

KEY

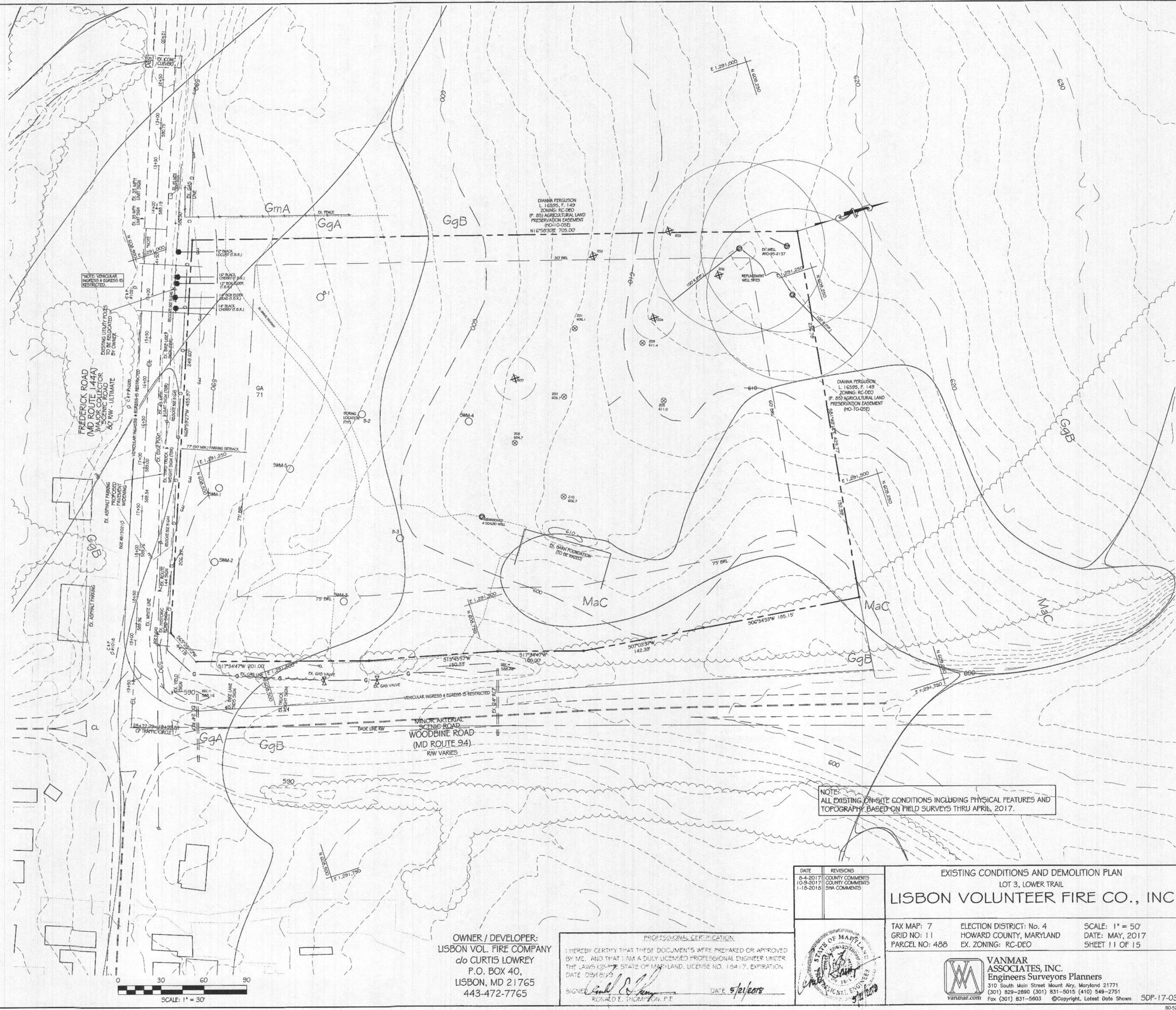
BORING LOCATION: B-1; SWM-4
T.B.R. TO BE REMOVED

SHA MITIGATION WAIVED. NO MITIGATION IS REQUESTED BY
SHA FOR THE REMOVAL OF TREES NOTED.

SHA TREE REMOVAL SCHEDULE				
KEY	BOTANICAL NAME COMMON NAME	SIZE	NOTES	CONDITION
1	BLACK LOCUST <i>Robinia Pseudoacacia</i>	12" dbh	T.B.R.	Poor
2	BLACK CHERRY <i>Prunus serotina</i>	16" dbh	T.B.R.	Poor
3	BOX ELDER <i>Acer negundo</i>	12" dbh	T.B.R.	Fair
4	BOX ELDER <i>Acer negundo</i>	14" dbh	T.B.R.	Dead
5	BLACK CHERRY <i>Prunus serotina</i>	14" dbh	T.B.R.	Poor

ROADSIDE TREE PERMIT. Tree removal, tree installation, tree root and branch pruning, and other regulated impacts to trees in the SHA right of way shall conform to the requirements of the Roadside Tree Permit (RTP) issued by the Maryland Department of Natural Resources, or the approved Forest Conservation Plan (FCP) of the local authority.

1. A copy of the RTP or FCP shall be submitted to the SHA Office of Environmental Design before work is performed, and a copy of the RTP or FCP shall be reproduced in the plans or be in possession of the applicant at the project site when the work is performed.
2. A Maryland Licensed Tree Expert shall perform the specified tree operations in conformance with the SHA Standard Specifications and ANSI A300 Standards for Tree Care Operations.

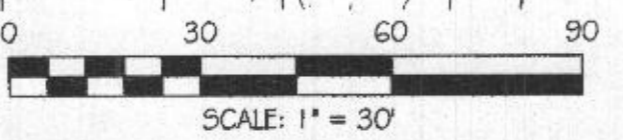


APPROVED
HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Nathan J. Jaffe 7-12-18
DIRECTOR DATE

Keith Seelbach 7-11-18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

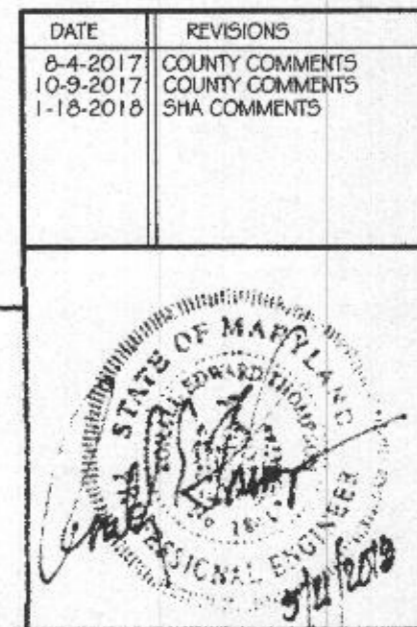
Chad Chalmers 6-12-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



OWNER / DEVELOPER:
LISBON VOL. FIRE COMPANY
c/o CURTIS LOWREY
P.O. BOX 40,
LISBON, MD 21765
443-472-7765

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED
BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER
THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 118417, EXPIRATION
DATE 09/18/19

SIGNED *Ronald E. Thompson* DATE 5/1/2018
RONALD E. THOMPSON, P.E.



