

SYSTEM # 1

DETERMINATION OF OSTDS TYPE AND STANDARDS PER SECTION 24-42.7

GROSS LOT SIZE = 71,301.2 FT² = 1.637 ACRES
LAND USE: Residential
GROSS BUILDING AREA = 43,083.3 FT²
SEWAGE FLOW = 510 GPD
SEWAGE LOADING = 510 GPD / 1.637 ACRES = 311.54 GPD/ACRE

Y	N	CRITERIA FOR OSTDS TYPE SELECTION
Y		PROPERTY WILL BE SERVED BY PUBLIC WATER
Y		PROPERTY COMPLETELY OUTSIDE WELLFIELD PROTECTION AREA
N		SURFACE WATER BODIES BEYOND 1000 FEET
Y		SEWAGE FLOW IS LESS THAN 500 GPD FOR SFR /DUPEX
N	A	SEWAGE FLOW IS LESS THAN 1000 GPD FOR MULTI-FAMILY/OTHER USES
Y		SEWAGE LOADING LESS THAN 500 GPD/ACRE
Y	N	OTHER CONSIDERATIONS FOR OSTDS APPROVAL
Y		SANITARY SEWERS NOT AVAILABLE, ABUTTING, OR OPERATIVE
Y		SYSTEM WILL SERVE ONLY ONE LOT
N	A	PROPERTY LINES OVER 50 FEET FROM OSTDS FOR PROPERTIES SERVED BY A POTABLE WATER WELL

TYPE OF SYSTEM REQUIRED: PBTS (Advanced Secondary Treatment Standards TYPE III)
TOTAL NITROGEN TREATED BY: NORWECO SINGULAR 960-750
TOTAL PHOSPHORUS TREATED BY: NORWECO SINGULAR 960-750
FECAL COLIFORM TREATED BY: BLUE CRYSTAL DESINFECTION TANK
SOURCE OF TREATMENT STANDARDS: DEP Average Testing Performance Data for PBTS

POLLUTANT	TREATMENT STANDARDS (ANNUAL AVERAGE)	PROPOSED (mg/L) (ANNUAL AVERAGE)
CBOD ₅	<10 MG/L	6
TSS	<10MG/L	10
TN	50% Removal	53% RED.
TP	<10 MG/L	10
FECAL COLIFORM (cfu/100ml)	<200 FC COL/100ML	<2 FC COL/100ML (98% RED.)

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

NET LOT SIZE = 69260 FT² = 1.589 ACRES
LAND USE: Residential
BUILDING AREA = 11814.08 FT²
1ndFL 7373.92 sqft + 2ndFL 3917.11 sqft + EXEC. BLDG 523.77 SQFT = 11,814.8 SQFT

SEWAGE FLOW
MAXIMUM SEWAGE LOADING ALLOWANCE = 1500 GPD/ACRE (1,500 GPD/ACRE OR 2,500 GPD/ACRE)
AUTHORIZED SEWAGE FLOW = 1500 GPD/ACRE x 1.589 ACRES = 2384.88 GPD
UNIT FLOW CRITERIA (PER TABLE 1): BEDRMS/ BLDG AREA
SEWAGE FLOW PER UNIT FLOW = 100 G.P.D.X BEDRMS or per 750 sqft
TOTAL SEWAGE FLOW = 1120 GPD

TREATMENT TANK AND DRAINFIELD
PROPOSED SYSTEM: PBTS (Advanced Secondary Treatment Standards)
MINIMUM REQUIRED TREATMENT CAPACITY = 750 GPD
DRAINFIELD CONFIGURATION: TRENCH
DRAINFIELD TYPE: STANDARD (SYSTEM#1)
DRAINFIELD MATERIAL: CHAMBER ARC 24
MAXIMUM SEWAGE LOADING RATE FOR THE PROPOSED DRAINFIELD = 0.8 GAL/FT²/DAY
DRAINFIELD SIZE = 650 GPD / 0.8 GAL/FT²/DAY = 813 FT²

