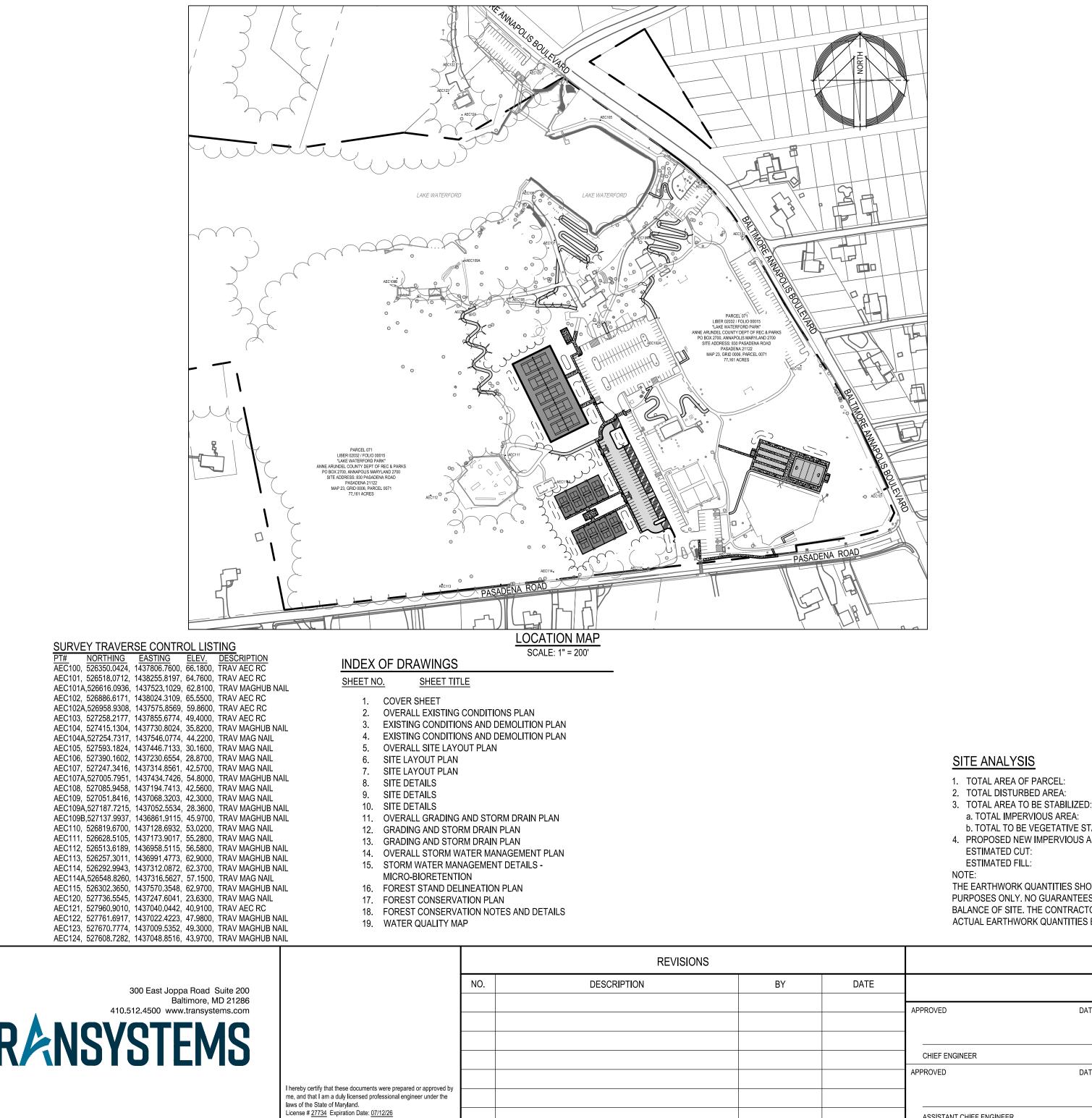
<u>ST</u>	ANDARD RESPONSIBILITY NOTES:
1. a.	I (WE) CERTIFY THAT: ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THIS SEDIMENT AND EROSION CONTROL PLAN, AND FURTHER, AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE ANNE ARUNDEL SOIL CONSERVATION DISTRICT (AASCD) BOARD OF SUPERVISORS OR THEIR AUTHORIZED AGENTS.
b.	ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT'S APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. RESPONSIBLE PERSONNEL ON SITE:
с.	IF APPLICABLE, THE APPROPRIATE ENCLOSURE WILL BE CONSTRUCTED AND MAINTAINED ON SEDIMENT BASIN(S) INCLUDED IN THIS PLAN. SUCH STRUCTURE(S) WILL BE IN COMPLIANCE WITH THE ANNE ARUNDEL COUNTY CODE.
2. 3.	THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHT, AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THE PLAN. FOR INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT AND/OR TEMPORARY STABILIZATION PER THE AASCD VEGETATIVE ESTABLISHMENT SHALL BE COMPLETED WITHIN THREE CALENDAR DAYS FOR THE SURFACE OF ALL CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND SEVEN DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4.	THE GRADING AND SEDIMENT CONTROL APPROVAL ON THIS PLAN EXTENDS ONLY TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE.
5. 6.	THE APPROVAL OF THIS PLAN FOR SEDIMENT AND EROSION CONTROL DOES NOT RELIEVE THE DEVELOPER/CONSULTANT FROM COMPLYING WITH FEDERAL, STATE OR COUNTY REQUIREMENTS PERTAINING TO ENVIRONMENTAL ISSUES. THE DEVELOPER MUST REQUEST THAT THE SEDIMENT AND EROSION CONTROL INSPECTOR APPROVE WORK COMPLETED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN, THE GRADING OR BUILDING PERMIT,
7. 8.	AND THE ORDINANCE. ALL MATERIAL SHALL BE TAKEN TO A SITE WITH AN APPROVED SEDIMENT AND EROSION CONTROL PLAN. FIRST PHASE INSPECTION AND APPROVAL OF THE SEDIMENT AND EROSION CONTROL INSPECTOR SHALL BE REQUIRED UPON COMPLETION OF THE INSTALLATION OF EROSION AND SEDIMENT CONTROLS PRIOR TO PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THE INITIAL APPROVAL BY THE SEDIMENT AND EROSION CONTROL INSPECTOR IS GIVEN. INSPECTION AND PERMITS MAY ALSO REQUIRE THAT AN INSPECTION AND CERTIFICATION OF THE INSTALLATION OF SEDIMENT CONTROL ALSO BE PERFORMED BY A DESIGN PROFESSIONAL PRIOR TO CONSTRUCTION COMMENCING.
9.	APPROVAL FROM THE INSPECTOR MUST BE REQUESTED ON FINAL STABILIZATION OF ALL SITES PRIOR TO REMOVAL OF
10.	SEDIMENT AND EROSION CONTROLS. EXISTING TOPOGRAPHY MUST BE FIELD VERIFIED BY RESPONSIBLE PERSONNEL TO THE SATISFACTION OF THE SEDIMENT CONTROL INSPECTOR PRIOR TO COMMENCING WORK.
SIGN	ATURE OF DEVELOPER/OWNER DATE
	T NAME: David Braun
TITLE	
	2662 RIVA ROAD
דרו רו	ANNAPOLIS, MARYLAND 21401
	PHONE NUMBER: (410) 222 - 7500 L ADDRESS: pwbrau78@aacounty.org
	ISULTANT'S CERTIFICATION
	DEVELOPER'S PLAN TO CONTROL SILT AND EROSION IS ADEQUATE TO CONTAIN THE SILT AND EROSION HE PROPERTY COVERED BY THE PLAN. I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL
REPR	RESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THIS SITE, AND PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASCD PLAN SUBMITTAL GUIDELINES
AND <sup>-</sup>	THE CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT
	TROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.         E LICENSE #       27734
	AND SURVEYOR LICENSE #
	ANDSCAPE ARCHITECT #
NAME	
	NAME TRANSYSTEMS
ADDR	DATE
CITY	TOWSON STATE MD ZIP CODE 21286
	:: THE CONSULTANT'S CERTIFICATION MUST BE SIGNED AND SEALED BY A PROFESSIONAL NEER IF THE SITE LIES WITHIN THE SEVERN RIVER WATERSHED.
GEN	IERAL NOTES:
1.	THE PROPERTY DELINEATED HEREON IS SHOWN ON TAX MAP 23, GRID 6, PARCEL 71 AND IS LISTED IN THE NAME OF ANNE ARUNDEL
2.	COUNTY, MARYLAND AS RECORDED IN LIBER 2032 AT FOLIO 15 AMONG THE LAND RECORDS OF ANNE ARUNDEL COUNTY, MARYLAND. THE PROPERTY LIES WITHIN ZONE 'X' (AREA OF 0.2% ANNUAL CHANCE OF FLOOD) AS PLOTTED ON NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL MAP NO. 24003C0145E DATED OCTOBER 16, 2012 FOR ANNE ARUNDEL COUNTY,
3.	MARYLAND. NO TITLE REPORT FURNISHED: THIS SURVEY IS NOT A COMPREHENSIVE RECORD OF APPURTENANCES OR ENCUMBRANCES OF RECORD OR
4.	IN USE. THIS SURVEY INFORMATION SHOWN HEREON IS BASED ON MARYLAND STATE PLAN COORDINATE SYSTEM NAD 83(2011) HORIZONTAL DATUM AND NAVD 88 VERTICAL DATUM. PRIMARY CONTROL IS BASED ON GPS OBSERVATIONS USING OPUS PROCESSED THROUGH NGS.
	AEC100 N 526,350.0424 E 1,437,806.7600 EL 66.18' (REBAR&CAP) AEC101 N 526,518.0712 E 1,438,255.8197 EL 64.76' (REBAR&CAP) COMBINED SCALE FACTOR: (AEC107A - GRID TO GROUND) 0.9999612107
5.	THIS FIELD RUN BOUNDARY AND TOPOGRAPHIC SURVEY WAS PERFORMED BY ARUNDEL COUNTY, MARYLAND DURING JANUARY 2022 THRU JANUARY 2023.
6.	NO EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITION WAS OBSERVED AT THE TIME OF THE SURVEY.
7.	THE EXISTENCE OF VEGETATED OR TIDAL WETLANDS, WATERS OF THE U.S. AND/OR HAZARDOUS WASTES HAS BEEN NEITHER INVESTIGATED NOR CONFIRMED DURING THE PERFORMANCE OF THIS SURVEY.
8.	ADDITIONAL SPOT ELEVATIONS RESIDE IN THE ELECTRONIC VERSION OF THIS DRAWING BUT ARE NOT PLOTTED HEREON.
9.	THE EXISTING UTILITIES SHOWN HEREON HAVE BEEN LOCATED BY ACTUAL FIELD MEASUREMENTS OF OBSERVABLE EVIDENCE. WE DO NOT GUARANTEE THE ACCURACY OR THE COMPLETENESS OF THE INFORMATION RECEIVED. THE CONTRACTOR MUST VERIFY ALL SUCH INFORMATION TO HIS OWN SATISFACTION AND MUST NOTIFY THE UTILITY COMPANIES INVOLVED PRIOR TO THE START OF THE WORK. OBSERVED PAINT MARKINGS WERE LOCATED AS SHOWN.
10.	IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ACTUAL SITE CONDITIONS PRIOR TO THE START OF ANY WORK. THERE IS NO WARRANTY OR GUARANTEE ON THE COMPLETENESS OR CORRECTNESS OF THE EXISTING CONDITION INFORMATION. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO THE START OF ANY WORK.
11.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" AT 1-800-257-7777 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION WORK.
12.	THE WORDS "CERTIFY" OR "CERTIFICATION" AS USED HEREON ARE UNDERSTOOD TO BE AN EXPRESSION OF PROFESSIONAL OPINION BY THE UNDERSIGNED SURVEYOR, BASED UPON HIS BEST KNOWLEDGE, INFORMATION, AND BELIEF. AS SUCH, IT DOES NOT CONSTITUTE A GUARANTEE NOR A WARRANTY, EXPRESSED OR IMPLIED.
13.	THE WORDS "CERTIFY" OR "CERTIFICATION" AS USED HEREON ARE UNDERSTOOD TO BE AN EXPRESSION OF PROFESSIONAL
	OPINION BY THE UNDERSIGNED SURVEYOR, BASED UPON HIS BEST KNOWLEDGE, INFORMATION, AND BELIEF. AS SUCH, IT DOES NOT CONSTITUTE A GUARANTEE NOR A WARRANTY, EXPRESSED OR IMPLIED.
14. 15.	TRACK-TYPE VEHICLES ARE PROHIBITED FROM TRAVELING ON OR ACROSS PAVED SITE ROADWAYS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY REMOVAL OF ALL DUST AND MUD ON ALL THE ROADS DUE TO
	CONTRACTOR ARRIVING AND LEAVING THE JOB SITE AND AS DIRECTED BY THE ENGINEER OR ANNE ARUNDEL COUNTY INSPECTOR. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR APPLYING AND OBTAINING ALL TRADE (ELECTRICAL,

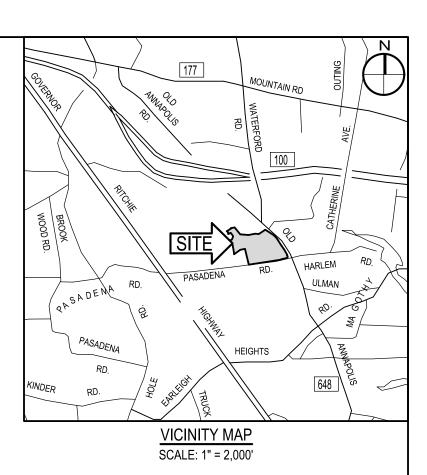
BUILDING AND PLUMBING) PERMITS.

<u>PI#</u> <u>NORTHING</u> AEC100, <u>526350.0424</u>,

# ANNE ARUNDEL COUNTY MARYLAND DEPARTMENT OF PUBLIC WORKS LAKE WATERFORD PARK SITE DEVELOPMENT

# SD SUBMISSION - DECEMBER 20th 2024 830 PASADENA ROAD, PASADENA, MARYLAND 21122 PROJECT NO.: P591000, CONTRACT NO. P591001



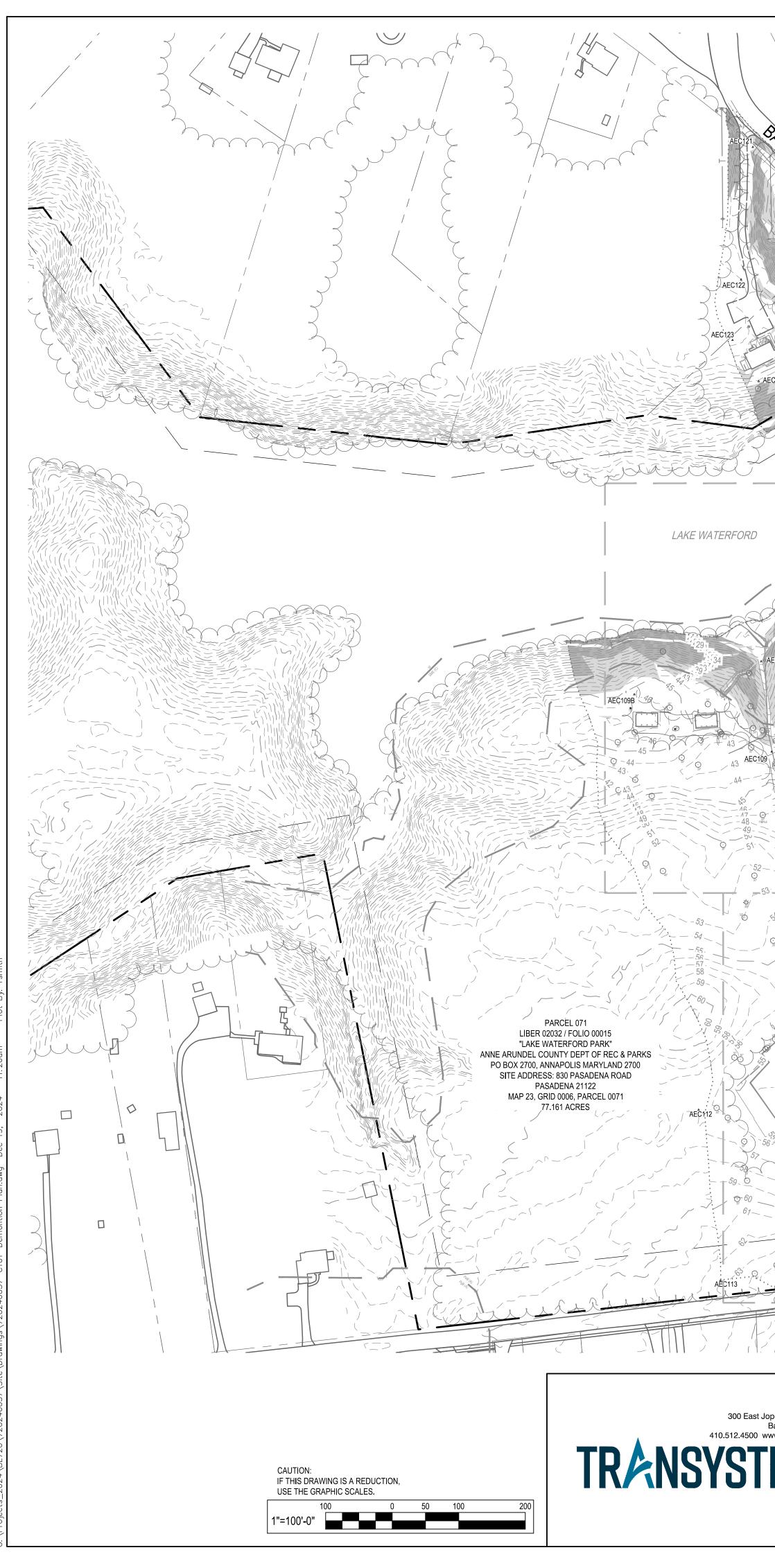


<u>LE(</u>	GEND					
DES	SCRIPTION	EXISTING		REMOVE	NEW	
BUI	LDING	EX. BLDG		EX. BLDG		
BITU	UMINOUS CONCRETE PAVING	EX. MACADA	M			
MAG	CADAM WALK	MAC/ADAM W	ALK			
CON	NCRETE WALK	CONC WAL	K			
MILI	L AND OVERLAY	EX. MACADA	M			
ATH	ILETIC COURT SURFACE					
CON WAI	NC. CURB					
	TAL FENCE	X		X	X	
WO	OD FENCE			II	-	
	IN (ONE-POST)			<del></del>	<del>- 0 -</del>	
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DRA	AIN INLET					
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	TER VALVE	$\bowtie$				
WA'	TER VALVE	O CO PgB (A)				
SO	IL LINE	PeB (A)				
STE	EEP SLOPES (15% - 25%)					
(25%	% OR GREATER)					
	IT OF DISTURBANCE DW ARROW					
	ACRES					
	SF. = ACRES ACRES	<u>OWNE</u>				
	ACRES			ITY		
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	CU.YDS.		· ^ N IT		F THIS DRAWING IS A REDUCTION, ISE THE GRAPHIC SCALES.	
EDEAN		APPLIC TRANSYS			200 0 100 200	4
CCURA	I ARE FOR INFORMATION ACY OF QUANTITIES OR IKE FULL RESPONSIBILITY OF ED DURING CONSTRUCTION.	300 E. JOI	PPA ROAD, S RE, MARYLAN		=200'-0"	
	ANNE /	ARUNDE	EL CO	UNTY		
	DEPARTME	NT OF		C WORKS		
APPRO	DVED	DATE	SCALE:	AS SHOWN		
			DRAWN BY:	DCC	LAKE WATERFORD PARK	
			DRAWN BY:	R.S.S.		
PR	OJECT MANAGER		CHECKED BY	: R.W.H.		
APPRO	DVED	DATE	SHEET NO.	01 OF 19		
					COVER SHEET	