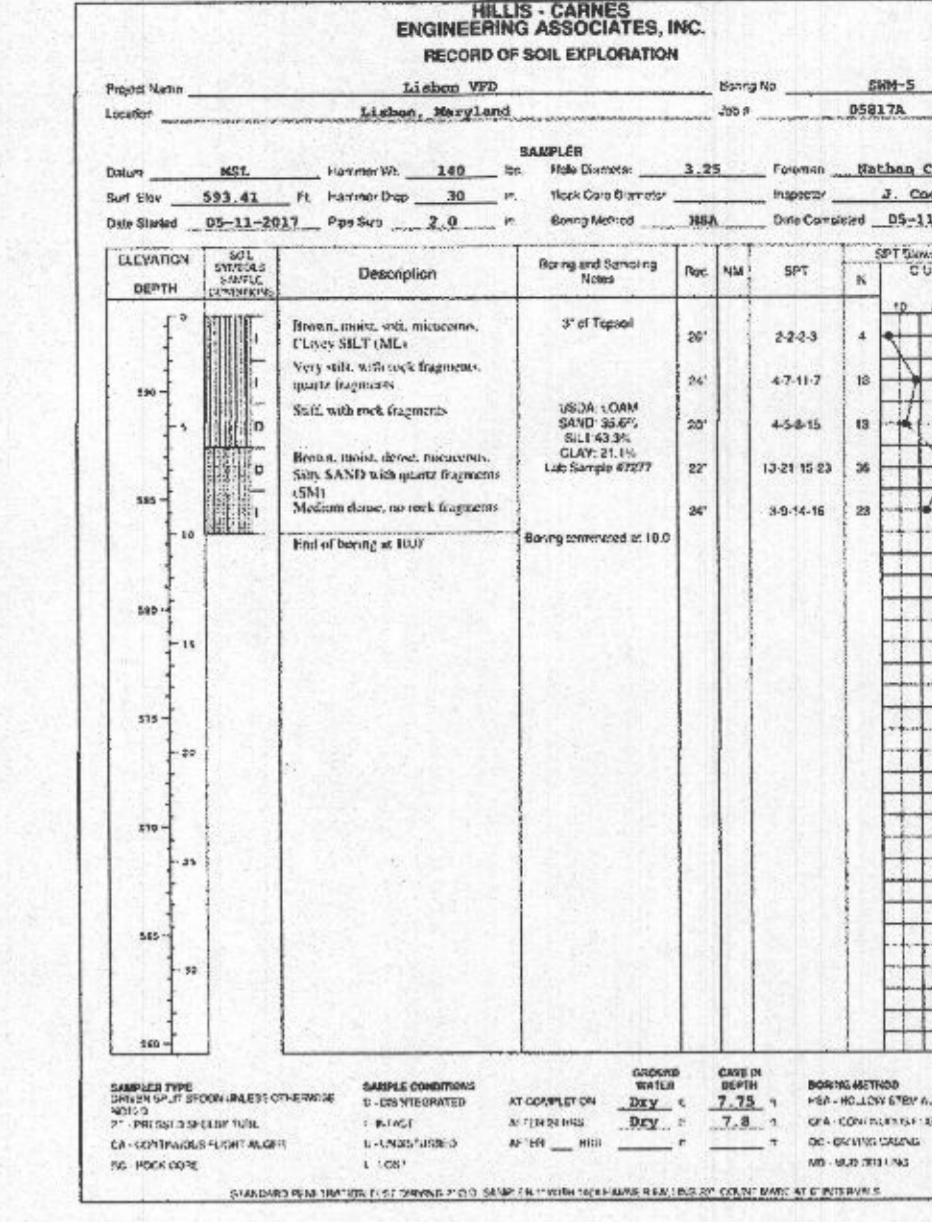
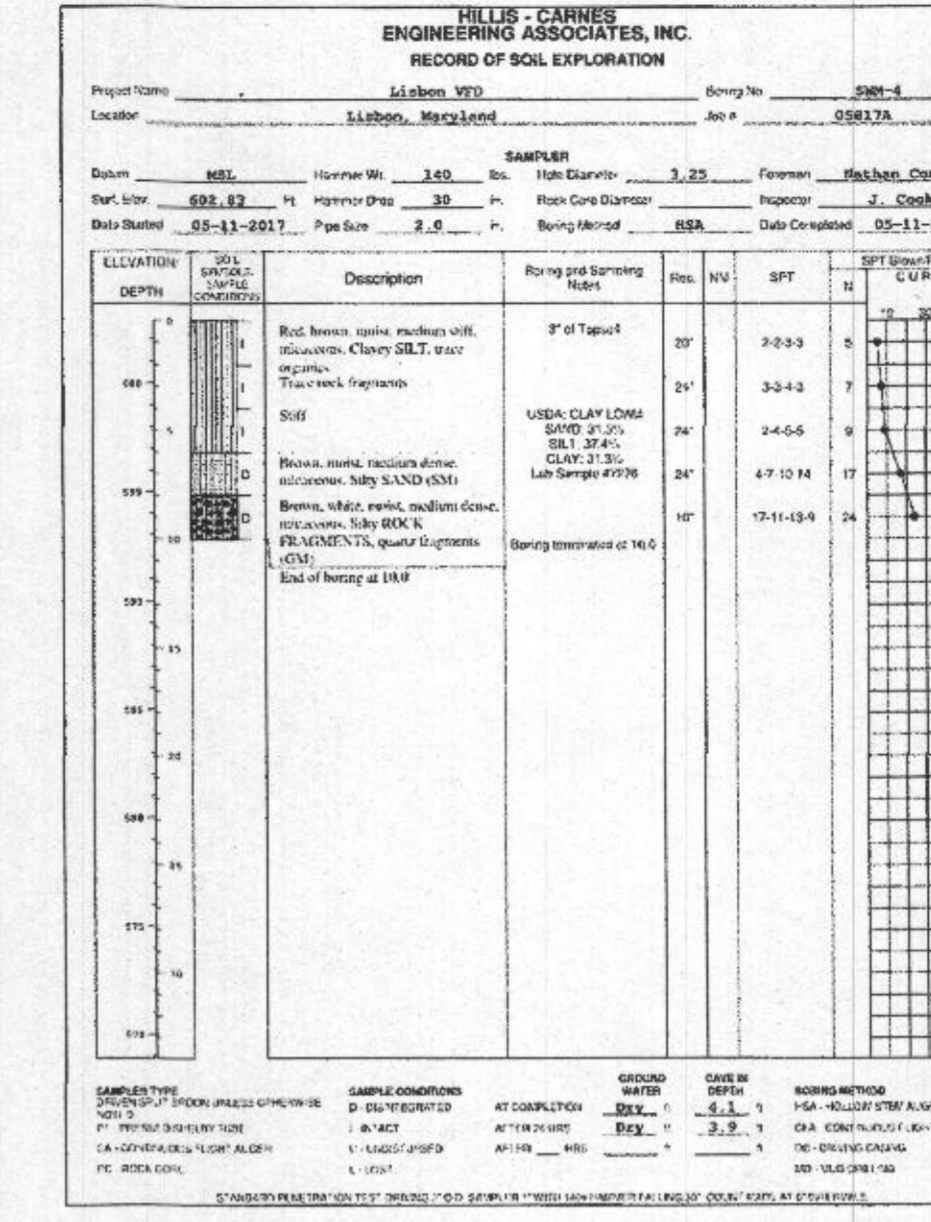
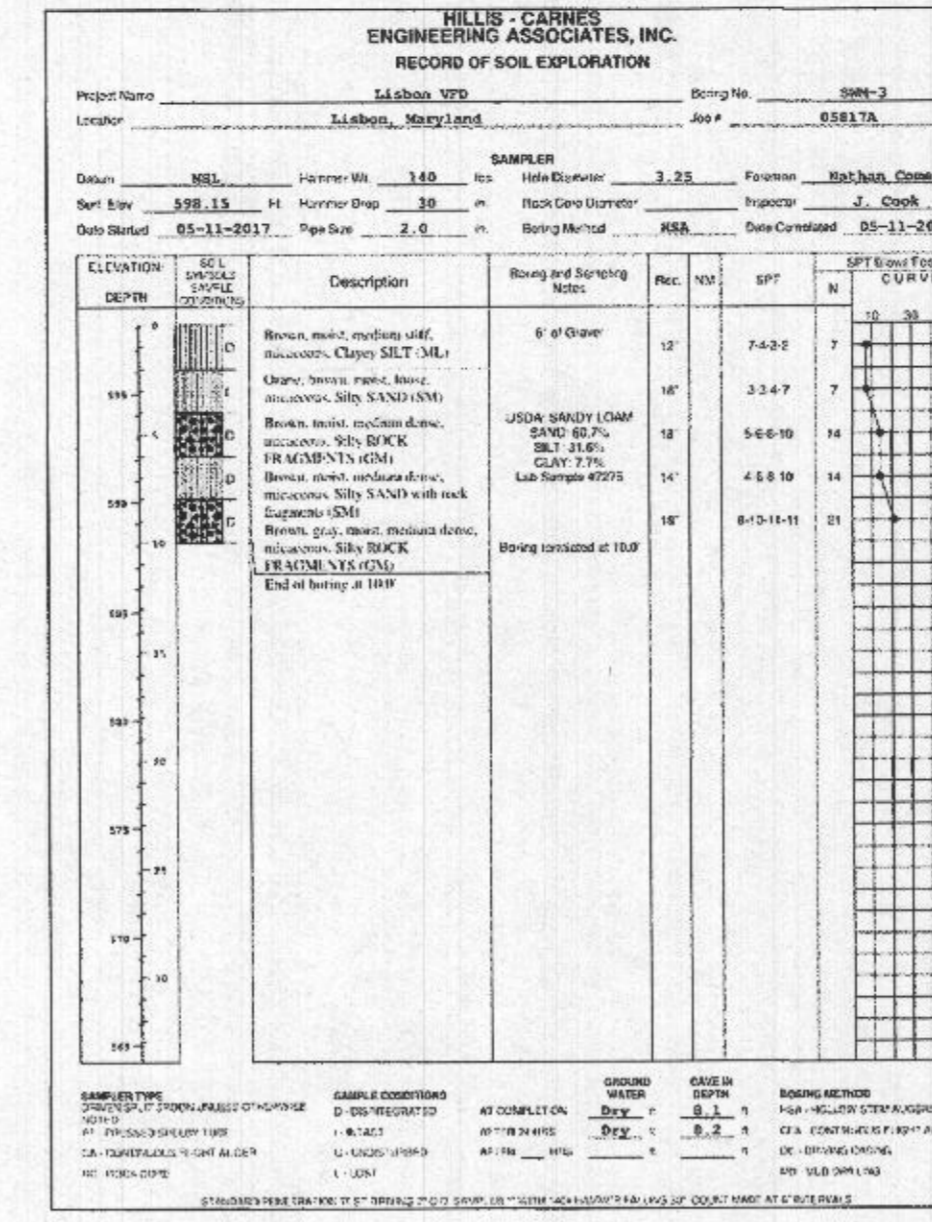
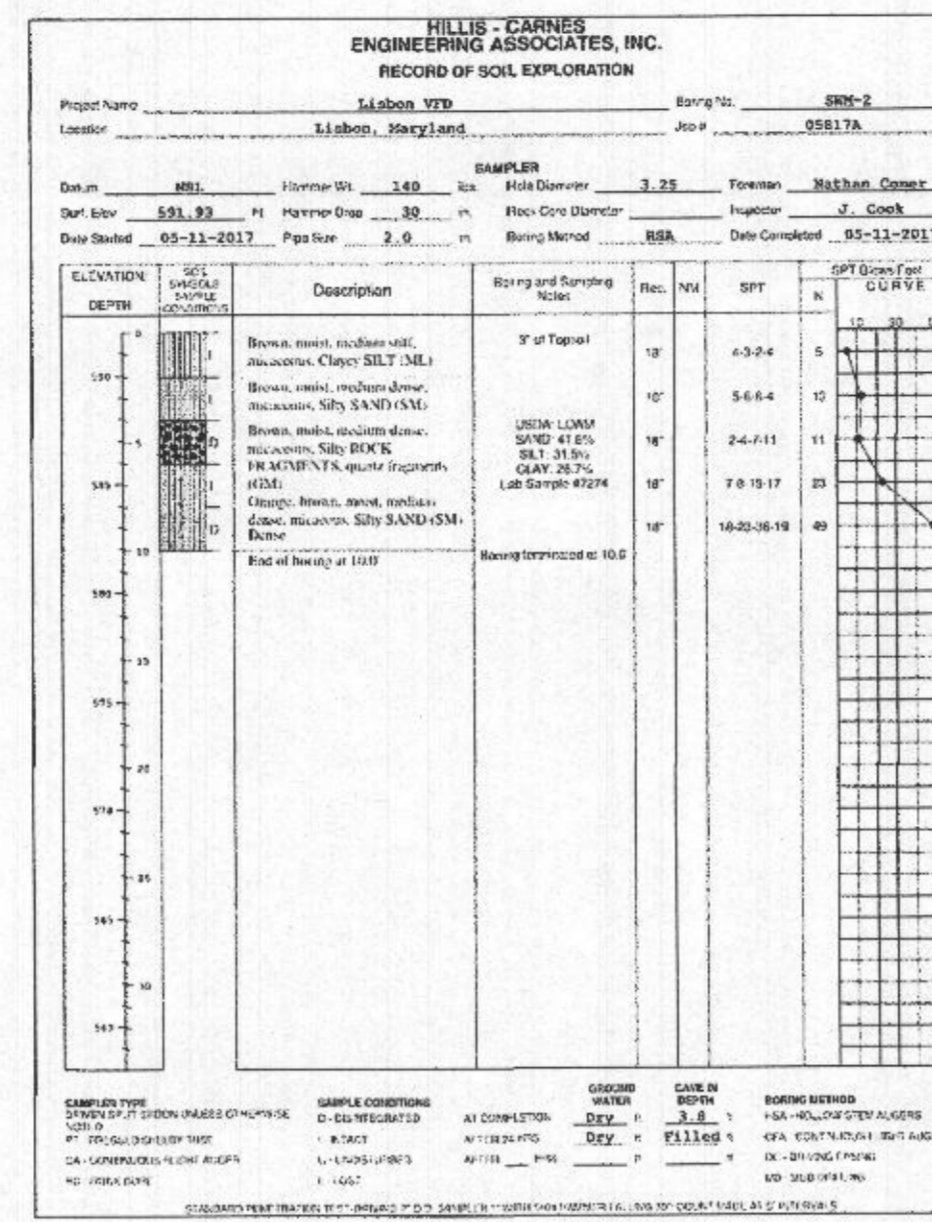
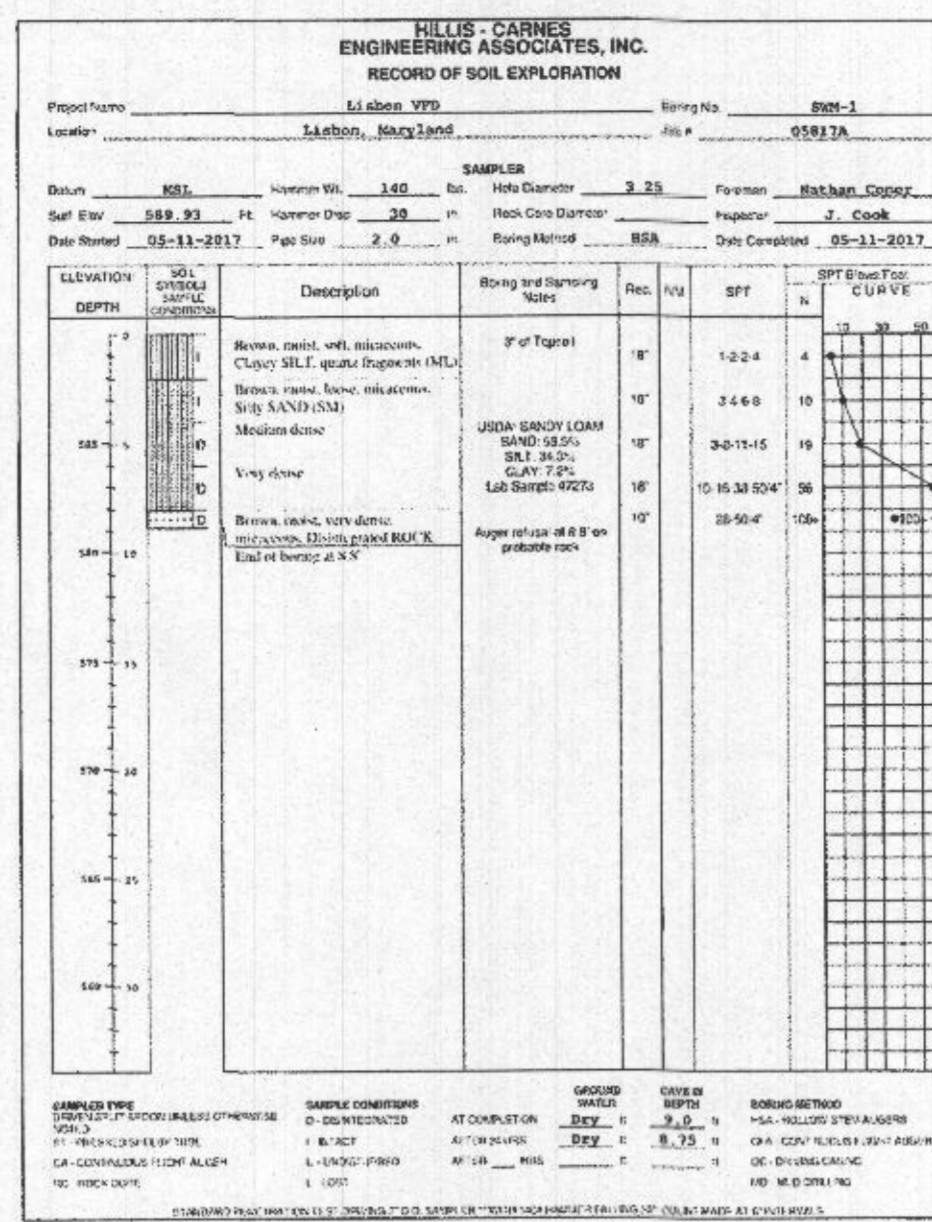
EXISTING CONDITIONS AND DEMOLITION PLAN
LOT 3, LOWER TRAIL
LISBON VOLUNTEER FIRE CO., INC.

