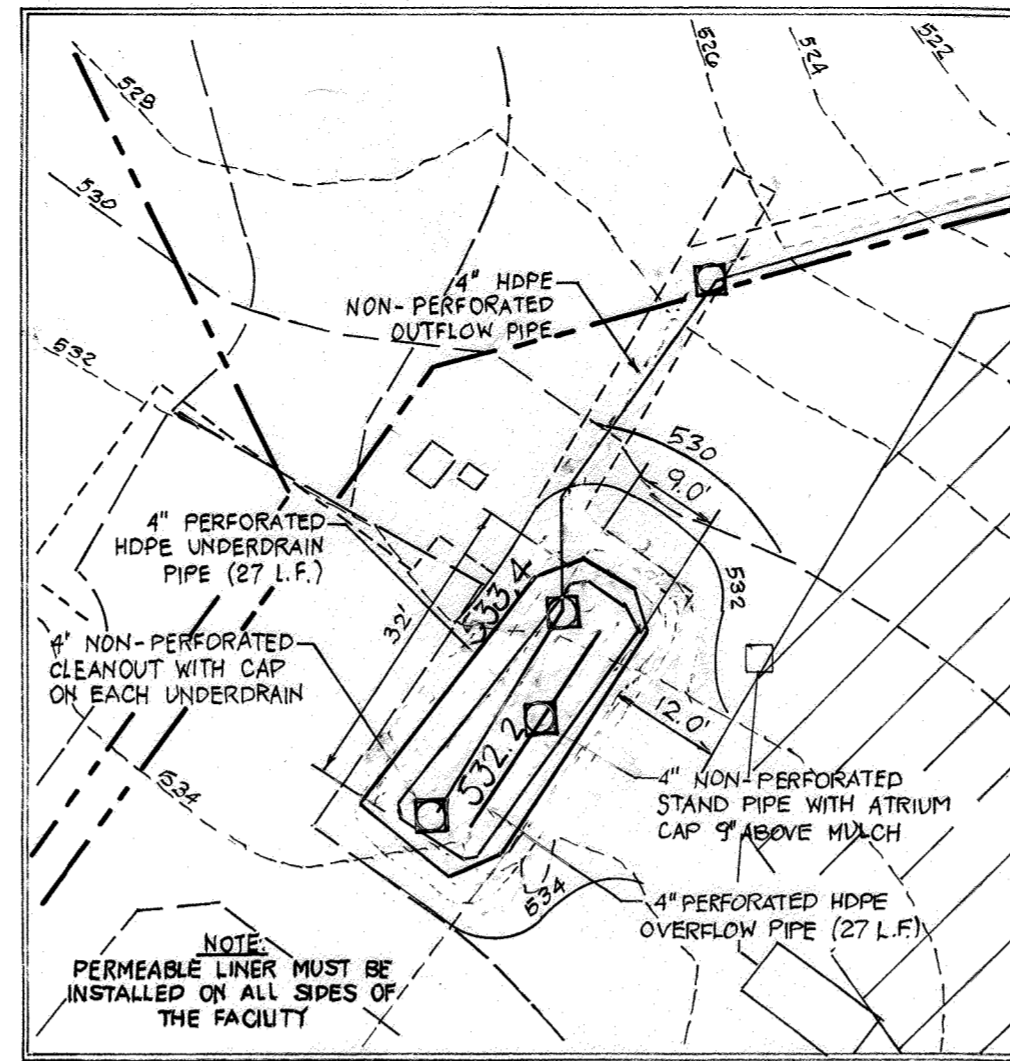
REVISE	1/1/15	date	description
1	JUN 2015	date	REVISIONS
2	JUN 2015	date	REVISIONS

MELCHIOR PROPERTY
LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A
TAX MAP 10 - GRID 13 PARCEL 194
HOWARD COUNTY, MARYLAND
3rd ELECTION DISTRICT
STORMWATER MANAGEMENT AND STREAM RESTORATION DETAILS