CHIEF, RIGHT-OF-WAY

ASSISTANT CHIEF ENGINEER

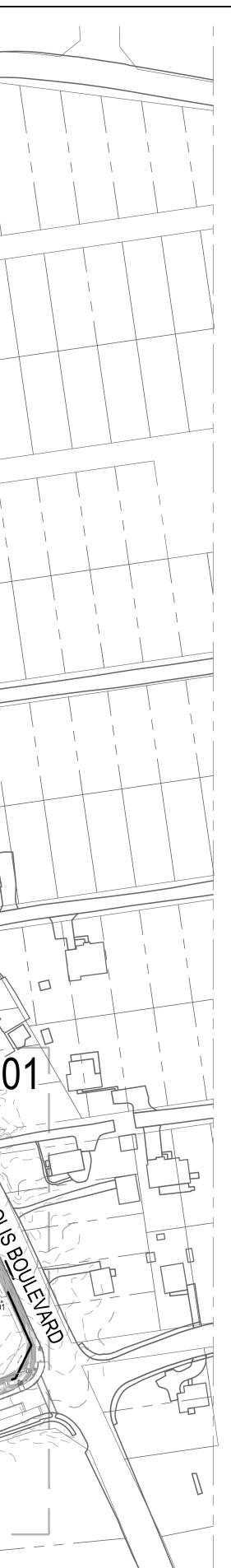
PROJECT NO .: P591000 CONTRACT NO.: P591001 COVER SHEET

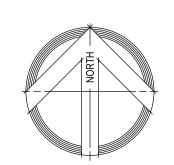


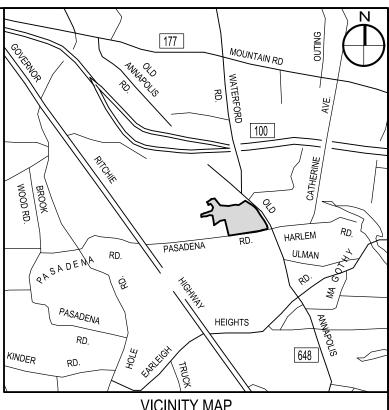
scts\_2024\BL720\720240037\Site\Drawings\720240037-C101-Demolition Plan.dwg Dec 19, 2024 - 11:26am Plot By: rsmi

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49- 51 51 52- 9		PASADENA 2 MAP 23, GRID 0006, F 77.161 ACR	ARCEL 0071	
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	75' BUILDING SETBACK LINE	AEC100	DASA	DENA ROAD
-62- AEC114.	3 62 (115) AEC115		PASA	
PASADENA ROAD				

ppa Road Suite 200		NO.	DESCRIPTION	BY	DATE	
Baltimore, MD 21286 ww.transystems.com						APPROVED
EMS						
LIVIU						CHIEF ENGINEER
						APPROVED
	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 # <u>27734</u> Expiration Date: <u>07/12/26</u>					ASSISTANT CHIEF ENGINE







VICINITY MAP SCALE: 1" = 2,000'

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
AEC100	526,350.042	1,437,806.760	66.18	TRAV AEC RC
AEC101	526,518.071	1,438,255.820	64.76	TRAV AEC RC
AEC101A	526,616.094	1,437,523.103	62.81	TRAV MAGHUB NAI
AEC102	526,886.617	1,438,024.311	65.55	TRAV AEC RC
AEC102A	526,958.931	1,437,575.857	59.86	TRAV AEC RC
AEC103	527,258.218	1,437,855.677	49.40	TRAV AEC RC
AEC104	527,415.130	1,437,730.802	35.82	TRAV MAGHUB NAI
AEC104A	527,254.732	1,437,546.077	44.22	TRAV MAG NAIL
AEC105	527,593.182	1,437,446.713	30.16	TRAV MAG NAIL
AEC106	527,390.160	1,437,230.655	28.87	TRAV MAG NAIL
AEC107	527,247.342	1,437,314.856	42.57	TRAV MAG NAIL
AEC107A	527,005.795	1,437,434.743	54.80	TRAV MAGHUB NAI
AEC108	527,085.946	1,437,194.741	42.56	TRAV MAG NAIL
AEC109	527,051.842	1,437,068.320	42.30	TRAV MAG NAIL
AEC109A	527,187.722	1,437,052.553	28.36	TRAV MAGHUB NAI
AEC109B	527,137.994	1,436,861.911	45.97	TRAV MAGHUB NAI
AEC110	526,819.670	1,437,128.693	53.02	TRAV MAG NAIL
AEC111	526,628.511	1,437,173.902	55.28	TRAV MAG NAIL
AEC112	526,513.619	1,436,958.511	56.58	TRAV MAGHUB NAI
AEC113	526,257.301	1,436,991.477	62.90	TRAV MAGHUB NAI
AEC114	526,292.994	1,437,312.087	62.37	TRAV MAGHUB NAI
AEC114A	526,548.826	1,437,316.563	57.15	TRAV MAG NAIL
AEC115	526,302.365	1,437,570.355	62.97	TRAV MAGHUB NAI
AEC120	527,736.554	1,437,247.604	23.63	TRAV MAG NAIL
AEC121	527,960.901	1,437,040.044	40.91	TRAV AEC RC
AEC122	527,761.692	1,437,022.422	47.98	TRAV MAGHUB NAI
AEC123	527,670.777	1,437,009.535	49.30	TRAV MAGHUB NAI
AEC124	527,608.728	1,437,048.852	43.97	TRAV MAGHUB NAI

# SITE INFORMATION :

1.	OWNER: ANNE ARUNDEL COUNTY DEPARTMENT OF RECREATIONS AND PARKS P.O. BOX 2700
	ANNAPOLIS, MARYLAND 21404-2700
	SITE ADDRESS:
	LAKE WATERFORD PARK
	830 PASADENA ROAD
	PASADENA, MARYLAND 21122

SITE DATA:

DATA:	
	TAX ID: 03-000-00477574
	TAX MAP / GRID: 0023 / 0006
	PARCEL: 0071
	LIBER / FOLIO: 02032 / 00015
	ZONING: OS (OPEN SPACE)
	77.161 ACRES

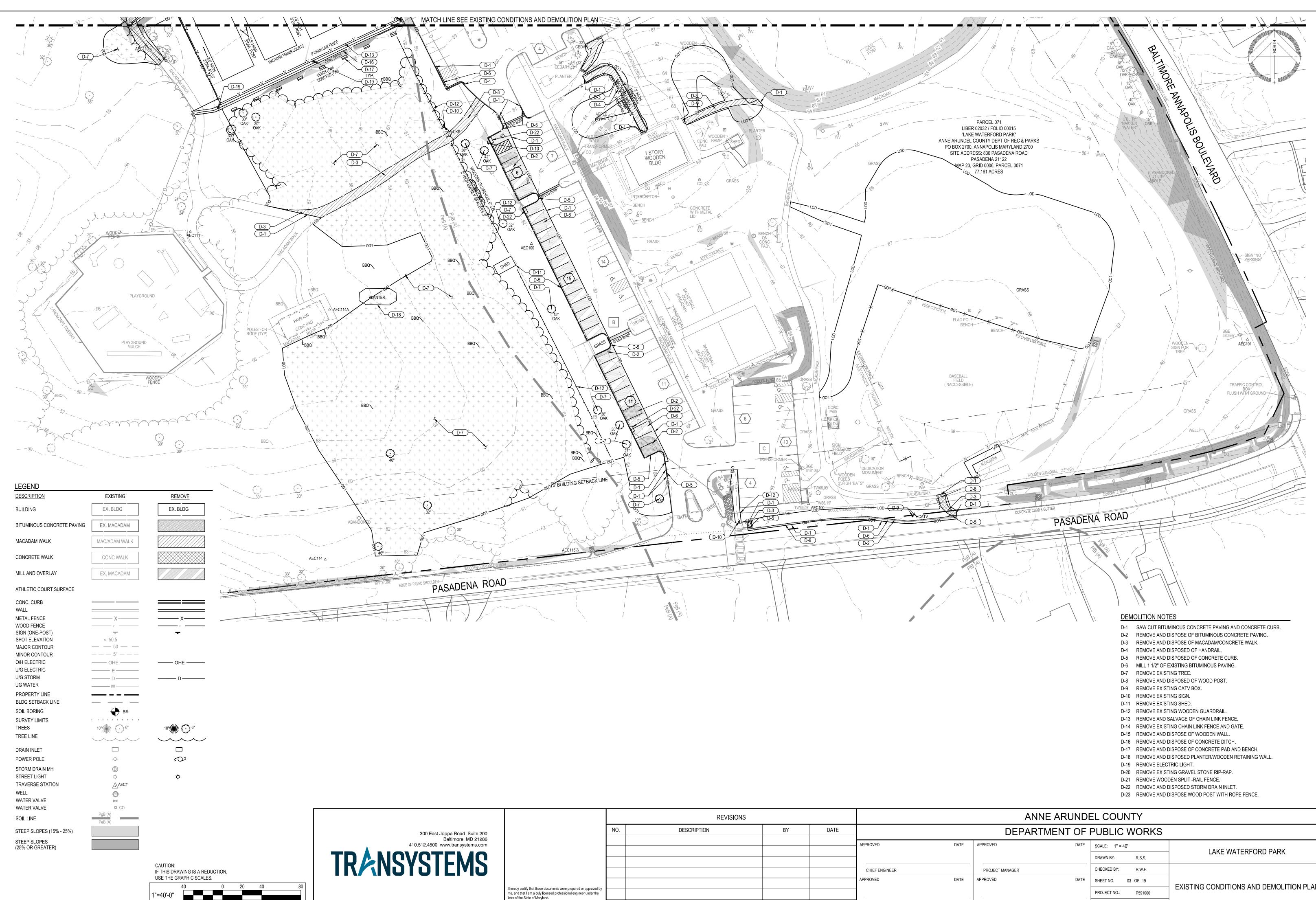
- 1. EXISTING FEATURES SHOWN HEREON WERE TAKEN FROM ACTUAL FIELD MEASUREMENTS BY AECOM DURING JANUARY 2022 THRU JANUARY 2023.
- SURVEY INFORMATION SHOWN HEREON IS BASED ON MARYLAND STATE PLAN COORDINATE SYSTEM NAD83(2011) HORIZONTAL DATUM AND NAVD88 VERTICAL DATUM. PRIMARY CONTROL IS BASED ON GPS OBSERVATIONS USING OPUS PROCESSED THROUGH NGS.

AEC100	N 526,350.0424	E 1,437,806.7600	EL 66.18'	(REBAR&CAP)

- AEC101 N 526,518.0712 E 1,438,255.8197 EL 64.76' (REBAR&CAP) COMBINED SCALE FACTOR: (AEC107A - GRID TO GROUND) 0.9999612107
- 3. UTILITIES SHOWN HEREON HAVE BEEN LOCATED BY ACTUAL FIELD MEASUREMENTS OF OBSERVABLE EVIDENCE. WE DO NOT GUARANTEE THE ACCURACY OR THE COMPLETENESS OF THE INFORMATION RECEIVED. THE CONTRACTOR MUST VERIFY ALL SUCH INFORMATION TO HIS OWN SATISFACTION AND MUST NOTIFY THE UTILITY COMPANIES INVOLVED PRIOR TO THE START OF THE WORK. OBSERVED PAINT MARKINGS WERE LOCATED AS SHOWN.

PARKING TABULATION:		
EXISTING PARKING LOT 'A'		
STANDARD PARKING SPACES	=	108 SPACES
HANDICAP (ADA) PARKING SPACES	=	5 (5 VAN ACCESSIBLE)
TOTAL PARKING SPACES	=	113 SPACES
EXISTING PARKING LOT 'B'		
STANDARD PARKING SPACES	=	61 SPACES
HANDICAP (ADA) PARKING SPACES	=	3 (3 VAN ACCESSIBLE)
TOTAL PARKING SPACES	=	64 SPACES
EXISTING PARKING LOT 'C'		
STANDARD PARKING SPACES	=	16 SPACES
HANDICAP (ADA) PARKING SPACES	=	4 (3 VAN ACCESSIBLE)
TOTAL PARKING SPACES	=	20 SPACES

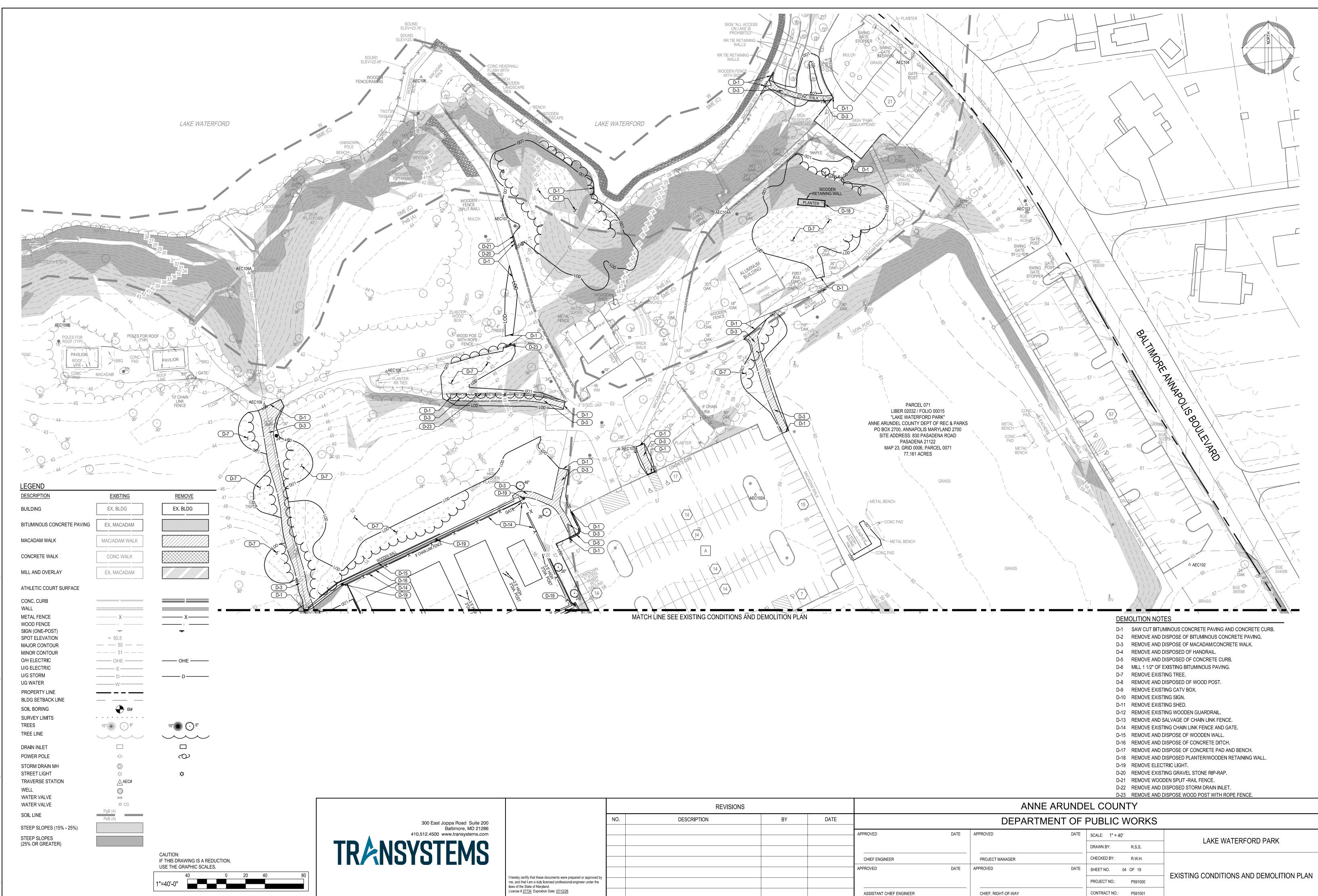
DATE	APPROVED DATE	SCALE: 1" = 100'	LAKE WATERFORD PARK
		DRAWN BY: R.S.S.	
	PROJECT MANAGER	CHECKED BY: R.W.H.	
DATE	APPROVED DATE	SHEET NO. 02 OF 19	OVERALL EXISTING CONDITIONS PLAN
		PROJECT NO.: P591000	
R	CHIEF, RIGHT-OF-WAY	CONTRACT NO.: P591001	



