DETERMINATION OF OSTDS TYPE AND STANDARDS PER SECTION 24-42.7

GROSS LOT SIZE = 43,588 FT² = 1.001 ACRES
LAND USE: SINGLE–FAMILY RESIDENCE
GROSS BUILDING AREA = 10,156 FT²
SEWAGE FLOW = 510 GPD
SEWAGE LOADING = 510 GPD / 1.001 ACRES = 509.5 GPD/ACRE

Y	N	CRITERIA FOR OSTDS TYPE SELECTION
X		PROPERTY WILL BE SERVED BY PUBLIC WATER
X		PROPERTY COMPLETELY OUTSIDE WELLFIELD PROTECTION AREA
X		SURFACE WATER BODIES BEYOND 1000 FEET
	X	SEWAGE FLOW IS LESS THAN 500 GPD FOR SFR /DUPLEX
	N/A	SEWAGE FLOW IS LESS THAN 1000 GPD FOR MULTI-FAMILY/OTHER USES
	X	SEWAGE LOADING LESS THAN 500 GPD/ACRE

Y	N	OTHER CONSIDERATIONS FOR OSTDS APPROVAL
X		SANITARY SEWERS NOT AVAILABLE, ABUTTING, OR OPERATIVE
X		SYSTEM WILL SERVE ONLY ONE LOT
X		PROPERTY LINES OVER 50 FEET FROM OSTDS FOR PROPERTIES SERVED BY A POTABLE WATER WELL

TYPE OF SYSTEM REQUIRED : TYPE 3 – ADVANCED SECONDARY TREATMENT STANDARDS
TOTAL NITROGEN TREATED BY : NORWECO SINGULAIR R3
TOTAL PHOSPHORUS TREATED BY : BIOKINETIC SYSTEM
FECAL COLIFORM TREATED BY : NORWECO SINGULAIR R3 – BIOKINETIC SYSTEM CHLORINATION & DECHLORINATION
SOURCE OF TREATMENT STANDARDS : TESTING PERFOMANCE DATA FOR COMPONENTS OF PBTS

TREATMENT STANDARDS

POLLUTANT	REQUIRED (mg/L) (ANNUAL AVERAGE)	PROPOSED (mg/L) (ANNUAL AVERAGE)
$CBOD_5$	10	5
TSS	10	4.6
TN	50%	65.7%
TP	10	10
FECAL COLIFORM (cfu/100ml)	200	2

OSTDS CALCULATIONS PER CHAPTER 62-6 F.A.C.

