

ESD Computations	
NORTON #	21-139
Property Address	Treeman Property
Site Area (SURVEY PROPERTY AREA)	91,627 SF
Site Area (SURVEY STUDY AREA)	91,627 SF
Total LOD Area:	57,400 SF
LOD in property:	57,400 SF
LOD outside property:	- SF
Soil Type:	B
Impervious Cover	SF
Existing Asphalt drive to remain	3,990 SF
Existing house/walkways/sheds to remain	2,196 SF
Proposed:	
Gravel parking lot	35,223 SF
	SF
	SF
	SF
Total Proposed	35,223 SF
Total Impervious Proposed Project	35,223 SF
Total Impervious in Property	41,409 SF
Impervious % for Pe	45.2 = (41,409/91,627)
Impervious % for Rv	61.4 = (35,223/57,400)
RCN for Woods	55
PE	1.8 in
Rv	0.602 = (0.05+0.009*61.4)
ESDv REQUIRED	5186 CF = (1.8*0.602*57,400)/12

STORMWATER MANAGEMENT STATEMENT

ESD IS PROVIDED BY 2 LANDSCAPE INFILTRATION FACILITIES.
(SEE DRAINAGE AREA ANALYSIS SHEET L-1.1).

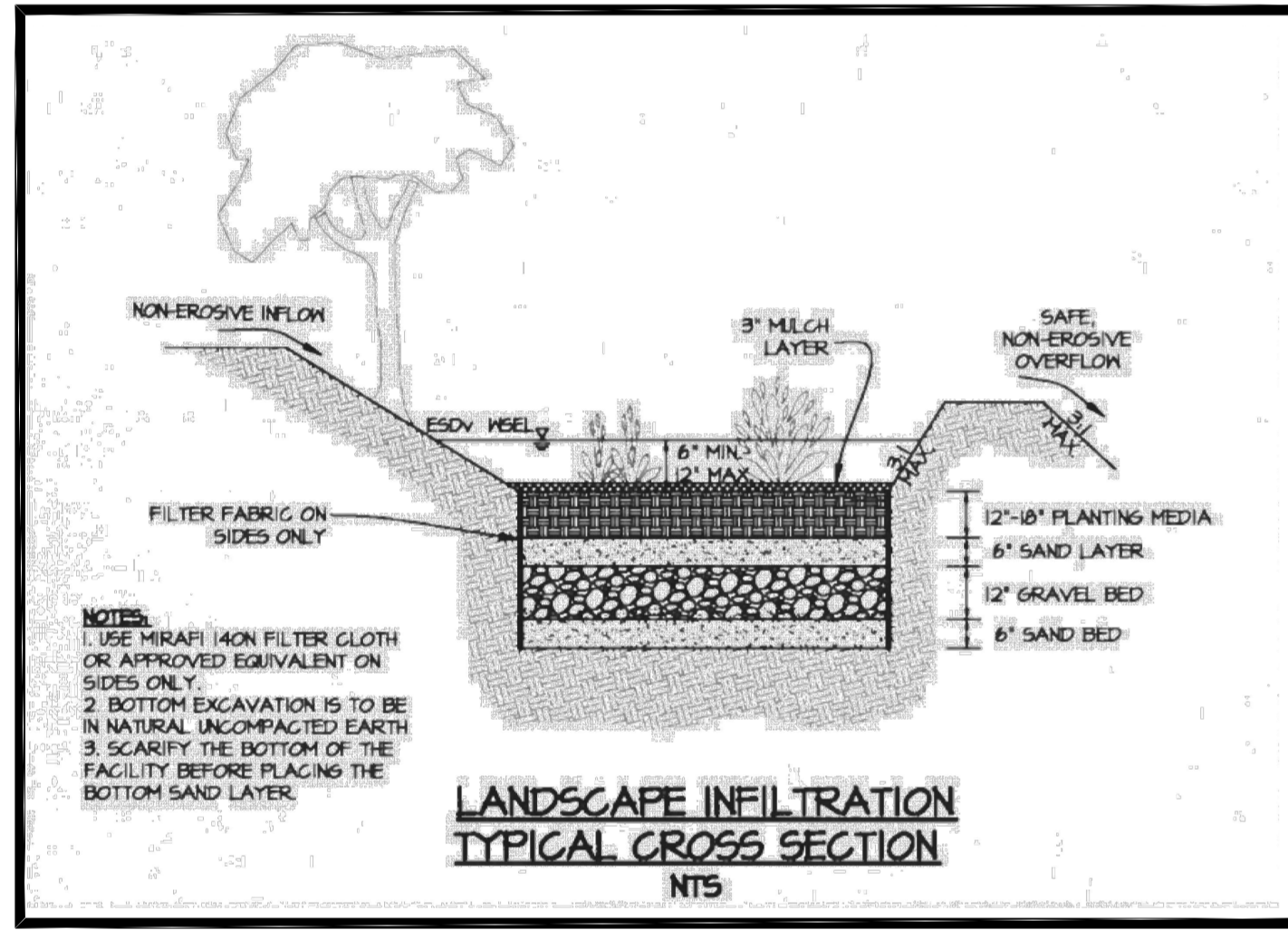
FACILITY DRAINAGE NOTE

ALL WATER PER DRAINAGE AREA IS REQUIRED TO BE DIRECTED TOWARD RECEIVING STRUCTURE.

DRAINAGE AREA ANALYSIS														
D.A. NUMBER	DRAINAGE AREA (SF)	IMPERVIOUS (SF)	IMPERVIOUS %	MAX VOLUME PE=2.6"	MIN VOLUME PE=1.0"	TREATMENT STRUCTURE	STRUCTURE LABEL	STRUCTURE DIMENSIONS				STRUCTURE CAP. (CF)	ESDv TREATED (CF)	