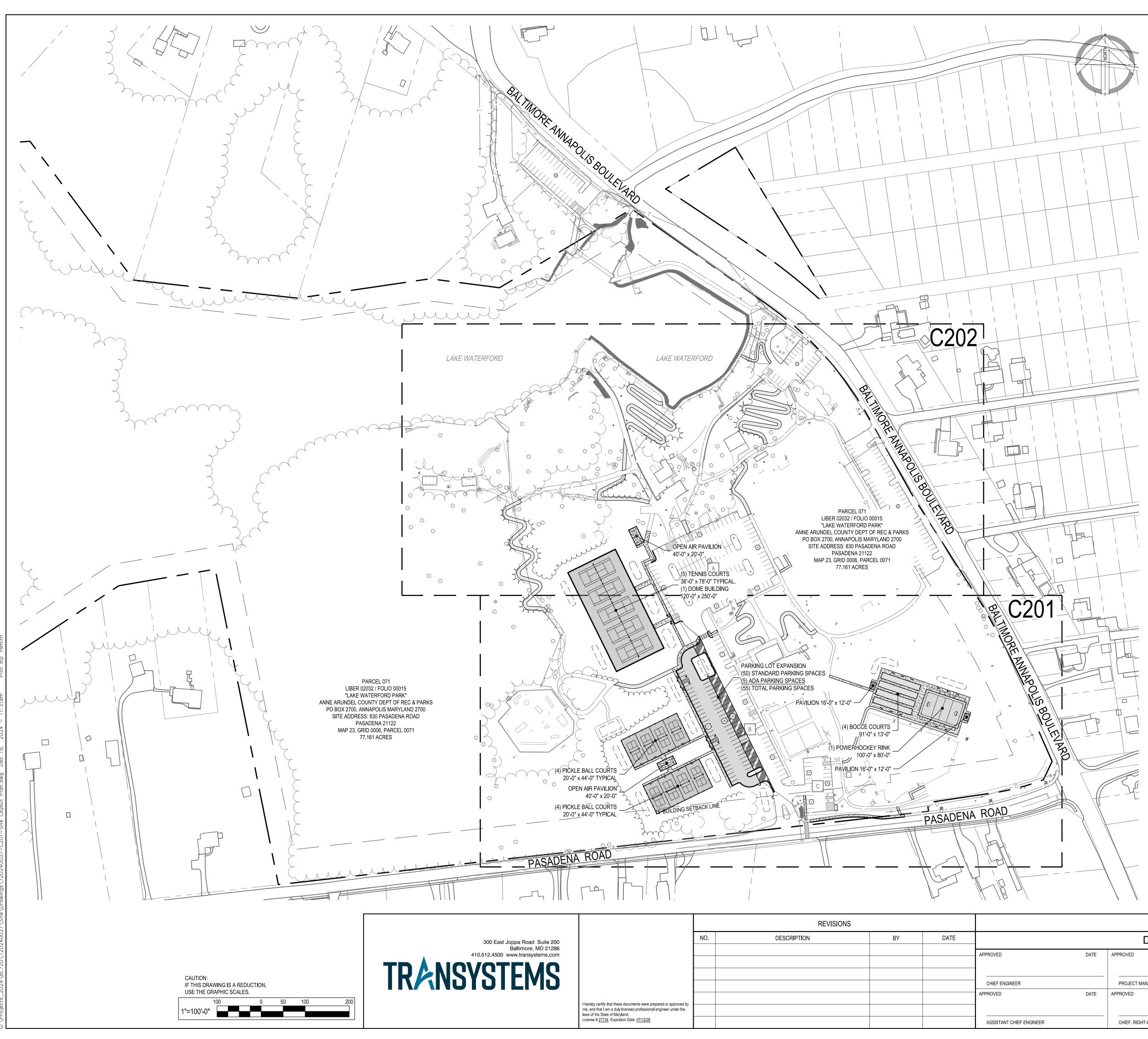
			REVISIONS			
East Joppa Road Suite 200 Baltimore, MD 21286		NO.	DESCRIPTION	BY	DATE	
500 www.transystems.com						APPROVED
TEMS						CHIEF ENGINEER
						APPROVED
	I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.					
	License # $\frac{27734}{27734}$ Expiration Date: $\frac{07/12/26}{27734}$					ASSISTANT CHIEF ENGINEER

# EXISTING CONDITIONS AND DEMOLITION PLAN

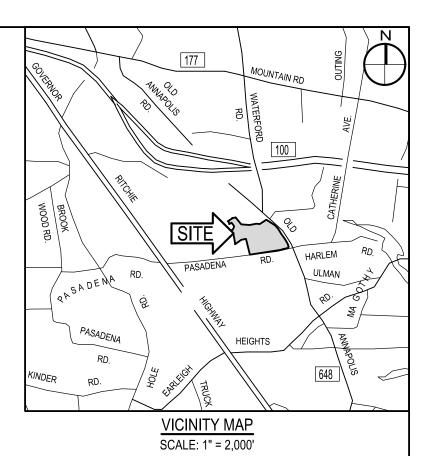
CONTRACT NO.: P591001



			REVISIONS			
ast Joppa Road Suite 200		NO.	DESCRIPTION	BY	DATE	
Baltimore, MD 21286 00 www.transystems.com						APPROVED
ΤΕΝΛΟ						_
TEMS						CHIEF ENGINEER
						APPROVED
	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 # 27734 Expiration Date: 07/12/26					ASSISTANT CHIEF ENGIN



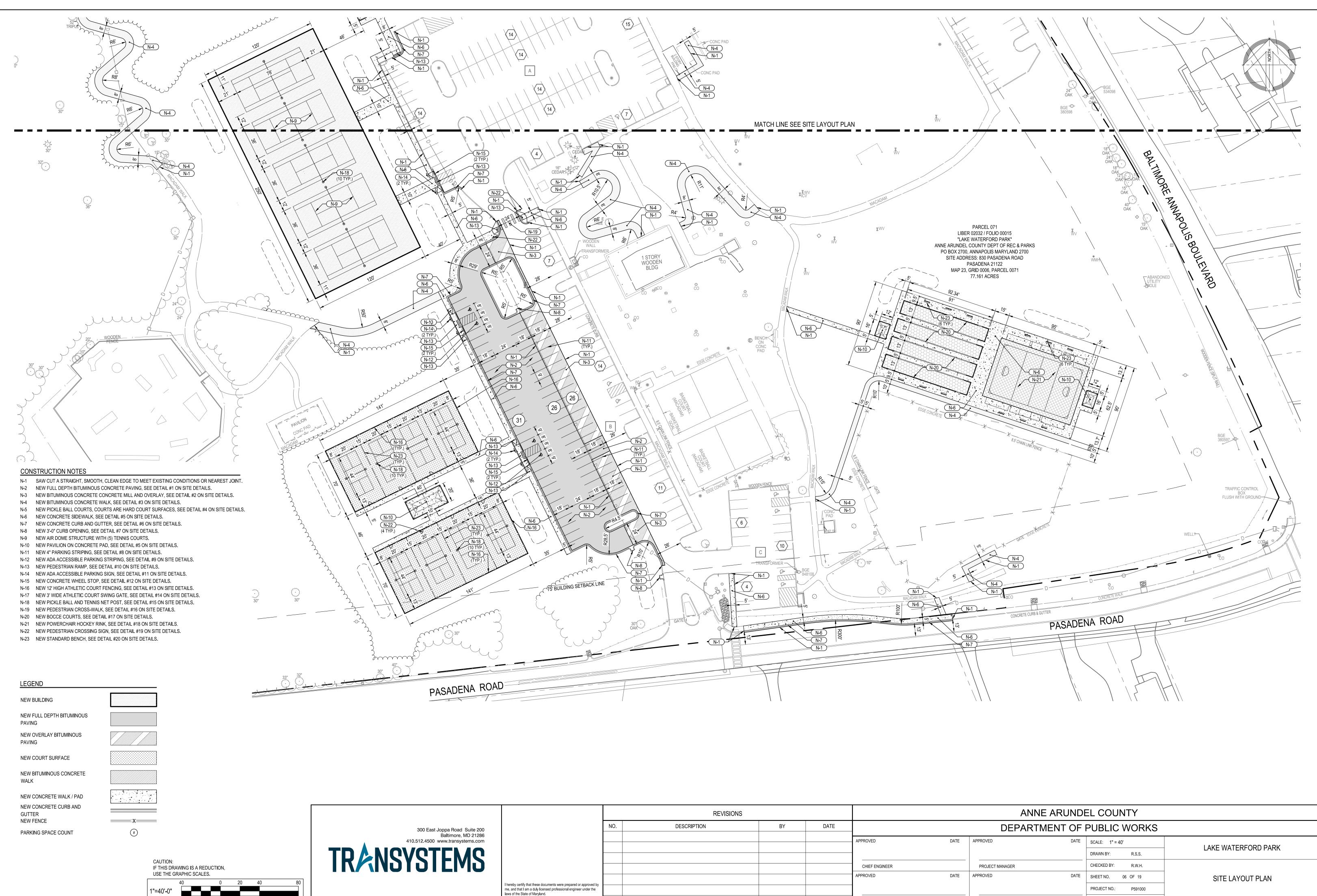
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st Joppa Road Suite 200		NO.	DESCRIPTION	BY	DATE	_
Baltimore, MD 21286 0 www.transystems.com						APPROVED
TEMS						CHIEF ENGINEER
						APPROVED
	I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.					
	License # 27734 Expiration Date: 07/12/26					



ESCRIPTION	EXISTING	NEW
UILDING	EX. BLDG	
ITUMINOUS CONCRETE PAVING	EX. MACADAM	
IACADAM WALK	MAC/ADAM WALK	
ONCRETE WALK	CONC WALK	
IILL AND OVERLAY	EX. MACADAM	
THLETIC COURT SURFACE		
CONC. CURB		
IETAL FENCE	X	X
	//	
IGN (ONE-POST) POT ELEVATION	× 50.5	<del></del> + 50.5
IAJOR CONTOUR	50	50
INOR CONTOUR	— — —	<u> </u>
D/H ELECTRIC	OHE	
I/G ELECTRIC I/G STORM	——— E ———	
IG WATER	D	
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BLDG SETBACK LINE		
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TREET LIGHT	¢	•
RAVERSE STATION	AEC#	
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VATER VALVE VATER VALVE	► CO	
	PgB (A)	
OIL LINE	PeB (A)	
TEEP SLOPES (15% - 25%)		
TEEP SLOPES 25% OR GREATER)		
IMIT OF DISTURBANCE		LOD
LOW ARROW		

PARKING TABULATION:		
PROPOSED PARKING LOT 'A'		
STANDARD PARKING SPACES	=	108 SPACES
HANDICAP (ADA) PARKING SPACES	=	5 (5 VAN ACCESSIBLE)
TOTAL PARKING SPACES	=	113 SPACES
PROPOSED PARKING LOT 'B'		
STANDARD PARKING SPACES PROVIDED	=	109 SPACES
HANDICAP (ADA) SPACES	=	6 (6 VAN ACCESSIBLE)
TOTAL PARKING SPACES PROVIDED	=	115 SPACES
PROPOSED PARKING LOT 'C'		
STANDARD PARKING SPACES	=	16 SPACES
HANDICAP (ADA) PARKING SPACES	=	4 (3 VAN ACCESSIBLE)
TOTAL PARKING SPACES	=	20 SPACES
NET ADD	=	51 SPACES

DEPARTMENT OF PUBLIC WORKS								
TE APPROVED	DATE	SCALE: 1" = 100'	LAKE WATERFORD PARK					
		DRAWN BY: R.S.S.						
PROJECT MANAGER		CHECKED BY: R.W.H.						
TE APPROVED	DATE	SHEET NO. 05 OF 19	OVERALL SITE LAYOUT PLAN					
		PROJECT NO.: P591000						
CHIEF, RIGHT-OF-WAY		CONTRACT NO.: P591001						
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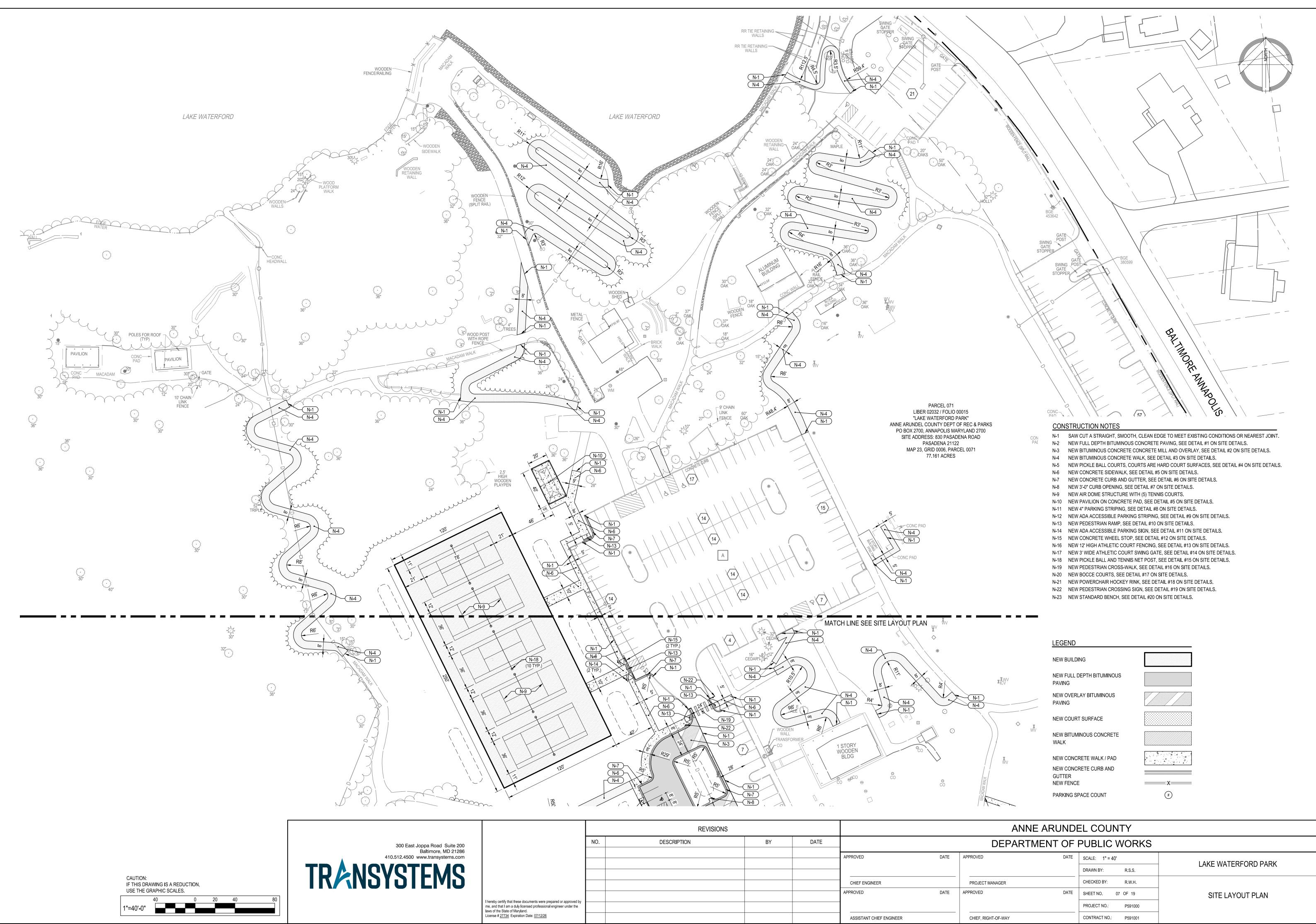