NET LOT SIZE = 31,798 FT² = 0.730 ACRES
LAND USE: SINGLE–FAMILY RESIDENCE
BUILDING AREA = 7,928 FT² & 7 BEDROOMS

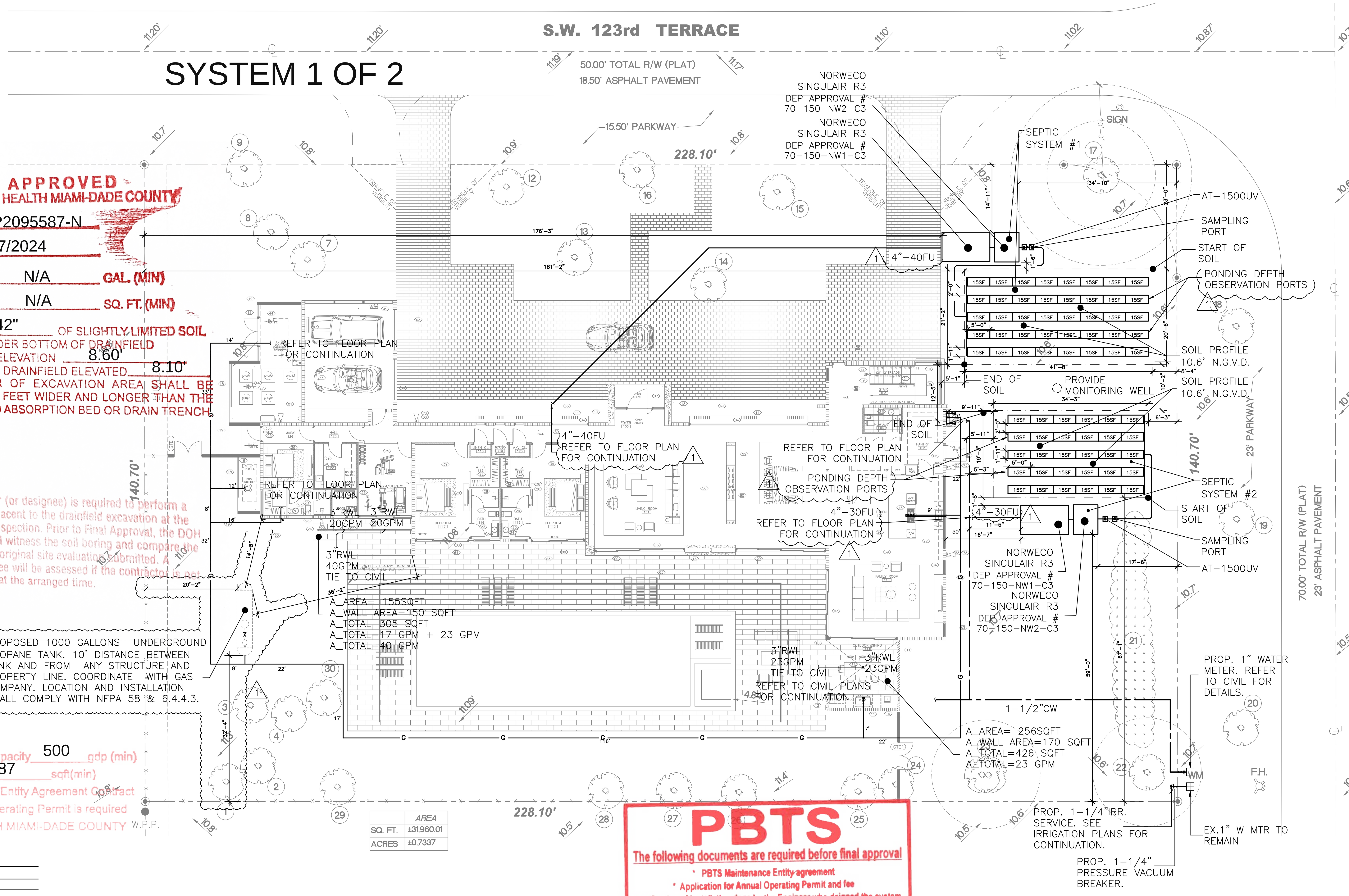
SEWAGE FLOW
MAXIMUM SEWAGE LOADING ALLOWANCE = 2,500 GPD/ACRE (1,500 GPD/ACRE OR 2,500 GPD/ACRE)
AUTHORIZED SEWAGE FLOW = 2,500 GPD/ACRE x 0.730 ACRES = 1,825 GPD
UNIT FLOW CRITERIA (PER TABLE 1) : NUMBER OF BEDROOMS/BUILDING AREA
SEWAGE FLOW PER UNIT FLOW = 400 GPD FOR 4 BEDS W/ 2251–3300 SQFT + 60 GPD PER ADDITIONAL 750 SQFT
TOTAL SEWAGE FLOW = 820 GPD

TREATMENT TANK AND DRAINFIELD
PROPOSED SYSTEM : NORWECO SINGULAIR R3
MINIMUM REQUIRED TREATMENT CAPACITY = 820 GPD
DRAINFIELD CONFIGURATION : TRENCH
DRAINFIELD TYPE : STANDARD
DRAINFIELD MATERIAL : CHAMBERS
MAXIMUM SEWAGE LOADING RATE FOR THE PROPOSED DRAINFIELD = 0.8 GAL/FT²DAY
DRAINFIELD SIZE = 820 GPD / 0.8 GAL/FT²DAY = 1025 FT²

SEPARATION BETWEEN THE SHWT AND BOTTOM OF THE DRAINFIELD (ELEVATIONS IN ~~NAVD 88~~ N.G.V.D.)
GRADE ELEVATION = 10.6 FT
SEASONAL HIGH WATER TABLE ELEVATION = 4.0 FT
ELEVATION AT THE BOTTOM OF THE DRAINFIELD = 8.6 FT
SEPARATION BETWEEN SHWT AND BOTTOM OF DRAINFIELD = 55.2 INCHES

