22-1019

PERMIT NO.
DATE PAID: 12.20.22
FEE PAID: 285.00
RECEIPT #:

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
CONSTRUCTION PERMIT
Ichetucknee EH OSTDS permit app.doc

CONSTRUCTION PERMIT FOR: Engineered - ATU

[X]	New System	[ ]	Existing System	[ ]	Holding Tank	[ ]	Innovative
[ ]	Repair	[ ]	Abandonment	[ ]	Temporary	[X]	LPD

APPLICANT: State of Florida
AGENT: (Engineer) Mark D. Repasky, PE 0036872 SR 00111699 TELEPHONE: 850-251-7743
PROPERTY ADDRESS: 11627 SW US Highway 27, Fort White, FL 32038
LOT: _____ BLOCK: _____ SUBDIVISION: Metes/bounds
[SECTION, TOWNSHIP, RANGE, PARCEL NUMBER]
PROPERTY ID #: 24-6S-15-00515-000 [OR TAX ID NUMBER]

SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATIONS AND STANDARDS OF SECTION 381.0065, F.S., AND CHAPTER 62-6, F.A.C. DEPARTMENT APPROVAL OF SYSTEM DOES NOT GUARANTEE SATISFACTORY PERFORMANCE FOR ANY SPECIFIC PERIOD OF TIME. ANY CHANGE IN MATERIAL FACTS, WHICH SERVED AS A BASIS FOR ISSUANCE OF THIS PERMIT, REQUIRE THE APPLICANT TO MODIFY THE PERMIT APPLICATION. SUCH MODIFICATIONS MAY RESULT IN THIS PERMIT BEING MADE NULL AND VOID. ISSUANCE OF THIS PERMIT DOES NOT EXEMPT THE APPLICANT FROM COMPLIANCE WITH OTHER FEDERAL, STATE, OR LOCAL PERMITTING REQUIRED FOR DEVELOPMENT OF THIS PROPERTY.

SYSTEM DESIGN AND SPECIFICATIONS

TANK
[2800] GALLONS ~~/GPD~~ SEPTIC TANK ~~/AEROBIC UNIT~~ CAPACITY — MULTI-CHAMBERED/IN-SERIES [Y]
[1500]* ~~GALLONS/~~GPD AEROBIC UNIT CAPACITY 2 in 1350 gals. — MULTI-CHAMBERED/IN-SERIES [N]
~~[ ] GALLONS GREASE INTERCEPTOR CAPACITY [MAXIMUM CAPACITY SINGLE TANK: 1250 GALLONS]~~
[3518] GALLONS DOSING TANK CAPACITY 2 ZONES x [300] GALS. @ [5] DOSES/DAY # PUMPS [2]

*********SEE PAGE 2 FOR ADDITIONAL TANK INFO*********

DRAINFIELD
[3750] SQUARE FEET PRIMARY DRAINFIELD SYSTEM
[ ] SQUARE FEET _____ SYSTEM
TYPE SYSTEM: [x] STANDARD [ ] FILLED [ ] MOUND [ ] _____
CONFIGURATION: [x] TRENCH [ ] BED [X] LPD

LOCATION OF BENCHMARK: FIR / C = 46.56'
ELEVATION OF PROPOSED SYSTEM SITE [14"] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
BOTTOM OF DRAINFIELD TO BE (MAX) [49"] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
FILL REQUIRED: [0] INCHES EXCAVATION REQUIRED: [0] INCHES

OTHER
Must follow engineer design. See Engineer's Additional Installation Specifications.
Installer MUST be certified to install of PBTS components in this system by this Engineer (or manufacturer).
MicroFAST 1.5 BLOWER: [34-40] CFM 1/2-3/4 HP 2" PVC BLOWER PIPE
Biennial operating permit for ATU or PBTS required. [6.030(1)(m)]
This system is regulated under 62-6, Part(s) I, FAC
This permit is issued by DOH only. PROPERTY OWNER or Contractor must contact all other local or county permitting departments BEFORE commencing project. Engineer is not liable for failure to comply with rules and regulations of other agencies or local ordinances.

rev date 3/8/23:
clarify dosing

SPECIFICATIONS BY: Mark D. Repasky TITLE: PE0036872 SR00111699
3096 S Adams Street, Tallahassee, Florida 32301
APPROVED BY: Sallie Ford TITLE: Env. Health Director Columbia CHD
DATE ISSUED: 4.12.23 EXPIRATION DATE: 10.12.24

MARK D. REPASKY LICENSE PE0036872 STATE OF FLORIDA PROFESSIONAL ENGINEER

DH 4016, 08/09 (Obsoletes previous editions which may not be used)
Incorporated: 62-6.003, FAC

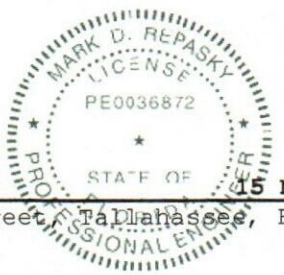
ENGINEER'S ADDITIONAL INSTALLATION SPECIFICATIONS

CONSTRUCTION PERMIT FOR: 11627 SW US Highway 27, Fort White, FL 32038
24-6S-15-00515-000 Engineered - ATU 3000 gpd
ALSO SEE PERMIT APPLICATION DRAWINGS AND NOTES.

Property owner/Contractor/Installer must request bid documents from Engineer.
ENGINEER MUST APPROVE ANY AND ALL SUBSTITUTIONS PRIOR TO CONSTRUCTION [6.004(4)].
PROPERTY OWNER or Contractor must contact local Underground Utility Locator and have all onsite underground utilities located prior to any excavation/site preparation. Engineer and/or Installer assume no responsibility for damage to underground utilities.
Connections of electrical components to power supply requires properly licensed/insured electrician. Connection of building sewer to inlet of first tank requires properly licensed/insured plumber. Other trades work may be required; ensure proper licensure/insurance prior to commencement of work.
Maintain 200 ft from all public wells with flow of 2000 gallons per day or more.
Roof and lot drainage shall be directed away from system area.
Installer is responsible for installing the minimum category of tank in accordance with 62-6.013(3)(f), FAC.
Installation must have minimum 42" suitable soil below bottom of drainfield.
Installation must have minimum 24" separation between bottom of drainfield and ESHW.
Bottom of drainfield infiltrative surface must be no more than 30" below finished grade.
Engineer or his designated representative shall be notified prior to health department final inspection.
Requires design engineer to certify that the installed system complies with the approved design and installation requirements. [62-6.003(2)(c)1. and 62-6.004(4)]

ENGINEER-APPROVED EQUIPMENT

Manufacturer/Supplier	Material	Function	Engineer Spec	Tank #-Category
Florida Septic, Inc.	Concrete	Pretreatment tank	2800 effective gallons	01-011-52D-C4
Goulds	N/A	Lift Pump	WS0311B	if applicable
Bonded Septic Tank	Concrete	Treatment tanks (2)	1350 effective gallons	09-030-BM1S-C3
Wastewater Technologies, Inc.	plastic	Treatment units (2)	MicroFAST 1.5	
Florida Septic, Inc.	Concrete	Dosing tank	3518 total gallons	01-011-52P-C4
Orenco, Inc.	N/A	Dosing Pump	WS0511B or WS0712B	



SPECIFICATIONS BY: Mark D. Repasky 15 November 2022 TITLE: PE0036872 SR00111699
3096 S Adams Street, Tallahassee, Florida 32301

CERTIFICATION FOR MULTIPLE ATUs TREATING FLOW OVER 1500 gpd

I, Mark D Repasky, PE0036872, do hereby certify that the unit(s) used in this system design is capable of consistently meeting, at minimum, secondary treatment standards established by for $CBOD_5$ and TSS established in Rule 62-6.025(12)(a), FAC.
In addition, the following requirements shall also be met:
The system installation shall be inspected and approved by the design Engineer (62-6.003(2)(c)1., FAC) prior to use of the system.
The owner or lessee of a system shall continuously comply with the applicable safety, maintenance and operational requirements of 62-6.025(2). FAC as well as manufacturer and design engineer recommendations.
This system requires a maintenance agreement with a permitted aerobic unit maintenance entity which has at least a Class D state certified operator who has been certified under the provisions of Chapter 62-602, FAC.
Sampling for effluent quality reports for $CBOD_5$ and suspended solids shall be collected at least semi-annually and such samples shall be analyzed by a department-approved laboratory.