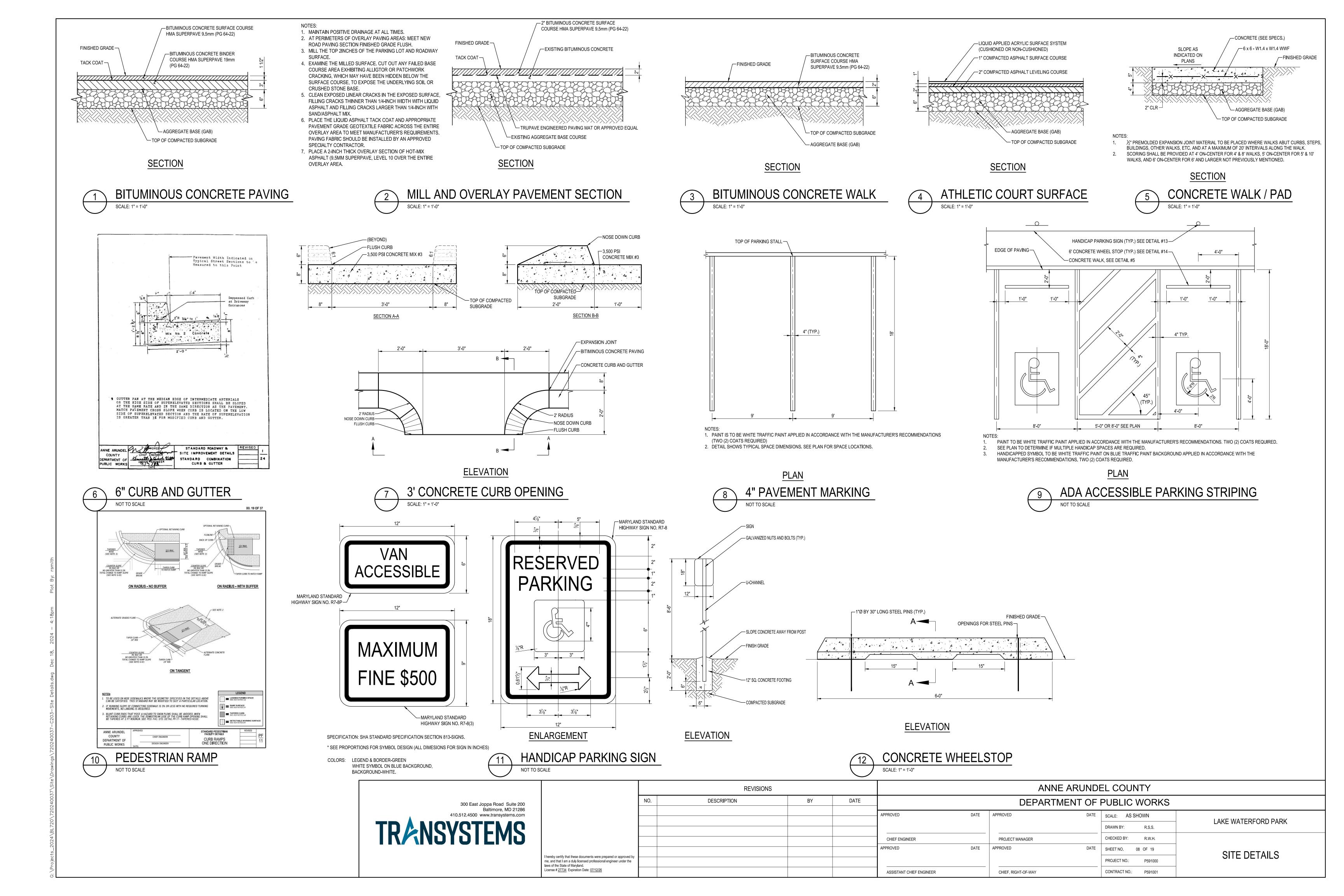
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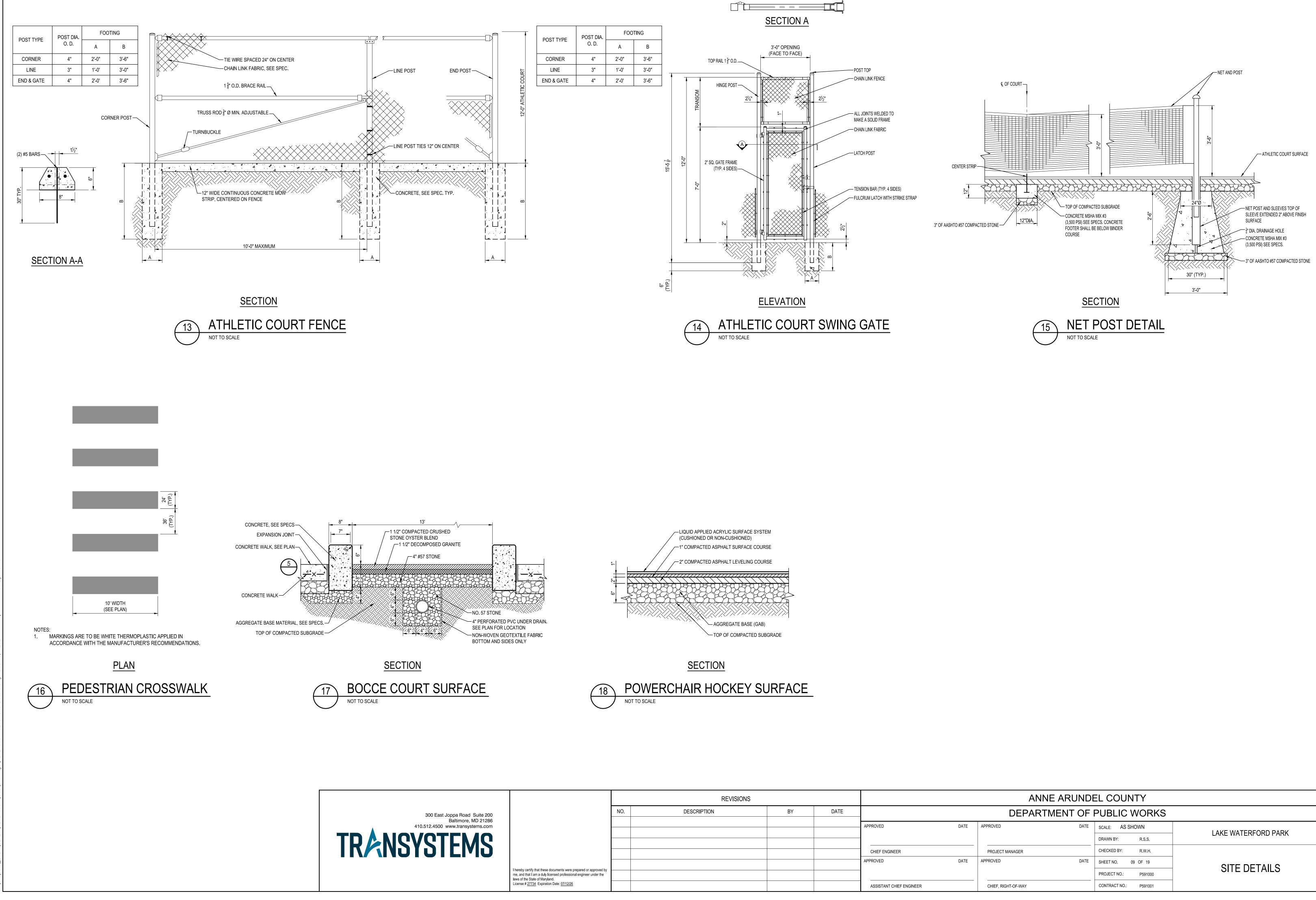
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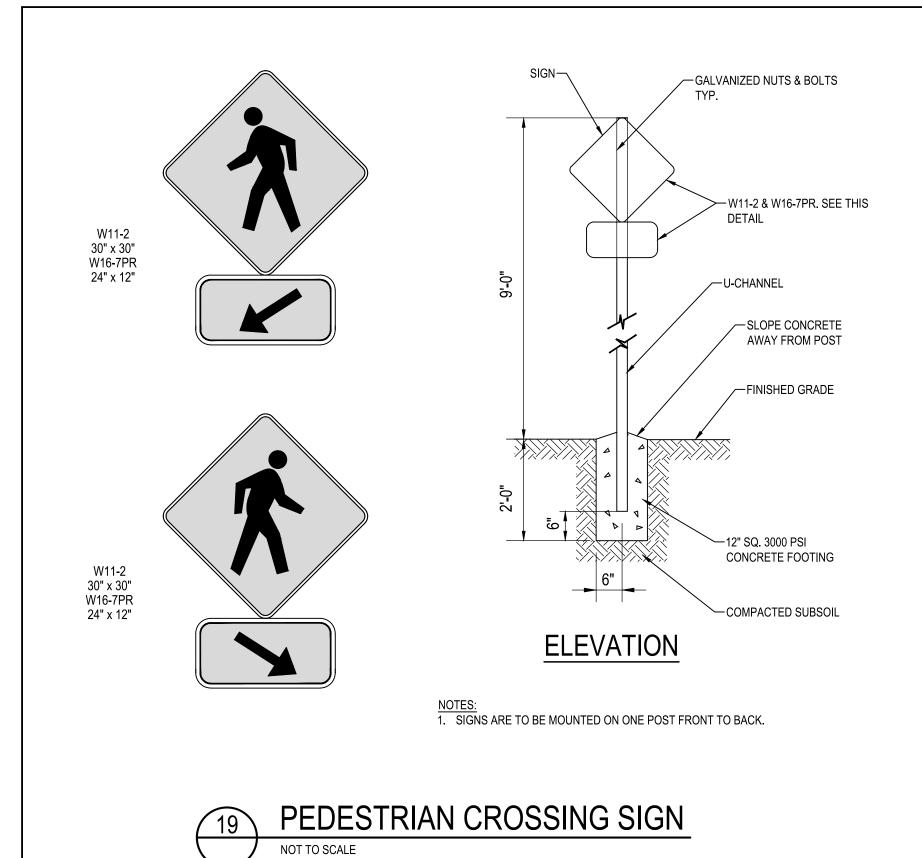


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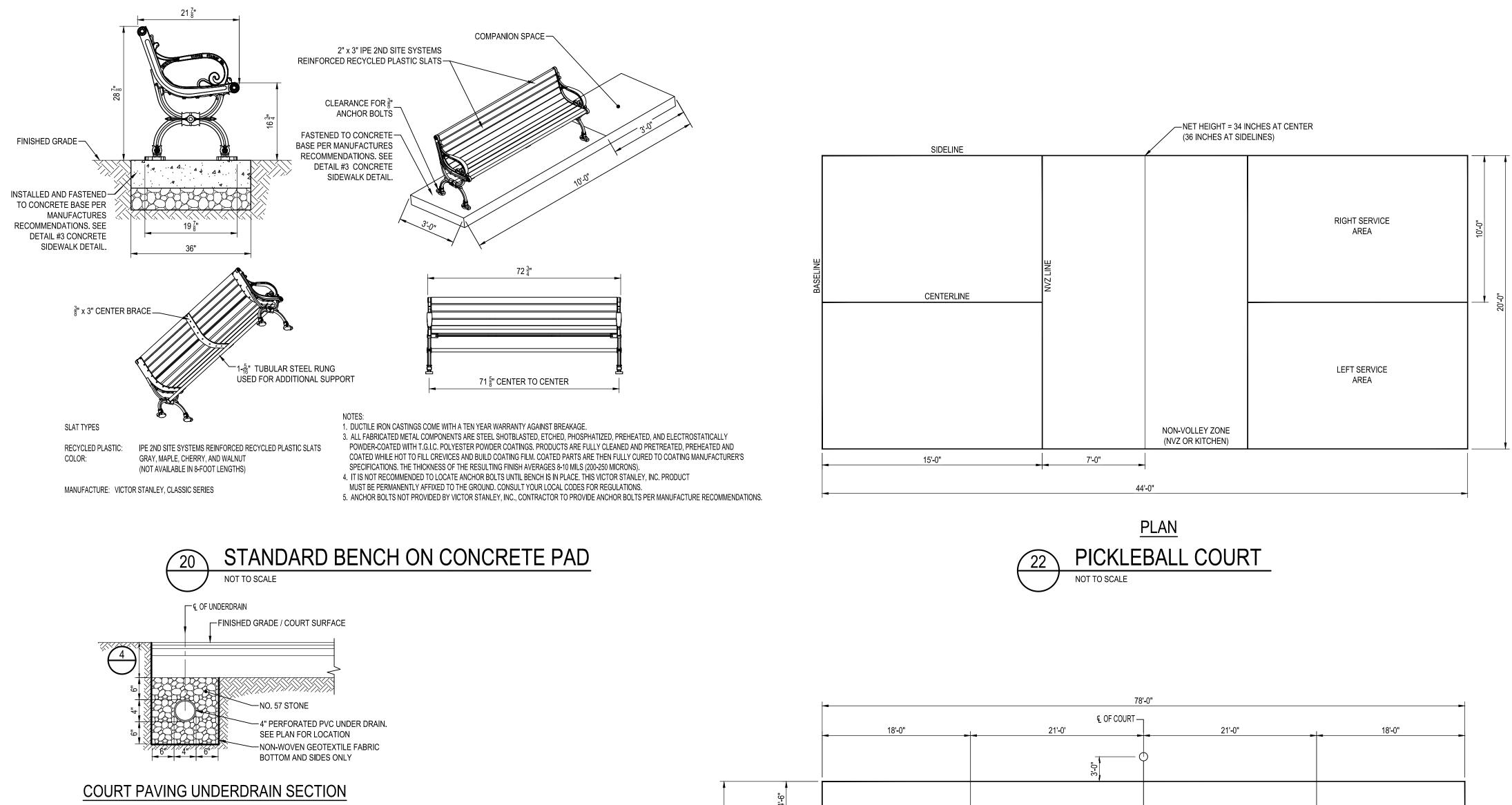


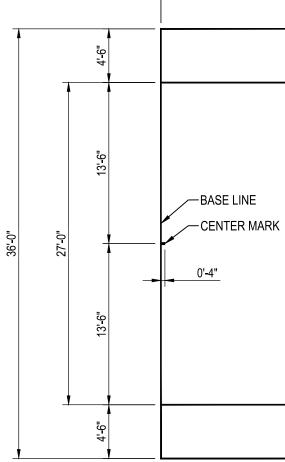


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						CHIEF ENGINEER		PROJECT MANAGER		CHECKED BY: R.W.H.	
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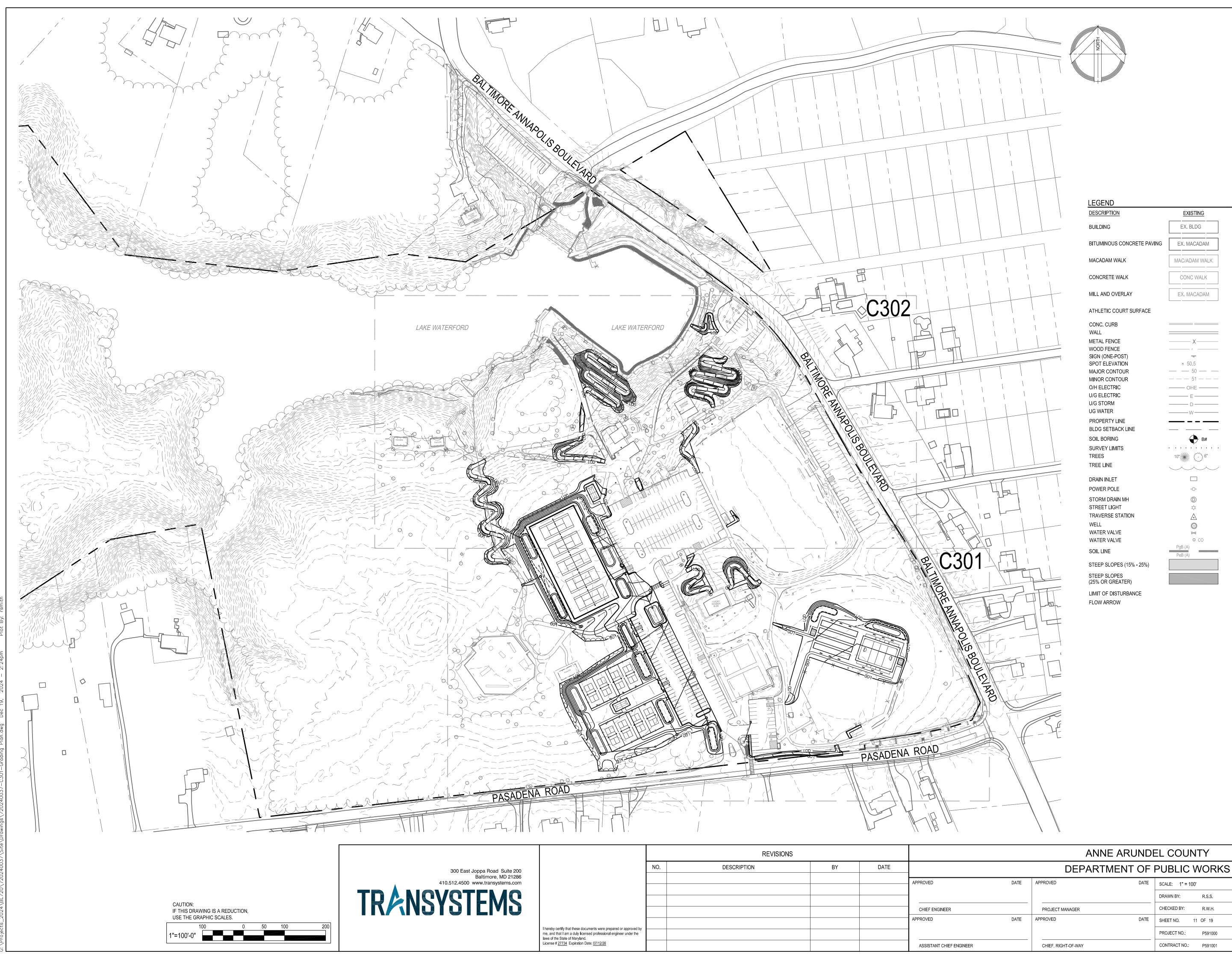




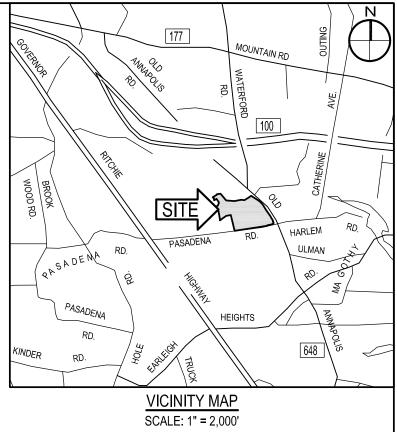
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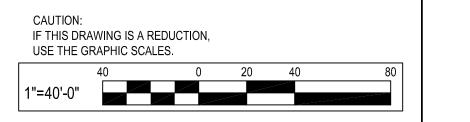
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# EXISTING <u>NEW</u> EX. BLDG EX. MACADAM BITUMINOUS CONCRETE PAVING \_\_\_\_\_ MAC/ADAM WALK \_\_\_\_ CONC WALK · 4 · \_\_\_\_ EX. MACADAM \_\_\_\_\_ X \_\_\_\_\_ \_\_\_\_ × 50.5 + 50.5 — — — 51 — ------ OHE ------——— E —— \_\_\_\_\_ 🕀 в# . . . . . . . . . . 10" 💥 💮 6" $\checkmark$ $\checkmark$ **O** CO ------ LOD-------