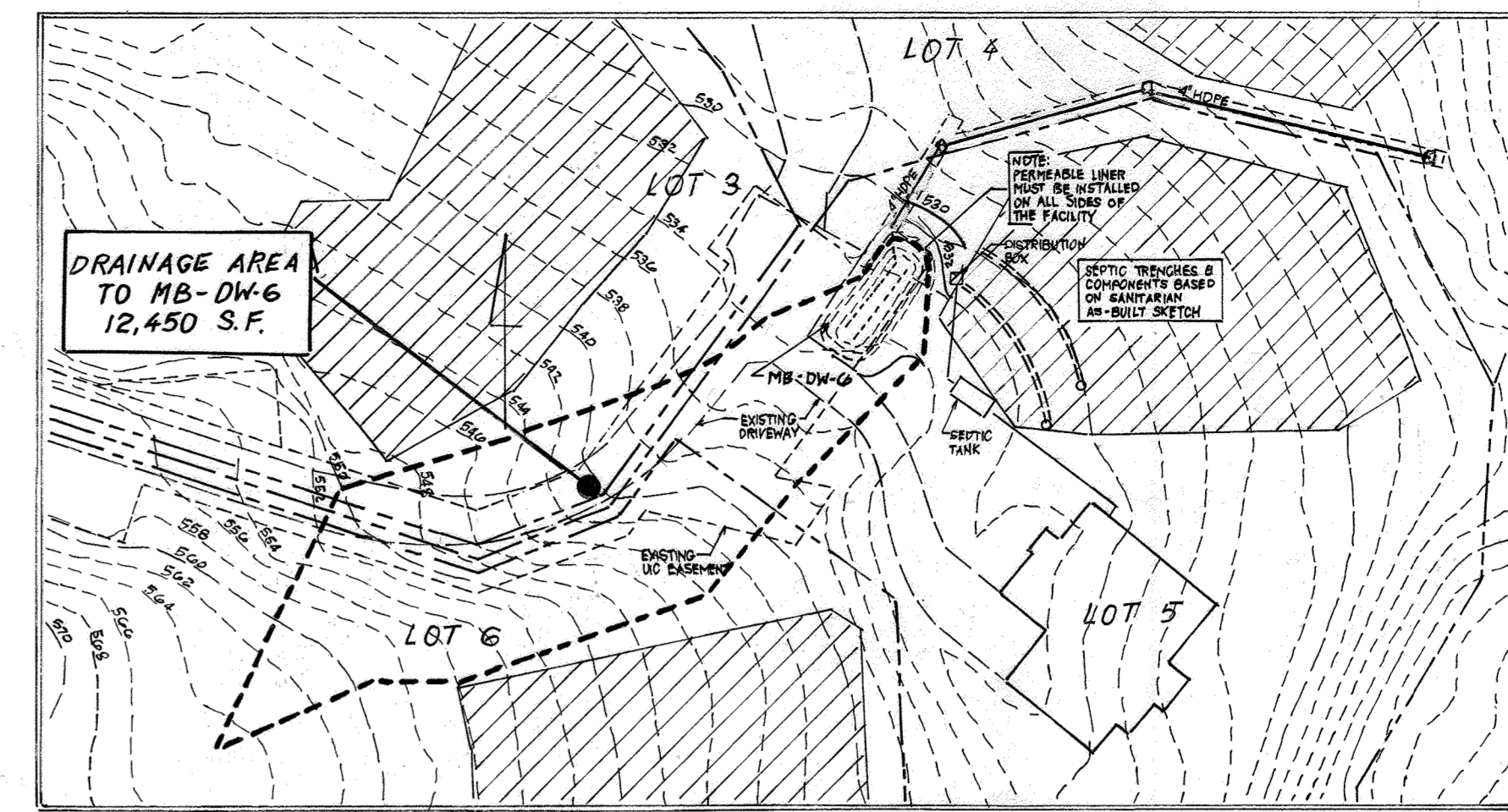
MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
6800 Deerpath Road, Suite 150, Elkridge, MD 21075
(410) 997-0286 Fax: (410) 997-0286



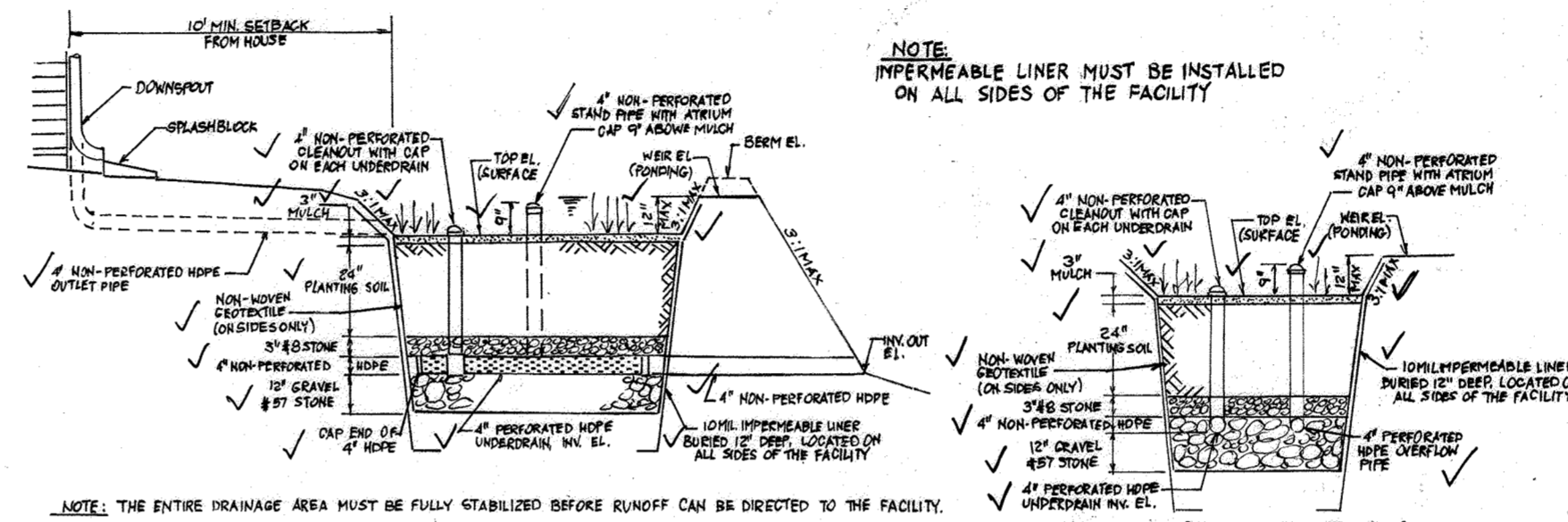
LOT 1
1" = 50'