CONTROLS

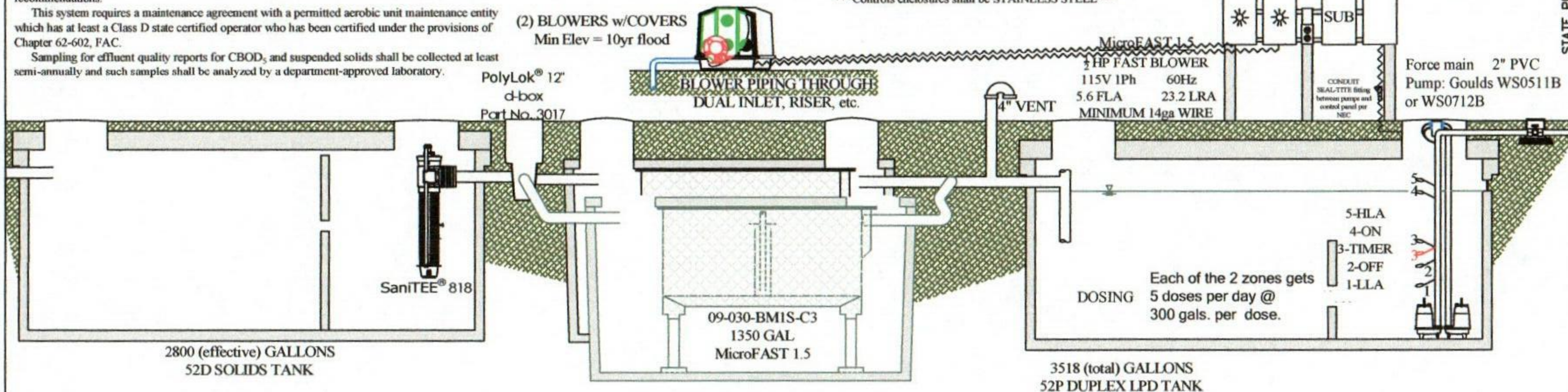
Electrical conduit and effluent dosing pipe is water tight and exits the tank through the tank outlet with a water-tight seal, or through the riser wall, above ESHW, with a soil-tight seal, or through an access port in the tank lid installed by manuf. with a water-tight seal per 62-6.013(9)(c), FAC.

TIMER is allowed as part of this design submitted by this Engineer, per 62-6.013(9)(d)1., FAC
Control panels shall be as close as practicable to equipment served.

Alarm shall be located in a conspicuous location. When outdoors, alarm shall be waterproof and specified by manufacturer for outdoor use per 62-6.013(9)(d)2, FAC
Controls enclosures shall be STAINLESS STEEL

811 Know what's below. Call before you dig.

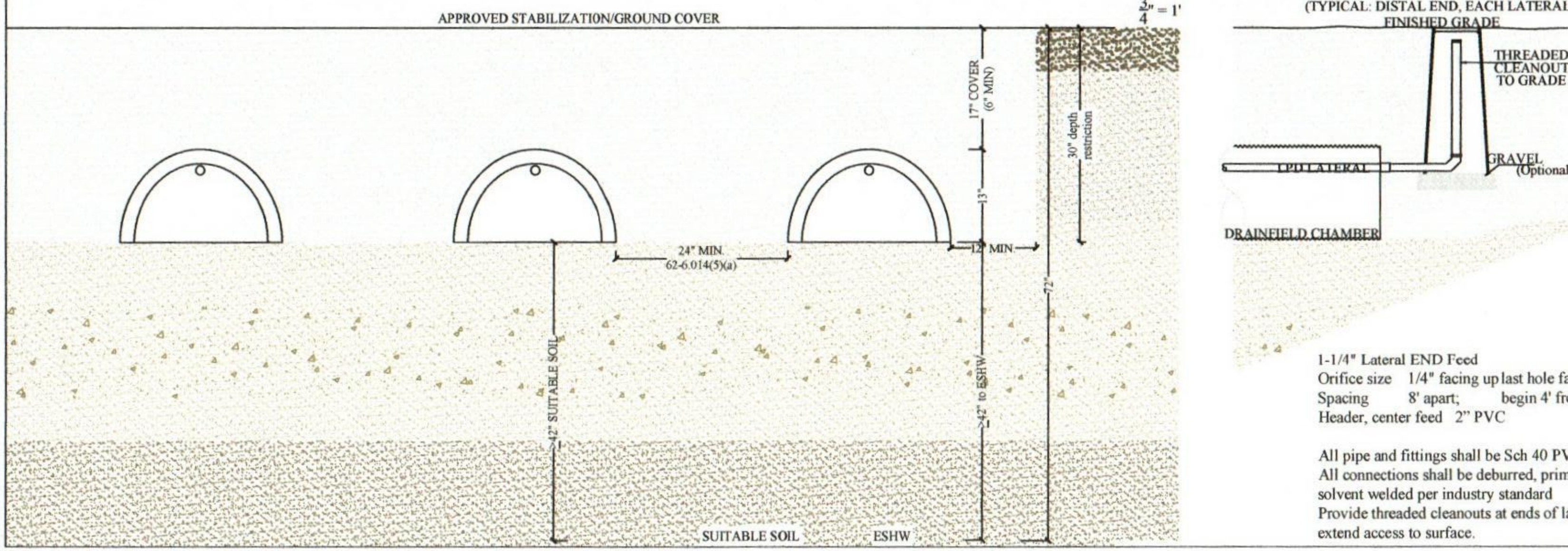
STATE PROJECT No.: 61363C



TWO ZONES x 8 laterals/zone @ 80' ea x 3' PTI eq = 3,840 s.f.
Orifices per lateral 10 80 orifices per DOSE

LP DRAINFIELD PROFILE

$\frac{3}{4}" = 1'$



1-1/4" Lateral END Feed
Orifice size 1/4" facing up last hole faces down
Spacing 8' apart; begin 4' from end
Header, center feed 2" PVC

All pipe and fittings shall be Sch 40 PVC
All connections shall be deburred, primed, and solvent welded per industry standard
Provide threaded cleanouts at ends of laterals, extend access to surface.

TANK PROFILE
N.T.S.

OSTDS GENERAL INFORMATION:

NEW RESTROOM BUILDING 3000 gpd design
(2) TREATMENT UNIT: MicroFAST 1.5, no equals
DRAINFIELD SIZING: 3750 s.f. MIN
DRAINFIELD REDUCTION: NONE
SETBACK REDUCTIONS: NONE
LOT LOADING INCREASE: NONE

