

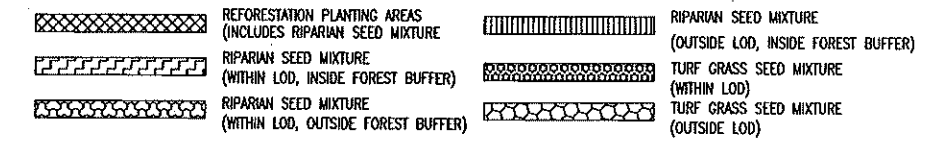
DWG. L-03 SPECIMEN TREE PROTECTION SCHEDULE

TREE ID	COMMON NAME	SCIENTIFIC NAME	DBH (INCHES)	HEALTH	FOREST STAND	CRZ IMPACT	RETAIN OR REMOVE	TREE PROTECTION MEASURES
T-31	EASTERN COTTONWOOD	POPULUS DELTOIDES	39.9	GOOD	N/A	9%	RETAIN	ROOT PRUNING/ TREE PROTECTION DURING CONSTRUCTION
T-32	EASTERN COTTONWOOD	POPULUS DELTOIDES	54.4	GOOD	N/A	20%	RETAIN	ROOT PRUNING/ TREE PROTECTION DURING CONSTRUCTION
T-33	SILVER MAPLE	ACER SACCHARINUM	32.0	GOOD	N/A	8%	RETAIN	ROOT PRUNING/ TREE PROTECTION DURING CONSTRUCTION

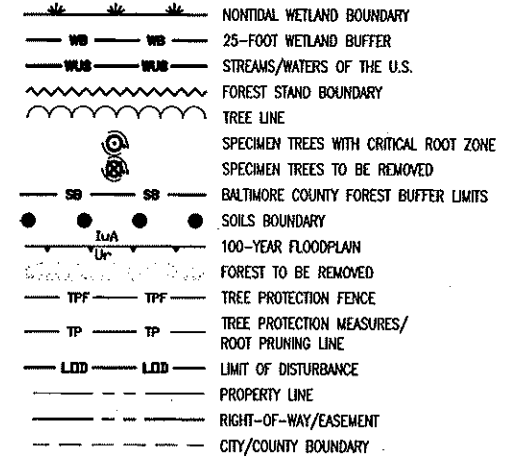
DWG. L-03 PERMANENT SEEDING SCHEDULE

QUANTITY	SEED MIXTURE TYPE	LOCATION WITHIN WORKING LIMITS
850 SY	RIPIARIAN SEED MIXTURE	WITHIN LOD, INSIDE FOREST BUFFER
-	RIPIARIAN SEED MIXTURE	WITHIN LOD, OUTSIDE FOREST BUFFER
-	RIPIARIAN SEED MIXTURE	OUTSIDE LOD, INSIDE FOREST BUFFER
8,437 SY	TURF GRASS SEED MIXTURE	WITHIN LOD
2,973 SY	TURF GRASS SEED MIXTURE	OUTSIDE LOD