								LENGTH (FT)	WIDTH (FT)	AREA (SF)	DEPTH POND (FT)			DEPTH MEDIA (FT)
1	19,866	17,137	86	3,530	1,358	LANDSCAPE INFILTRATION	A	60	17		1	4	2652	2,652
2	18,718	12,760	68	2,677	1,029	LANDSCAPE INFILTRATION	B	60	17		1	4	2652	2,652
											PE REQUIRED = 1.8"	ESD TREATED	5,304	
												ESD REQUIRED	5,186	

LANDSCAPE INFILTRATION CALCULATIONS	
TREEMAN PROPERTY Norton #21-139	
Facility - LANDSCAPE INFILTRATION A, D.A.=19,866 SF	
ESDv (MAX) =	(2.6 * 82 * 19866)/12 = 3530 CF
ESDv (MIN) =	(1.0 * 82 * 19866)/12 = 1358 CF
Structure Capacity (1020*1.0) + (4*1020*4.0)	2652 CF
Calculation of Rv for Landscape Infiltration:	
Total Drainage Area	19866 SF
Overland Impervious	17137 SF
Total Impervious	17137 SF
% Impervious = 17,137/19,866*100 =	86%
Rv=0.05+(.009xi) = 0.05+(.009*86)	
Rv = 82	
Facility - LANDSCAPE INFILTRATION B, D.A.=18,718 SF	
ESDv (MAX) =	(2.6 * 0.66 * 18,718)/12 = 2677 CF
ESDv (MIN) =	(1.0 * 0.66 * 18,718)/12 = 1029 CF
Structure Capacity (1020*1.0) + (4*1020*4.0)	2652 CF
Calculation of Rv for Landscape Infiltration:	
Total Drainage Area	18,718 SF
Overland Impervious	12,760 SF
Total Impervious	12,760 SF
% Impervious = 12,760/18,718*100 =	68%
Rv=0.05+(.009xi) = 0.05+(.009*68)	
Rv = 66	