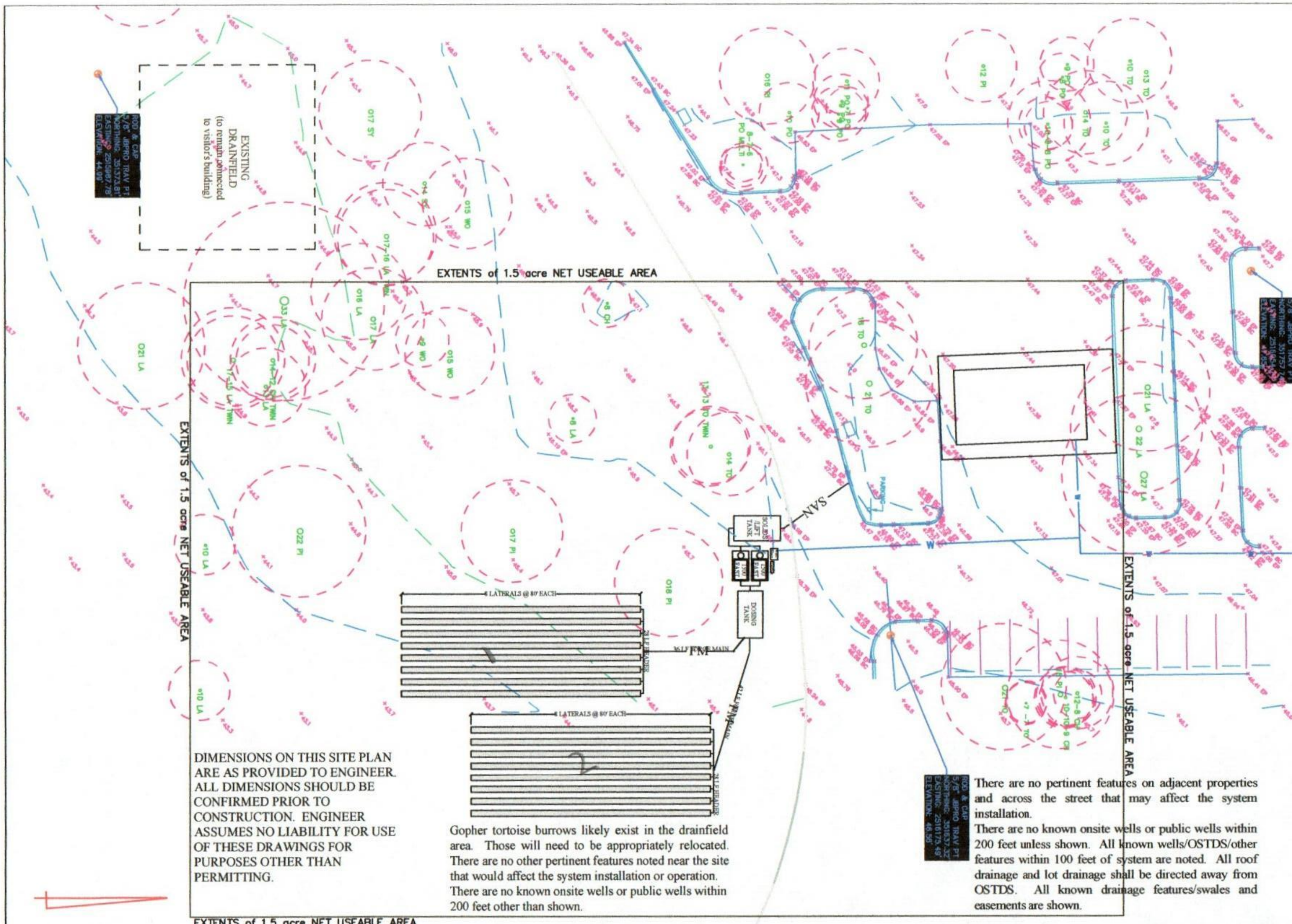
OSTDS DESIGN FOR:
STATE OF FLORIDA

LOCATION:
SOUTH ENTRANCE
ICHETUCKNEE SPRINGS
12087 SW US Hwy 27
FORT WHITE, COLUMBIA COUNTY

MARK D. REPASKY, PE0036872
WASTEWATER TECHNOLOGIES, INC.
3096 S ADAMS STREET, TALLAHASSEE, FL 32301
ROGER ... ROMAN ... 489
GEORGE WADE ..., CFC1426578

MARK D. REPASKY LICENSE PE0036872

rev date 3/8/23: clarify dosing


EXISTING
DRAINFIELD
(to remain connected
to visitor's building)
EXTENTS of 1.5 acre NET USEABLE AREA
EXTENTS of 1.5 acre NET USEABLE AREA
EXTENTS of 1.5 acre NET USEABLE AREA
EXTENTS of 1.5 acre NET USEABLE AREA
SOLIDS /LIFT TANK
DOSING TANK
8 LATERALS @ 80' EACH
8 LATERALS @ 80' EACH
FM
SAN
W
DIMENSIONS ON THIS SITE PLAN ARE AS PROVIDED TO ENGINEER. ALL DIMENSIONS SHOULD BE CONFIRMED PRIOR TO CONSTRUCTION. ENGINEER ASSUMES NO LIABILITY FOR USE OF THESE DRAWINGS FOR PURPOSES OTHER THAN PERMITTING.
Gopher tortoise burrows likely exist in the drainfield area. Those will need to be appropriately relocated. There are no other pertinent features noted near the site that would affect the system installation or operation. There are no known onsite wells or public wells within 200 feet other than shown.
There are no pertinent features on adjacent properties and across the street that may affect the system installation.
There are no known onsite wells or public wells within 200 feet unless shown. All known wells/OSTDS/other features within 100 feet of system are noted. All roof drainage and lot drainage shall be directed away from OSTDS. All known drainage features/swales and easements are shown.

STATE PROJECT No.: 61363C

NET USABLE AREA
SCALE: 1" = 30'

OSTDS GENERAL INFORMATION:

NEW RESTROOM BUILDING 3000 gpd design
(2) TREATMENT UNIT: MicroFAST 1.5, no equals
DRAINFIELD SIZING: 3750 s.f. MIN
DRAINFIELD REDUCTION: NONE
SETBACK REDUCTIONS: NONE
LOT LOADING INCREASE: NONE

OSTDS DESIGN FOR:

STATE OF FLORIDA

LOCATION:
SOUTH ENTRANCE
ICHETUCKNEE SPRINGS
12087 SW US Hwy 27
FORT WHITE, COLUMBIA COUNTY

MARK D. REPASKY, PE0036872 SR0111699
WASTEWATER TECHNOLOGIES, INC.
3096 S ADAMS STREET, TALLAHASSEE FL 32301
GEORGE WADE UPPERMAN, CFC1426578

rev date 3/8/23: clarify FM detail

Low Pressure Dosed CONSTRUCTION SPECIFICATIONS

DRAINFIELD SIZING	3000 gpd / 0.8 LTAR TRENCH	= 3,750 s.f.	
2 ZONES x	8 laterals @ 80' ea x 3' PTI eq	= 3,840 s.f.	
DOSING	Network Volume x 4 =	249 gallons/dose	minimum
3,000 gpd /	5 doses/day	600 gallons/dose	OKAY