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PROJECT MANAGER		CHECKED BY: R.W.H.					
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		PROJECT NO.: P591000					
CHIEF, RIGHT-OF-WAY		CONTRACT NO.: P591001					
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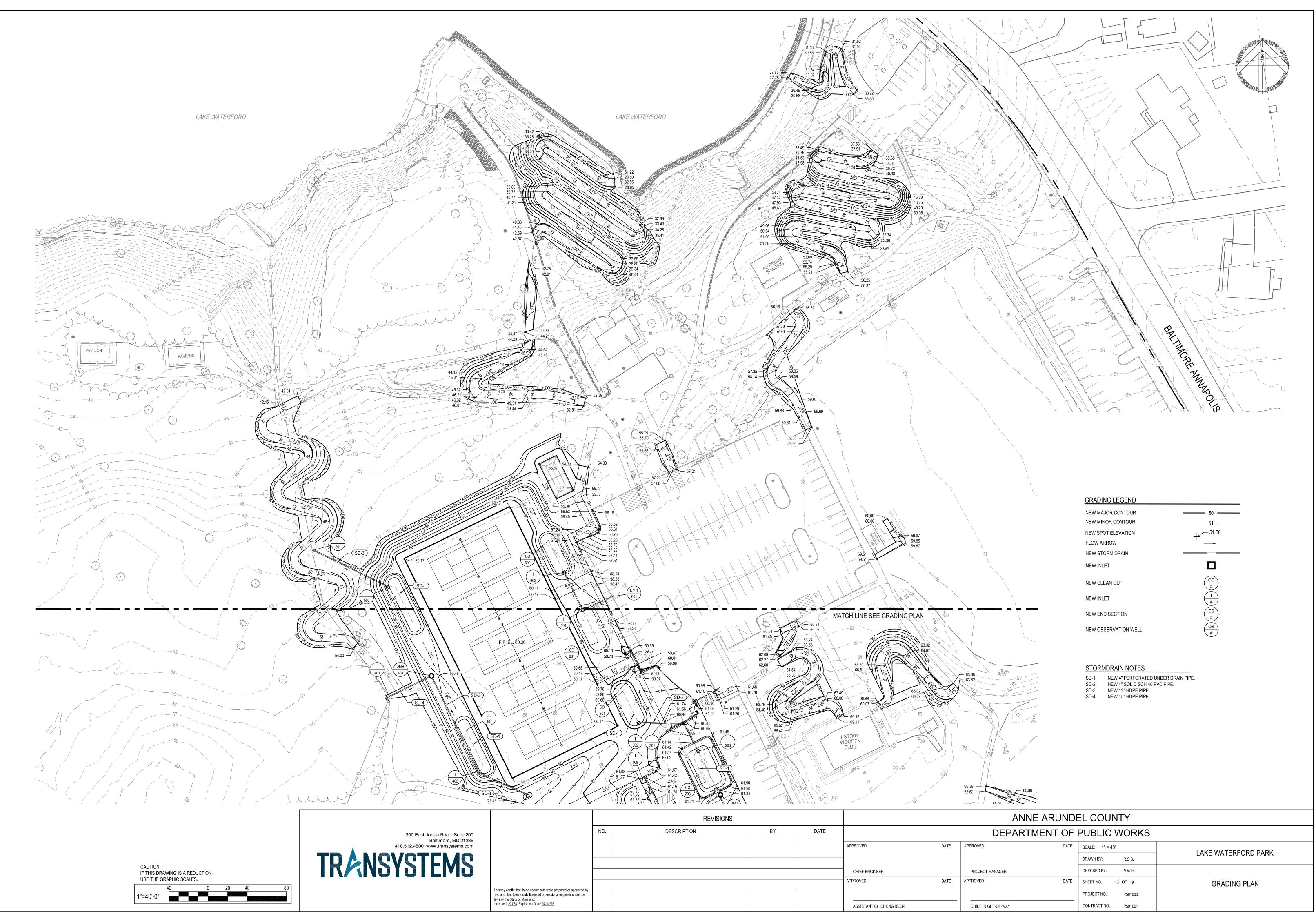


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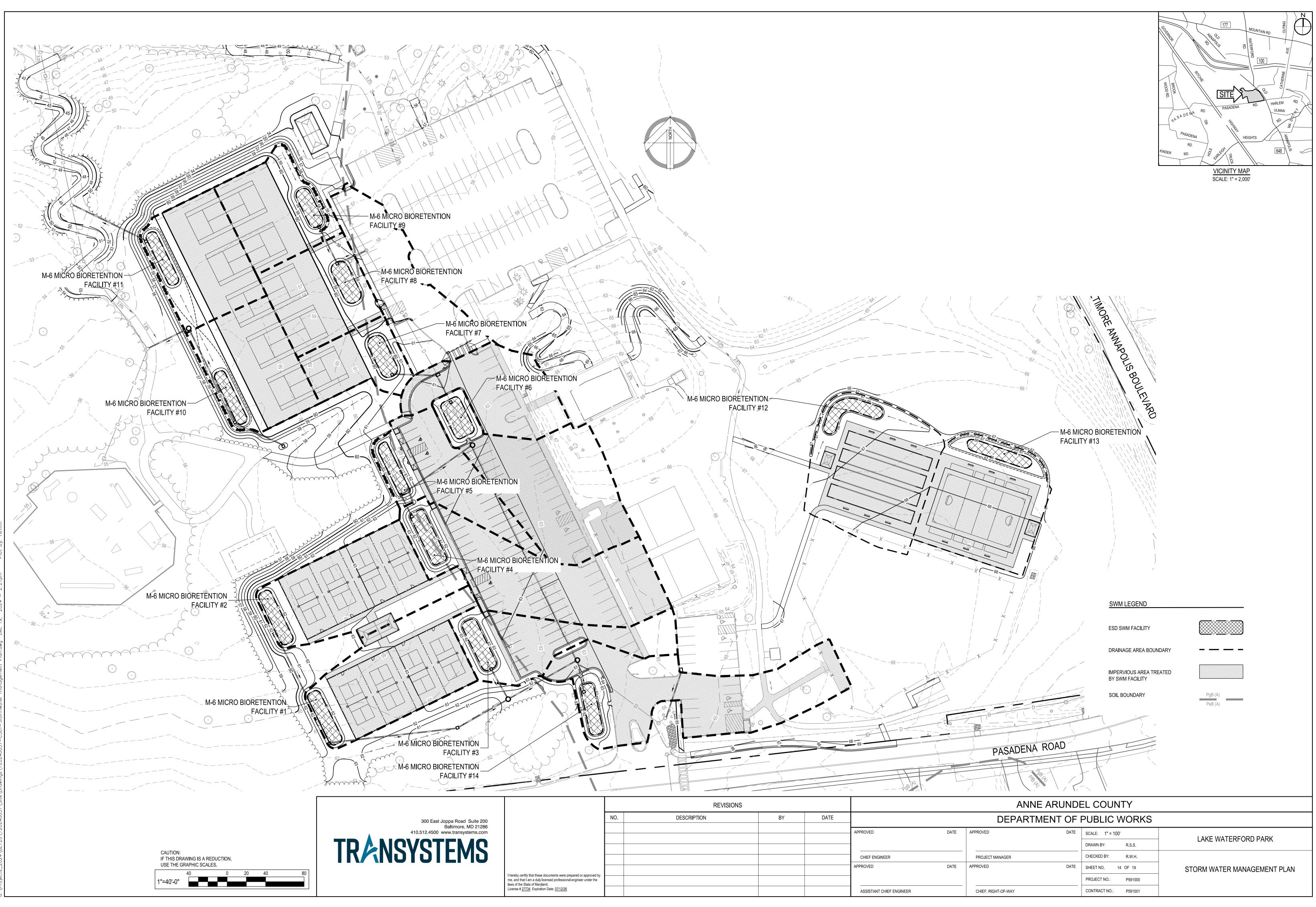
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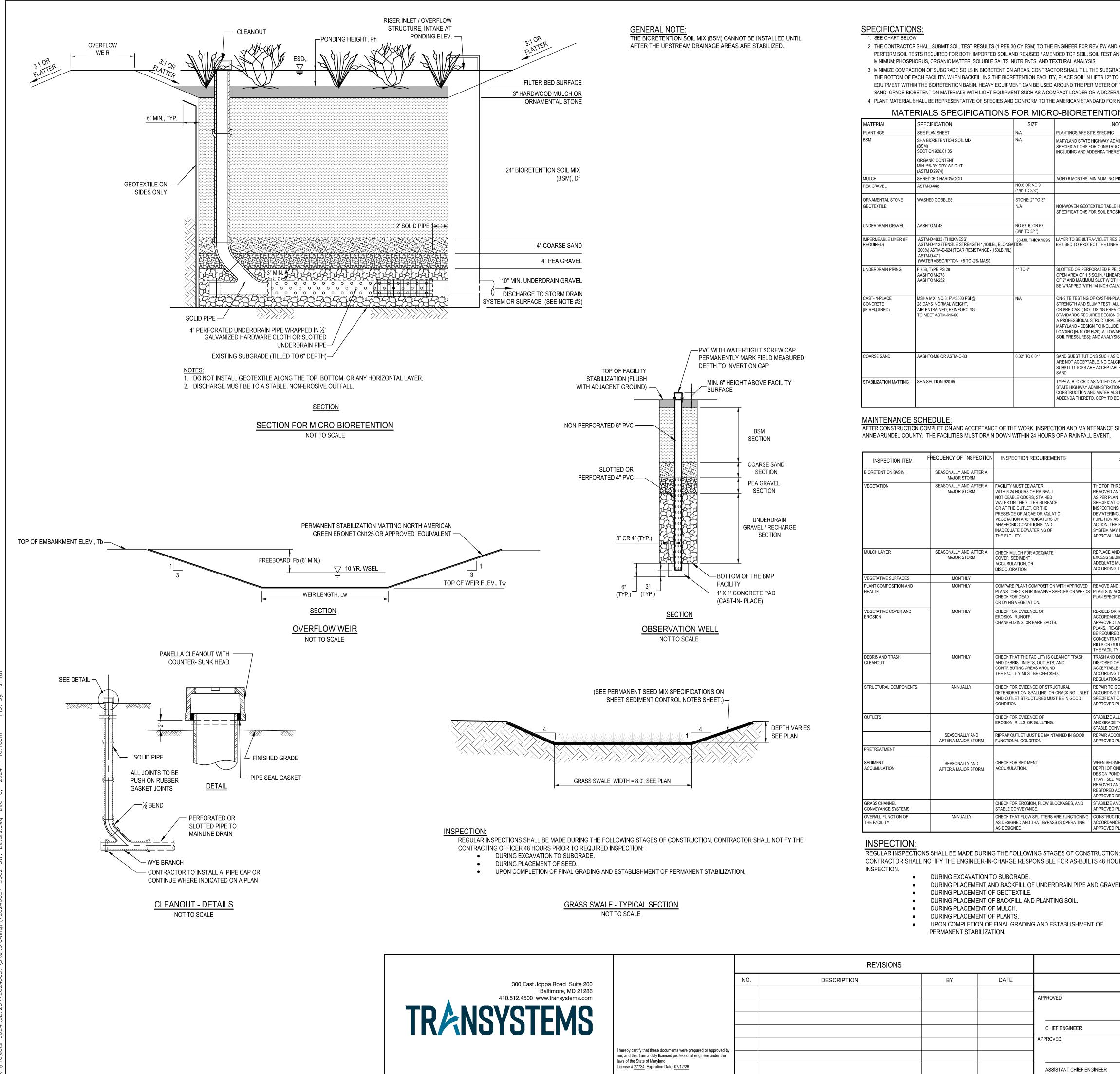
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by certify that these documents were prepared or approved by nd that I am a duly licensed professional engineer under the of the State of Maryland.					_				PROJECT NO.:	P591000	MICRO-BIORETENTION
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	T MATERIAL SHALL BE REPRESENTATIVE OF SPECIES AND CONFORM TO T								
MATERIALS SPECIFICATIONS FOR MICF									
\L	SPECIFICATION	SIZE							
S	SEE PLAN SHEET	N/A							
	SHA BIORETENTION SOIL MIX (BSM) SECTION 920.01.05	N/A							
	ORGANIC CONTENT MIN. 5% BY DRY WEIGHT (ASTM D 2974)								
	SHREDDED HARDWOOD								

SEASONALLY AND AFTER A

MAJOR STORM

MAJOR STORM

MAJOR STORM

MONTHLY

MONTHLY

MONTHLY

MONTHLY

ANNUALLY

SEASONALLY AND

AFTER A MAJOR STORM

SEASONALLY AND

ANNUALLY

AFTER A MAJOR STORM

EASONALLY AND AFTER A FACILITY MUST DEWATER

PERFORM SOIL TESTS REQUIRED FOR BOTH IMPORTED SOIL AND RE-USED / AMENDED TOP SOIL. SOIL TEST AND RESULTS SHALL INCLUDE AT A MINIMUM; PHOSPHORUS, ORGANIC MATTER, SOLUBLE SALTS, NUTRIENTS, AND TEXTURAL ANALYSIS. 3. MINIMIZE COMPACTION OF SUBGRADE SOILS IN BIORETENTION AREAS. CONTRACTOR SHALL TILL THE SUBGRADE SOILS TO A DEPTH OF 6" BELOW THE BOTTOM OF EACH FACILITY. WHEN BACKFILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12" TO 18". DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN. HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY SOILS AND

NO.8 OR NO.9

(1/8" TO 3/8")

NO 57. 6. OR 6 3/8" TO 3/4")

4" TO 6"

0.02" TO 0.04"

WITHIN 24 HOURS OF RAINFALL

NOTICEABLE ODORS, STAINED

WATER ON THE FILTER SURFACE OR AT THE OUTLET, OR THE

PRESENCE OF ALGAE OR AQUATIC

VEGETATION ARE INDICATORS OF

ANAEROBIC CONDITIONS, AND

INADEQUATE DEWATERING OF

THE FACILITY.

COVER, SEDIMENT

DISCOLORATION.

CHECK FOR DEAD

EROSION, RUNOFF

CONDITION.

CHECK FOR EVIDENCE OF

FUNCTIONAL CONDITION.

CHECK FOR SEDIMEN

STABLE CONVEYANCE.

AS DESIGNED

ACCUMULATION.

EROSION, RILLS, OR GULLYING.

OR DYING VEGETATION.

CHECK FOR EVIDENCE OF

CHANNELIZING, OR BARE SPOTS.

CHECK THAT THE FACILITY IS CLEAN OF TRASH

AND OUTLET STRUCTURES MUST BE IN GOOD

RIPRAP OUTLET MUST BE MAINTAINED IN GOOD

CHECK FOR EROSION, FLOW BLOCKAGES, AND

AND DEBRIS. INLETS, OUTLETS, AND

CHECK FOR EVIDENCE OF STRUCTURAL

CONTRIBUTING AREAS AROUND

THE FACILITY MUST BE CHECKED.

ACCUMULATION, OR

SEASONALLY AND AFTER A CHECK MULCH FOR ADEQUATE

STONE: 2" TO 3"

2. THE CONTRACTOR SHALL SUBMIT SOIL TEST RESULTS (1 PER 30 CY BSM) TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

SAND. GRADE BIORETENTION MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH MARSH TRACKS. THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1-2004.

RO-BIORETENTION NOTES

PLANTINGS ARE SITE SPECIFIC MARYLAND STATE HIGHWAY ADMINISTRATION STANDARDS SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS DATED MAY 2017 INCLUDING AND ADDENDA THERETO. COPY TO BE KEPT ON-SITE

AGED 6 MONTHS, MINIMUM; NO PINE OR WOOD CHIPS

NONWOVEN GEOTEXTILE TABLE H.1 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

AS 1M-0-4833 (THICKNESS) ASTM-D-412 (TENSILE STRENGTH 1,100LB., ELONGATION 200%) ASTM-D-624 (TEAP DESISTANCE - 4FOLD THE 200%) ASTM-D-624 (TEAP DESISTANCE - 4FOLD THE

SLOTTED OR PERFORATED PIPE; SLOTTED PIPE SHALL HAVE A MINIMUM OPEN AREA OF 1.5 SO IN / LINEAR FOOT WITH A MAXIMUM SLOT LENGTH OF 2" AND MAXIMUM SLOT WIDTH OF 1/8 INCH. PERFORATED PIPE SHALL E WRAPPED WITH 1/4 INCH GALVANIZED HARDWARE CLOTH.

ON-SITE TESTING OF CAST-IN-PLACE CONCRETE REQUIRED: 28 DAY STRENGTH AND SILIMP TEST: ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRE-CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWINGS SEALED AND APPROVED B A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND - DESIGN TO INCLUDE MEETING ACI CODE 350.R/89; VERTICAL LOADING [H-10 OR H-20]; ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING

SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE (AASHTO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR

TYPE A, B, C OR D AS NOTED ON PLAN / SECTION / DETAILS MARYLAND STATE HIGHWAY ADMINISTRATION STANDARDS SPECIFICATIONS FOR

CONSTRUCTION AND MATERIALS DATED MAY 2017 INCLUDING AND ADDENDA THERETO. COPY TO BE KEPT ON-SITE

AFTER CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE WORK, INSPECTION AND MAINTENANCE SHALL BE THE RESPONSIBILITY OF

REMEDIAL ACTION

THE TOP THREE INCHES OF SOIL SHOULD BE REMOVED AND REPLACED WITH SOIL MATERIA AS PER PLAN SPECIFICATIONS, FOLLOW UP

INSPECTIONS MUST CONFIRM ADEQUATE DEWATERING. IF THE FACILITY DOES NOT UNCTION AS INTENDED AFTER THE ABOVE ACTION, THE ENTIRE FILTER AND UNDERDRAIN SYSTEM MAY NEED MAINTENANCE. MDE APPROVAL MAY BE NECESSARY.