TAX MAP: 7 ELECTION DISTRICT: No. 4 SCALE: 1" = 50'
GRID NO: 11 HOWARD COUNTY, MARYLAND DATE: MAY, 2017
PARCEL NO: 488 EX. ZONING: RC-DEO SHEET 11 OF 15

VANMAR ASSOCIATES, INC.
Engineers Surveyors Planners
310 South Main Street Mount Airy, Maryland 21771
(301) 829-2880 (301) 831-5015 (410) 549-2751
vanmar.com Fax (301) 831-5603 ©Copyright, Latest Date Shown 5DP-17-035

NOTE:
ALL EXISTING ON-SITE CONDITIONS INCLUDING PHYSICAL FEATURES AND
TOPOGRAPHY BASED ON FIELD SURVEYS THRU APRIL, 2017.

C:\Users\jlowry\OneDrive\Documents\2018\18-0018-Avg_3/20/2018_11:05 PM 11



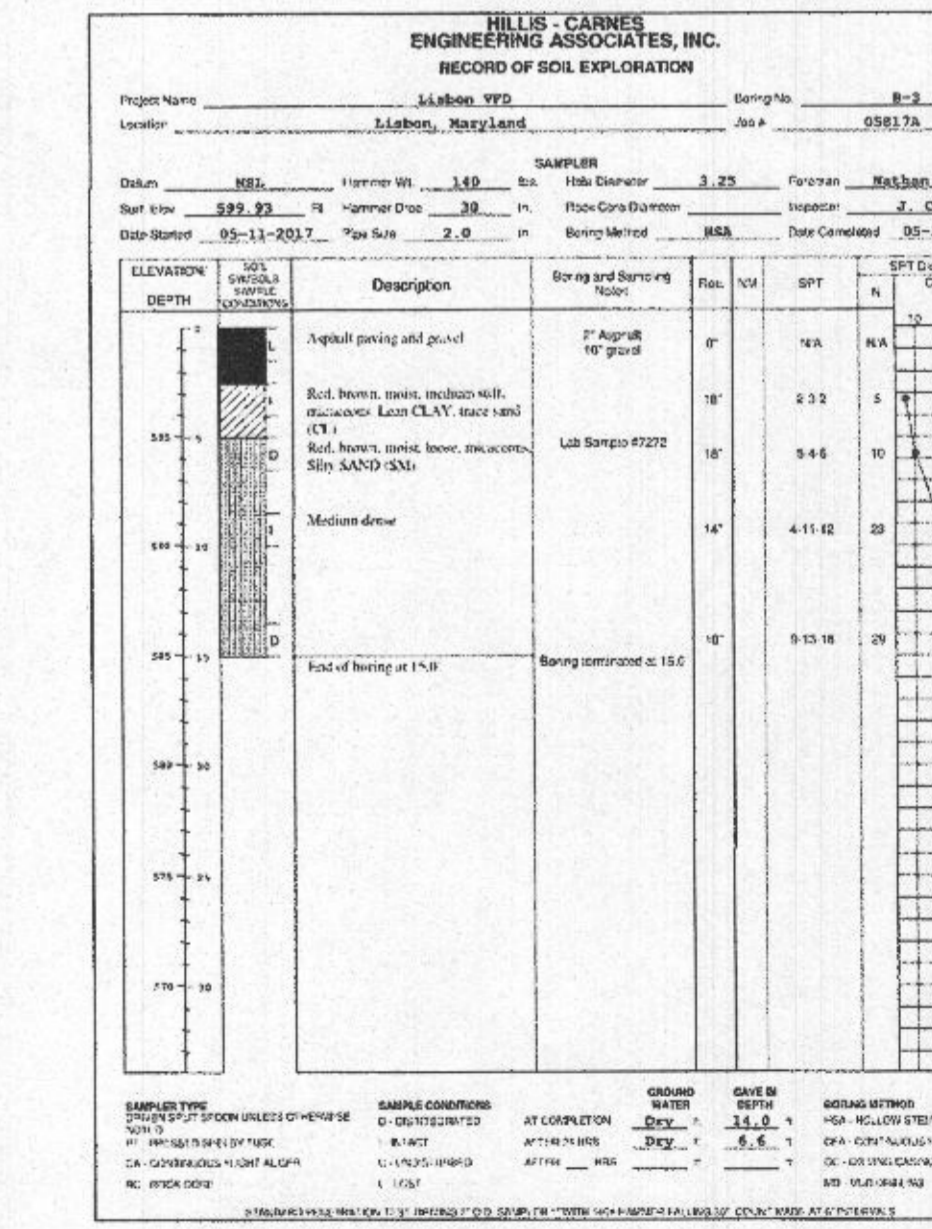
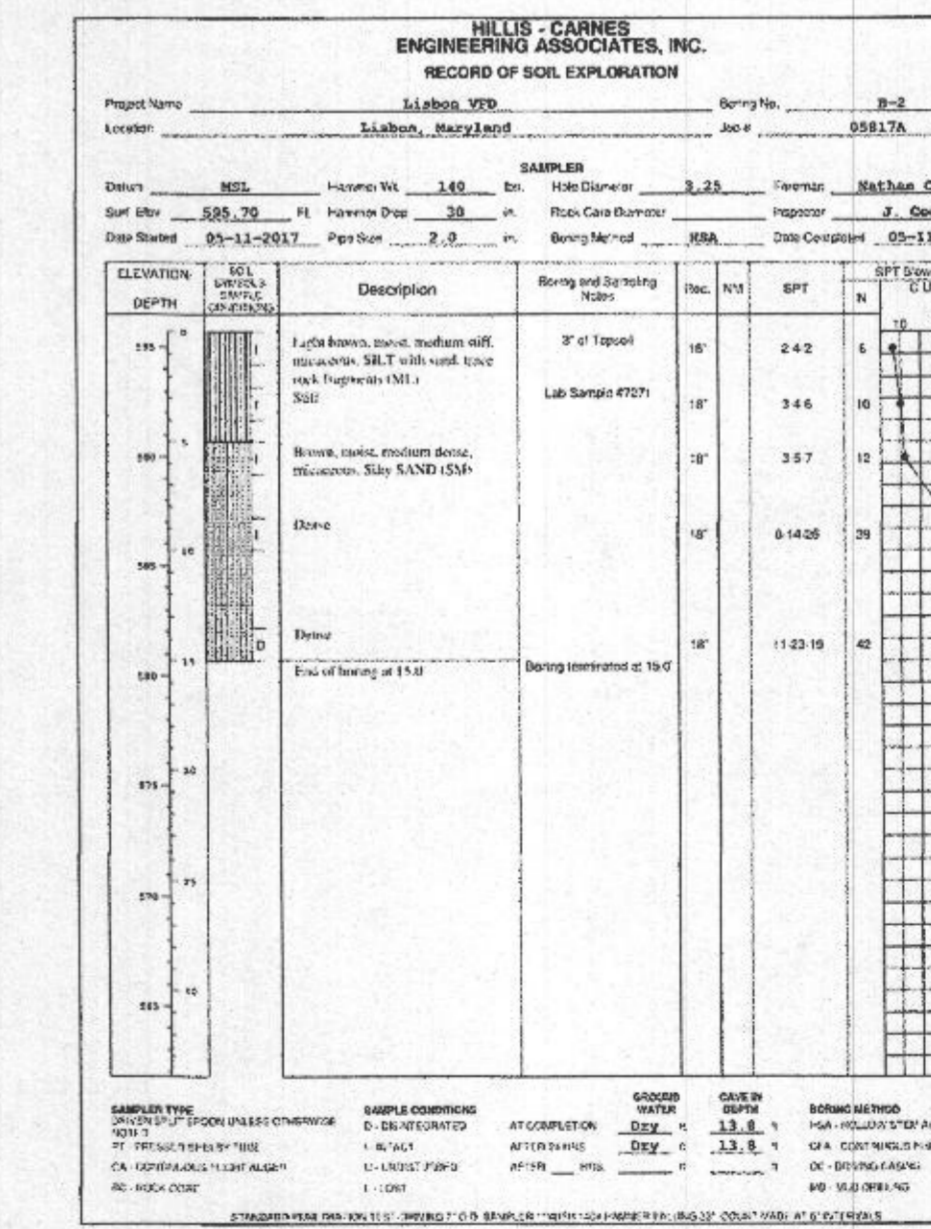
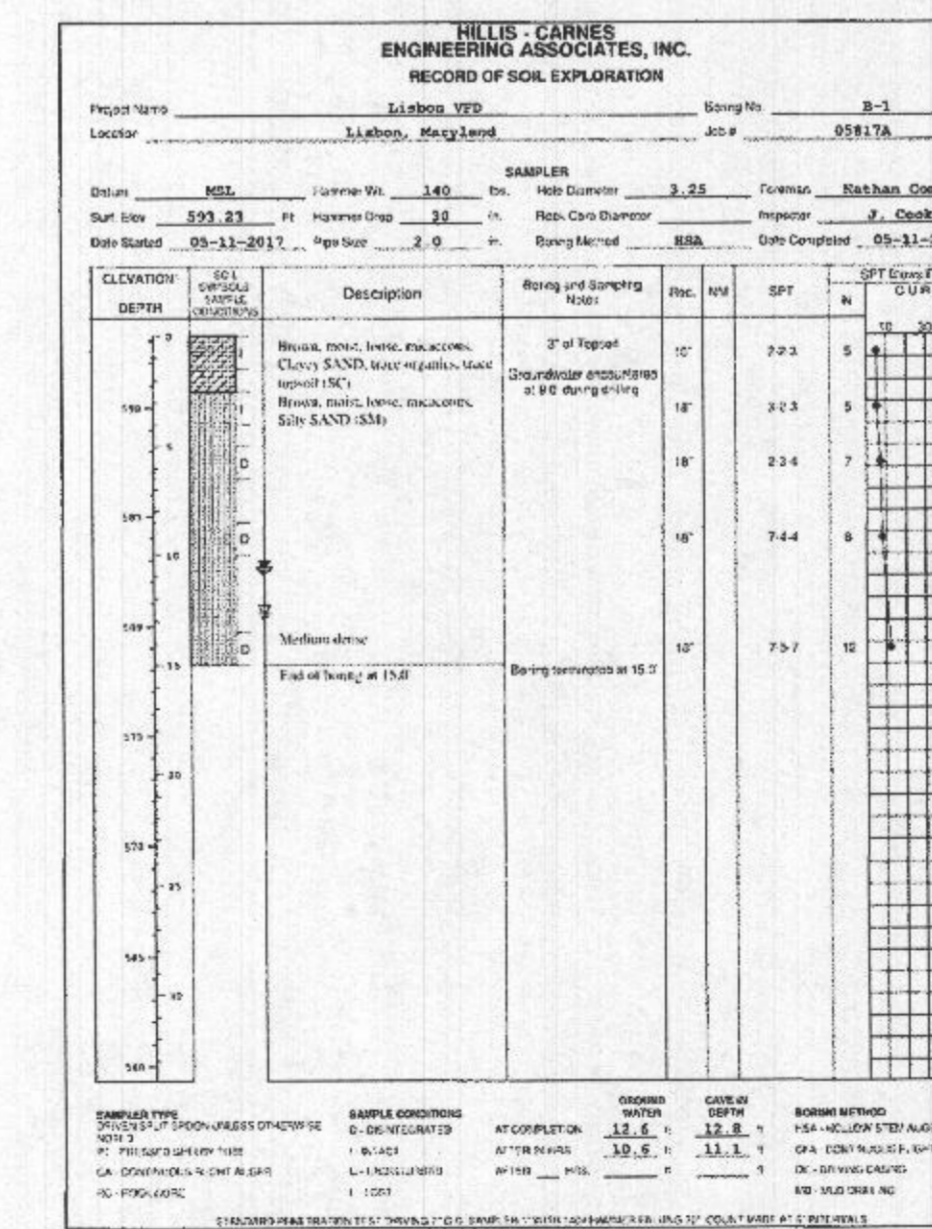
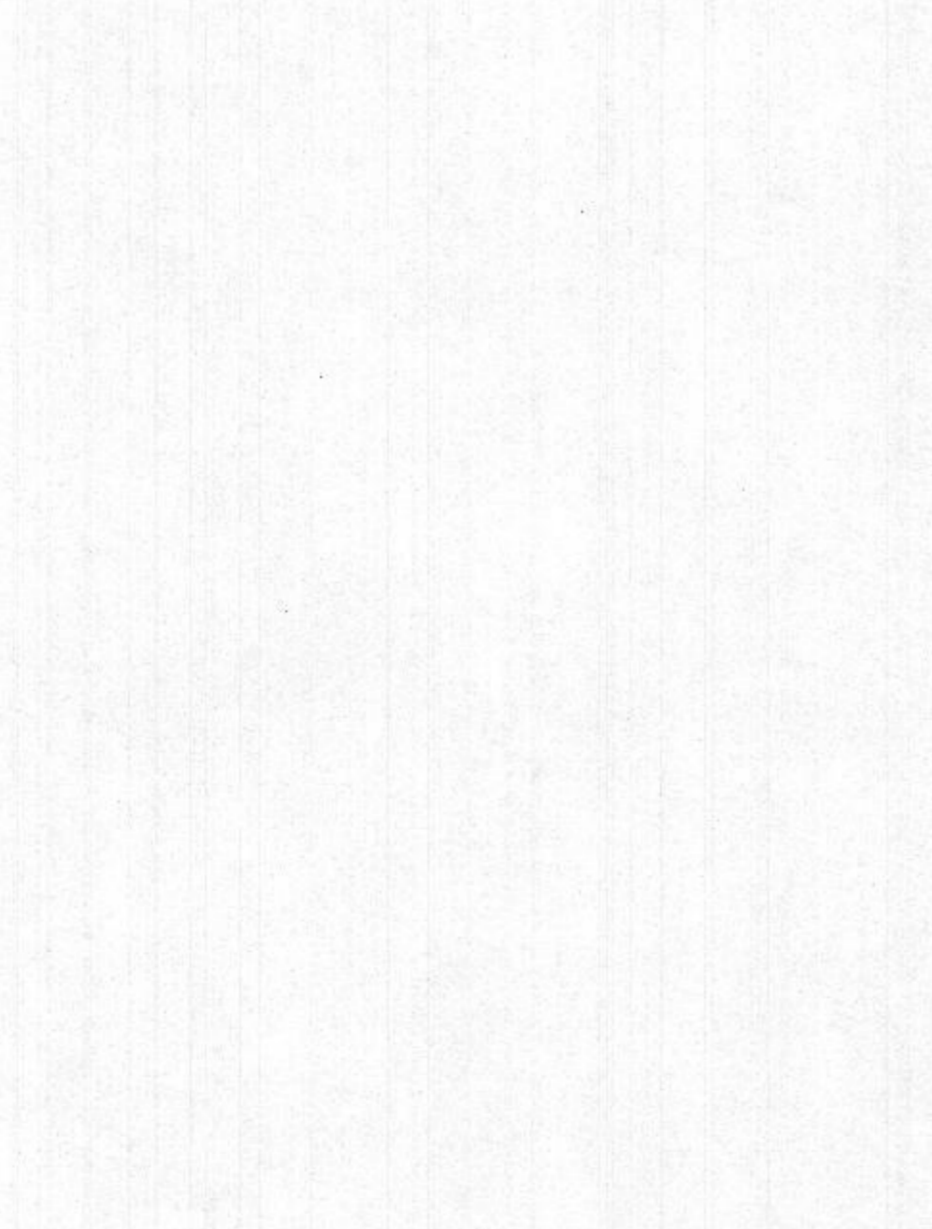
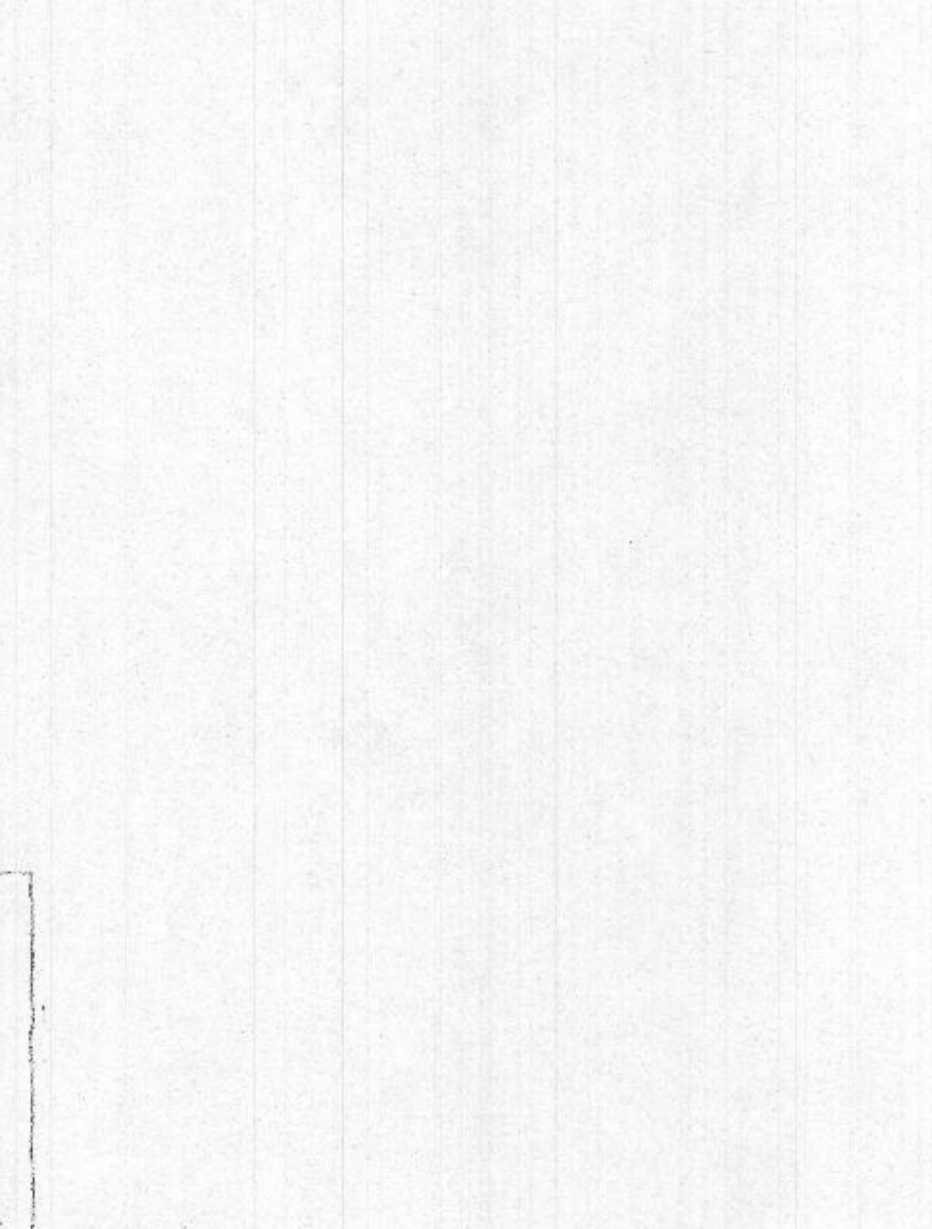
TIME OF READING	DEPTH TO WATER, INCHES	TIME CHANGE, HOURS	DEPTH CHANGE, INCHES	RATE, INCHES/HOUR
9:36	46 1/16			
10:06	46 9/16	0.5	4/16	1.000
10:36	46 13/16	0.5	4/16	0.500
11:06	47 1/16	0.5	12/16	1.500
11:36	47 5/16	0.5	5/16	0.625
12:06	48 15/16	0.5	1 3/16	1.375
12:36	49 14/16	0.5	15/16	1.875
13:06	50 1/16	0.5	13/16	1.875
13:36	51 5/16	0.5	10/16	1.250