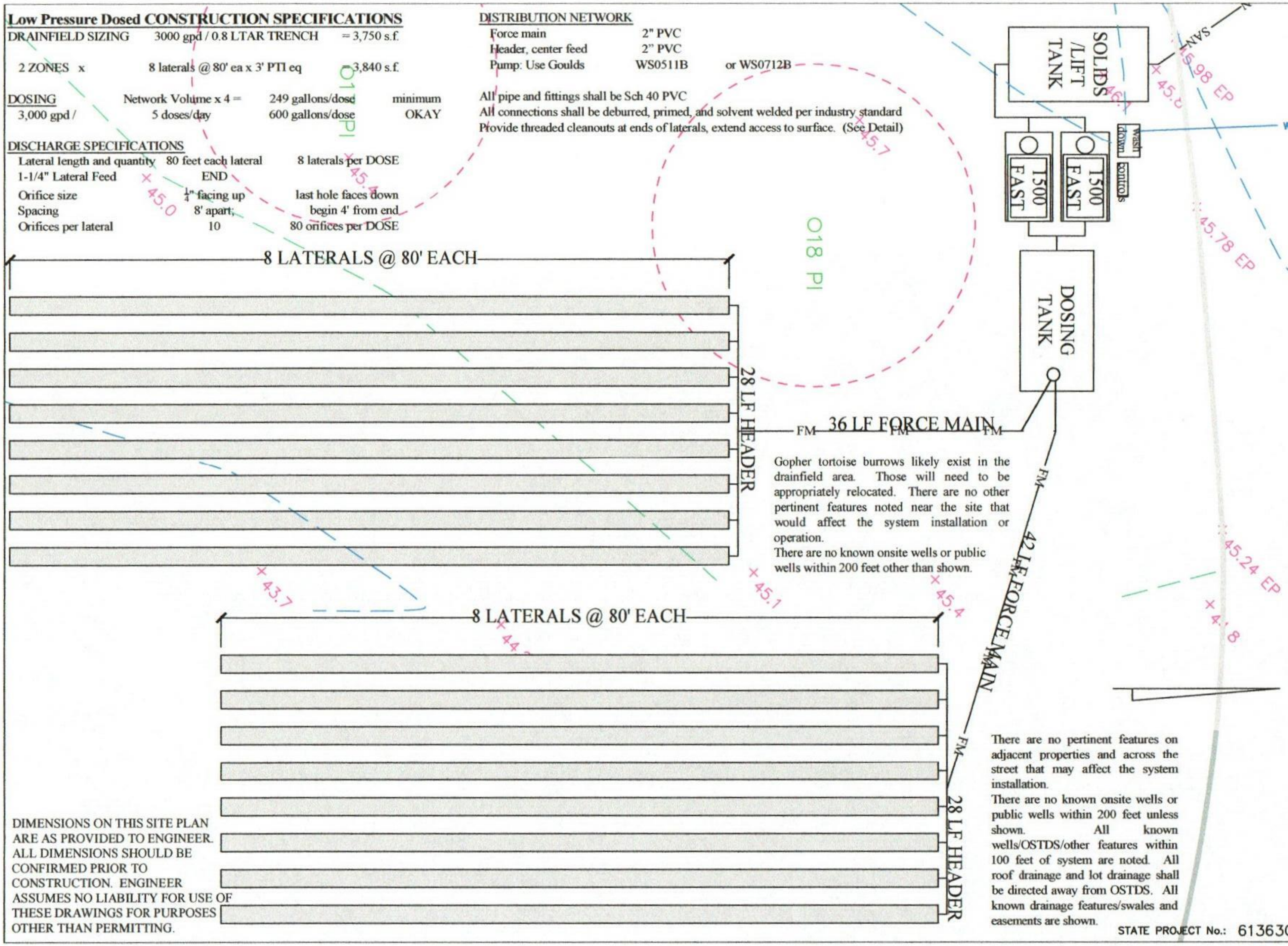
DISCHARGE SPECIFICATIONS

Lateral length and quantity	80 feet each lateral	8 laterals per DOSE
1-1/4" Lateral Feed	END	
Orifice size	$\frac{1}{4}$" facing up	last hole faces down
Spacing	8' apart;	begin 4' from end
Orifices per lateral	10	80 orifices per DOSE

DISTRIBUTION NETWORK

Force main	2" PVC	
Header, center feed	2" PVC	
Pump: Use Goulds	WS0511B	or WS0712B

All pipe and fittings shall be Sch 40 PVC
All connections shall be deburred, primed, and solvent welded per industry standard
Provide threaded cleanouts at ends of laterals, extend access to surface. (See Detail)



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There are no pertinent features on adjacent properties and across the street that may affect the system installation.
There are no known onsite wells or public wells within 200 feet unless shown. All known wells/OSTDS/other features within 100 feet of system are noted. All roof drainage and lot drainage shall be directed away from OSTDS. All known drainage features/swales and easements are shown.

DIMENSIONS ON THIS SITE PLAN ARE AS PROVIDED TO ENGINEER. ALL DIMENSIONS SHOULD BE CONFIRMED PRIOR TO CONSTRUCTION. ENGINEER ASSUMES NO LIABILITY FOR USE OF THESE DRAWINGS FOR PURPOSES OTHER THAN PERMITTING.

STATE PROJECT No.: 61363C

TANKS AND DRAINFIELD
SCALE: 1" = 10'

OSTDS GENERAL INFORMATION:

NEW RESTROOM BUILDING 3000 gpd design
(2) TREATMENT UNIT: MicroFAST 1.5, no equals

DRAINFIELD SIZING:	3750 s.f. MIN
DRAINFIELD REDUCTION:	NONE
SETBACK REDUCTIONS:	NONE
LOT LOADING INCREASE:	NONE

OSTDS DESIGN FOR:
STATE OF FLORIDA

LOCATION:
SOUTH ENTRANCE
ICHETUCKNEE SPRINGS
12087 SW US Hwy 27
FORT WHITE, COLUMBIA COUNTY

MARK D. REPASKY, PE0036872 SR0019699
WASTEWATER TECHNOLOGIES, INC.
3096 S ADAMS STREET, TALLAHASSEE FL 32301
ROGER W. TURNAN
GEORGE WADE OPPERMAN, CFC1426578

rev date 3/8/23: clarify FM detail

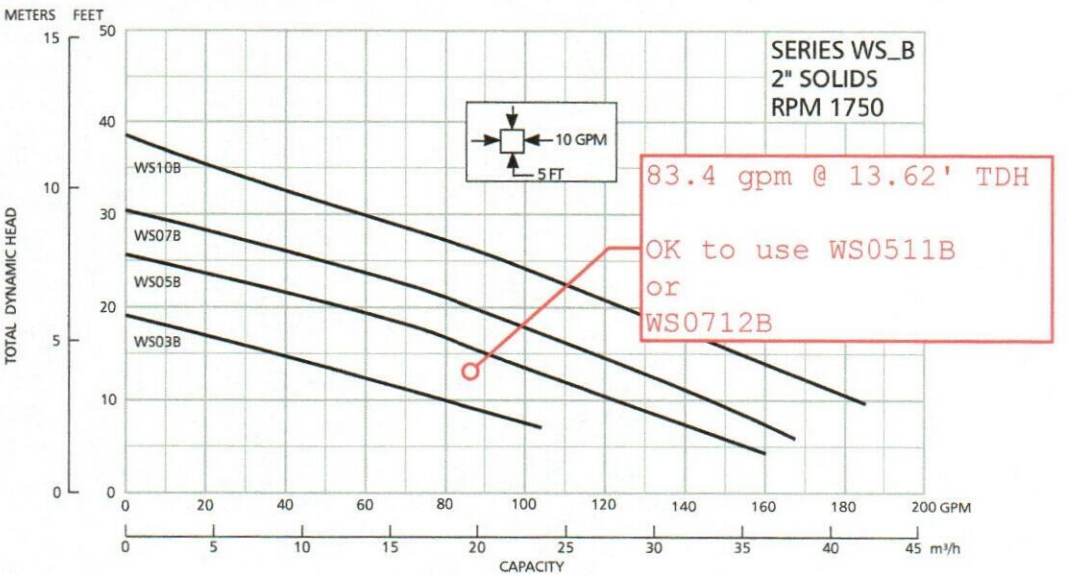
ITT

ICHETUKNEE
PUMP CURVE
&
PUMP OPTIONS

GOULDS PUMPS
Wastewater

MODELS

ORDER NUMBER	HP	PHASE	VOLTS	RPM	IMPELLER DIA. (in.)	MAX AMPS	LRA	KVA CODE	FULL LOAD MOTOR EFF.	RESISTANCE START	RESISTANCE LINE-LINE	WT (LBS.)
WS0311B	0.33	1	115	1750	4.69	10.7	30.0	M	54	11.9	1.7	63
WS0318B			208			6.8	19.5	K	51	9.1	4.2	
WS0312B			230			4.9	14.1	L	53	14.5	8.0	
WS0511B	0.5		115		5.00	14.5	31.1	J	55	9.3	1.4	65
WS0518B			208			8.0	19.5	K	51	9.1	4.2	
WS0512B			230			7.3	16.5	J	54	11.7	5.6	
WS0538B		3	200			3.8	12.3	K	75	NA	6.7	
WS0532B			230			3.3	9.7	K	75	NA	9.9	
WS0534B			460			1.7	4.9	K	75	NA	39.4	
WS0537B			575			1.4	4.3	K	68	NA	47.8	
WS0718B	0.75	1	208		5.38	11.0	39.0	K	65	2.6	1.4	85
WS0712B			230			9.4	24.8	J	57	4.8	2.3	
WS0738B		3	200			4.1	21.2	H	74	NA	4.3	
WS0732B			230			3.6	17.3	J	76	NA	5.6	
WS0734B			460			1.8	8.9	J	76	NA	22.4	
WS0737B			575			1.5	7.3	J	71	NA	29.2	
WS1018B	1	1	208		5.75	14.0	39.0	K	65	2.6	1.4	
WS1012B			230			12.3	30.5	H	60	4.3	1.8	
WS1038B		3	200			6.0	21.2	H	74	NA	4.3	
WS1032B			230			5.8	17.3	J	76	NA	5.6	
WS1034B			460			2.9	8.9	J	76	NA	22.4	
WS1037B			575			2.4	7.3	J	71	NA	29.2	



By Fiscal Year (FY)

By Calendar Year (CY)