LANDSCAPE LEGEND



FOREST CONSERVATION LEGEND

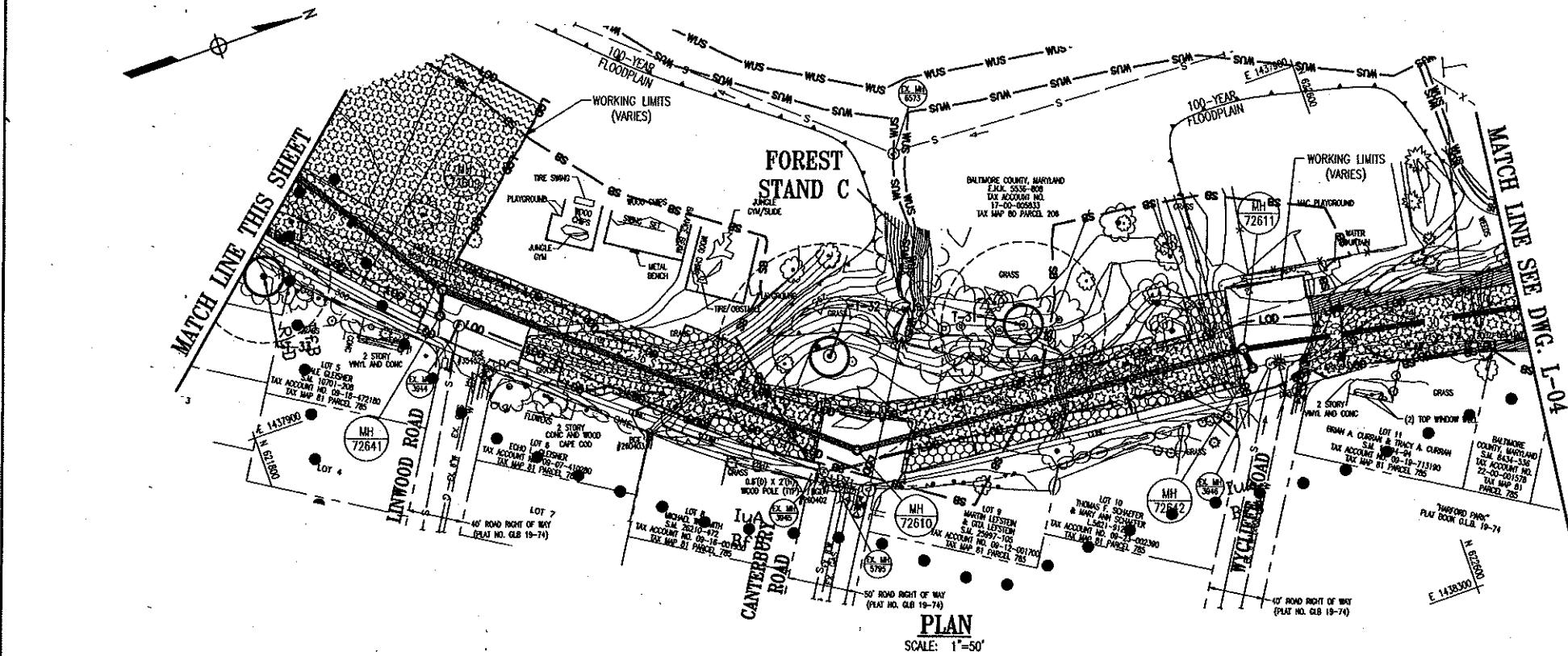


NOTES:

- SEE DWG. L-07 FOR FOREST BUFFER MITIGATION REQUIREMENTS, FOREST CONSERVATION REQUIREMENTS, OVERALL SPECIMEN TREE SCHEDULE, LANDSCAPE QUANTITIES, NOTES, AND PLANTING DETAILS.
- SEE DWG. L-08 FOR FOREST BUFFER PROTECTION DETAILS AND NOTES.

ALTERNATIVE ANALYSIS NOTE:

1. ON JULY 2, 2014, AN ALTERNATIVES ANALYSIS WAS REVIEWED AND APPROVED BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY IN ACCORDANCE WITH BALTIMORE COUNTY CODE, ARTICLE 33, TITLE 3, PROTECTION OF WATER QUALITY, STREAMS, WETLANDS, AND FLOODPLAINS. THE ANALYSIS RESULTED IN THE APPROVAL OF FOREST BUFFER IMPACTS FOR THE SANITARY SEWER CONSTRUCTION THAT IS THE SUBJECT OF THIS PLAN. CONDITIONS, INCLUDING ON-SITE FOREST BUFFER MITIGATION PLANTING, WERE PLACED ON THIS ALTERNATIVE ANALYSIS APPROVAL TO REDUCE WATER QUALITY IMPACTS.