TIME OF READING	DEPTH TO WATER, INCHES	TIME CHANGE, HOURS	DEPTH CHANGE, INCHES	RATE, INCHES/HOUR
9:36	47 5/16			
10:06	49 4/16	0.5	1 14/16	3.750
10:36	50 4/16	0.5	1 2/16	0.375
11:06	51 4/16	0.5	1	2.000
11:36	52 5/16	0.5	15/16	1.875
12:06	53 7/16	0.5	15/16	1.750
12:36	53 11/16	0.5	12/16	1.500
13:06	54 17/16	0.5	13/16	1.875
13:36	55 7/16	0.5	9/16	1.125

TIME OF READING	DEPTH TO WATER, INCHES	TIME CHANGE, HOURS	DEPTH CHANGE, INCHES	RATE, INCHES/HOUR
9:46	32 10/16			
10:16	32 13/16	0.5	3/16	0.375
10:46	32 15/16	0.5	4/16	0.500
11:16	33 4/16	0.5	7/16	0.875
11:46	33 12/16	0.5	4/16	0.750
12:16	34 2/16	0.5	6/16	0.750
12:46	34 7/16	0.5	5/16	0.625
13:16	34 11/16	0.5	4/16	0.500
13:46	34 15/16	0.5	4/16	0.500

TIME OF READING	DEPTH TO WATER, INCHES	TIME CHANGE, HOURS	DEPTH CHANGE, INCHES	RATE, INCHES/HOUR
9:44	42 1/16			
10:14	42 9/16	0.5	8/16	1.000
10:44	42 13/16	0.5	4/16	0.500
11:14	43 1/16	0.5	3/16	0.375
11:44	43 5/16	0.5	5/16	0.625
12:14	43 11/16	0.5	6/16	0.750
12:44	44 1/16	0.5	5/16	0.625
13:14	44 8/16	0.5	8/16	1.000
13:44	44 12/16	0.5	3/16	0.375

TIME OF READING	DEPTH TO WATER, INCHES	TIME CHANGE, HOURS	DEPTH CHANGE, INCHES	RATE, INCHES/HOUR
9:43	56 9/16			
10:13	56 13/16	0.5	3/16	0.375
10:43	57	0.5	4/16	0.500
11:13	57 5/16	0.5	5/16	0.625
11:43	57 9/16	0.5	3/16	0.375
12:13	57 13/16	0.5	4/16	0.500
12:43	58 1/16	0.5	5/16	0.625
13:13	58 5/16	0.5	5/16	0.625
13:43	58 10/16	0.5	4/16	0.500



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

John R. Robertson 5/29/18
WARD SCS DATE

APPROVED
HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

William J. J. J. 7-12-18
DIRECTOR DATE

Keith S. S. 7-11-18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Ch. Ch. 6-12-19
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

OWNER / DEVELOPER:
LISBON VOL. FIRE COMPANY
c/o CURTIS LOWREY
P.O. BOX 40,
LISBON, MD 21765
443-472-7765

PROFESSIONAL CERTIFICATION
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. 15417. EXPIRATION DATE 05/31/2025
SIGNED: *Richard D. Thompson* DATE: 5/21/2018
RICHARD D. THOMPSON, P.E.

DATE	REVISIONS	COUNTY COMMENTS
10-9-2017		

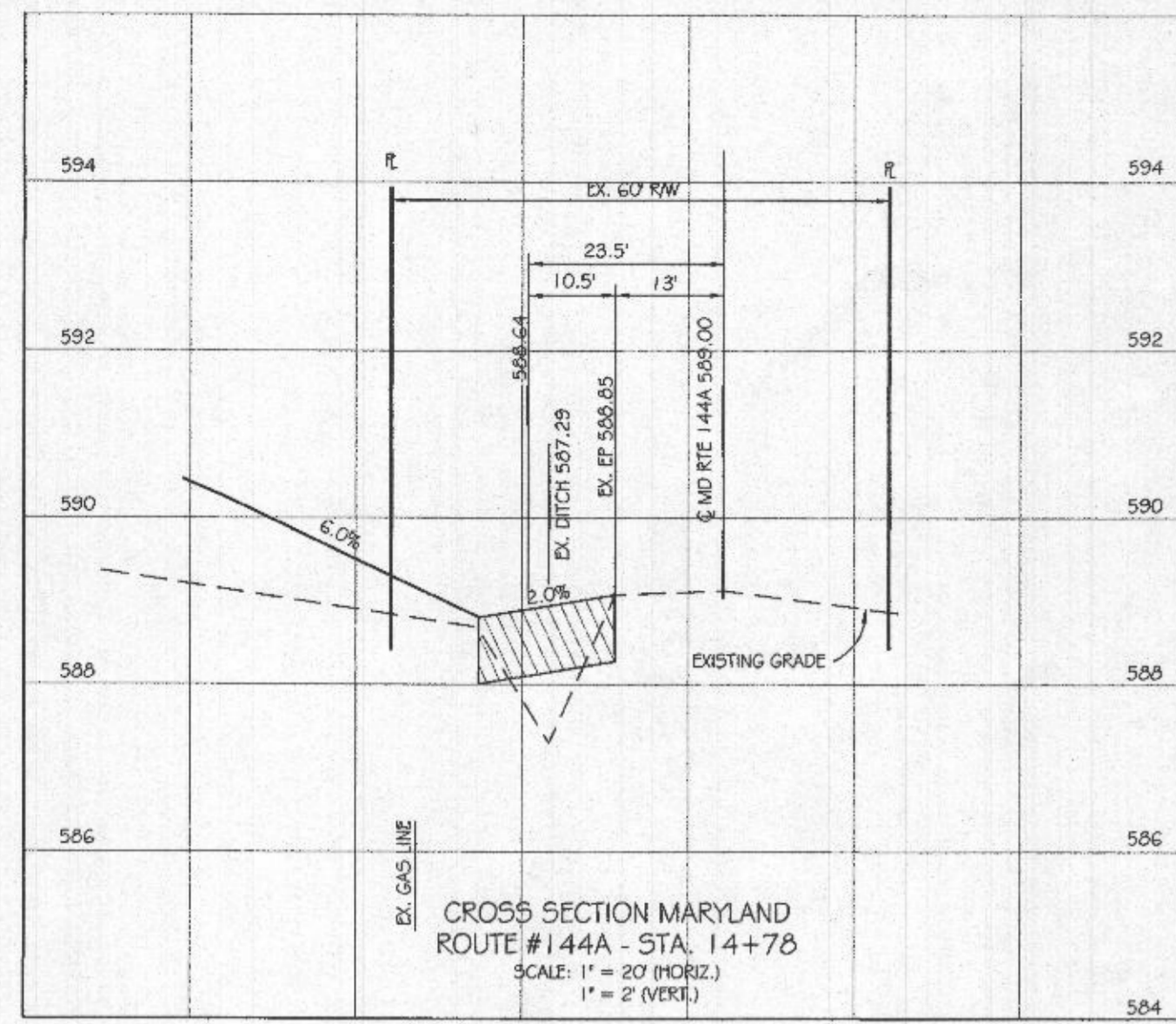
SOIL BORING LOGS AND DETAILS
LOT 3, LOWER TRAIL
LISBON VOLUNTEER FIRE CO., INC.