Rolling 12 Months

What are the details for the most recent 5 years of attendance by month? *There are charts and tables by FY, CY or rolling 12 month periods below. Change between these options by using buttons at left. Click on the Tab name to change; the current visualization (table or chart) is highlighted/underlined. The KPI figures update as data is filtered. To filter the data by Park, District, etc., click on any of those fields in the Filter at right and make your selections by clicking one or more values. To save selections, click the green check mark. To delete selections, click the Clear all Filters button at top right. To export data, right-click and choose Download as... Data and then click on the generated hyperlink to open the download file. File will open in Excel.*

Attendance - FY 18/19
342.8k

Attendance - FY 19/20
245.3k

Attendance - FY 20/21
247.2k

Attendance - FY 21/22
215.8k

Attendance - 22/23 FYTD
55.56k

Chart, Month over Month | FY Chart, Month to Month | Table, Totals by Month | Table, by District & Park | Table, by District | Events affecting Attendance

Attendance for Ichetucknee Springs

Available Data
07/01/2018-7/31/2022

Calculation Check for LPDS review E. Roeder End manifold Version October 2019 enter data required results Oct2019 correctedelevation May 2019 delete Sheet 1; May 2018 trench width as input; March 22, 2016 refer consistently to Otis' flow, look-up F-factor in column H

ICHETUCKNEE UPDATED PER GAO 2023.03.08

Information for Hydraulic Profile	diameter (nominal)	diameter (actual SCH40)	flow at beginning (gpm)	flow at beginning (cfm)	flow velocity (ft/sec)	head loss coefficient (ft/100 ft) (C=150)	equal/unequal flow friction loss coefficient (1 for constant flow, 1/3 for many evenly spaced losses as in lateral)	equivalent length (ft)	friction loss (ft)	elevation change relative to distal orifice (up="+") (opposite sign relative to pump)?	head at location	heads (ft)	orifice diameter (in)	orifice flow (gpm) (Otis, 1981)	orifice flow (gpm) (Crites and Tchobanoglous 1989 p.732)
										0	distal orifice operating head	2.00	1/4	1.04210	1.09
lateral (location (1))	1.25	1.38	10.42	1.4	2.2	1.56	0.396	80	0.495	0.00	first in lateral pressure head	2.50	1/4	1.16	1.22
manifold at distal lateral (location (2))	1.25	1.38	10.42	1.4	2.2	1.56	1.000	1	0.016	0.00	end of manifold pressure head	2.51			
manifold at proximal lateral (location (3))	2	2.067	41.68	5.6	4.0	2.85	0.479	13	0.177	0.00	proximal orifice pressure head	2.69	1/4	1.21	1.27
transmission line (location (4))	2	2.067	83.37	11.1	8.0	10.27	1.000	42	4.314	0.00	beginning of forcemain at pump tank	7.00			
pump discharge pipe	2	2.067	83.37	11.1	8.0	10.27	1.000	6	0.616	-6.00	pump	13.62			

note: lateral maximum 2" diameter **note: velocity @ first orifice all laterals at least 2 ft/s**

static head

Ratio w/in lateral: 89.5%

Total Dynamic Head 13.62 **Ratio network: 86.3%**

note: ratio at least 75%

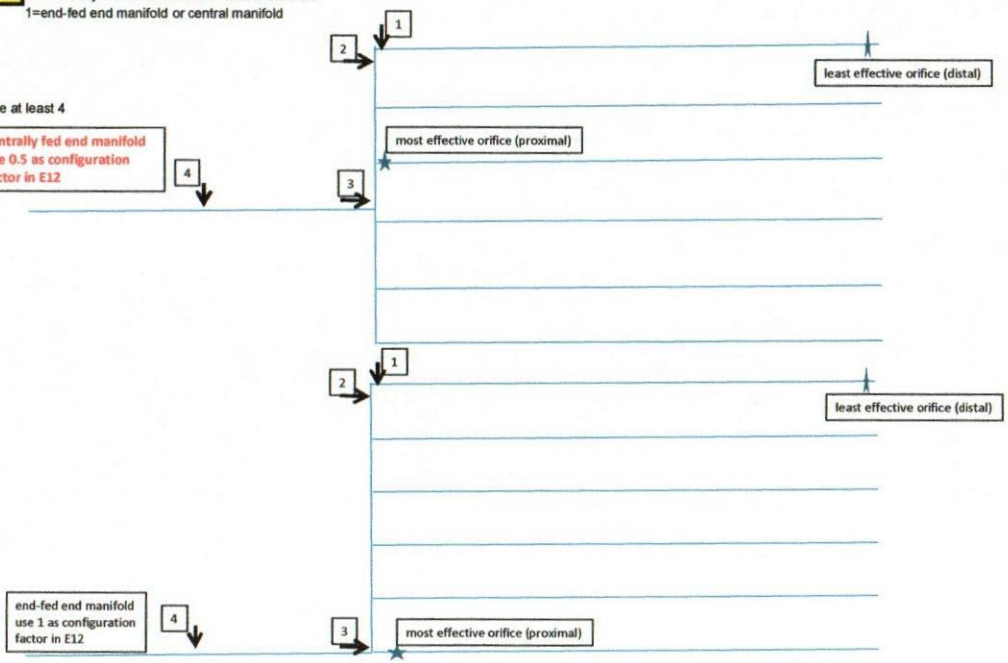
Check for drainfield configuration

		Dosing volume		Configuration
estimated sewage flow)gpd)	3000	lateral diameter (in)	1.38	0.5 .5= centrally fed end manifold or central manifold
LTAR (gpd/SF) for ATU	0.65	length (ft)	80	1=end-fed end manifold or central manifold
SF absorption area	4615.38462			
trench width rating (SF per linear foot)	3			
LF laterals (ft)	1538.46	min dosing vol. (gal)	198.9	
# of zones	2	dosing volume (gal)	300.0	
# of laterals CONFIRM LATS/ZONE, not total	8	fills per dose	6.0	Must be at least 4
LF per lateral required (ft)				
LF per lateral chosen (ft)	80			

Consistency check for flows

# of orifices per lateral	10
flow per lateral (gpm)	10.4
total flow (gpm) needs to approximate specified flow	83.4

centrally fed end manifold use 0.5 as configuration factor in E12



pipe sizes ASTM D1785-06

nominal diameter	actual diameter
0.5	0.622
0.75	0.824
1	1.050
1.25	1.380
1.5	1.610
2	2.067
2.5	2.469
3	3.068
3.5	3.548
4	4.026

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
APPLICATION FOR CONSTRUCTION PERMIT
Ichetucknee EH OSTDS permit app.doc

PERMIT NO. 22-1019
DATE PAID:
FEE PAID: 12-20-22
RECEIPT #: 285

APPLICATION FOR: **Engineered - ATU**

[X] New System [] Existing System [] Holding Tank [] Innovative
[] Repair [] Abandonment [ ] Temporary [] _

APPLICANT: State of Florida
AGENT: (Engineer) Mark D. Repasky, PE 0036872 SR 00111699 TELEPHONE: 850-251-7743
MAILING ADDRESS: 3096 S Adams Street, Tallahassee, Florida 32301

==========

TO BE COMPLETED BY APPLICANT OR APPLICANT'S AUTHORIZED AGENT. SYSTEMS MUST BE CONSTRUCTED BY A PERSON LICENSED PURSUANT TO 489.105(3)(m) OR 489.552, FLORIDA STATUTES. IT IS THE APPLICANT'S RESPONSIBILITY TO PROVIDE DOCUMENTATION OF THE DATE THE LOT WAS CREATED OR PLATTED (MM/DD/YY) IF REQUESTING CONSIDERATION OF STATUTORY GRANDFATHER PROVISIONS.

