

Certification of Design
I certified that the engineering features of this performance-based treatment system have been designed or specified by me and conform to engineering principles applicable to such projects. In my professional judgment, this system, when properly constructed, operated and maintained, will achieve the established performance standard and comply with all applicable status of the State of Florida and rules of the Department.

This is based on average Testing Performance Data for components of Performance-Based Treatment Systems (PBTs) by E. Roeder, for innovative system testing in Florida or from test centers for evaluation of use in nutrient and fecal coliform reducing PBTs or from test centers for NSF-certification as Aerobic Treatment Units (ATUs).

Florida-approved NSF 40-Certified Models

Florida-approved NSF Standard 245

Nitrogen-Reducing, certified Aerobic Treatment Units in Florida

(Rule 62.6-6.012, Florida Administrative Code)

Norweco Singular 960-500, 600, 750, 800, 1000, 1250, 1500

Average Total Nitrogen Reduction NSF 245 Completion report 68%

Singular TNT TN=6.80 mg/L, CBOD5=6 mg/L, TSS=10 mg/L

TP treatment anticipates sufficiently low influent concentrations and is expected to meet the establish performance standard.

Testing facility: Chelsea, MI



SECTION No. 1 COVER LETTER

Miami-Dade Department of Health
O.S.T.D.S. Program
Miami-Dade County Building
11805 S.W. 26th St.
Miami, FL 33175

ENGINEER OF RECORD: Fausto Guerrero
Florida State Licensed Engineer, Lic. No. 50465
Address: 19552 SW 133 Ave
Miami, FL 33177

REFERENCE: HH6100, LLC
6100 W SUBURBAN DR
MIAMI, FL 33156

LEGAL DESCRIPTION: Lot 17, Block N/A Subdivision: MARTIN SUBURBAN ACRES
PROPERTY ID: 20-5001-008-0160

We are hereby requesting approval of a Performance-Based Treatment System (PBTs) designed for, and to be installed upon, the property being dealt with. The Engineer of record, the certified installation entity, (Sarima Batista, Registered Septic Tank Contractor and/or personnel under her supervision), the Aerobic Treatment Unit providers and warrantors in the State of Florida (SB Engineering, Inc) and the primary manufacturer (NORWECO, INC.) will be involved in all necessary activities to warranty the complete installation as well as the maintenance thereof.

WTUMDR Engineered ATU
Operation, Maintenance, and Inspection Specifications

Operation:
Power supply to all electric components must remain constant at all times. It is not acceptable to disconnect power from the system at any time except under the direction of the maintenance entity or in case of emergency.
Homeowner is not to power off during extended absences from home, vacations or otherwise. Liquid waste treatment additives shall not be used.
Maintenance and Inspection 2-year contract

Inspection: Effluent monitoring and preventative maintenance shall be performed as required by 62.6 Part I, F.A.C.
-First inspection: At system installation by engineer.
-Second: After system has been in operation a total of 6 months by maintenance entity.
-Thereafter, every 6 months, as part of maintenance entity inspection. Maintenance entity inspection to include:
Solids Check accumulation (expect pump-out every 3 to 5 years)
Blower: Confirm proper operation; clean air filter, as required.
Alarms: Trip all alarms manually to confirm effective operation.
Outlet Filter: Operate filter plunger. Remove, clean, and reinstall as required.
Pump: Check operation by manually tripping float switch. Operate each pump manually at control panel.
Monitoring to be conducted semi-annually.
Monitoring / Sampling: At SAMPLING PORT.
Pollutant to be check:

- Ponding depth quarterly
- TN $\leq$ 50% REDUCTION
- TP $\leq$ 10 mg/l
- Fecal coliform = $\leq$ 200 cfu/col/100 ml

Contingency
1- At the high water level, the system alarm sound. The Owner must contact the Maintenance entity within 24 hours of alarm.
2- Maintenance entity personnel will inspect the system, and order a repair on the problem as necessary, within 30 hours as specified in 62.6-012 (4)(b).
3- Owner shall be have tanks pumped as required to prevent the creation of sanitary nuisance/conditions until such time as repairs are effected which prevent sanitary nuisance conditions.