TAX MAP: 7
GRID NO: 11
PARCEL NO: 488

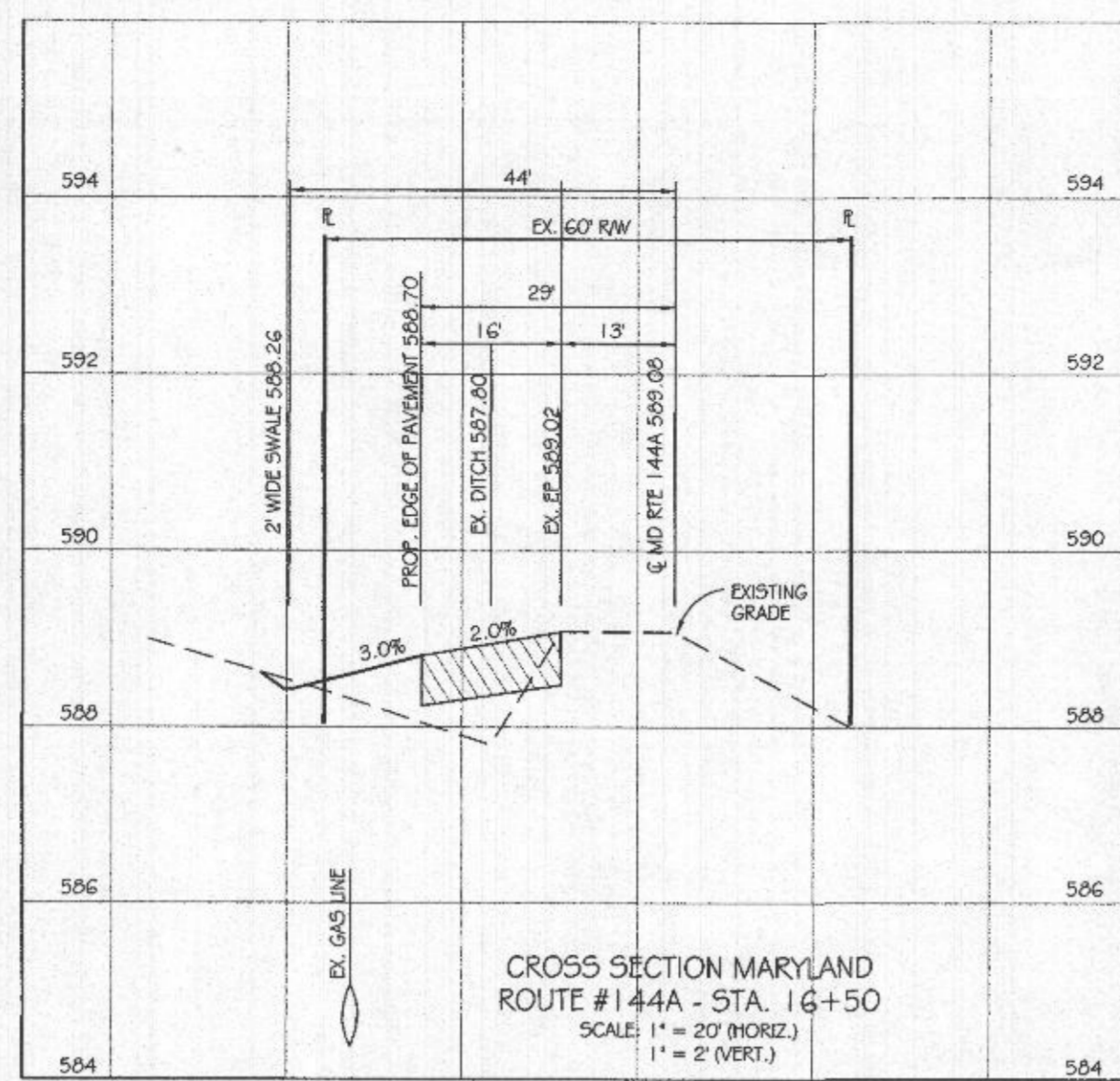
ELECTION DISTRICT: No. 4
HOWARD COUNTY, MARYLAND
EX. ZONING: RC-DEO

SCALE: AS SHOWN
DATE: MAY, 2017
SHEET 12 OF 15

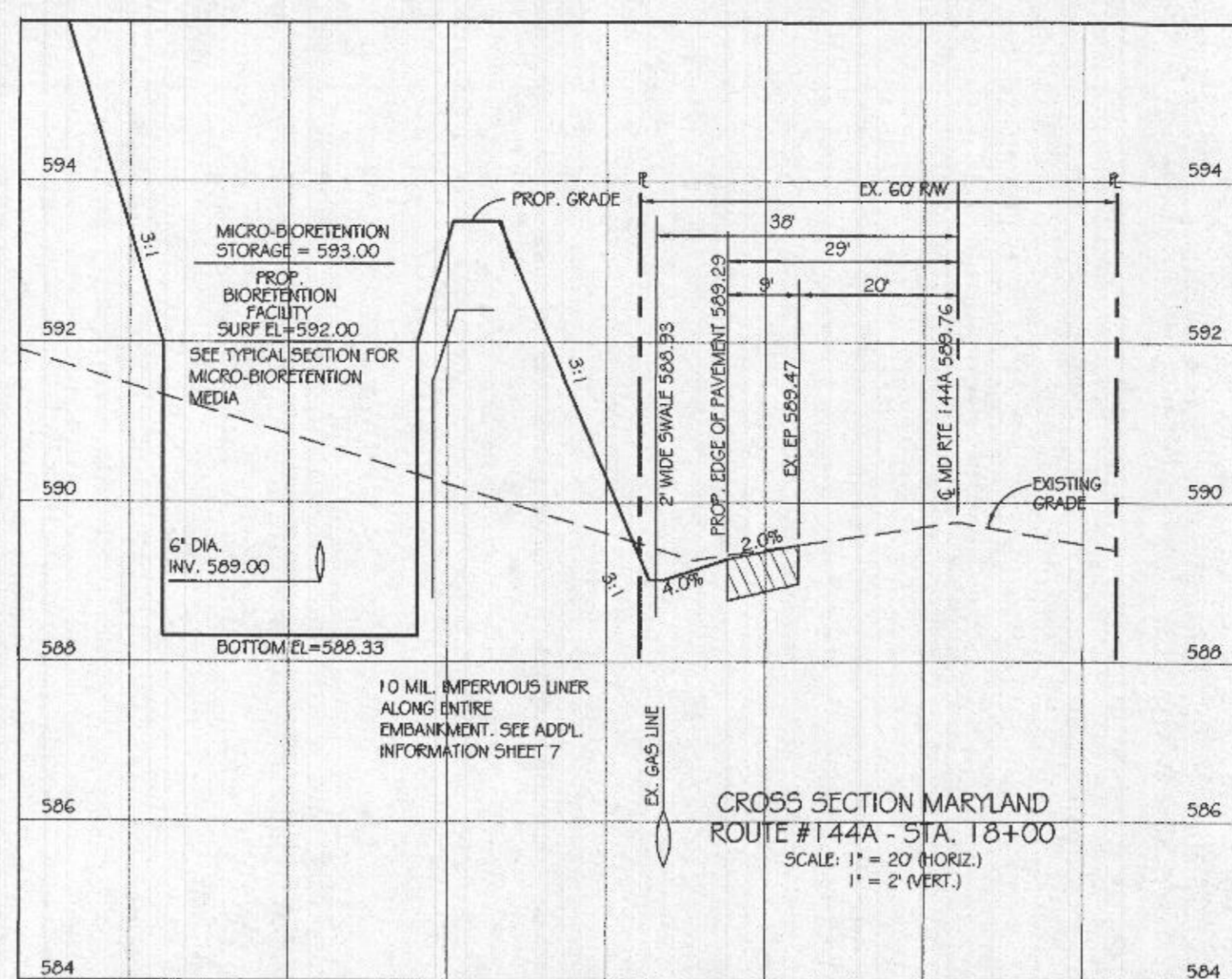
VANMAR ASSOCIATES, INC.
Engineers Surveyors Planners
310 South Main Street Mount Airy, Maryland 21771
(301) 829-2890 (301) 831-5015 (410) 549-2751
Fax (301) 831-5603 ©Copyright, Latest Date Shown SDP-17-035



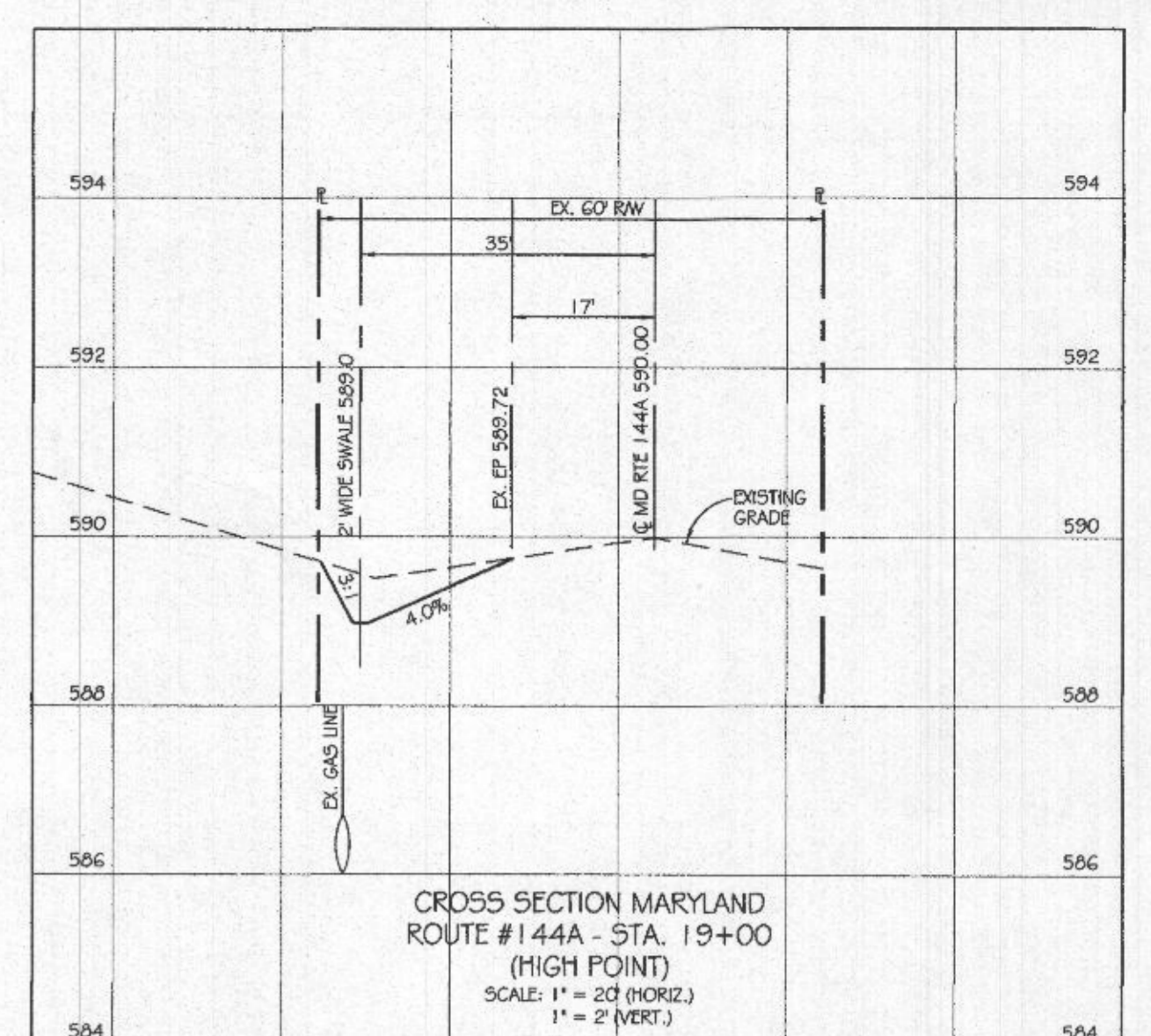
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SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



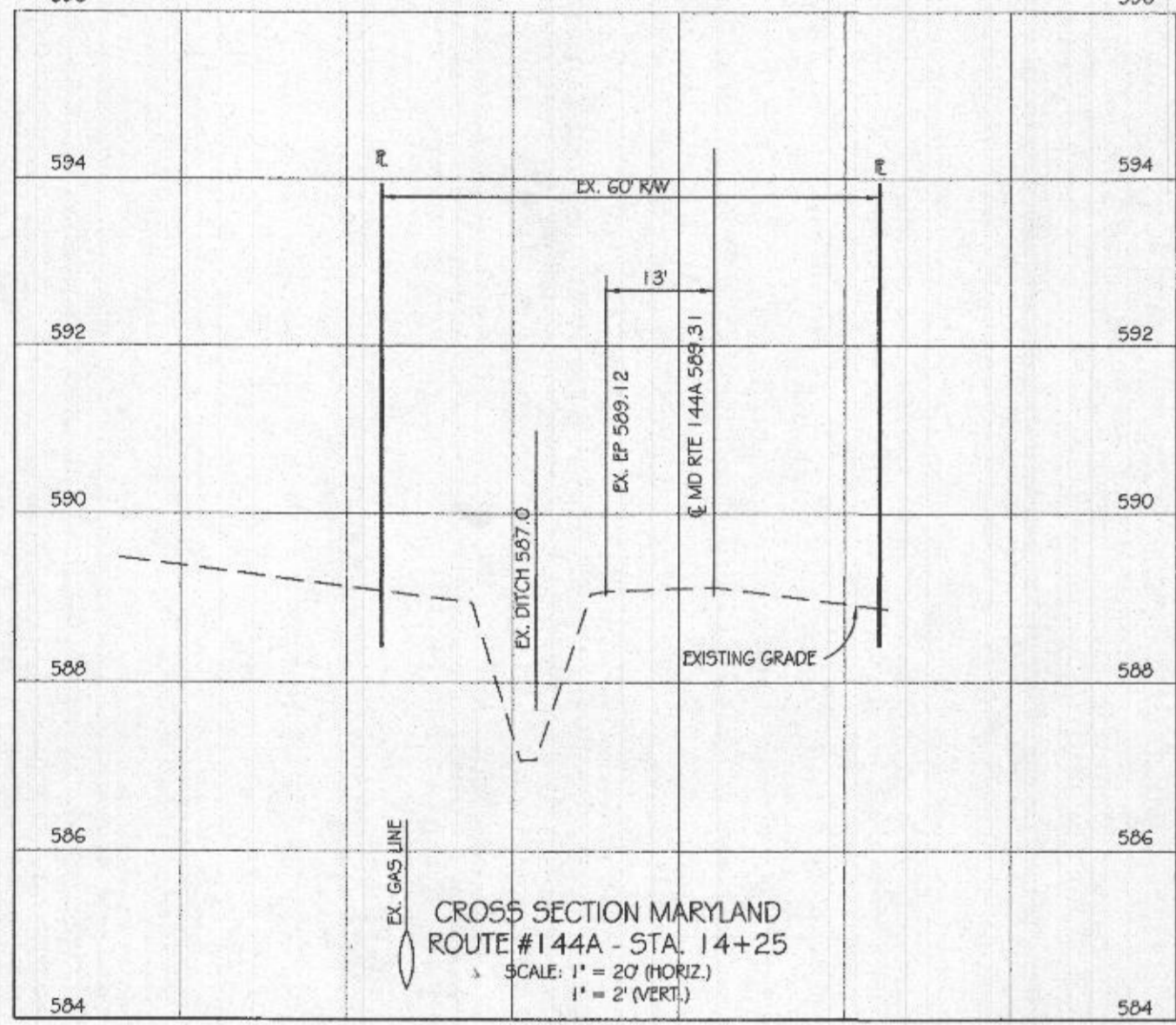
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1" = 2' (VERT.)