REPLACE AND REMOVE OLD MULCH AND EXCESS SEDIMENTS. PROVIDE ADEQUATE MULCH COVER

ACCORDING TO APPROVED DESIGN. COMPARE PLANT COMPOSITION WITH APPROVED REMOVE AND REPLACE

PLANS. CHECK FOR INVASIVE SPECIES OR WEEDS. PLANTS IN ACCORDANCE WITH PLAN SPECIFICATIONS.

> RE-SEED OR RE-PLANT IN ACCORDANCE WITH APPROVED LANDSCAPING PLANS. RE-GRADING MAY BE REQUIRED WHEN CONCENTRATED FLOW CAUSES

RILLS OR GULLYING THROUGH THE FACILITY. TRASH AND DEBRIS MUST BE DISPOSED OF IN AN

ACCEPTABLE MANNER ACCORDING TO CURRENT REGULATIONS.

REPAIR TO GOOD CONDITION DETERIORATION, SPALLING, OR CRACKING. INLET ACCORDING TO SPECIFICATIONS ON THE PROVED PLANS.

> STABILIZE ALL ERODED AREAS AND GRADE TO PROVIDE STABLE CONVEYANCE.

REPAIR ACCORDING TO APPROVED PLAN.

WHEN SEDIMENT ACCUMULATIONS TO A DEPTH OF ONE HALF THE DESIGN PONDING DEPTH OR COVERS MORE THAN . SEDIMENT MUST BE REMOVED AND THE FACILITY

RESTORED ACCORDING TO THE APPROVED DESIGN. STABILIZE AND GRADE ACCORDING TO APPROVED PLAN.

CHECK THAT FLOW SPLITTERS ARE FUNCTIONING CONSTRUCTION MUST BE IN AS DESIGNED AND THAT BYPASS IS OPERATING ACCORDANCE WITH APPROVED PLANS

CONTRACTOR SHALL NOTIFY THE ENGINEER-IN-CHARGE RESPONSIBLE FOR AS-BUILTS 48 HOURS PRIOR TO REQUIRED

DURING PLACEMENT AND BACKFILL OF UNDERDRAIN PIPE AND GRAVEL.

920.01.05 BIORETENTION SOIL MIX (bsm). A HOMOGENEOUS MIXTURE COMPOSED BY LOOSE VOLUME OF 5 PARTS COARSE SAND, 3 PARTS BASE SOIL, AND 2 PARTS FINE BARK. BSM SHALL CONFORM TO THE FOLLOWING:

a. COMPONENTS: COMPONENTS OF BSM SHALL BE SAMPLE, TESTED AND APPROVED BEFORE MIXING AS FOLLOWS:

1. COARSE SAND: MSMT 356. COARSE SAND SHALL BE WASHED SILICA SAND OR CRUSHED GLASS THAT CONFORMS TO ASTM FINE AGGREGATE C-33. COARSE SAND SHALL INCLUDE LESS THAN 1% BY WEIGHT OF CLAY OR SILT SIZE PARTICLES, AND LESS THAN 5% BY WEIGHT OF ANY COMBINATION OF DIABASE, GREYSTONE, CALCAREOUS OR DOLOMITIC SAND.

2. BASE SOIL: BASE SOIL SHALL BE TESTED AND CERTIFIED BY THE PRODUCER TO CONFORM TO THE FOLLOWING REQUIREMENTS:

	C	OMPOSI	FION - BASE SC	DIL					
TEST PROPERTY	TEST METHOD		TEST VALUE AN	ND AMENDMENT					
PROHIBITED WEEDS		FREE OF SEED AND VIABLE PLANT PARTS OF SPECIES IN 920.06.02(a)(b)(c) WHEN INSPECTED.							
DEBRIS		NO OBSERVABLE CONTENT OF CEMENT, CONCRETE, ASPHALT, CRUSHED GRAVEL OR CONSTRUCTION DEBRIS WHEN INSPECTED							
		s	SIEVE SIZE PASSING BY WEIGHT MINIMUM %						
GRADING	T 87		2 IN.	1	00				
ANALYSIS			NO. 4	90					
			NO. 10		80				
			PARTICLE	PASSING	BY WEIGHT				
		SIZE	MM	MINIMUM	MAXIMUM				
TEXTURAL ANALYSIS	T 88	SAND	2.0 - 0.050	50	85				
		SILT	0.050 - 0.002	5	45				
		CLAY	LESS THAN 0.002	5	10				
SOIL PH	D 4972	PH OF 5.7 1	ГО 6.9						
ORGANIC MATTER	T 194	1.0 TO 10.0% BY WEIGHT.							
SOLUBLE SALTS	EC1:2 (V:V)	500 PPM (1.25 MMHOS/CM) OR LESS.							
HARMFUL MATERIALS		920.01.01(a)							

3. FINE BARK: FINE BARK SHALL BE THE BARK OF HARDWOOD TREES THAT IS MILLED AND SCREENED TO A UNIFORM PARTICLE SIZE OF 2 IN. OR LESS. FINE BARK SHALL BE COMPOSTED AND AGED FOR 6 MONTHS OR LONGER AND BE FREE FROM SAWDUST AND FOREIGN MATERIALS.

A 1 TO 2 LB SAMPLE OF FINE BARK SHALL BE SUBMITTED TO THE LANDSCAPE OPERATIONS DIVISION FOR EXAMINATION.

b. COMPOSITION: BSM SHALL BE SAMPLED AND TESTED ACCORDING TO THE REQUIREMENTS OF MSMT 356 AND CONFORM TO THE FOLLOWING:

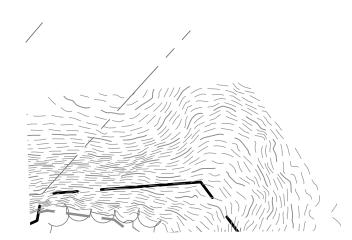
СОМ	COMPOSITION - BIORETENTION SOIL MIX (BSM)									
TEST PROPERTY	TEST METHOD		TEST VALUE AND AMENDMENT							
WEEDS	_	FREE OF SEED AND VIABLE PLANT PARTS OF SPECIES IN 920.0602(a)(b)(c) WHEN INSPECTED								
DEBRIS	_	920.01.05(a	920.01.05(a)(2)							
			PARTICLE % PASSING BY WEIGHT							
		SIZE	ND 2.0 - 0.050 55 85					MAXIMUM		
TEXTURAL ANALYIS	T 88	SAND	SAND 2.0 - 0.050					85		
ANALTIS		SILT 0.050 - 0.002			_			20		
		CLAY LESST THAN 0.002			1		8			
SOIL PH	D 4972	PH OF 5.7 TO 7.1.								
ORGANIC MATTER	T 194	MINIMUM 1.5% BY WEIGHT.								
				CONCE	INTRATION	٧				
		ELEMENT		MINIMU	JM		MAX	MUM		
				PPM	FIV	PP	Μ	FIV		
NUTRIENT ANALYSIS AND	MEHLICH-3	CALCIUM (	CA)	32	25	NO L	MIT	NO LIMIT		
SOLUBLE		MAGNESIL	JM (MG)	15	25	NO L	MIT	NO LIMIT		
SALTS		PHOSPHO	RUS (P)	18	25	92		100		
		POTASSIU	M (K)	22	25	NO L	MIT	NO LIMIT		
		SULFUR (S	6O4)	25	N/A	NO L	MIT	NO LIMIT		
	ECA1:2 (V:V)	SOLUBLE	SALTS	40	N/A	50	00	N/A		
HARMFUL MATERIALS		920.01.01(a	ı).							

c. AMENDMENT OR FAILURE: BSM THAT DOES NOT CONFORM TO COMPOSITION REQUIREMENTS FOR PH OR NUTRIENT ANALYSIS SHALL BE AMENDED AS SPECIFIED BY THE NMP. BSM THAT EXCEEDS MAXIMUM PHOSPHORUS CONCENTRATION OR FAILS OTHER COMPOSITION REQUIREMENTS WILL NOT BE ACCEPTED, AND SHALL NOT BE DELIVERED OR USED AS BSM.

d. STORAGE: 920.01.02(b). BSM SHALL BE STORED IN A STOCKPILE THAT IS PROTECTED FROM WEATHER UNDER TARP OR SHED. BSM STORED FOR 6 MONTHS OR LONGER SHALL BE RESAMPLED, RETESTED, AND REAPPROVED BEFORE USE.

e. APPROVAL: 920.0102(c).

f. CERTIFICATION AND DELIVERY: 920.01.02(d).



# SIMPLIFIED FOREST STAND DELINEATION

# Forest Area:

The total existing forest on-site covers approximately 29.53 acres. Within the 3-acre project area, the dominant species are Northern Red Oak (Quercus rubra), which are large, mature trees providing significant canopy cover. This forest is part of a larger contiguous forest that includes a mix of other species.

# Forest Composition:

The forest is composed primarily of Southern Red Oak (Quercus falcata), Northern Red Oak (Quercus rubra), Black Oak (Quercus velutina), and Tulip Poplar (Liriodendron tulipifera). There are also occasional individuals of Sweetgum (Liquidambar styraciflua) and other hardwood species, typical of upland deciduous forests in this region of Maryland.

# Specimen Trees:

A total of 21 specimen trees have been identified in the project area, most of which are large oaks, with DBH ranging from 30 to 45 inches. The health of these trees varies, with the majority in good condition and a few identified as being in poor health.

# Soils and Hydrology:

The soil on-site consists predominantly of the Patapsco-Evesboro-Fort Mott complex with 0 to 5 percent slopes, indicating moderately drained soils with a low erodibility rating (K-factor of 0.02). No nontidal wetlands or streams have been identified on the property. However, Lake Waterford lies within the park boundaries, providing a water source and habitat for wildlife.

# Environmental Features:

The site contains areas of steep slopes (greater than 15%) and is partly within a 100-year floodplain. These features create environmentally sensitive areas that should be protected and managed during the project's development.

# Wildlife Habitat:

The forest provides habitat for a variety of local wildlife species typical of Maryland's forest ecosystems. No rare, threatened, or endangered species or habitats have been observed on-site, but a formal review is pending with the Maryland Department of Natural Resources.

Management and Recommendations

## Retention:

High-value specimen trees, particularly the large Northern Red Oaks and Southern Red Oaks, should be prioritized for retention where possible. These trees provide critical canopy cover and contribute to the overall forest structure.

## Reforestation:

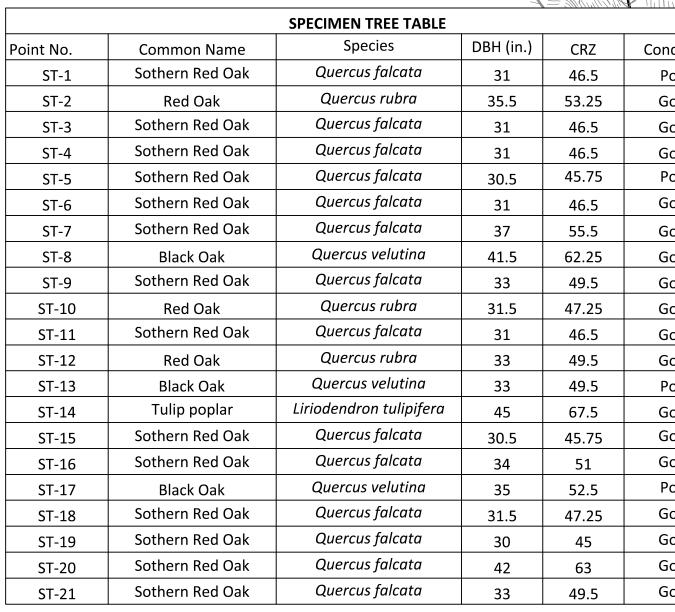
Areas disturbed by the proposed improvements (including the construction of new facilities such as the powerchair roller hockey rink and tennis courts) should be mitigated through reforestation efforts, particularly along the edges of the project area to restore the forest's connectivity.

## Soil and Erosion Control:

Given the low erodibility of the site's soils (K-factor of 0.02), the risk of erosion is minimal, but standard best management practices (BMPs) for soil and erosion control should still be implemented during construction activities, particularly on the steeper slopes.

### Invasive Species:

Regular monitoring for invasive species, such as Tree of Heaven (Ailanthus altissima), should be conducted post-construction to ensure that the forest's ecological integrity is maintained.



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

SIGNATURE



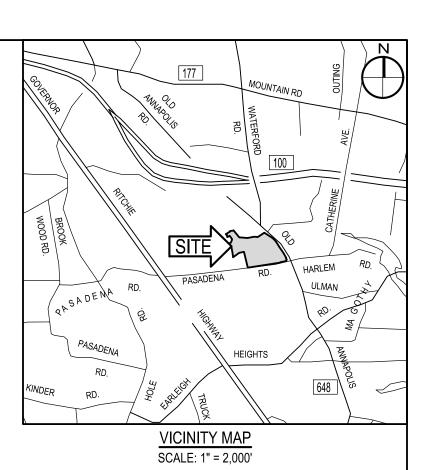






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			REVISIONS			
ast Joppa Road Suite 200		NO.	DESCRIPTION	BY	DATE	_
Baltimore, MD 21286 00 www.transystems.com						APPROVED
TFMQ						_
						CHIEF ENGINEER
						APPROVED
	I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.					-
	License # <u>27734</u> Expiration Date: <u>07/12/26</u>					ASSISTANT CHIEF ENGINEER



# FOREST STND DELINEATION NOTES:

- 1. EXISTING FOREST ON SITE = 29.53 AC.
- 1.1. EXISTING FOREST WITHIN PROJECT AREA: 2.93 AC. 2. THE TREE DELINEATION AND ENVIRONMENTAL DATA USED IN THIS SIMPLIFIED FSD WERE OBTAINED FROM A PLAN PREPARED BY ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS.
- 3. ADDRESS: LAKE WATERFORD PARK, 830 PASADENA ROAD, PASADENA, MARYLAND 21122.
- 4. OWNER: ANNE ARUNDEL COUNTY DEPARTMENT OF RECREATION AND PARKS, P.O. BOX 2700, ANNAPOLIS,
- MARYLAND 21404-2700. 5. ZONING: OS. OPEN SPACE TAX ID: 03-000-00477574
- TAX MAP / GRID: 0023 / 0006
- PARCEL: 0071 LIBER / FOLIO: 02032 / 00015
- 6. NO RARE, THREATENED, OR ENDANGERED SPECIES OR HABITATS WERE OBSERVED ON THE PROPERTY, PENDING FINAL CONFIRMATION VIA LETTER SUBMISSION.
- 7. ADJACENT SURROUNDING LAND USE IS PRIMARILY LOW-DENSITY RESIDENTIAL DEVELOPMENT. TO THE NORTH OF
- THE PROPERTY IS COMMERCIAL LAND USE ALONG BALTIMORE ANNAPOLIS BLVD. 8. NO HISTORIC ELEMENTS OR CEMETERIES ARE KNOWN TO OCCUR ON THE PROPERTY.
- 9. A ZONE A 100-YEAR FLOODPLAIN IS PRESENT WITHIN PORTIONS OF THE PROPOSED LOT AREAS AND/OR ACCESS ROADS, AS INDICATED ON THE SITE PLAN.
- 10. STEEP SLOPES (15% AND GREATER) ARE PRESENT ON THE PROPERTY, AND APPROPRIATE MANAGEMENT PRACTICES WILL BE APPLIED WHERE NECESSARY.
- 11. NO ISOLATED NONTIDAL WETLANDS OR STREAMS WERE IDENTIFIED WITHIN THE PROJECT SITE. LAKE WATERFORD, A SIGNIFICANT WATER FEATURE, IS WITHIN THE PROPERTY BOUNDARIES.
- 12. TWENTY-ONE (21) SPECIMEN TREES HAVE BEEN FIELD-IDENTIFIED WITHIN THE PROJECT SITE, AND THEIR LOCATIONS ARE MARKED ON THE ACCOMPANYING PLAN.

# SOIL SUMMARY:

PeB

SME

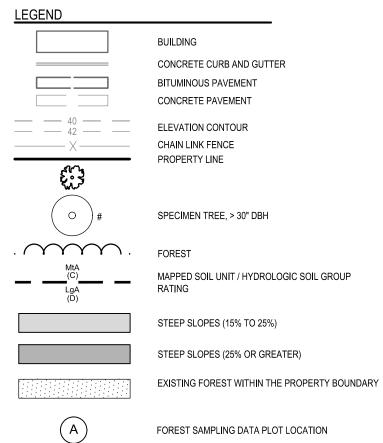
ZBA

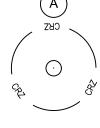
<u>SYMBOL</u>

MAP UNIT NAME Patapsco-Evesboro-Fort Mott complex, 0 to 5% Patapsco-Fort Mott-Urban land complex, 0 to 5% PqB Sassafras and Croom soils, 15 to 25%

Zekiah and Issue soils, 0 to 2%, frequently flooded

K RATING 0.02 Low erodibility 0.02 Low erodibility 0.15 Moderately low erodibility 0.32 Moderately high erodibility





FOREST SAMPLING DATA PLOT LOCATION

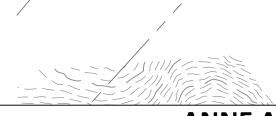
CRITICAL ROOT ZONE FOR SPECIMEN TREE

# LIMIT OF DISTURBANCE

CAUTION: IF THIS DRAWING IS A REDUCTION, USE THE GRAPHIC SCALES.