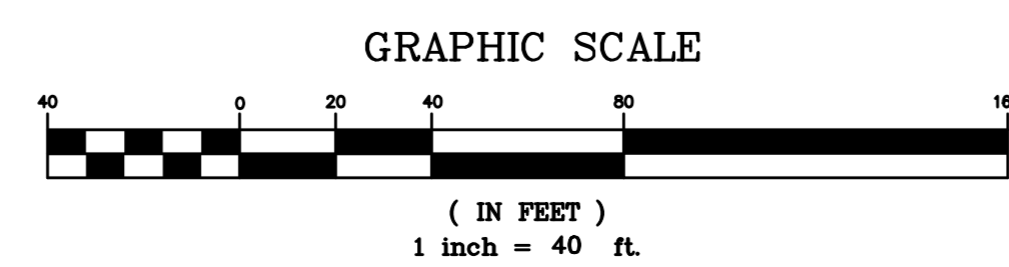
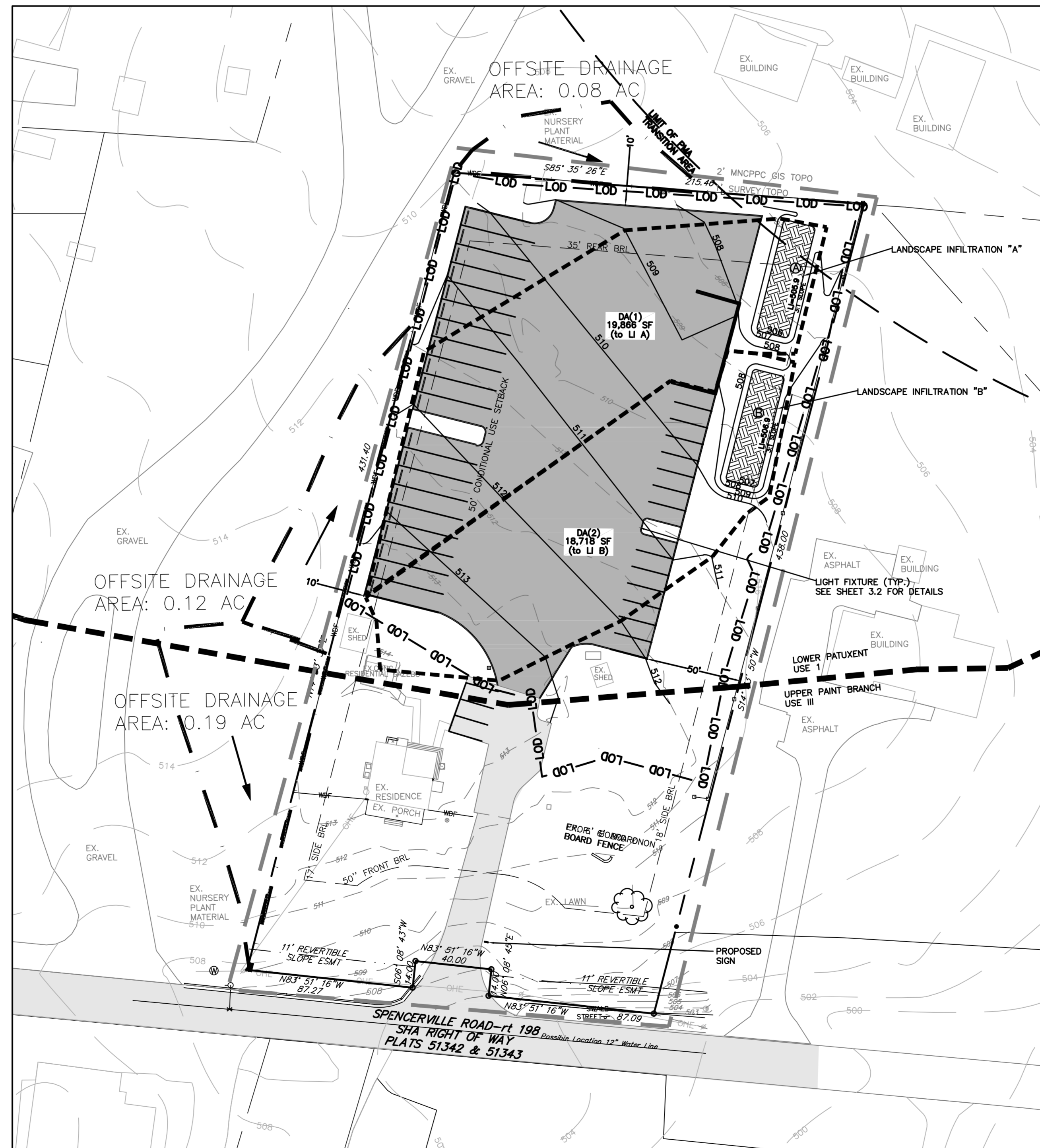
- ### LEGEND
- EXISTING PROPERTY BOUNDARY
 - EXISTING ADJ PROPERTY BOUNDARY
 - 336 --- EX. CONTOUR
 - LOD --- LIMITS OF DISTURBANCE
 - 512 --- PROPOSED CONTOUR
 - FACILITY DRAINAGE AREA
 - PROPOSED LANDSCAPE INFILTRATION FACILITY
 - OFFSITE DRAINAGE AREA
-
- EXISTING PROPERTY BOUNDARY
 - EXISTING ADJ PROPERTY BOUNDARY
 - 336 --- EX. CONTOUR
 - 440 --- PROPOSED CONTOUR
 - 2' MNCPPC GIS TOPO --- SURVEY BOUNDARY
 - 2' SURVEY TOPO --- SURVEY BOUNDARY
 - TREE CANOPY FOR AERIAL PHOTO
 - PROPOSED LANDSCAPE INFILTRATION
 - LOD --- LOD --- LIMIT OF DISTURBANCE
 - PROPOSED LAWN
 - BUILDING RESTRICTION LINE/ CONDITIONAL USE SETBACK
 - PROPOSED GRAVEL PARKING (INCLUDES SOME OF THE EXISTING GRAVEL AREA)
 - EXISTING ASPHALT
 - WATERSHED BOUNDARY