SEPARATION BETWEEN THE SHWT AND BOTTOM OF THE DRAINFIELD (ELEVATIONS IN NGVD)
GRADE ELEVATION = 9.8 FT
SEASONAL HIGH WATER TABLE ELEVATION = 4.5 FT
ELEVATION AT THE BOTTOM OF THE DRAINFIELD = 8.2 FT
SEPARATION BETWEEN SHWT AND BOTTOM OF DRAINFIELD = 44.4 INCHES

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FIXTURE UNITS CALCULATIONS

SANITARY SYSTEM No.#1 EXIST. DRAINAGE FIXTURE UNIT COUNT	SANITARY SYSTEM No.#1 TOTAL GALLONS PER DAY=1120 GPD TOTAL FIXTURE UNITS= 40 + 29 = 69 FU 40/69=0.5797 x1120= 650 GPD SEPTIC TANK 1500 GAL. / DOSING TANK 525 GLS REQ. DRAINFIELD 813 SQFT TRENCH (55CHAMBERS) RESERVE AREA: 407 SQFT TOTAL SYSTEM AREA 1220 SQFT
GUEST BATHRM#1 6FU GUEST BATHRM#2 6FU BATHRM #3 6FU BATHRM #4 6FU BATHRM #5 6FU BATHRM #6 6FU GYM BATHRM 4FU TOTAL FIXTURE UNITS 40FU TOTAL HOUSE COUNT 69 FU	
SANITARY SYSTEM No.#2 DRAINAGE FIXTURE UNIT COUNT	SANITARY SYSTEM No.#2 TOTAL GALLONS PER DAY= 1120 GPD TOTAL FIXTURE UNITS= 40 + 29 = 69 FU 29/69= 0.4202 x 1120= 471 GPD SEPTIC TANK 1200 GAL. / DOSING TANK 375 GLS REQ. DF 589 SQFT 1400 SQFT X 0.4202= 589 SQFT REQ DRAINFIELD (40 CHAMBERS) RESERVE AREA 295 SQFT TOTAL AREA: 884 SQFT
MBATH RM 9FU LAUNDRY 2FU POOL BATHRM 4FU BBQ BATHRM 4FU SERV. BATHRM 2FU BBQ SINK 2FU KITCHEN SINK 2FU TOTAL FIXTURE UNITS 29FU TOTAL HOUSE COUNT 69 FU	