THERE ARE NO PERTINENT FEATURES ON ADJACENT PROPERTIES AND ACROSS THE STREET THAT MAY AFFECT THE SYSTEM INSTALLATION

APPROVED -
FLORIDA HEALTH MIAMI-DADE COUNTY
PERMIT #: AP2148177-N
DATE: 9/27/2024
SEPTIC TANK N/A **GAL. (MIN)**
DRAINFIELD N/A **SQ. FT. (MIN)**
INSTALL 42" **OF SLIGHTLY LIMITED SOIL**
UNDER BOTTOM OF DRAINFIELD
INVERT ELEVATION 8.41
BOTTOM OF DRAINFIELD ELEVATED 7.91'
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

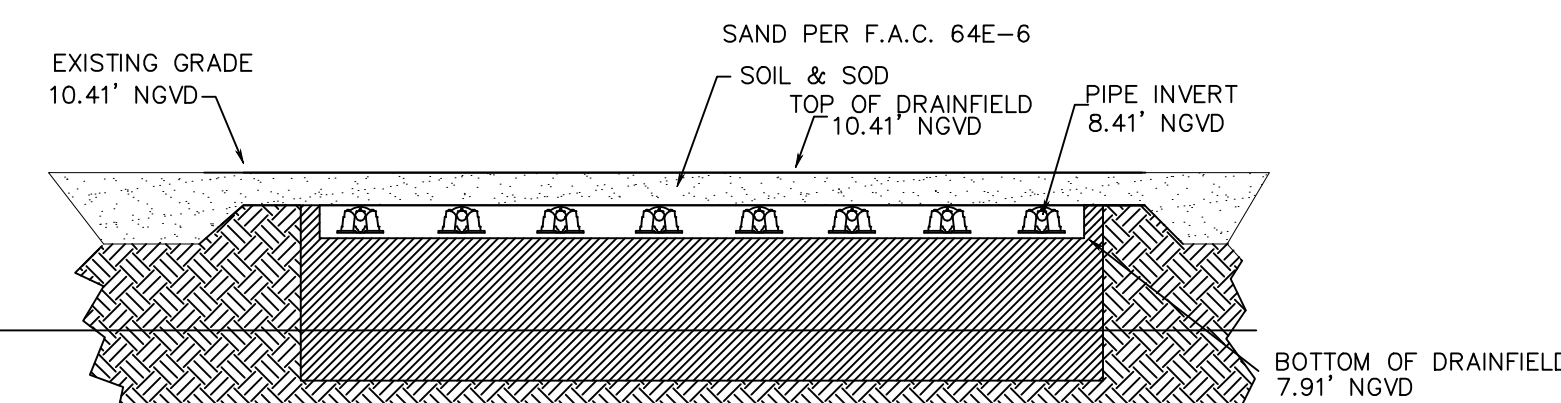
ATU Treatment Capacity 1000 **gdp (min)**