SEPTIC TANK CALCULATION				
NUMBER OF SYSTEMS	1			
TOTAL LIVING AREA	7,928	SF		
TOTAL OF BEDROOMS	7			
7,928	-3300	4 bedrooms (400 GPD)		
4,628	/ 750			
6.2	add	420 GPD		
FLOW ALLOWANCE	820	GPD		
TOTAL LOT AREA	0.7300	ACRES		
TOTAL FLOW PER DAY PER ACRE ALLOW	1825	GPD		
FIXTURE COUNT CALCULATION				
SYSTEM #1	FU	#	TOTAL	
FULL BATHROOM	6	5	30	
WASHER	2	2	4	
POOL BATH	4	1	4	
LAUNDRY SINK	2	1	2	
TOTAL FIXTURES			40	
SYSTEM #2	FU	#	TOTAL	
FULL BATHROOM	6	1	6	
KITCHEN SINK W/DISHWASHER	2	1	2	
DISHWASHER	2	1	2	
POWDER	4	1	4	
BBQ SINK	2	1	2	
BBQ ICEMAKER	2	1	2	
MASTER BATHROOM	12	1	12	
TOTAL FIXTURES			**30**	
TOTAL HOUSE FU	**70**			
FLOW CALCULATION				
SYSTEM	**1**			DRAIN FIELD REQUIRED BED (SF)
SYSTEM FLOW =	#FU	X TOTAL FLOW		= GPD/0.8
	TOTAL FU			
=	40	X	820	
		70		
	= 469	GPD		586
UNOBSTRUCTED AREA				879
SYSTEM	**2**			
SYSTEM FLOW =	30	X TOTAL FLOW		
	TOTAL FU			
=	30	X	820	
		70		
	= 351	GPD		439
UNOBSTRUCTED AREA				659

SYSTEM 1 OF 2



	AREA
SQ. FT.	±31,960.01
ACRES	±0.7337

APPROVED
FLORIDA HEALTH MIAMI-DADE COUNTY
PERMIT #: AP2095587-N
DATE: 06/07/2024
SEPTIC TANK N/A GAL. (MIN)
DRAINFIELD N/A SQ. FT. (MIN)
INSTALL 42" OF SLIGHTLY LIMITED SOIL UNDER BOTTOM OF DRAINFIELD
INVERT ELEVATION 8.60'
BOTTOM OF DRAINFIELD ELEVATED 8.10'
PERIMETER OF EXCAVATION AREA SHALL BE AT LEAST 2 FEET WIDER AND LONGER THAN THE PROPOSED ABSORPTION BED OR DRAIN TRENCH

The contractor (or designee) is required to perform a soil boring adjacent to the drainfield excavation at the time of final inspection. Prior to Final Approval, the DOH inspector shall witness the soil boring and compare the results to the original site evaluation submitted. A reinspection fee will be assessed if the contractor is not at the jobsite at the arranged time.

AEROBIC SYSTEM
ATU Treatment Capacity 500 gdp (min)
Drainfiel Area 587 sqft(min)
ATU Maintenance Entity Agreement Contract & DOH Annual Operating Permit is required
FLORIDA HEALTH MIAMI-DADE COUNTY

PBTS
The following documents are required before final approval
* PBTS Maintenance Entity agreement
* Application for Annual Operating Permit and fee
Certification of installation done by the Engineer who dsigned the system
* Aa-Built site plan by the Engineer who designed the system
* Wastewater affidavit recorded in the County Court

PLUMBING SITE PLAN
1 / PS–100
SCALE: 3/32"=1'-0"

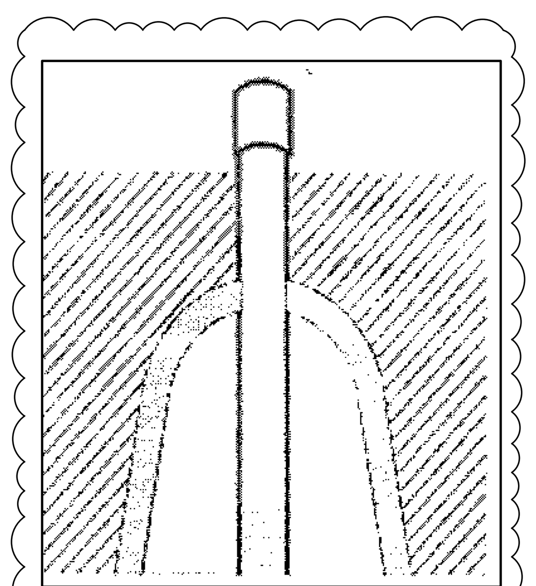
NOTE
THERE ARE NO PERTINENT FEATURES ON ADJACENT PROPERTIES AND ACROSS THE STREET THAT MAY AFFECT THE SYSTEM INSTALLATION SEWAGE DISPOSAL AND TREATMENT SYSTEM INSTALLATION.