SYSTEM # 2

DETERMINATION OF OSTDS TYPE AND STANDARDS PER SECTION 24-42.7

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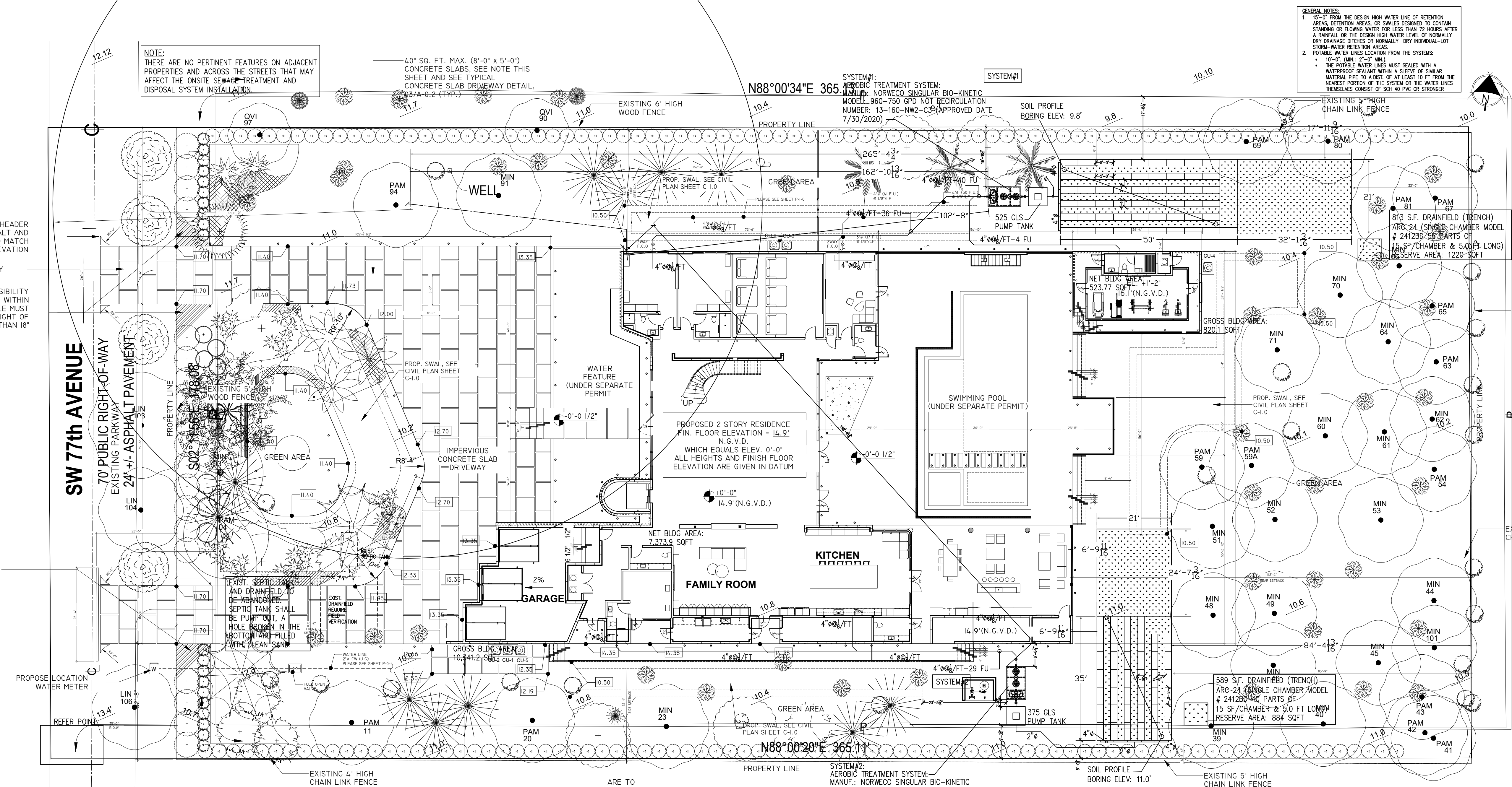
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TOTAL SEWAGE FLOW = 1120 GPD

TREATMENT TANK AND DRAINFIELD
PROPOSED SYSTEM: PBTS (Advanced Secondary Treatment Standards)
MINIMUM REQUIRED TREATMENT CAPACITY = 750 GPD
DRAINFIELD CONFIGURATION: TRENCH
DRAINFIELD TYPE: STANDARD (SYSTEM#2)
DRAINFIELD MATERIAL: CHAMBER ARC 24
MAXIMUM SEWAGE LOADING RATE FOR THE PROPOSED DRAINFIELD = 0.8 GAL/FT²/DAY
DRAINFIELD SIZE = 650 GPD / 0.8 GAL/FT²/DAY = 813 FT²