Drainfield Area 1175 **sqft(min)**

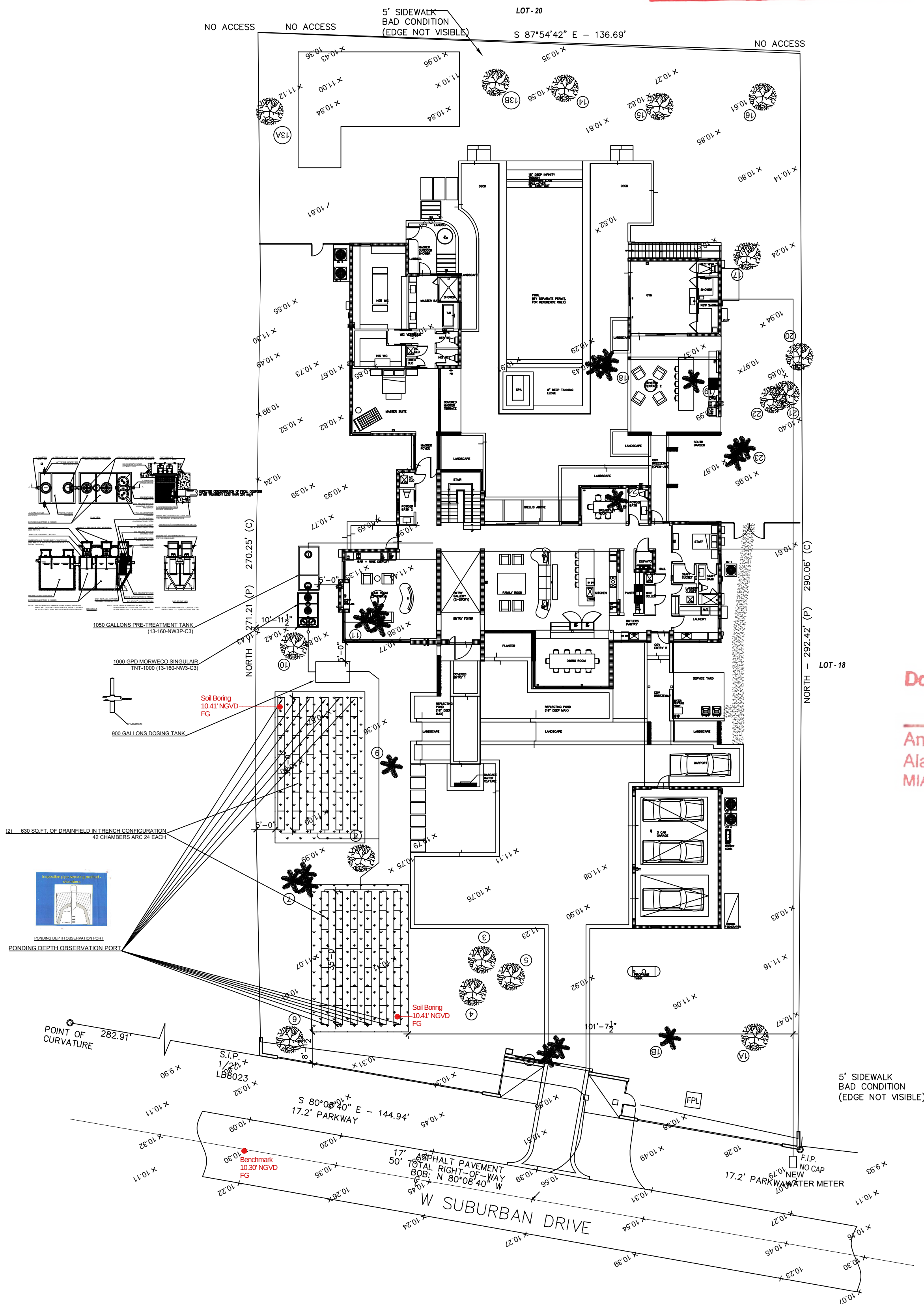
ATU Maintenance Entity Agreement Contract & DOH Annual Operating Permit is required
FLORIDA HEALTH MIAMI-DADE COUNTY

Dosing/Lift Tank 900 **GAL. (MIN)**
1 **Dosing Lift pump(s)**
An appropriate audiovisual high water Alarm shall be installed
MIAMI-DADE COUNTY HEALTH DEPARTMENT

CROSS SECTION



SCALE NTS



DETERMINATION OF OSDTS TYPE AND STANDARDS PER SECTION 24-42.7

GROSS LOT SIZE 41,955.5 SQ.FT. = 0.963 ACRES

LAND USE: RESIDENTIAL

GROSS BUILDING AREA: 11,952 SQ.FT.

SEWAGE FLOW: 510 GPD

SEWAGE LOADING: 510 GPD / 0.963 ACRES= 529 GPD/ACRES

Y	N	CRITERIA FOR OSDTS 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/DOUPLEX
	X	SEWAGE FLOW IS LESS THAN 1000 GPD FOR MULTI-FAMILY/OTHERS USES
	X	SEWAGE LOADING LESS THAN 500 GPD/ACRE
		OTHER CONSIDERATIONS FOR OSDTS APPROVAL
X		SANITARY SEWERS NOT AVAILABLE, ABUTTING, OR OPERATIVE
X		SYSTEM WILL SERVE ONLY ONE LOT
		PROPERTY LINES OVER 50 FEET FROM OSDTS FOR PROPERTIES SERVE BY A POTABLE WATER WELL