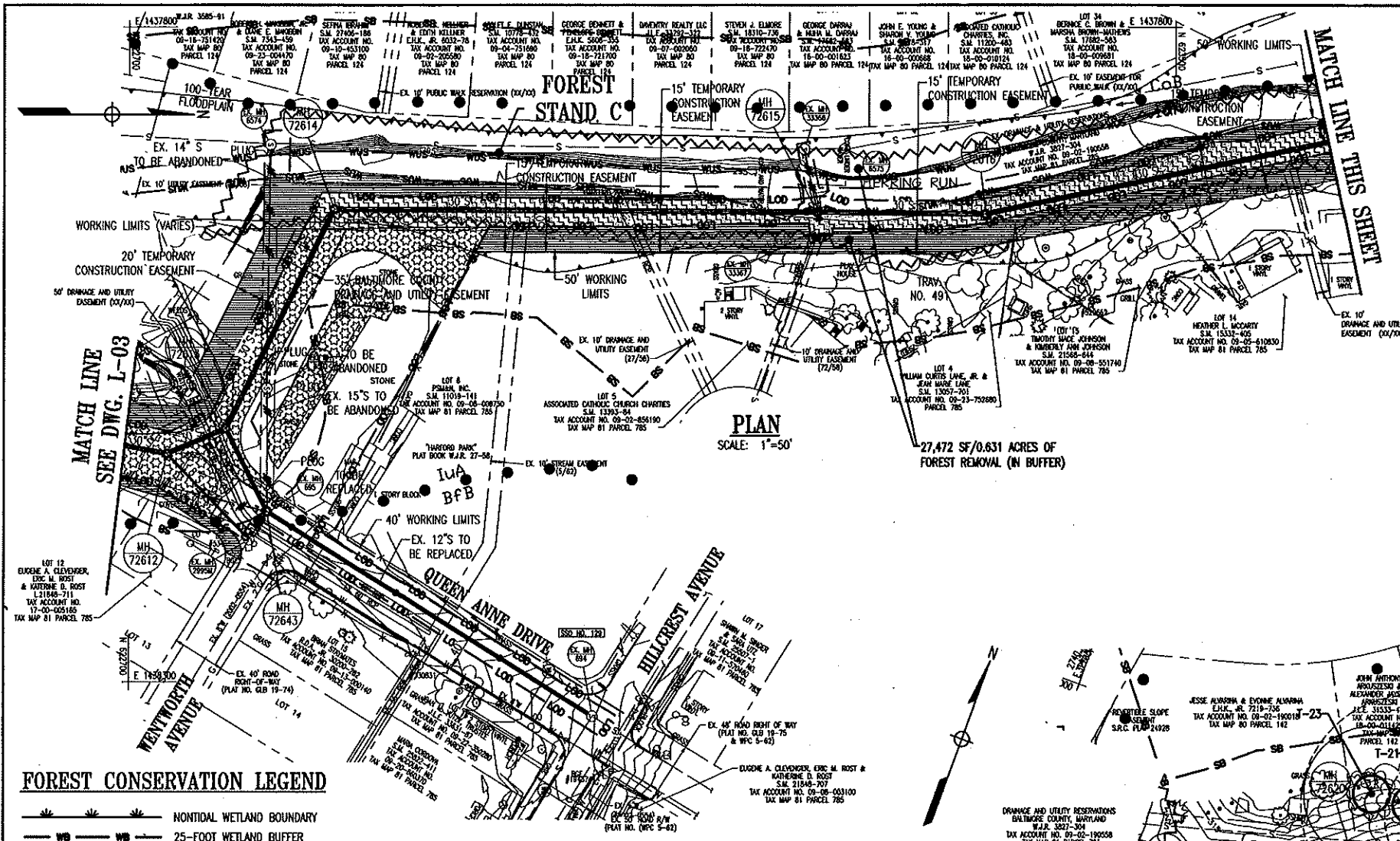
Laura Callens 5/19/2015
 LAURA CALLENS DATE
 MARYLAND DNR QUALIFIED PROFESSIONAL, 2006