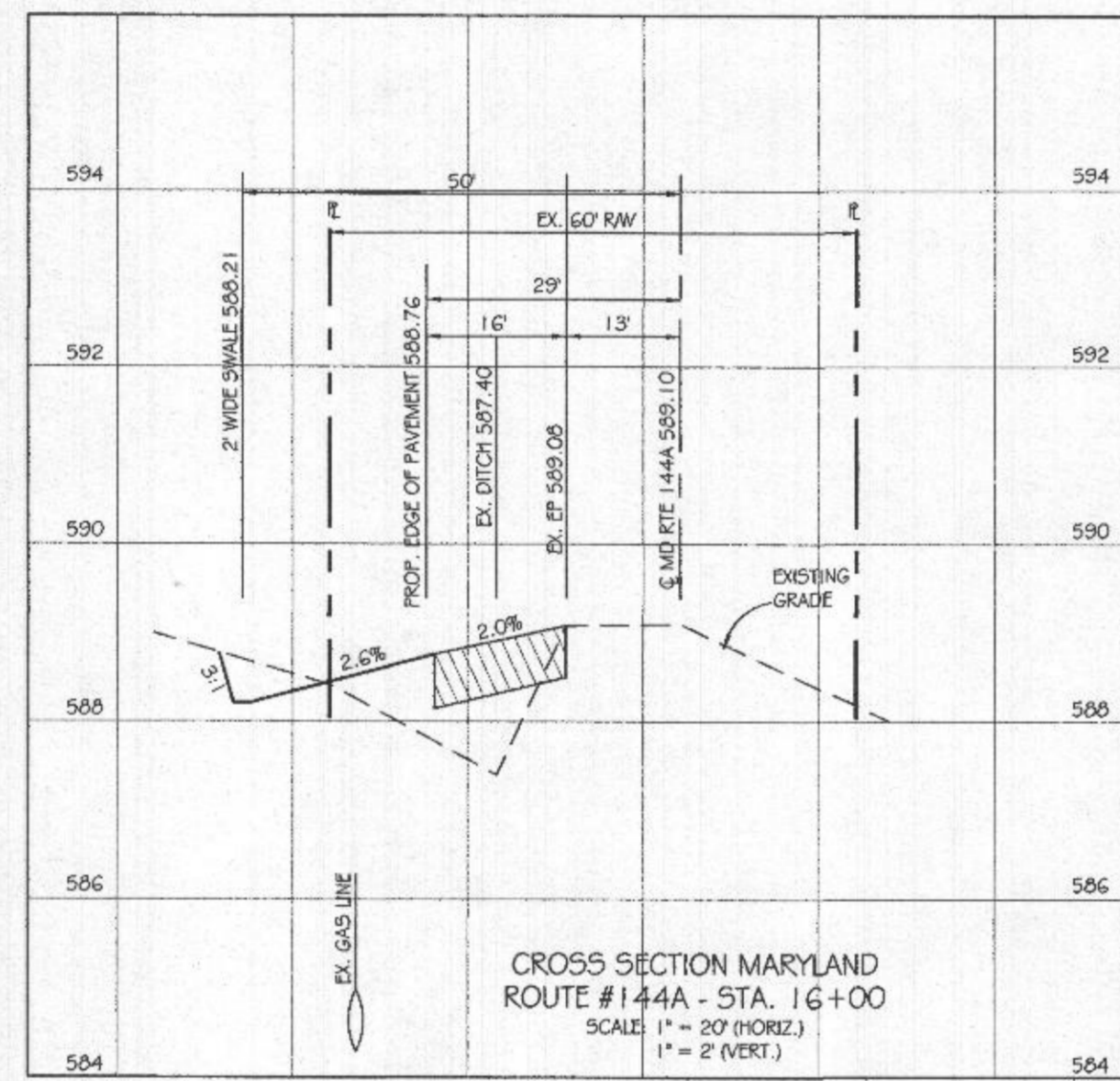
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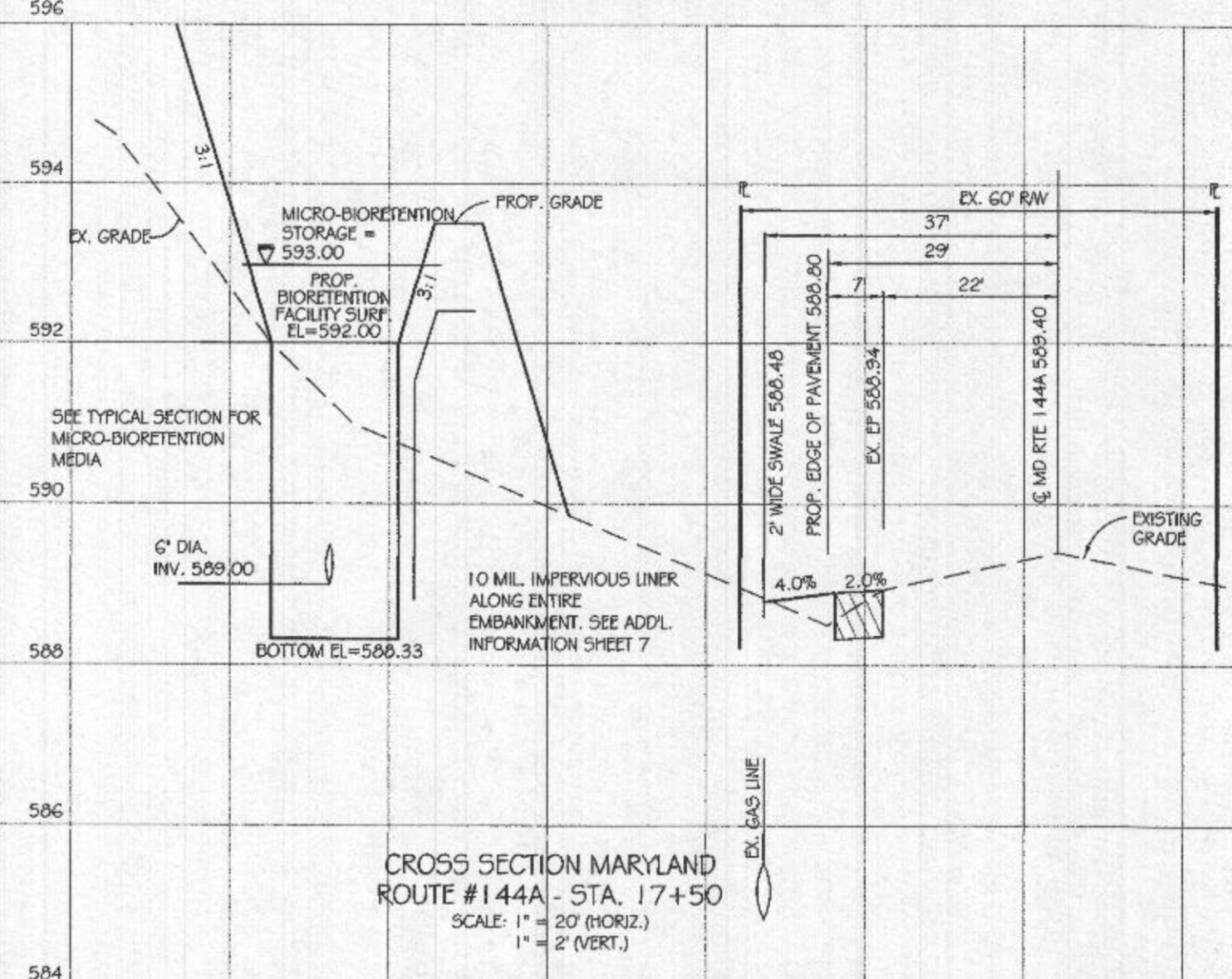
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1" = 2' (VERT.)