BENCHMARK ELEVATION
SW 62 AVE/CENER OF PL 10.53'NGVD

LEGEND
— — *UNOBSTRUCTED AREA*

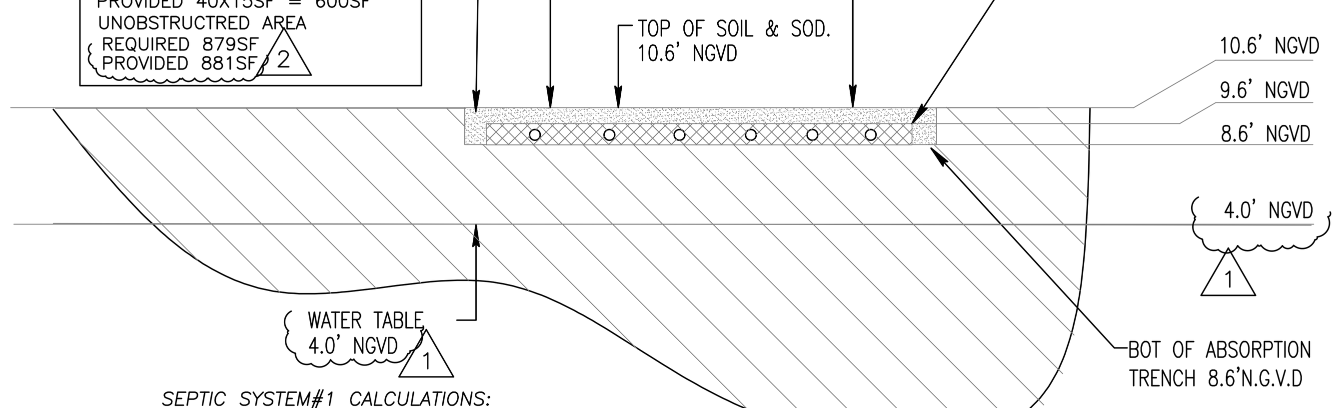
GROSS LOT SIZE = 43,588 SQFT = 1.001 ACRES
GROSS BUILDING AREA = 10,156 SQFT

LOT SIZE = 31,798 SQFT = 0.730 ACRES
FIRST FLOOR LIVING AREA = 4,814 SQFT
SECOND FLOOR LIVING AREA = 3,114 SQFT
TOTAL LIVING AREA = 7,928 SQFT



PONDING DEPTH OBSERVATION PORTS DETAIL

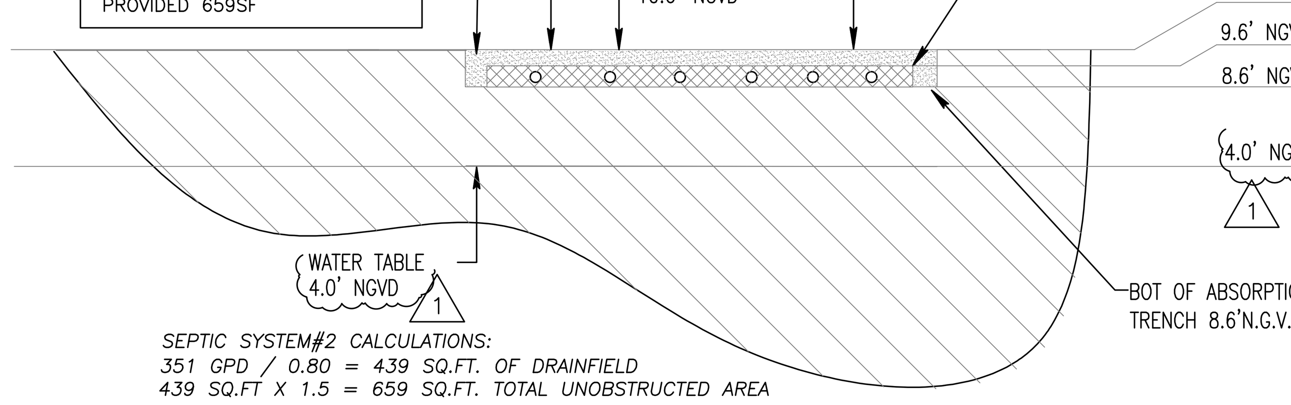
SYSTEM_1
TYPICAL 40 ARC 24" CHAMBER SET FOR TRENCH DRAIN FIELD SYSTEM.
586SF/15SF = 39.06666667
REQUIRED 586SF
PROVIDED 40X15SF = 600SF
UNOBSTRUCTED AREA
REQUIRED 879SF
PROVIDED 881SF