EAST BRANCH HERRING RUN RELIEF SEWER CONSENT DECREE	DESIGN AND DRAWINGS BASED ON MARYLAND COORDINATE SYSTEM (MCS) HORIZONTAL NAD 83/91 AND VERTICAL NAVD 88	PC-2015-007 FB-2015-003	SHEET DESIGNATION L-03	CONTRACT NUMBER 14117-SX0
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PROFESSIONAL CERTIFICATION	AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SET	DRAWING SCALE	DEPARTMENT OF PUBLIC WORKS
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. 10639 EXPIRATION DATE 09/24/2016 ENGINEER: ROBERT HAMILTON, P.E. DIVISION: BUREAU OF ENGINEERING AND CONSTRUCTION DIVISION: BUILDINGS DIVISION: HIGHWAYS DIVISION: STRUCTURES DIVISION: STORM DRAIN DIVISION: SEWER DIVISION: WATER DIVISION: FIELD ENGINEER							1"=50'	BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING & CONSTRUCTION

BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING & CONSTRUCTION
 EAST BRANCH HERRING RUN RELIEF SEWER
 FOREST BUFFER PROTECTION, FOREST CONSERVATION, AND LANDSCAPE PLAN
 SUBDIVISION: PARKVILLE BALTIMORE COUNTY ELECTION DIST. NO.: 9C5

DATE: MAY 10, 2015	WRA William Rappaport & Associates, LLP 201 South Central Express Avenue, Annapolis, MD 21401	APPROVED BY: DIRECTOR DATE: _____	APPROVED BY: CHIEF DATE: _____	JOB ORDER NUMBER 201-0077-7103 SHEET 45 OF 78 DRAWING NUMBER 2014-1686 FILE NO. _____
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DWG. L-04 SPECIMEN TREE PROTECTION SCHEDULE

TREE ID	COMMON NAME	SCIENTIFIC NAME	DBH (INCHES)	HEALTH	FOREST STAND	CRZ IMPACT	RETAIN OR REMOVE	TREE PROTECTION MEASURES
T-5	SILVER MAPLE	ACER SACCHARINUM	32.5	GOOD	N/A	42%	REMOVE	TREE AND STUMP TO BE REMOVED
T-18	TULIP POPLAR	LIRIODENDRON TULIPIFERA	34.9	FAIR	FS-C	43%	REMOVE	TREE AND STUMP TO BE REMOVED
T-19	SILVER MAPLE	ACER SACCHARINUM	38.0	GOOD	N/A	45%	REMOVE	TREE AND STUMP TO BE REMOVED
T-20	SILVER MAPLE	ACER SACCHARINUM	36.0	GOOD	N/A	41%	REMOVE	TREE AND STUMP TO BE REMOVED
T-21	NORTHERN RED OAK	QUERCUS RUBRA	55.9	GOOD	N/A	13%	RETAIN	ROOT PRUNING/ TREE PROTECTION DURING CONSTRUCTION
T-22	TULIP POPLAR	LIRIODENDRON TULIPIFERA	36.5	GOOD	N/A	3%	RETAIN	ROOT PRUNING/ TREE PROTECTION DURING CONSTRUCTION
T-23	TULIP POPLAR	LIRIODENDRON TULIPIFERA	34.6	GOOD	N/A	0%	RETAIN	NONE NECESSARY
T-24	SILVER MAPLE	ACER SACCHARINUM	63.0	GOOD	N/A	8%	RETAIN	ROOT PRUNING/ TREE PROTECTION DURING CONSTRUCTION