	ANNE ARUNDEL COUNTY									
	DEPARTME	ENT OF	PUBLIC WORKS							
DATE	APPROVED	DATE	SCALE: 1" = 30'	LAKE WATERFORD PARK						
			DRAWN BY: R.S.S.							
	PROJECT MANAGER		CHECKED BY: R.W.H.							
DATE	APPROVED	DATE	SHEET NO. 16 OF 19	FOREST STAND						
			PROJECT NO.: P591000	DELINEATION PLAN						
R	CHIEF, RIGHT-OF-WAY		CONTRACT NO.: P591001							





ΥY

CONSERVATION WORKSHEET (	In Acres)	
Variables	Unique Tract 1	
Site Information		
A. Growth Management Area	Outside Priority Funding Area	
B. Land Use Type	Institutional	
C. Total Unique Tract Area	61.3	
D. Universal Deductions (Critical Area or 100-Yr Floodplain)	15.1	
<i>E. Impervious Surface Deductions for Targeted Growth and Priority Funding Areas</i>	0.0	
F. Existing Forest Cover within Net Unique Tract Area	29.6	
G. Proposed Forest Clearing within Net Unique Tract Area	2.9	Total Net Tract Area
H. Net Unique Tract Area = (C)-(D)-(E)	46.1	46
Is Total Net Tract Area less than or equal to 5 Acres?	No	
Key for lookup table	Outside Priority Funding Area Institutional/No	
I. Conservation Threshold	20%	
J. Afforestation Threshold	15%	
Forest Conservation		
K. Conservation Threshold Area = (H) X (I)	9.2	
L. Area of Forest Above Conservation Threshold = (F) - (K)	20.3	
<i>M. Breakeven Point (Amount of forest that must be retained so that no mitigation is required.)</i>		
If the Area of Forest Above Conservation Threshold (L) is greater than 0, then $M = ((0.3333) X (L)) + (K)$ . If the Area of Forest Above Conservation Threshold is equal to 0, then $M = (F)$ .	16.0	
N. Forest Clearing Permitted without Mitigation = (F) - (M)	13.6	
O. Proposed Forest Retention = (F) - (G)	26.6	
P. Reforestation for Retention Above the Threshold		
If Proposed Forest Clearing (G) is > Area of Forest Above Conservation Threshold (L), then (P) = (L) X (0.5). If not, then (P) = (G) X (0.5).	1.5	
Q. Credit for Retention Above the Threshold		
If Proposed Forest Clearing (G) is > Area of Forest Above Conservation Threshold (L), then (R) = 0. If not, then (R) = (L) - (G).	17.4	
R. Reforestation for Retention Below the Threshold		
If Proposed Forest Clearing (G) < Area of Forest Above Conservation Threshold (L), then (R) = 0. If not, then (R) = ((G) - (L)) X 2	0.0	
S. Total Reforestation Required = (P) + (R) - (Q)	0.0	
T. Afforestation Threshold Area = (H) X (J)	6.9	
U. Total Afforestation Required		
If Existing Forest Cover (F) < Afforestation Threshold Area (T), then (U) = (T) - (F). If not, then (U) = 0.	0.0	Total Mitigation Required for Site (Acres)*
V. Total Mitigation Required By Tract = (S) + (U)	0.0	0.0
	* These mitigation values represent mitigation absent any other condi	-

such as mitigation to cure a violation of fulfill a conditional approval.

PARCEL 071

LIBER 02032 / FOLIO 00015

"LAKE WATERFORD PARK"

PASADENA 21122

MAP 23, GRID 0006, PARCEL 0071 77.161 ACRES

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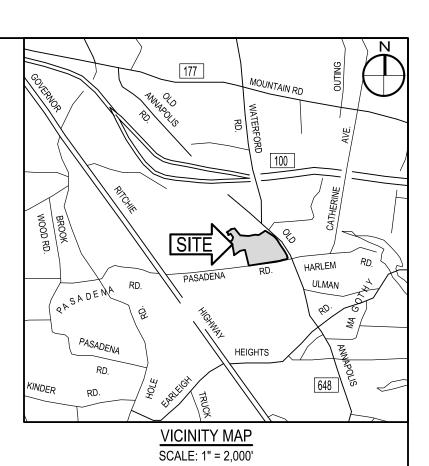
		SPECIMEN TREE TABLE			1
Point No.	Common Name	Species	DBH (in.)	CRZ	Conditior
ST-1	Sothern Red Oak	Quercus falcata	31	46.5	Poor
ST-2	Red Oak	Quercus rubra	35.5	53.25	Good
ST-3	Sothern Red Oak	Quercus falcata	31	46.5	Good
ST-4	Sothern Red Oak	Quercus falcata	31	46.5	Good
ST-5	Sothern Red Oak	Quercus falcata	30.5	45.75	Poor
ST-6	Sothern Red Oak	Quercus falcata	31	46.5	Good
ST-7	Sothern Red Oak	Quercus falcata	37	55.5	Good
ST-8	Black Oak	Quercus velutina	41.5	62.25	Good
ST-9	Sothern Red Oak	Quercus falcata	33	49.5	Good
ST-10	Red Oak	Quercus rubra	31.5	47.25	Good
ST-11	Sothern Red Oak	Quercus falcata	31	46.5	Good
ST-12	Red Oak	Quercus rubra	33	49.5	Good
ST-13	Black Oak	Quercus velutina	33	49.5	Poor
ST-14	Tulip poplar	Liriodendron tulipifera	45	67.5	Good
ST-15	Sothern Red Oak	Quercus falcata	30.5	45.75	Good
ST-16	Sothern Red Oak	Quercus falcata	34	51	Good
ST-17	Black Oak	Quercus velutina	35	52.5	Poor
ST-18	Sothern Red Oak	Quercus falcata	31.5	47.25	Good
ST-19	Sothern Red Oak	Quercus falcata	30	45	Good
ST-20	Sothern Red Oak	Quercus falcata	42	63	Good
ST-21	Sothern Red Oak	Quercus falcata	33	49.5	Good

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SIGNATURE



			REVISIO	NS		
300 East Joppa Road Suite 200		NO.	DESCRIPTION	BY	DATE	
Baltimore, MD 21286 410.512.4500 www.transystems.com						APPROVED
TRANSYSTEMS						CHIEF ENGINEER
						APPROVED
	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 # 27734 Expiration Date: 07/12/26					ASSISTANT CHIEF ENGINEER



# FOREST CONSERVATION NOTES:

- 1. EXISTING FOREST ON SITE = 29.53 AC.
- 1.1. EXISTING FOREST WITHIN PROJECT AREA: 2.93 AC.
- 2. THE TREE DELINEATION AND ENVIRONMENTAL DATA USED IN THIS SIMPLIFIED FSD WERE OBTAINED FROM A PLAN PREPARED BY ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS.
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- 4. OWNER: ANNE ARUNDEL COUNTY DEPARTMENT OF RECREATION AND PARKS, P.O. BOX 2700, ANNAPOLIS, MARYLAND 21404-2700.
- 5. ZONING: OS, OPEN SPACE TAX ID: 03-000-00477574
- TAX MAP / GRID: 0023 / 0006 PARCEL: 0071
- LIBER / FOLIO: 02032 / 00015
- 6. THIS PROJECT WILL REMOVE 127,817 SF OR 2.93 ACRES OF EXISTING FOREST FROM WITHIN THE NET TRACT AREA.
- 7. REFORESTATION PLANTING REQUIREMENTS PER THE FOREST CONSERVATION WORKSHEET 0
- 8. NO PLANTING REQUIREMENTS ARE PROPOSED TO BE MET THROUGH ON-SITE PLANTING OF 0 ACRES. 0 TOTAL TREES TO BE PLANTED BASED ON 350 TREES PER ACRE FOR 1 GALLON CONTAINER STOCK.

# SOIL SUMMARY:

<u>SYMBOL</u> PeB MAP UNIT NAME Patapsco-Evesboro-Fort Mott complex, 0 to 5% PgB Patapsco-Fort Mott-Urban land complex, 0 to 5% SME Sassafras and Croom soils, 15 to 25% ZBA Zekiah and Issue soils, 0 to 2%, frequently flooded BUILDING \_\_\_\_ \_\_\_\_

> \_\_\_\_\_ 40 \_\_\_\_\_ · \_\_\_\_\_ 42 \_\_\_\_ \_\_\_\_\_X\_\_\_\_\_ 5 O);

. FOREST MtA \_\_\_\_\_

(A)

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CONCRETE CURB AND GUTTER

<u>K RATING</u>

0.02 Low erodibility

0.02 Low erodibility

0.15 Moderately low erodibility

0.32 Moderately high erodibility

BITUMINOUS PAVEMENT CONCRETE PAVEMENT ELEVATION CONTOUR CHAIN LINK FENCE PROPERTY LINE

SPECIMEN TREE, > 30" DBH

MAPPED SOIL UNIT / HYDROLOGIC SOIL GROUP RATING

STEEP SLOPES (15% TO 25%)

STEEP SLOPES (25% OR GREATER)

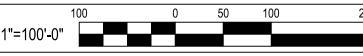
EXISTING FOREST WITHIN THE PROPERTY BOUNDARY

FOREST SAMPLING DATA PLOT LOCATION

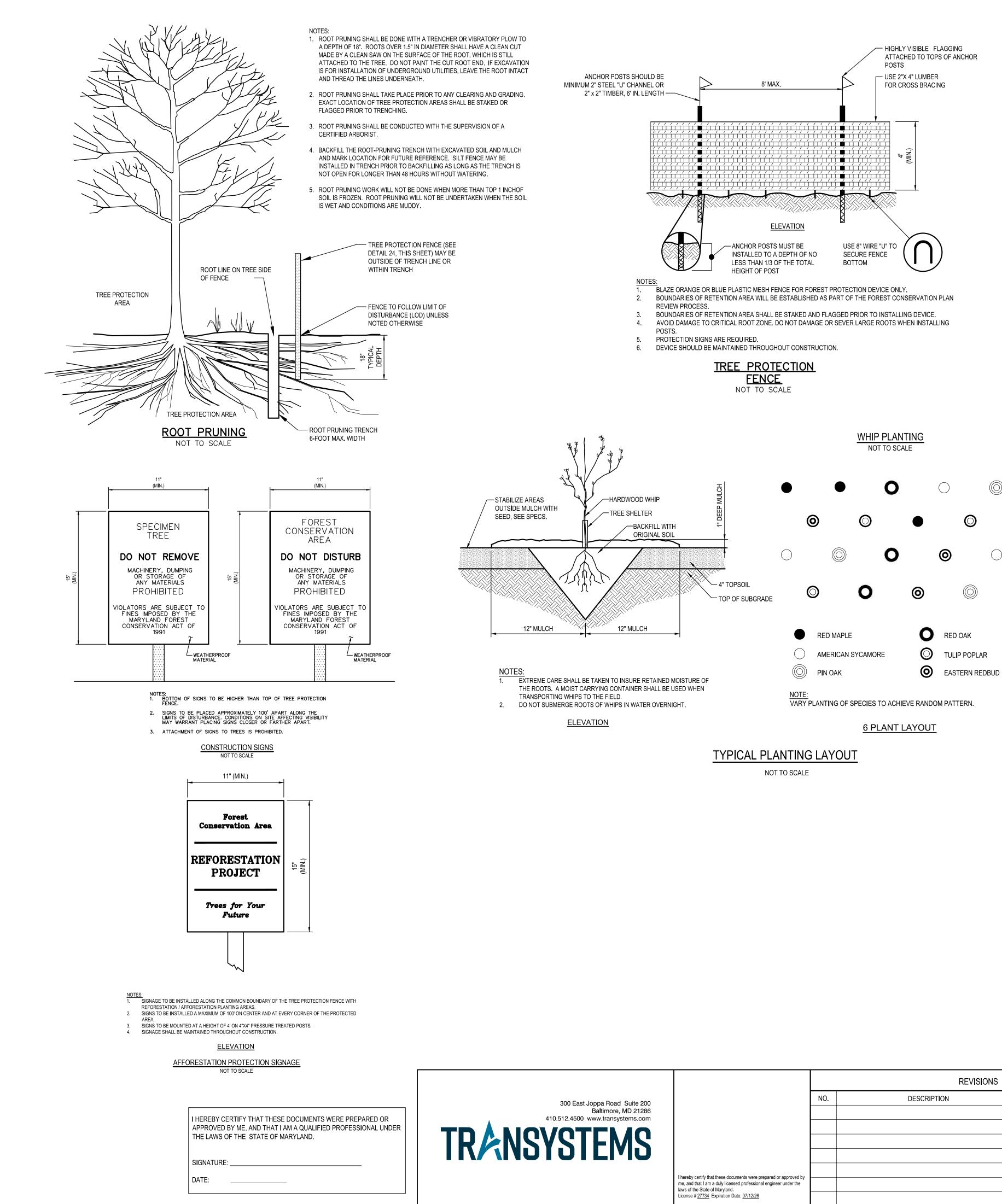


LIMIT OF DISTURBANCE

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	ANNE ARUNDEL COUNTY									
	DEPARTMENT OF	PUBLIC WORKS								
DATE	APPROVED DATE	SCALE: 1" = 30'	LAKE WATERFORD PARK							
		DRAWN BY: R.S.S.	LAKE WATERFURD PARK							
	PROJECT MANAGER	CHECKED BY: R.W.H.								
DATE	APPROVED DATE	SHEET NO. 17 OF 19	FOREST CONSERVATION							
		PROJECT NO.: P591000	PLAN							
ER	CHIEF, RIGHT-OF-WAY	CONTRACT NO.: P591001								



# AFFORESTATION OR REFORESTATION MAINTENANCE AND **REPLACEMENT REQUIREMENTS**

A TWO YEAR MAINTENANCE AND REPLACEMENT WARRANTY PERIOD IS REQUIRED FOR ALL NEWLY PLANTED MATERIALS. THE MAINTENANCE AND REPLACEMENT WARRANTY E PRO PERIOD SHALL COMMENCE UPON THE DATE OF THE WRITTEN ACCEPTANCE BY THE OWNER OF THE PLANTED AREAS. A WRITTEN WARRANTY WILL BE DELIVERED TO THE OWNER UPON ACCEPTANCE OF THE PLANTED AREAS. THE CONTRACTOR RESPONSIBLE FOR THE INITIAL PLANTING OPERATIONS AND RELATED WORK SHALL PROVIDE MAINTENANCE AND REPLACEMENT. ALL LANDSCAPE PLANT MATERIAL INCLUDED AS FOREST CONSERVATION CREDITS SHALL BE COVERED UNDER THE MAINTENANCE AND REPLACEMENT WARRANTY PERIOD.

# MAINTENANCE

THE CONTRACTOR SHALL FIELD CHECK THE NEWLY PLANTED AREA(S) AND SHALL PROVIDE THE FOLLOWING MAINTENANCE ITEMS IN ACCORDANCE WITH THE FOLLOWING SCHEDULE WHICH SHALL BEGIN AFTER THE COMPLETION AND ACCEPTANCE OF THE INITIAL AFFORESTATION OR REFORESTATION PLANTING.

- 1. WATERING: WATERING OF ALL NEWLY PLANTED MATERIALS ONCE PER WEEK AS WEATHER PERMITS DURING THE ENTIRE INITIAL GROWING SEASON. FOLLOWING THE INITIAL GROWING SEASON, WATERING SHALL BE DONE ON AN "AS NEEDED" BASIS DEPENDING ON THE FREQUENCY OF NATURAL RAINFALL. DURING THE MONTHS OF JULY AND AUGUST AND PERIODS OF SEVERE DROUGHT, ALL ALLOWING THE WATER TO BE ABSORBED INTO THE SOIL UNTIL THOROUGHLY SATURATED. THE
- 2. FERTILIZING: FERTILIZING SHALL BE APPLIED ONLY AFTER THE SOIL HAS BEEN TESTED TO DETERMINE ITS NEEDS. ORGANIC FERTILIZER SHOULD BE APPLIED IN ACCORDANCE WITH THE AMOUNTS RECOMMENDED IN THE SOIL ANALYSIS REPORT. NO FERTILIZING OF NEW PLANTED TREES SHALL BE DONE WITHIN THE FIRST GROWING SEASON AFTER INITIAL PLANTING. FOLLOWING THE FIRST GROWING SEASON, APPLY FERTILIZER AS RECOMMENDED EITHER IN LATE FALL OR EARLY SPRING. 3. SUPPLEMENTAL MULCH: TO CONTROL UNDESIRABLE VEGETATION ADJACENT TO THE NEWLY PLANTED OVER THE EXISTING MULCH FIELD WHERE REQUIRED. CAREFULLY REMOVE ANY INVASIVE PLANTS. INCLUDING THE ROOT SYSTEM WITHIN THE MULCH FIELDS. DO NOT DAMAGE TREES IN ANY WAY DURING REMOVAL OF INVASIVE PLANTS OR MULCHING OPERATIONS.
- 4. PRUNING: REMOVE DEAD, DISEASED, DYING, AND BROKEN BRANCHES FROM ALL PLANT MATERIALS. PRUNING SHALL BE DONE CLEANLY, LEAVING NO RAGGED EDGES.