==========

PROPERTY INFORMATION

LOT: _ BLOCK: _ SUBDIVISION: Metes/bounds PLATTED:

PROPERTY ID #: 24-6S-15-00515-000 ZONING: State Park I/M OR EQUIVALENT: [Y / N]

PROPERTY SIZE: 130 ACRES WATER SUPPLY: [ ] PRIVATE PUBLIC [ ] <2000gpd [X] >2000gpd

IS SEWER AVAILABLE AS PER 381.0065, FS? [Y / N] DISTANCE TO SEWER: N/A FT

PROPERTY ADDRESS: 11627 SW US Highway 27, Fort White, FL 32038

DIRECTIONS TO PROPERTY: Ichetucknee Springs south entrance

BUILDING INFORMATION: [ ] Residential [x] Commercial

Unit No	Type of Establishment	No. of Bedrooms	Building Area Sqft	Commercial/Institutional System Design Table 1, Chapter 62-6, FAC
1	Visitors Center restrooms			see cover page; 3000 gpd per Engineers
2				
3				
4				

[] Floor/Equipment Drains [] Other (Specify):

SIGNATURE: Mark SR00111699 DATE: rev. date 03/08/23; establishment

MARK D. REPASKY, PE 0036872, 3096 S Adams Street, TALLAHASSEE, FLORIDA 32301

22-1019

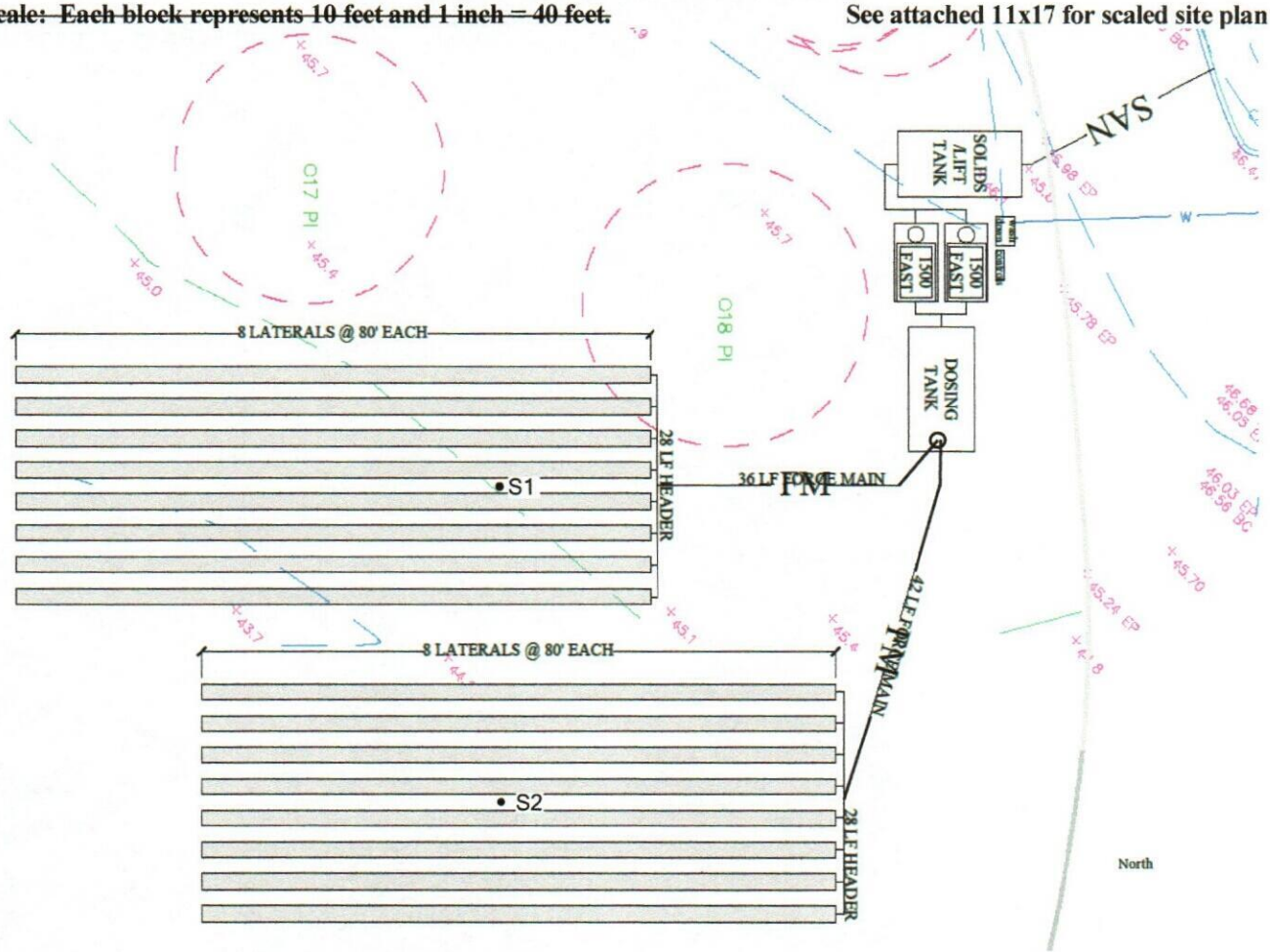
STATE OF FLORIDA
DEPARTMENT OF HEALTH
APPLICATION FOR CONSTRUCTION PERMIT

Ichetucknee EH OSTDS permit app.doc — Permit Application Number

---------- PART II - SITEPLAN ----------

State of Florida

~~**Scale: Each block represents 10 feet and 1 inch = 40 feet.**~~ **See attached 11x17 for scaled site plan**



Notes: Engineered - ATU Design Flow = 3000 gpd

*ST	**Provide and Install** 2800 gallon minimum concrete solids tank.
*TT (2)	**Provide and Install** 1350 gals. minimum concrete tank with Bio-Microbics MicroFAST 1.5 module.
*DT	**Provide and Install** 3518 gallon minimum dosing tank with dosing pump(s). See specifications.
*Dispersal	Standard MultiPipeSystem/Infiltrator Drainfield Minimum 3750 square feet in trench system. See specifications.
*Samples	Install port (SP) as per 62-6, FAC.
*Setbacks	See Page 3 of 4, Form DH 4015. ***Double sleeve*** all potable water lines within 10 feet of system. Potable water lines must be installed a minimum of 12 inches above (vertical) effluent transmission lines where crossing or within 10 feet horizontal.
*General	There are no known onsite wells or public wells within 200 feet unless shown. All known wells/OSTDS/other features within 100 feet of system are noted. All roof drainage and lot drainage shall be directed away from OSTDS. All known drainage features/swales and easements are shown.

Site Plan submitted by: Mark — PE0036872 SR00111699

MARK D. REPASKY, 3096 S Adams Street TALLAHASSEE, FLORIDA 32301

rev date 3/8/23: add S1, S2

Plan Approved ✓ Not Approved _____ Date 4-12-23

By Sallie Fred Env Health Director Columbia County Health Department

email WastewaterTechno@aol.com when permit is issued

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

22-1019

PERMIT #.

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
SITE EVALUATION AND SYSTEM SPECIFICATIONS
Ichetucknee EH OSTDS permit app.doc

APPLICANT: State of Florida **AGENT:** Eng Mark D. Repasky PE0036872 SR00111699

LOT: _____ **BLOCK:** _____ **SUBDIVISION:** Metes/bounds

PROPERTY ID #: 24-6S-15-00515-000 **[Section/Township/Parcel No. or Tax ID Number]**

TO BE COMPLETED BY ENGINEER, HEALTH DEPARTMENT EMPLOYEE, OR OTHER QUALIFIED PERSON. ENGINEERS MUST PROVIDE REGISTRATION NUMBER AND SIGN AND SEAL EACH PAGE OF SUBMITTAL. COMPLETE ALL ITEMS.