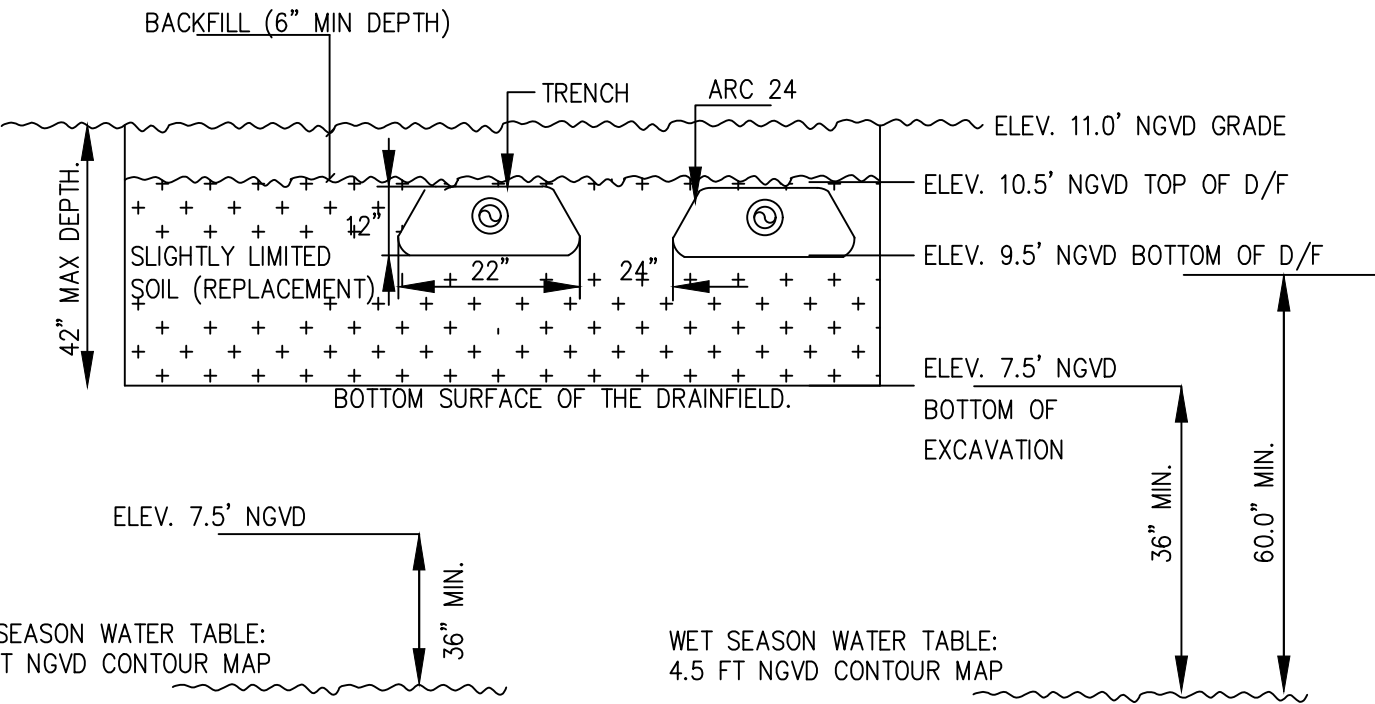
SEPARATION BETWEEN THE SHWT AND BOTTOM OF THE DRAINFIELD (ELEVATIONS IN NGVD)
GRADE ELEVATION = 11.0 FT
SEASONAL HIGH WATER TABLE ELEVATION = 4.5 FT
ELEVATION AT THE BOTTOM OF THE DRAINFIELD = 9.5 FT
SEPARATION BETWEEN SHWT AND BOTTOM OF DRAINFIELD = 60.0 INCHES



SITE PLAN PLUMBING

SCALE 1/16" = 1'-0"