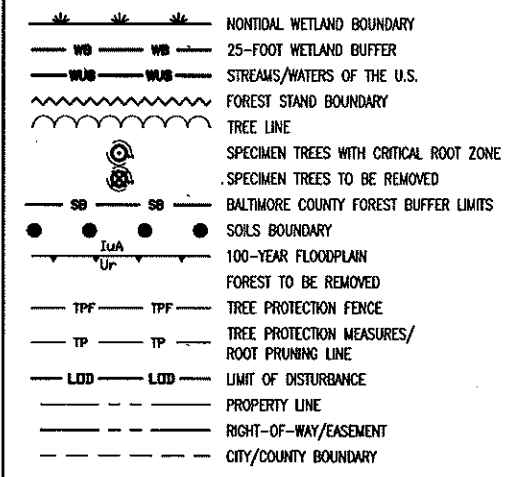
NOTES:

- SEE DWG. L-07 FOR FOREST BUFFER MITIGATION REQUIREMENTS, FOREST CONSERVATION REQUIREMENTS, OVERALL SPECIMEN TREE SCHEDULE, LANDSCAPE QUANTITIES, NOTES, AND PLANTING DETAILS.
- SEE DWG. L-08 FOR FOREST BUFFER PROTECTION DETAILS AND NOTES.

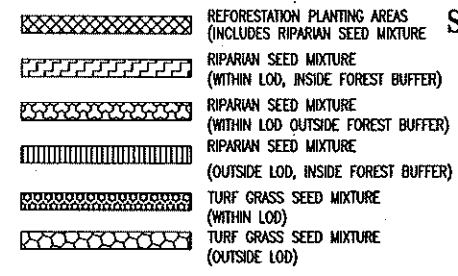
DWG. L-04 PERMANENT SEEDING SCHEDULE

QUANTITY	SEED MIXTURE TYPE	LOCATION WITHIN WORKING LIMITS
3,579 SY	RIPARIAN SEED MIXTURE	WITHIN LOD, INSIDE FOREST BUFFER
-	RIPARIAN SEED MIXTURE	WITHIN LOD, OUTSIDE FOREST BUFFER
1,592 SY	RIPARIAN SEED MIXTURE	OUTSIDE LOD, INSIDE FOREST BUFFER
2,148 SY	TURF GRASS SEED MIXTURE	WITHIN LOD
-	TURF GRASS SEED MIXTURE	OUTSIDE LOD