PROPERTY SIZE CONFORMS TO SITE PLAN: [X] YES [ ] NO
NET USABLE AREA AVAILABLE: 1.5 **ACRES**
TOTAL ESTIMATED SEWAGE FLOW: 3000 **GALLONS PER DAY**
[RESIDENCES-TABLE I/OTHER-TABLE2]
AUTHORIZED SEWAGE FLOW: 3750 **GALLONS PER DAY**
[1500 GPD/ACRE or 2500 GPD/ACRE]
UNOBSTRUCTED AREA AVAILABLE: 8000 **SQFT**
UNOBSTRUCTED AREA REQUIRED: 5625 **SQFT**

BENCHMARK/REFERENCE POINT LOCATION: FIR/C =46.56'
ELEVATION OF PROPOSED SYSTEM SITE IS 19 **[INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT.**

THE MINIMUM SETBACK THAT CAN BE MAINTAINED FROM THE PROPOSED SYSTEM TO THE FOLLOWING FEATURES
SURFACE WATER: n/a **FT** **DITCHES/SWALES:** n/a **FT** **NORMALLY WET?** [ ] YES [X] NO
WELLS: PUBLIC: ___ **FT** **LIMITED USE:** n/a **FT** **PRIVATE:** N/A **FT** **NON-POTABLE:** N/A **FT**
BUILDING FOUNDATIONS: 130 **FT** **PROPERTY LINES:** 500 **FT** **POTABLE WATER LINES:** 10 **FT**

SITE SUBJECT TO FREQUENT FLOODING: [ ] YES [X] NO **10 YEAR FLOODING?** [ ] YES [X] NO
10 YEAR FLOOD ELEVATION FOR SITE: **FT MSL/NGVD** **CURRENT SITE ELEV:** **FT MSL/NGVD**

SOIL PROFILE INFORMATION Site 1: S1

MUNSELL # / COLOR	TEXTURE	DEPTH
10YR 5/2 GB	FS	0-12
10YR 6/3 PB	FS	12-36
10YR 7/3 VPB	FS	36-72
USDA Soil Series: mapped Alpin FS		

SOIL PROFILE INFORMATION Site 2: S2

MUNSELL # / COLOR	TEXTURE	DEPTH
10YR 5/2	FS	0-11
10YR 6/3 PB	FS	11-39
10YR 7/3 VPB	FS	39-72
USDA Soil Series: mapped Alpin FS		

OBSERVED WATER TABLE: NA **INCHES [ABOVE/BELOW] EXISTING GRADE.** **TYPE: [PERCHED/APPARENT]**
ESTIMATED WET SEASON WATER TABLE ELEVATION: 72 **INCHES** **[ABOVE/BELOW]** **EXISTING GRADE**
HIGH WATER TABLE VEGETATION: [ ] YES [X] NO **MOTTLING** [ ] YES [X] NO **DEPTH:** n/a **INCHES**

SOIL TEXTURE/LOADING RATE FOR SYSTEM SIZING: 0.80 **DEPTH OF EXCAVATION:** 0 **INCHES**
DRAINFIELD CONFIGURATION: [x] **TRENCH** [] **BED** [x] **OTHER (SPECIFY)** LPD, 2 zone alternating
REMARKS/ADDITIONAL CRITERIA: Installer must be certified by Engineer and *must* have pre-construction conference with Engineer. Only licensed contractors shall perform all electrical and other trades work.
Engineer or his designated representative shall be notified prior to health department final inspection.
Local Underground Utility Locator contact required. Have all onsite underground utilities located prior to any excavation/site preparation. Engineer assumes no responsibility for damage to underground utilities.

Mark D. Repasky PE

SITE EVALUATED BY: _____ PE0036872 SR00111699 **DATE:** 03/09/23
MARK D. REPASKY, 3096 S. Adams Street, TALLAHASSEE, FLORIDA 32301

System Design:	State of Florida	15 November 2022

Ichetucknee EH OSTDS permit app.doc

Certification of Design

I certify that the units used in this system design is capable of consistently meeting, at minimum, secondary treatment standards established in 62-6.025(12)(a), FAC. The following requirements shall also be met:

- The system installation shall be inspected and approved by the design Engineer (62-6.003(2)(c)1., FAC) prior to use of the system.
- This system requires a maintenance agreement with a permitted aerobic unit maintenance entity which has at least a Class D state certified operator who has been certified under the provisions of Chapter 62-602, FAC.
- Sampling for effluent quality reports for CBOD/5 and suspended solids shall be collected at least semi-annually and such samples shall be analyzed by a department-approved laboratory.

Calculations

Estimated Sewage Flow	Water Usage Records: MWAD is 3440. Use 3,000 as conservative estimate for this system					
		Estimated Flow			=	3000 gpd required
Allowable Lot Loading	1.500 acres	x 2500 gpd/acre			=	3750 gpd provided
Dispersal Area Required	3000 gpd	/ 0.80 LTAR [- 0% Reduction]			=	3750 s.f. required
Area Calculation	3' x (2 x8 x80') linear feet				=	3840 s.f. provided
Unobstructed Area	Minimum required dispersal area		3750 s.f.	x 1.5	=	5625 s.f. required
						8000 s.f. provided

Approved Tanks and Components

Manufacturer/Supplier	Material	Function	Engineer Spec	Tank #-Category
Florida Septic, Inc.	Concrete	Pretreatment tank	2800 effective gallons	01-011-52D-C4
Goulds	N/A	Lift Pump	WS0311B	if applicable
Bonded Septic Tank	Concrete	Treatment tanks (2)	1350 effective gallons	09-030-BM1S-C3
Wastewater Technologies, Inc.	plastic	Treatment units (2)	MicroFAST 1.5	
Florida Septic, Inc.	Concrete	Dosing tank	3518 total gallons	01-011-52P-C4
Orenco, Inc.	N/A	Dosing Pump	WS0511B or WS0712B	

Engineer has evaluated buoyancy for each tank listed above ***at normal operating conditions***. All equipment and filter media are considered in the calculation for each tank specified, PVC piping is conservatively ignored. Normal operating condition for tanks **without** pumps is full of fresh water to the outlet elevation. Normal operating condition for tanks with pumps is calculated as first chamber full to baffle invert and empty second chamber. Tank substitution or use of tanks other than shown above is not acceptable without prior written consent of this Engineer.

Specifications and Notes

1. System design: to achieve specified treatment levels, Domestic strength waste at flows that do not exceed the daily design flow. Liquid waste treatment additives shall not be used.
2. System and components: by Wastewater Technologies, Inc. or as approved by design engineer.
3. Tanks: Heavy duty tanks, lids, risers, and covers NOT REQUIRED. All access shall have risers to grade or higher, with covers per 62-6.
4. System Installation: by licensed contractors certified in the installation of Wastewater Technologies, Inc. treatment systems with oversight by Engineer of Record. Property Owner assumes full responsibility for the installation and system performance if licensed, certified contractors are not used.
5. Treatment module integration shall be by technicians trained by this engineer in the proper modification and installation requirements of FAST modules.
6. Operation and Maintenance: see attached O&M in this Engineered package.

©2022, Mark D. Repasky
PE0036872 SR00111699
3096 S Adams Street
Tallahassee FL 32301

WTI/MDR Engineered - ATU 3000 gpd
Operation, Inspections, Maintenance and Monitoring
Sampling Specifications

15 November 2022

Ichetucknee EH OSTDS permit app.doc

Operation

Electric power must be supplied to all electric components 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. System owner is not to power off during extended absences, vacations or otherwise. Liquid waste treatment additives shall not be used.

Inspections, Maintenance and Monitoring 4 times/year

Maintenance Inspections, preventive maintenance, and monitoring shall be performed as required by 62-6 Part I, FAC by a maintenance entity holding current certification from the engineer per 62-6.025(11), with a minimum Class D state certified operator. Inspection reports are to be forwarded to county DOH along with address of system, date and time of inspection, volume of effluent treated (if discernable), any maintenance performed and/or problems noted including actions taken or needed to remedy situation.

Maintenance inspections and preventive maintenance shall be performed by the maintenance entity every 3 months, as part of above inspection to include:

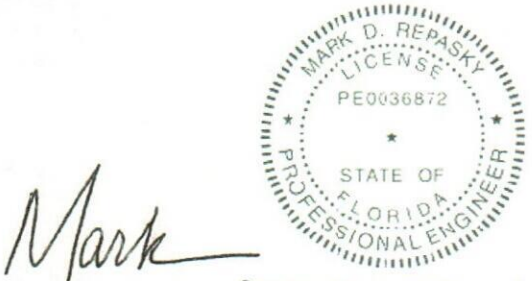
- FAST — Verify that unit is operating properly.
  - Blower — Confirm proper operation; clean air filter and note condition.
  - Solids — Check accumulation (expect pumpout every 3 to 5 years).
  - Outlet — Inspect outlet line or disposal system (where accessible)
- Chlorinator — Inspect and confirm tablet stack descends freely; load and record number of tablets added.
- All Pumps — Check operation by manually tripping float switch. Operate each pump manually at control panel.
- Electrical — Visual check of all controls and connections for proper power output/input, closure and moisture seal of NEMA boxes, component corrosion.
  - Control Panel — Record pump count. Verify and record proper timer setting (if any), float settings (if any).
  - Alarms — Trip all audible and visual alarms manually to confirm effective operation.
- Manhole covers — CONFIRM THAT ALL ARE IN PLACE/CLOSED, AND SECURED

Sampling and Monitoring - Engineered - ATU

Commercial: Effluent shall be sampled at least semi-annually for $CBOD_5$ and TSS. If any sample exceeds design standards by 100% or more, report results immediately to design engineer and DOH.