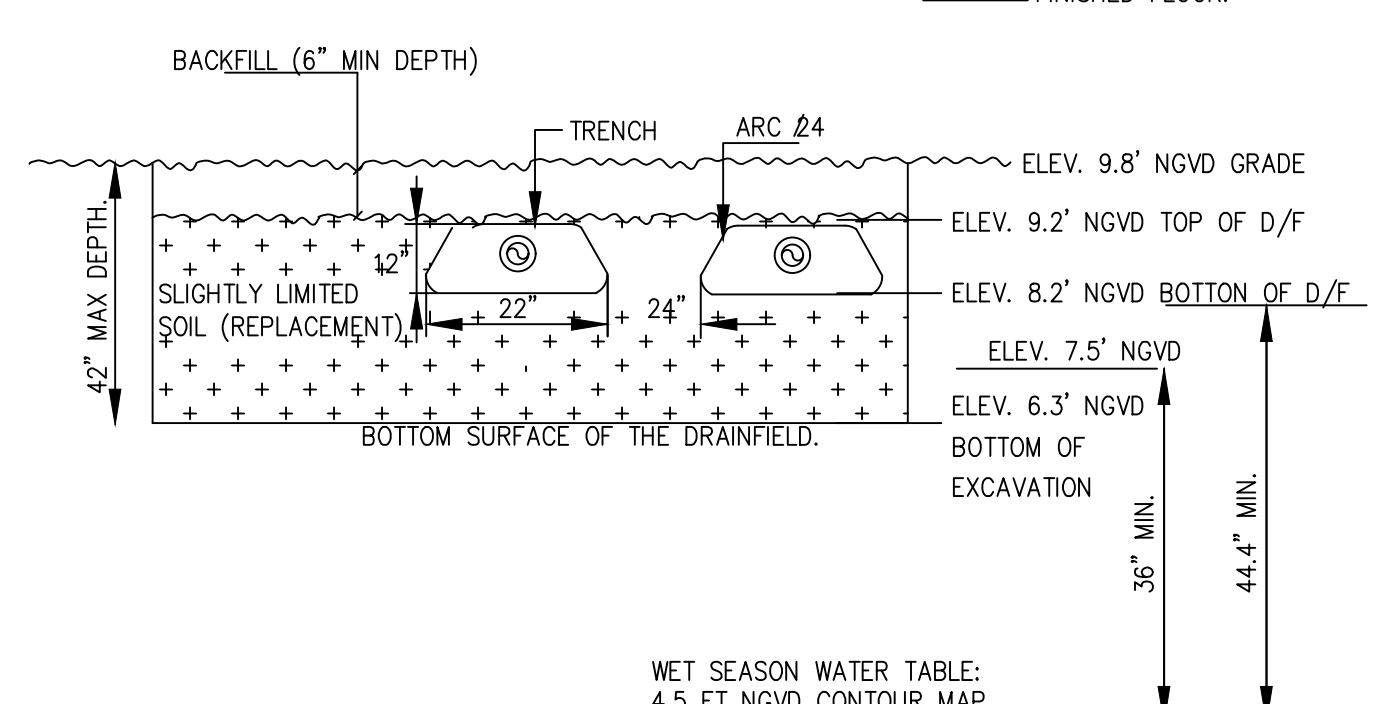
SYSTEM # 2



DRAINFIELD CROSS SECTION

N.T.S.

SYSTEM # 1

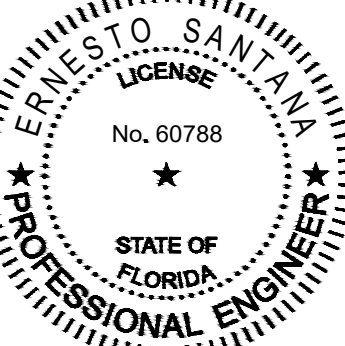


DRAINFIELD CROSS SECTION

N.T.S.

- GENERAL NOTES:
- 15'-0" FROM THE DESIGN HIGH WATER LINE OF RETENTION AREAS, DETENTION AREAS, OR SHALES DESIGNED TO CONTAIN STANDING OR FLOWING WATER FOR LESS THAN 72 HOURS AFTER A RAINFALL OR THE DESIGN HIGH WATER LEVEL OF NORMALLY DRY DRAINAGE DITCHES OR NORMALLY DRY INDIVIDUAL-LOT STORM-WATER RETENTION AREAS.
 - POTABLE WATER LINES LOCATION FROM THE SYSTEMS:
 - 10'-0" (MIN.) 2'-0" (MIN.)
 - THE POTABLE WATER LINES MUST BE SEALED WITH A WATERPROOF SEALANT WITHIN A SLEEVE OF SIMILAR MATERIAL PIPE TO A DEPT. OF AT LEAST 10 FT FROM THE NEAREST PORTION OF THE SYSTEM OR THE WATER LINES THEMSELVES CONSIST OF SCH 40 PIPE OR STRONGER

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SITE PLAN
ONSITE SEWAGE
TREATMENT

NEW SINGLE FAMILY
HOME
11041 SW 77 AVE, PINECREST,
FL 33156

REVISION	No.	DESCRIPTION	DATE:

JOB No. 123-2023

SITE PLAN

DATE: 11/13/2023

SP-2.00

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