FOREST CONSERVATION LEGEND



LANDSCAPE LEGEND

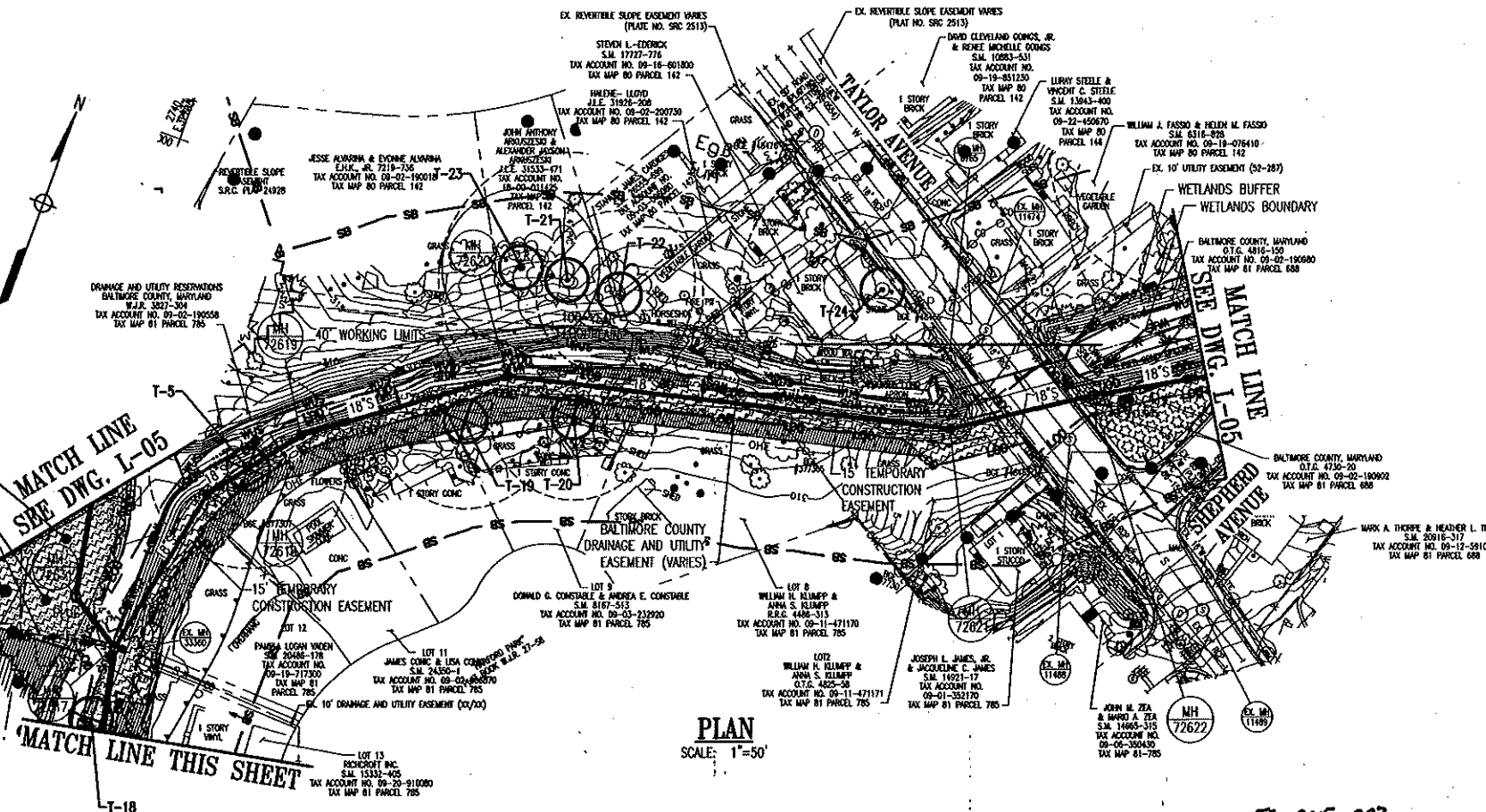


FOREST STAND C

EX. 8'S AND STREAM CROSSING TO BE ABANDONED

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PROFESSIONAL CERTIFICATION	AS-BUILT / REVISION	BY	DATE	P.T.A. NO.	KEY SHEET	POSITION SET	DRAWING SCALE	DEPARTMENT OF PUBLIC WORKS
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. 18059 EXPIRATION DATE 05/04/2019 ENGINEER: ROBERT HAMILTON, P.E.								
DESIGNED BY: RAH	BUREAU OF ENGINEERING AND CONSTRUCTION	BUILDINGS	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
DRAWN BY: RAH/ARM	REVIEWED BY:							
CHECKED BY: RIM	DATE REVIEWED:							

Laura Callene 5/19/2015
 LAURA CALLENS
 MARYLAND DNR QUALIFIED PROFESSIONAL, 2006

EAST BRANCH HERRING RUN SSO #41 & #129 CONSENT DECREE

DESIGN AND DRAWINGS BASED ON MARYLAND COORDINATE SYSTEM (MCS) HORIZONTAL NAD 83/91 AND VERTICAL NAVD 88

PC-2015-007
 FBR-2015-003

SHEET DESIGNATION: L-04
 CONTRACT NUMBER: 14117-SXO
 JOB ORDER NUMBER: 201-0077-7103
 SHEET 46 OF 76
 DRAWING NUMBER: 2014-1587
 FILE NO.: 06

BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING & CONSTRUCTION
 EAST BRANCH HERRING RUN RELIEF SEWER
 FOREST BUFFER PROTECTION, FOREST CONSERVATION, AND LANDSCAPE PLAN

SUBDIVISION: PARKVILLE BALTIMORE COUNTY ELECTION DIST. NO.: 9C6