SEPTIC SYSTEM#1 CALCULATIONS:
469 GPD / 0.80 = 586 SQ.FT. OF DRAINFIELD
586 SQ.FT X 1.5 = 879 SQ.FT. TOTAL UNOBSTRUCTED AREA

DRAINFIELD SYSTEM#1 SECTION
N.T.S

SYSTEM_2
TYPICAL 30 ARC 24" CHAMBER SET FOR TRENCH DRAIN FIELD SYSTEM.
439SF/15SF = 29.2666667
REQUIRED 439SF
PROVIDED 30X15SF = 450SF
UNOBSTRUCTED AREA
REQUIRED 659SF
PROVIDED 659SF



SEPTIC SYSTEM#2 CALCULATIONS:
351 GPD / 0.80 = 439 SQ.FT. OF DRAINFIELD
439 SQ.FT X 1.5 = 659 SQ.FT. TOTAL UNOBSTRUCTED AREA

DRAINFIELD SYSTEM#2 SECTION
N.T.S

This item has been digitally signed and sealed by Amarilis Rodriguez, P.E on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.
JOB # 23-0822

arpe engineering inc
2020 Ponce de Leon Blvd., Suite 1002
Coral Gables, Florida 33134
Phone > 305 444 9809
Fax > 305 444 9827
Engineering Design: > Mechanical > Electrical > Plumbing > Fire Protection
www.arpe-eng.com
Amarilis Rodriguez, P.E.
License Number 60236
Signature
Date: 2024.05.07 15:13:07 -04'00'

FAO ARCHITECTURE
407 LINCOLN ROAD
SUITE 8-S
MIAMI BEACH, FLORIDA 33139
P 786.448.5630

PROJECT NO: 2308

CLIENT: RONALDO FL1, LLC
1200 BISCAYNE BLVD.
MIAMI , FLORIDA 33181

REVISIONS:
1 CITY COMMENTS 01-30-2024
2 CITY COMMENTS 05-03-2024

CFS ENGINEERING GROUP, INC.
STRUCTURAL ENGINEER
185 NW 108TH STREET
MIAMI SHORES, FLORIDA 33168

ARPE ENGINEERING, LLC
MEP ENGINEERING
2020 PONCE DE LEON BLVD. SUITE 1002
CORAL GABLES, FLORIDA 33134

ALL LANDSCAPE DATA, INC
LANDSCAPE ARCHITECT
4459 NW 97THCOURT
DORAL, FLORIDA 33178

NEW LEAF ENVIRONMENTAL, LLC
ISA CERTIFIED ARBORIST
57 SILVER SPRINGS DRIVE
KEY LARGO, FLORIDA 33037

TERRA CIVIL ENGINEERING, LLC
CIVIL ENGINEERING
4011 WEST FLAGLER ST., SUITE 404
MIAMI, FLORIDA 33134

CASA OHAD
6200 SW 123RD TERRACE PINECREST, FLORIDA 33156

PROJECT DESCRIPTION : SINGLE FAMILY RESIDENCE

FAO ARCHITECTURE LLC.
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SEAL:

FELIPE ALVARADO AR 91841

PHASE : CONSTRUCTION DOCUMENTS

ISSUE DATE : DECEMBER 12, 2023

SHEET TITLE : PLUMBING SITE PLAN

SHEET: PS-100