MICRO BIO-RETENTION DETAIL (MB-DW-6)
SCALE 1" = 20'



MB-DW-6 DRAINAGE AREA MAP (LOT 6)
SCALE 1" = 50'

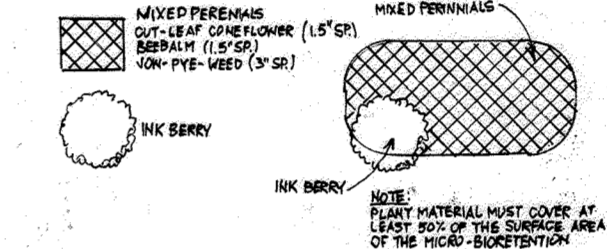


TYPICAL MICRO-BIORETENTION PROFILE
NTS

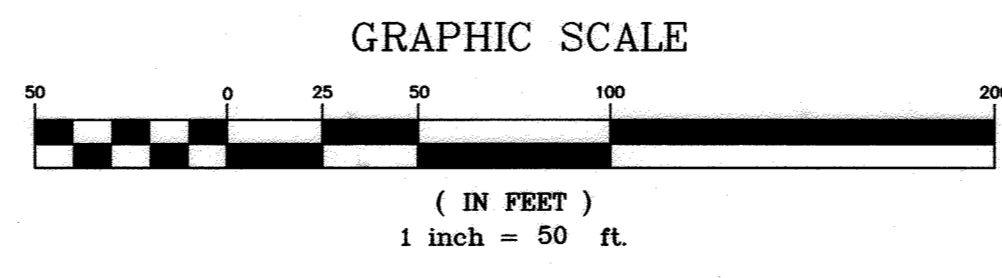
TYP. SECTION MICRO-BIORETENTION (M-G)
NTS

MICRO-BIORETENTION DESIGN DATA

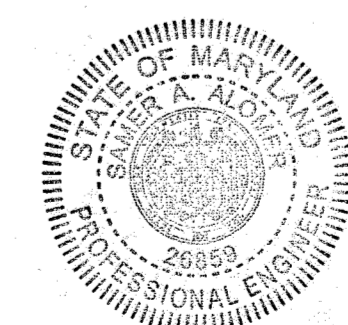
FACILITY	TOP EL. (SURFACE)	WER EL. (PONDING)	BERM EL.	INV. IN.	INV. OUT.	SURFACE AREA	PONDING AREA	PONDING DEPTH	GRAVEL DEPTH BELOW UNDERDRAIN
MB-DW-6	532.25	533.00	533.50	529.42	511.3	280 S.F.	176 S.F.	9"	12"



TYP. MICRO-BIORETENTION (M-G) PLANTING DETAIL
NTS



THE PURPOSE OF THIS PLAN IS TO SHOW THE FINAL GRADING, SEDIMENT CONTROL AND STORMWATER MANAGEMENT FOR EACH LOT.



AS-BUILT CERTIFICATION FOR PSWM
I hereby certify that the facility shown on this plan was constructed as shown on the 'As-Built' plans and meets with the approved plans and specifications.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 7.9.19
DATE

[Signature] 7/6/19
DATE

CHIEF, DIVISION OF LAND DEVELOPMENT

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP. DATE 09/03/20.

R. JACOB HIKMAT, P.E. 6/18/19
DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
7350-B Grace Drive, Columbia, MD. 21044
(410) 997-0296 Tel. (410) 997-0298 Fax

MELCHIOR PROPERTY
LOTS 1 THRU 6 AND NON-BUILDABLE PRESERVATION PARCEL A
TAX MAP 10 - GRID 13 PARCEL 184
3rd ELECTION DISTRICT HOWARD COUNTY, MARYLAND
REVISED FINAL ROAD CONSTRUCTION PLAN

project 12-028
date JUNE 2019
illustration MAM
description MAM (MB-DW-6) DETAILS AND AS-BUILT CONDITION OF LOT 6, DRAINAGE AREA (M-G)
scale 1" = 50'
date DEC 2022
no. 1
revisions

15 OF 15
F-13-074