TYPE OF SYSTEM REQUIRED: TYPE 3-ADVANCED SECONDARY TREATMENT STANDARDS

TOTAL NITROGEN TREATED BY: 3000 GPD NORWECO SINGULAR TNT-3000

TOTAL PHOSPHORUS TREATED BY: NO REDUCTION

FECAL COLIFORM TREATED BY: CHLORINATOR / DECHLORINATOR BIOKINETIC FILTER

SOURCE OF TREATMENT STANDARDS: FDP TESTING PERFORMANCE DATA FOR PBTs

POLLUTANT	REQUIRED (mg/L) (Annual Average)	PROPOSED (mg/L) (Annual Average)
CBOD ₅	10 mg/L	4 mg/L
TSS	10 mg/L	9 mg/L
TN	50%	68% - 12 mg/L
TP	10 mg/L	10 mg/L
FECAL COLIFORM (CFU/100ml)	200 cfu/100 ml	2 cfu/100 ml

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

NET LOT: 38,332 SQ.FT. = 0.8799 AC

LAND USE: RESIDENTIAL

BUILDING AREA: 9,688.10 SQ.FT. & 7 BEDROOMS

SEWAGE FLOW

MAXIMUM SEWAGE LOADING ALLOWANCE= 2,500 GPD/ACRE (1,500 GPD/ACRE OR 2,500 GPD/ACRE)

AUTHORIZED SEWAGE FLOW: 0.8799 AC X 2,500 GPD/AC = 2,199 GPD

UNIT FLOW CRITERIA (PER RESIDENTIAL TABLE I)- # BEDROOMS, BUILDING AREA

SEWAGE FLOW PER UNIT = 100 GPD per bedroom and/or 750 Sq.Ft. after 400 GPD for each additional bedroom

or each additional 750 square feet of building area or fraction thereof in a dwelling unit, system sizing shall be

increased by 50 gallons per dwelling unit.

TOTAL SEWAGE FLOW: 940 GPD

TREATMENT TANK AND DRAINFIELD

PROPOSED SYSTEM: 1000 GPD NORWECO SINGULAR TNT-1000

MINIMUM REQUIRED TREATMENT CAPACITY: 940 GPD

DRAINFIELD CONFIGURATION: TRENCH

DRAINFIELD TYPE: STANDARD / SUBSURFACE

DRAINFIELD MATERIAL: CHAMBER

MAXIMUM SEWAGE LOADING RATE FOR THE PROPOSED DRAINFIELD: 0.80 gal/FT²/day

DRAINFIELD SIZE:

940 GPD/0.80= 1,175 SQ.FT. OF DRAINFIELD (1763 SQ.FT. TOTAL UNOBSTRUCTED AREA)

SEPARATION BETWEEN THE SHWT AND BOTTOM OF THE DRAINFIELD (ELEVATIONS NGVD 29)

GRADE ELEVATION: 10.41' NGVD

SEASONAL HIGH WATER TABLE ELEVATION= 4.00' NGVD

ELEVATION AT THE BOTTOM OF DRAINFIELD= 7.91' NGVD

SEPARATION BETWEEN SHWT AND BOTTOM OF DRAINFIELD= 46.92 INCHES

General Notes

NEW 2-STORY RESIDENCE:
HH6100, LLC

6100 W SUBURBAN DR
PINECREST, FL, 33156

PROJECT

No.	Revision/Issue	Date

Firm Name and Address

FAUSTO GUERRERO P.E.
LIC. NO.: 50465
19552 SW 133 AVE
MIAMI, FL 33177

Project Name and Address

HH6100, LLC
10101 SOUTH DIXIE HWY
PINECREST, FL 33156

Project 6100	Sheet SP-1
Date 09/05/2024	
Scale 1"=20'-0"	

THIS SET HAS BEEN INTERNALLY REVIEWED AND SEAL BY FAUSTO GUERRERO
P.E. LICENSE NO. 50465. THE SEALING OF THIS SET DOES NOT CONSTITUTE A GUARANTEE OR WARRANTY OF ANY KIND. THE USER OF THIS SET SHALL BE RESPONSIBLE FOR THE RESULTS OF THE DESIGN AND CONSTRUCTION OF THE PROJECT.