# REPLACEMENT OF DEAD OR DYING MATERIALS

- 1. SURVIVAL REQUIREMENT: AREAS AT THE END OF THE SECOND GROWING SEASON SHALL MEET THE FOLLOWING MINIMUM PERCENTAGES OF TOTAL PLANTS SPECIFIED BY THE APPROVED PLAN. A. BARE ROOT SEEDLINGS OR WHIPS- 55% B. CONTAINER-GROWN SEEDLING TUBES OR WHIPS WITH TREE SHELTERS- 65% C. CONTAINER-GROWN 1-,2-, AND 3- GALLON- 75% D. CONTAINER-GROWN 5- AND 7- GALLON OF 1" CAL) B&B- 85%
- E. 2" CAL. B&B- 100%. 2. INSPECTION: CONTRACTOR SHALL SCHEDULE AN INSPECTION OF THE AFFORESTATION OR REFORESTATION AREA(S) BY A QUALIFIED REPRESENTATIVE OF THE DPZ AND BY THE QUALIFIED
- ACTIONS NEEDED TO CORRECT EXISTING PROBLEMS. THE INSPECTION SHOULD FOCUS ON THE FOLLOWING ITEMS WHEN DETERMINING SURVIVAL POTENTIAL: A. VIGOR AND THREAT OF COMPETING VEGETATION
- **B. PLANT STRUCTURE** C. GROWTH RATE
- D. CROWN DEVELOPMENT
- E. TRUNK CONDITIONS AND HEALTH. 3. PLANT CONDITION-CHECK SHEETS: THE CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS ON APPROPRIATE FIELD DATA CHECK SHEETS WHICH SHALL INCLUDE ALL CONDITIONS OBSERVED SHALL BE COMPLETED DURING EACH SCHEDULED MAINTENANCE SESSION DURING THE 24-MONTH MANAGEMENT AND MAINTENANCE PROGRAM. ONE COPY OF THE CHECK SHEETS SHALL BE SENT TO THE CLIENT, ONE COPY TO WBCM, AND ONE COPY SHALL BE SENT TO THE ANNE ARUNDEL COUNTY DEPARTMENT OF PLANNING AND ZONING.
- 4. REPLACEMENT: ANY PLANT MATERIALS WHICH ARE 25% DEAD OR MORE SHALL BE REPLACED DURING THE APPROPRIATE SPRING OR FALL PLANTING SEASONS IN ACCORDANCE WITH THE METHODS INDICATED IN THE PLANTING DETAILS. A TREE SHALL BE CONSIDERED DEAD WHEN THE MAIN LEADER HAS DIED BACK. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME GENUS, SPECIES, AND SIZE AS SPECIFIED ON THE PLANT LIST.
- 5. <u>INSPECTION/CERTIFICATION SCHEDULE:</u> THE CONTRACTOR SHALL SUBMIT WITH HIS BID A SCHEDULE PERIOD.
- WBCM SHALL TAKE PLACE AT THE END OF THE 24-MONTH MANAGEMENT AND MAINTENANCE AGREEMENT PERIOD. THE CONTRACTOR SHALL CONTACT WBCM AT LEAST ONE (1) MONTH IN OF THE 24-MONTH MANAGEMENT AND MAINTENANCE AGREEMENT. THE REMAINING AMOUNT OF THE CASH BOND OR OTHER SURETY MAY BE SUBJECT TO FORFEITURE, OR OTHER PENALTIES MAY BE IMPOSED.

			REVISIONS						DEL CO	DUNTY	
East Joppa Road Suite 200 Baltimore, MD 21286	_	NO.	DESCRIPTION BY		DATE	DEPARTMENT OF PUBLIC WORKS					
500 www.transystems.com	_					APPROVED	DATE	APPROVED D	TE SCALE:	AS SHOWN	LAKE WATERFORD PARK
TFMS	-					_			DRAWN BY	R.S.S.	
						CHIEF ENGINEER		PROJECT MANAGER	CHECKED	BY: R.W.H.	
						APPROVED	DATE	APPROVED D	TE SHEET NO	18 OF 19	FOREST CONSERVATION NOTES
I hereby certify that these documents were pre me, and that I am a duly licensed professiona laws of the State of Maryland.									PROJECT	NO.: P591000	AND DETAILS
License # <u>27734</u> Expiration Date: <u>07/12/26</u>						ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT-OF-WAY	CONTRAC	NO.: P591001	

NEWLY PLANTED MATERIALS SHALL BE WATERED THOROUGHLY ONCE EVERY WEEK. WATERING SHALL BE DONE DEEPLY AND SLOWLY USING AN OPEN END HOSE OR WATERING PROBE, AT LOW PRESSURE, WATERED AREA SHALL INCLUDE THE WHOLE ROOT ZONE AS THE TREE BECOMES MORE ESTABLISHED.

MATERIALS AND TO PREVENT TREE ROOTS FROM DRYING OUT, ADDITIONAL MULCH SHALL BE PLACED

PROFESSIONAL WHO PREPARED THE PLAN, AT THE BEGINNING AND AT THE END OF THE GROWING SEASON TO OBSERVE ANY PROBLEMS, MONITOR SURVIVAL RATE AND SPECIFY NECESSARY REMEDIAL

RELATIVE TO THE HEALTH AND POTENTIAL SURVIVAL OF THE PLANT MATERIALS. SUCH CHECK SHEETS

FOR THE WORK WHICH SHALL INCLUDE INSPECTIONS BY WBCM AT THE CONCLUSION OF INSTALLATION AND AT THE START AND CONCLUSION OF EACH GROWING SEASON DURING THE TWO-YEAR WARRANTY

6. PENALTY FOR VIOLATION: A SITE INSPECTION BY THE CONTRACTOR, AND A REPRESENTATIVE OF ADVANCE OF SUCH INSPECTION FOR COORDINATION. IF THE SURVIVAL RATE OF THE AFFORESTATION OR REFORESTATION AREA(S) FALLS BELOW THE ESTABLISHED SURVIVAL REQUIREMENTS BY THE END

# SEQUENCE OF OPERATIONS

PRE-CONSTRUCTION SITE PREPARATION

ALL CONSTRUCTION ACTIVITIES, PRACTICES, TECHNIQUES, ETC., SHALL BE IN CONFORMANCE WITH THE MARYLAND FOREST CONSERVATION PROGRAM, AS SPECIFIED IN THE STATE FOREST CONSERVATION TECHNICAL MANUAL. (THIS MANUAL SUPERCEDES ANY DISCREPANCIES BETWEEN IT AND THESE PLANS).

- 1. INSTALL TREE PROTECTION FENCE AND IMPLEMENT TREE PROTECTION METHODS AS SHOWN. 2. MOW OR BRUSHHOG THE SITE WITHIN THE LIMITS OF THE PROPOSED REFORESTATION/AFFORESTATION AREA. DO NOT REMOVE OR DAMAGE ANY EXISTING TREES OR
- SAPLINGS UNLESS OTHERWISE INDICATED. 3. REMOVE OR TREAT WITH AN ACCEPTABLE METHOD, NOXIOUS PLANT MATERIAL SUCH AS MULTIFLORA ROSE, TEARTHUMB, AND JOHNSON GRASS BEFORE INSTALLING REFORESTATION/AFFORESTATION PLANTS
- 4. INSTALL TREE PROTECTION SIGNAGE.
- 5. STABILIZE ANY DISTURBED AREAS USING THE SPECIFIED STABILIZATION MIXTURE THAT ALLOWS FOR NATURAL REVEGETATION OF FOREST COMMUNITIES.

# FOREST RETENTION SEQUENCE OF OPERATIONS

ALL CONSTRUCTION ACTIVITIES, PRACTICES, TECHNIQUES, ETC., SHALL BE IN CONFORMANCE WITH THE MARYLAND FOREST CONSERVATION PROGRAM, AS SPECIFIED IN THE STATE FOREST CONSERVATION TECHNICAL MANUAL. (THIS MANUAL SUPERCEDES ANY DISCREPANCIES BETWEEN IT AND THESE PLANS).

- 1. PRIOR TO BEGINNING ANY GRADING OPERATIONS ON THIS SITE OR ON A RESPECTIVE LOT, THERE SHALL BE A PRECONSTRUCTION MEETING HELD AT THE SITE, WHICH IS TO INCLUDE THE CONTRACTOR AND REPRESENTATIVES FROM WHITNEY, BAILEY, COX & MAGNANI, LLC (WBCM). THE ANNE ARUNDEL COUNTY DEPARTMENT OF PLANNING AND ZONING (DPZ) AND THE OWNER WILL BE NOTIFIED BY THE CONTRACTOR AS TO THE TIME AND PLACE OF THE FIELD MEETING, SHOULD THEY WISH TO SEND A REPRESENTATIVE. THE PURPOSE OF THIS MEETING WILL BE TO REVIEW THE APPROVED FCP AND TO FIELD VERIFY THE CORRECT LIMITS OF DISTURBANCE (LOD).
- 2. THE LIMITS OF DISTURBANCE (LOD) PERTINENT TO THE PRESERVATION OF WOODED AREAS SHALL BE STAKED IN THE FIELD WITH FINAL ADJUSTMENTS BEING MADE AS NECESSARY TO ENSURE ADEQUATE PROTECTION OF THE CRITICAL ROOT ZONE OF TREES DESIGNATED FOR RETENTION. STAKES TO BE USED SHALL BE THOSE SPECIFIED FOR THE "TREE PROTECTION DEVICES" TO WHICH APPROVED PROTECTIVE MATERIAL WILL BE ATTACHED. ALTERNATE MEANS OF DEFINING THE LOD MAY BE USED IF APPROVED BY THE DPZ.
- 3. ALL FOREST RETENTION AREAS SHALL BE PROTECTED BY HIGHLY VISIBLE, WELL-ANCHORED, TEMPORARY PROTECTION DEVICES (SEE DETAIL), WHICH SHALL BE SECURELY IN PLACE PRIOR TO ANY CLEARING OR GRADING OPERATIONS.
- 4. GRADING OPERATIONS OR OTHER CONSTRUCTION OPERATIONS THAT COULD DISLODGE OR OTHERWISE DAMAGE THE PROTECTIVE DEVICES SHALL BE AVOIDED ALONG THE EDGES OF THE LOD LINES IF POSSIBLE. THE CONTRACTOR SHALL PROPERLY REPAIR ANY PROTECTIVE DEVICES, WHICH ARE DAMAGED DURING SITE CONSTRUCTION OPERATIONS, IMMEDIATELY
- 5. AFTER SITE GRADING AND CONSTRUCTION HAVE BEEN COMPLETED, ALL EXISTING TREES ADJACENT TO THE LOD LINE SHALL BE INSPECTED FOR INDICATIONS OF CROWN DIE-BACK (SUMMER INDICATOR). DAMAGE WITHIN RESPECTIVE CRITICAL ROOT ZONES, ANY DEAD WOOD OR OTHER CONDITIONS WHICH MIGHT BE HAZARDOUS SUCH AS TO PEDESTRIANS, BUILDINGS, UTILITY LINES, VEHICULAR ACCESS WAYS, OR PARKED VEHICLES.
  - A. SHOULD THERE BE EVIDENCE OF ANY DAMAGE TO TREE TRUNKS, BRANCHES, OR OTHER CRITICAL ROOT ZONE OF TREES WITHIN THE PROTECTED AREAS, OR TO ISOLATED SPECIMEN TREES TO BE PRESERVED, THE DAMAGE SHALL BE EXAMINED WITHIN A PERIOD OF TWO (2) DAYS FROM THE DATE OF OBSERVANCE BY A LICENSED TREE CARE PROFESSIONAL. EXPOSED ROOTS SHOULD BE COVERED IMMEDIATELY TO A DEPTH OF 6-8 INCHES WITH SOIL, PREFERABLY MIXED WITH 50% PEAT MOSS OR LEAF MOLD.
  - B. THE CONTRACTOR SHALL REMOVE DAMAGED, DEAD, OR DYING TREES OR LIMBS ONLY IF THE TREES OR LIMBS POSE AN IMMEDIATE SAFETY HAZARD TO BUILDINGS, UTILITY LINES, VEHICLES, OR ACCESS AND EGRESS DRIVES OR PEDESTRIAN AREAS. TREES DESIGNATED FOR PRUNING OR REMOVAL SHALL BE PRUNED OR REMOVED USING EQUIPMENT AND METHODS WHICH WILL NOT DAMAGE OR DESTROY ADJACENT LARGE TREES OR UNDERSTORY TREES OR SHRUBS DESIGNATED FOR RETENTION.
- 6. ALL TEMPORARY FOREST PROTECTION DEVICES WILL BE CAREFULLY REMOVED AFTER ALL GENERAL CONSTRUCTION, NECESSARY TREE SURGERY, REMOVAL OF DEBRIS, REGRADING AND RESEEDING OF SEDIMENT AND EROSION CONTROL DISTURBANCE HAVE BEEN COMPLETED AND ACCEPTANCE AND APPROVAL OF THE WORK AND SITE CONDITIONS HAVE BEEN GIVEN BY THE DPZ.

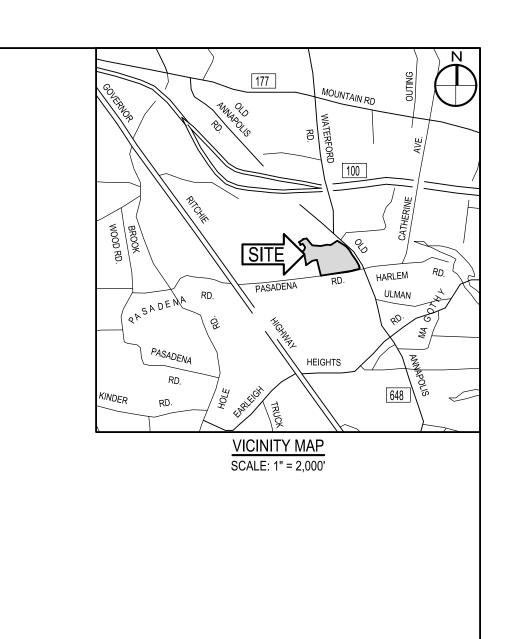
# AFFORESTATION/REFORESTATION PLANTING SEQUENCE OF OPERATIONS

ALL CONSTRUCTION ACTIVITIES, PRACTICES, TECHNIQUES, ETC., SHALL BE IN CONFORMANCE WITH THE MARYLAND FOREST CONSERVATION PROGRAM, AS SPECIFIED IN THE STATE FOREST CONSERVATION TECHNICAL MANUAL. (THIS MANUAL SUPERCEDES ANY DISCREPANCIES BETWEEN IT AND THESE PLANS.)

- 1. THE CONTRACTOR(S) SHALL INFORM THE ANNE ARUNDEL COUNTY DEPARTMENT OF PLANNING AND ZONING (DPZ) WHEN PLANTING OPERATIONS ARE TO BEGIN.
- 2. DETERMINE STORAGE AREAS FOR MATERIALS AND EQUIPMENT. OBTAIN APPROVAL OF LOCATION FROM OWNER AND THE DPZ.
- 3. PRIOR TO BEGINNING ANY PLANTING, THE SOILS WITHIN THE AREA(S) DESIGNATED FOR AFFORESTATION OR REFORESTATION SHALL BE ANALYZED REGARDING THE FOLLOWING FEATURES: NUTRIENT CONTENT, ORGANIC MATTER, STRUCTURE, PH AND CAUTION EXCHANGE CAPACITY. SOILS THAT HAVE BEEN ACTIVELY FORMED MAY REQUIRE EVALUATION FOR PESTICIDE OR HERBICIDE CONTAMINATION. THE LOCAL SOIL CONSERVATION SERVICE OR AGRICULTURAL EXTENSION SERVICE MAY PERFORM SUCH ANALYSIS. A MINIMUM OF THREE RANDOM SAMPLES SHOULD BE COLLECTED FOR THE ANALYSIS. AN ASSESSMENT OF SOIL MOISTURE SHOULD ALSO BE MADE AT THIS TIME. CORRECTIVE MEASURES SHALL BE MADE IN ACCORDANCE WITH ANALYSIS RESULTS AND RECOMMENDATIONS.
- 4. THE CONTRACTOR, ASSISTED BY A REPRESENTATIVE OF WHITNEY, BAILEY, COX & MAGNANI, LLC (WBCM) SHALL STAKE (OR WIRE-FLAG) PLANTING AREA LIMITS AND PLANT LOCATIONS IN ACCORDANCE WITH THE PLAN AND DETAILS.
- 5. PROVIDE AND PLANT ALL TREES OF THE SPECIES AND SIZES SPECIFIED AND IN ACCORDANCE WITH THE DETAIL(S) SHOWN ON THE FOREST CONSERVATION PLANS, UNLESS OTHERWISE DIRECTED BY THE ANNE ARUNDEL COUNTY DPZ. ANY SPECIES SUBSTITUTIONS SHALL BE APPROVED BY WBCM OR THE ANNE ARUNDEL COUNTY DPZ. THE CONTRACTOR IS URGED TO SEEK SUCH APPROVAL PRIOR TO ORDERING OR PLANTING.
- 6. AT THE COMPLETION OF PLANTING, REMOVE ALL EXCESS MATERIALS AND MISCELLANEOUS DEBRIS FROM THE RESPECTIVE AREA(S) OF WORK.
- 7. PROTECTION DEVICES: TO PREVENT DAMAGE WITHIN PLANTED AREAS, ALL REFORESTATION AND/OR AFFORESTATION SITES MUST BE POSTED WITH APPROPRIATE SIGNS AND THE AREA(S) DELINEATED WITH APPROPRIATE PROTECTIVE FENCING. NEITHER CONSTRUCTION EQUIPMENT NOR STORAGE OF MATERIALS SHALL BE PERMITTED WITHIN THE PLANTED AREAS. DETAILS ARE SHOWN ON THE FOREST CONSERVATION PLANS REGARDING TYPICAL SIGN SIZE AND WORDING. NO PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THE PROTECTED AREAS.
- 8. ATTACHMENT OF SIGNS OR ANY OTHER OBJECTS TO TREES WITHIN THE PROTECTED AREAS IS PROHIBITED.



		REVISIONS				
st Joppa Road Suite 200		NO.	DESCRIPTION	BY	DATE	-
Baltimore, MD 21286 00 www.transystems.com						APPROVED
TEMS						
						APPROVED
	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 # 27734 Expiration Date: 07/12/26					ASSISTANT CHIEF ENGINEER



# LEGEND:

'A' SOIL: 120,778 SQ.FT. 'C' SOIL: 7,364 SQ.FT.	
'A' SOIL: 120,883 SQ.FT. 'C' SOIL: 11,179 SQ.FT.	
260,204 SQ.FT.	LOD

# NEW IMPERVIOUS AREA

PERVIOUS TO REMAIN

LIMITS OF DISTURBANCE

DEPARTMENT OF PUBLIC WORKS						
DATE	APPROVED DATE	SCALE: 1" = 100'	LAKE WATERFORD PARK			
		DRAWN BY: R.S.S.				
	PROJECT MANAGER	CHECKED BY: R.W.H.				
DATE	APPROVED DATE	SHEET NO. 19 OF 19	WATER QUALITY MAP			
		PROJECT NO.: P591000				
EER	CHIEF, RIGHT-OF-WAY	CONTRACT NO.: P591001				