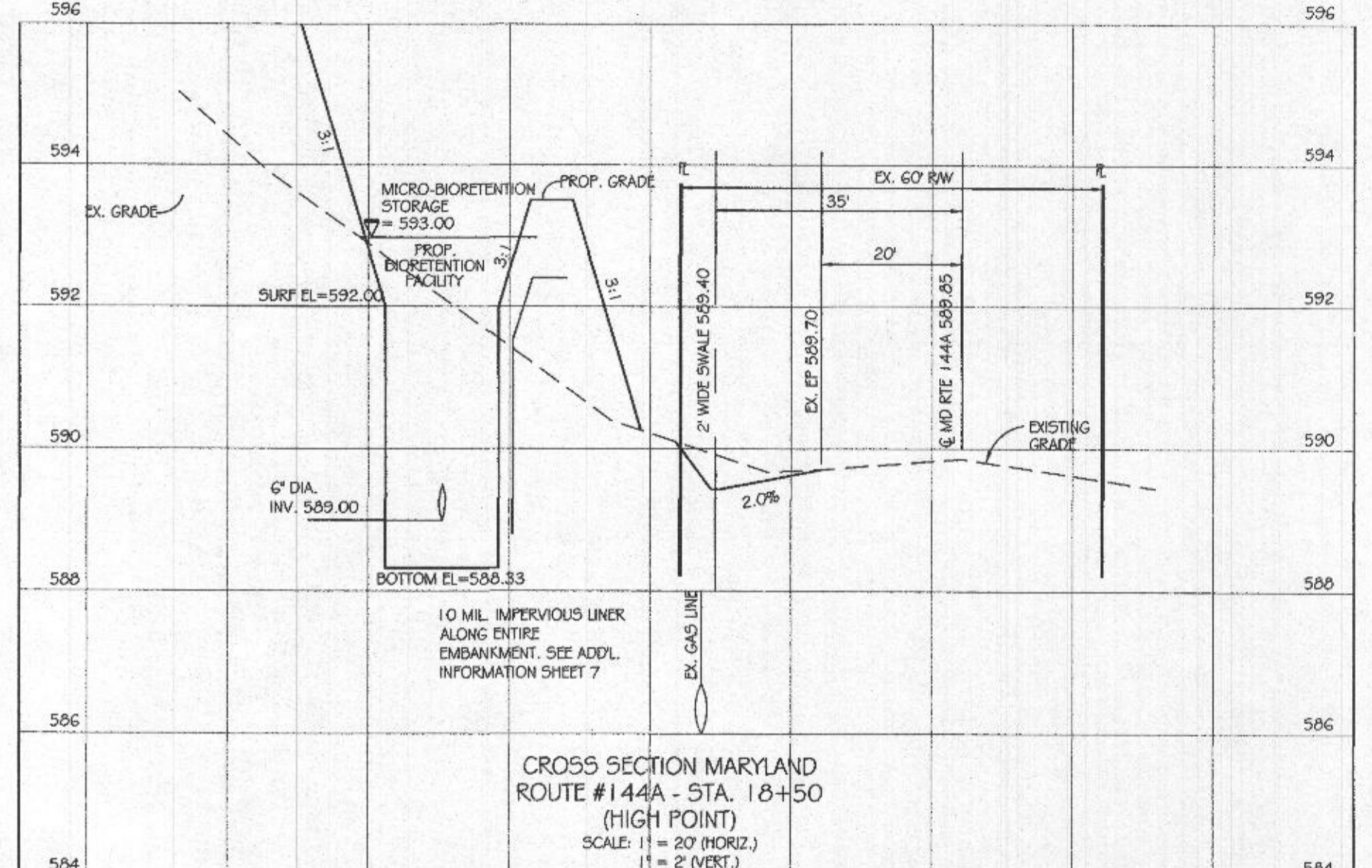
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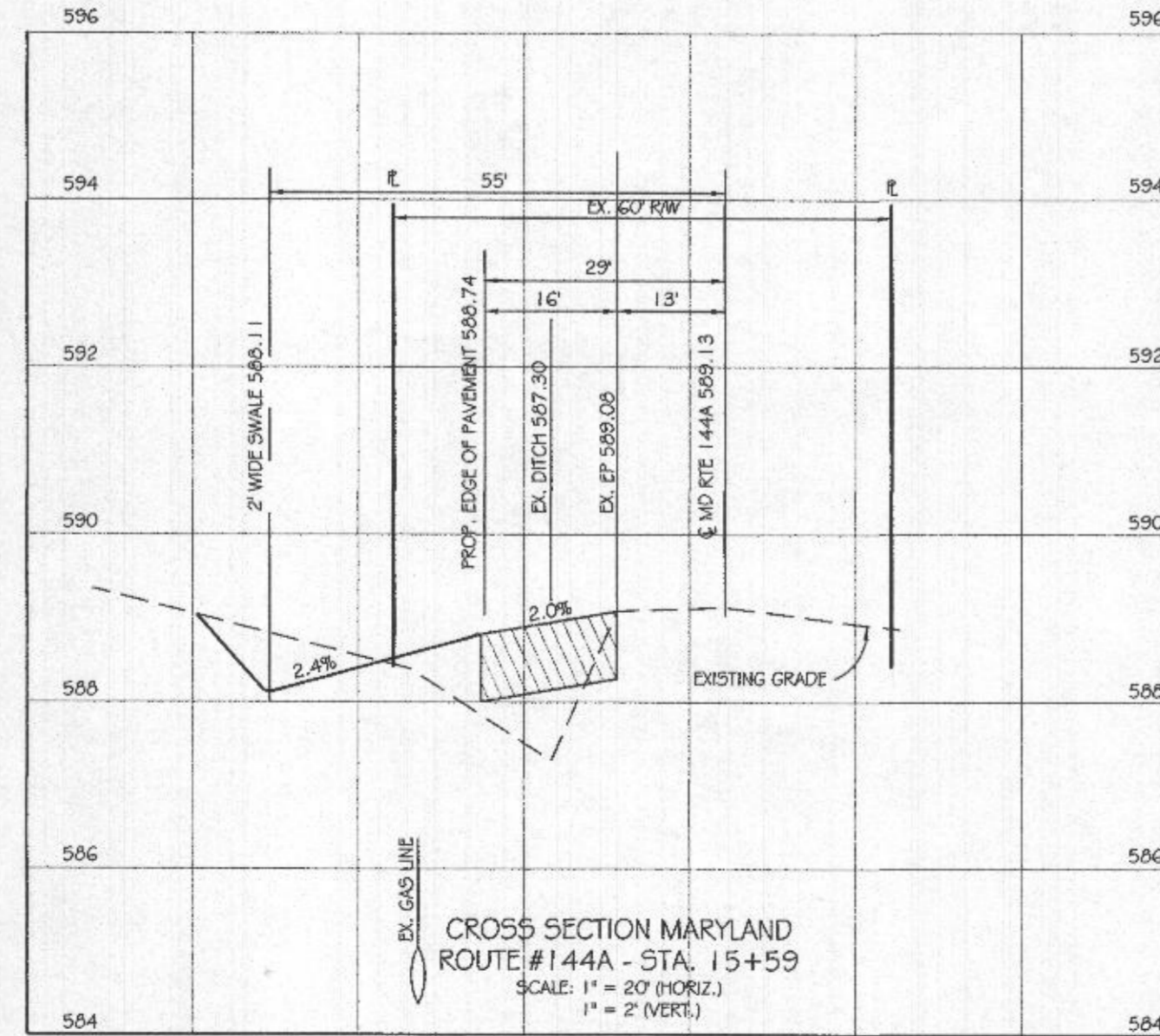
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SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



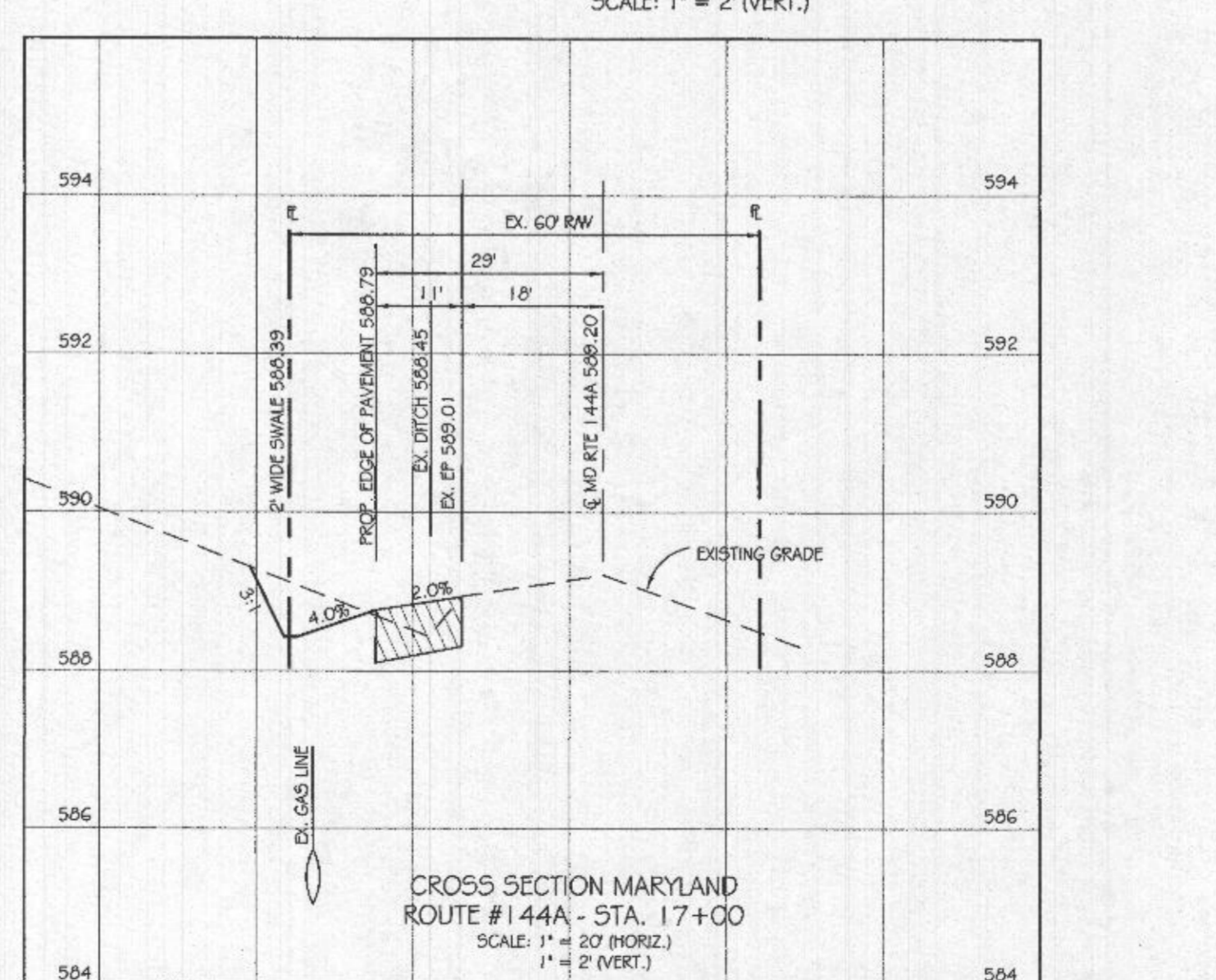
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SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



CROSS SECTION MARYLAND ROUTE #144A - STA. 18+50 (HIGH POINT)
SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



CROSS SECTION MARYLAND ROUTE #144A - STA. 15+59
SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



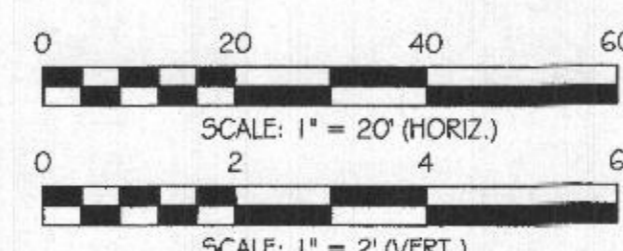
CROSS SECTION MARYLAND ROUTE #144A - STA. 17+00
SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)

APPROVED
HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Nathan J. J. [Signature] 7-12-18
DIRECTOR DATE

Veronica [Signature] 7-11-18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Carl [Signature] 6-12-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



OWNER / DEVELOPER:
LISBON VOLL FIRE COMPANY
c/o CURTIS LOWREY
P.O. BOX 40,
LISBON, MD 21765
443-472-7765

MDOT SHA TRACKING NUMBER | IAPH0014XX

STATE HIGHWAY CROSS SECTIONS
LOT 3, LOWER TRAIL
LISBON VOLUNTEER FIRE CO., INC.

TAX MAP: 7
GRID NO: 11
PARCEL NO: 488

ELECTION DISTRICT: No. 4
HOWARD COUNTY, MARYLAND
EX. ZONING: RC-DEO

SCALE: AS SHOWN
DATE: AUGUST, 2017
SHEET 15 OF 15



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 18417, EXPIRATION DATE 09/18/18.

SIGNATURE: *[Signature]* DATE: 5/16/2018
ROBERTA THOMAS, P.E.

VANMAR ASSOCIATES, INC.
Engineers Surveyors Planners
310 South Main Street Mount Airy, Maryland 21771
(301) 829-2890 (301) 831-5015 (410) 549-2751
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