FOR LANDSCAPE INFILTRATION A: ESDv = PONDING DEPTH (1') STORAGE FILTER IN MEDIA (4.0')

FOR LANDSCAPE INFILTRATION B: ESDv = PONDING DEPTH (1') STORAGE FILTER IN MEDIA (4.0')

*BOTTOM OF FACILITIES ARE TO BE IN NATURAL ORIGINAL GRADE PER PLAN.



DRAINAGE AREA MAP STUDY
SCALE: 1" = 40'

MISS UTILITY

CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. BEFORE EXCAVATION THE CONTRACTOR IS RESPONSIBLE FOR CALLING TICKET CHECK AT 1-866-821-4226 TO VERIFY THAT ALL UTILITIES HAVE BEEN MARKED, 48 HOURS AFTER CALLING MISS UTILITY. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

NOTE

ALL DISTURBED AREAS MUST BE TOPSOILED PER THE MONTGOMERY COUNTY STANDARDS AND SPECIFICATIONS FOR TOPSOIL, PRIOR TO FINAL VEGETATIVE STABILIZATION.

TITLE STORMWATER MANAGEMENT CONCEPT PLAN			
PROJECT TREEMAN PROPERTY 2230 SPENCERVILLE ROAD SPENCERVILLE, MD 20868 PARCEL 319 MONTGOMERY COUNTY, MD ELECTION DISTRICT 5			
PREPARED FOR JOSE & NELSY POLANCO 16201 BATSON ROAD SPENCERVILLE, MD 20868 240.353.0444 treemaninc@gmail.com			
		5146 DORSEY HALL DRIVE 2ND FLOOR ELLICOTT CITY, MD 21042 0.443.542.9199 NORTONLANDDESIGN.COM LANDSCAPE ARCHITECTURE & ENVIRONMENTAL PLANNING	
REVISIONS 			
WATER CLASS	IP/IMP	WATERSHED	FEMA FLOODPLAIN
TRIBUTARY	UNNAMED	LOWER PATUXENT	MAP PANEL #
TAX MAP	KS342	2200 SHEET	22031003800
SCALE	AS SHOWN	DATE	22_CDD_K13
		PROJ. NO.	SHEET NO.
		21-139	SMSC002