Contingency

1. At the high water level, the system alarm sounds. The System 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 36 hours as specified in 62-6.012(4)(b).
3. System owner shall 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.



PE0036872 SR00111699
3096 S Adams Street
Tallahassee FL 32301

COVER LETTER
TO: COLUMBIA HEALTH DEPARTMENT

REQUEST FOR SYSTEM APPROVAL
REGULATED UNDER 62-6 PART I
ENGINEERED - ATU - DISPERSAL TO LPD
TUESDAY, NOVEMBER 15, 2022
Rev. Date Wednesday, 08 March 2023

Property Owner **State of Florida**

Street Address	11627 SW US Highway 27, Fort White, FL 32038
Legal description	Ichetucknee Springs State Park
Property ID	24-6S-15-00515-000

This is a complete permit application package for the above property. Water records show the Maximum Weekend Average Day to be roughly 3,440 gpd. This new bathroom facility will relieve demand on the visitor center building restrooms. It is not anticipated that there will be more visitors because of this new building. As such, design treatment levels for **Engineered - ATU** of 3000 gpd domestic strength waste is conservatively used. Bio-Microbics FAST© treatment modules are utilized to achieve the performance standards listed below:

LEVEL SPECIFIED: Engineered - ATU		TREATMENT ACHIEVED		Engineer Notes
$CBOD_5$	≤20 mg/l	FAST	2.6 mg/l	OWNRS Phase I (Ph II = 1.2 mg/l)
Total Suspended Solids	≤20 mg/l	FAST	4.63 mg/l	OWNRS Phase I (Ph II = 3.9 mg/l)
Total Nitrogen	> 65% REDUCTION	FAST	9.3 mg/l >70%	NSF 40+Nitrogen OWNRS Phase I and Phase II
Fecal coliform Minimum disinfection level equivalent to a free chlorine residual of 0.5 mg/L at point of discharge				LF 1000 with minimum 93 gallons chlorine contact time

Per OWNRS, FAST units (when loaded at 100% capacity) have been shown to be effective at reducing Total Nitrogen levels by greater than 70 percent.

Per 62-6.003(2)(c)1: DOH county health department shall require the design engineer… to certify that the installed system complies with the approved design and installation requirements.… All changes to the engineering specifications shall be approved by the design engineer. Also see 62-6.004(4).

Per 62-6.004(3)(b): plumbing fixtures located at a non-residential establishment shall be included on the floor plan, but need not be drawn to scale. *–Engineer's NOTE: All plumbing fixtures have been included on the floorplan. Any floor drains currently planned will be shown.*

Per 62-6.012(3), an aerobic treatment unit used for treating domestic or commercial sewage flows in excess of 1500 gallons per day, or a combination of aerobic treatment units treating flows according to Rule 62-6.004(4)(a) or (b), F.A.C., shall be designed and certified by an engineer licensed in the State of Florida. The design shall include an assessment of wastewater strength. The certification shall state that the unit is capable of consistently meeting, at minimum, secondary treatment standards for $CBOD_5$ and TSS, established in Rule 62-6.025(12)(a), FAC…. The system shall be maintained by an entity with a minimum Class D wastewater operator. See Certification of Design included herein.

MARK D. REPASKY LICENSE PE0036872 STATE OF FLORIDA PROFESSIONAL ENGINEER

Mark D. Repasky,
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Tallahassee FL 32301

COVER LETTER (CONTINUED)
TO: COLUMBIA HEALTH DEPARTMENT

TUESDAY, NOVEMBER 15, 2022

Property Owner **State of Florida**

Street Address	11627 SW US Highway 27, Fort White, FL 32038
Legal description	Ichetucknee Springs State Park
Property ID	24-6S-15-00515-000

MONITORING/SAMPLING requirements specified for this on-site treatment and disposal system: Per NSF Standard 40 and incorporated by reference in 62-6, FAC, "a two-year initial service policy shall be furnished to the user by the manufacturer or the distributor through the dealer, and be included in the original purchase price." It shall contain provisions for (at least) four inspection/service calls (at least one every six months) over the two-year period … including inspection, adjustment, and servicing of the mechanical, electrical, and other applicable component parts to ensure property function….

Commercial: Effluent shall be sampled at least semi-annually for $CBOD_5$, and TSS. If any sample exceeds design standards by 100% or more, report results immediately to design engineer and DOH. Free chlorine residual shall be evaluated twice per year and such data recorded as part of the inspection information.

Contents of Permit Application Package

SITE/OWNER PAPERWORK:

- Engineer of Record/Agent Authorization
- Sample maintenance agreement (final agreement to be executed prior to issuance of operating permit)
- Building floor plan (4 copies)
- Special purpose survey

SYSTEM PERMITTING SETS:

- Florida DOH form DH4015 pp1-3
- Certification of Design; Calculations; Approved Tanks; and Specifications
- Low pressure dosing specifications and pump curve (from Manufacturer)
- Operation, Inspections, Maintenance and Monitoring; Sampling Specifications
- Florida DOH form DH4016 p1, engineer's additional installation specifications
- 11x17 site plan and details; system tank flow; and dispersal schematic

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Wastewater Technologies, Inc.

Maintenance Inspection Agreement

Property Owner Street Address

Legal description Property ID

It is hereby agreed by and between the **Property Owner** and Wastewater Technologies, Inc. as **Maintenance Entity** (hereinafter referred to as **ME**), that in consideration for payments provided for herein, the **ME** shall provide the services of a factory-trained technician. The technician will perform a Preventative Maintenance Inspection of the equipment described herein on the frequency shown below.

This and any future maintenance agreements between the **Property Owner** and the **ME** shall be valid only if payment has been made in good funds to the **ME**. The **Property Owner** is required to obtain an operating permit for the system from the DOH and is responsible for any and all fines and fees with regard to such operating permit or this Maintenance Inspection Agreement. Failure by the **Property Owner** to maintain compliance may result in enforcement action on the **Property Owner** by the DOH. The **ME** will notify the **Property Owner** approximately 45 days prior to the expiration of the operating permit. In the event the **Property Owner** fails to maintain said operating permit, this Maintenance Inspection Agreement shall be considered null and void and all costs paid to the **ME** shall be forfeited. The expiration of this Agreement, which coincides with a correctly issued operating permit by the DOH, hereby serves as notice on non-renewal, unless renewal paperwork is provided showing otherwise (notice herein in excess of 60 days prior to expiration to satisfy requirements of 62-6.012(2)(m)2.).

Thirty days written notice shall be given to the **Property Owner** and the DOH county health department in the event that the **ME** wishes to discontinue provision of maintenance services during the term of this Agreement. The **Property Owner** shall, within 60 days of the date of service termination by the **ME** (for any reason), contract with an approved maintenance entity and provide the DOH county health department a copy of the new agreement.

Reporting and inspection:

- Commercial inspection shall occur 4 times per year. Sampling: not required.
- Each inspection shall be followed by a written report to the **Property Owner**, upon the **Property Owner's** written request. The inspection report will describe the operational status of the system. It will also include recommendations for any preventative maintenance deemed necessary by the inspector as well as a list of any replacement parts needed and a recommendation of who to contact in order to effect such repair.
- Reports shall be provided to the DOH county health department as required by Code (62-6.012, FAC).

This agreement does not:

- Assume any responsibilities or obligations that are normally the responsibilities of the **Property Owner's** maintenance department (if applicable) as related to parts or labor.
- Extend to cover any costs that may be associated with any recommendations made under this agreement.
- Authorize **ME** to supply parts/labor for repairs or replacement without the Property Owner's Purchase Order, unless required to remedy a sanitary nuisance and **ME** is not able to reasonable contact **Property Owner**.
- Provide for replacement of finite materials, including but not limited to, chlorine or other chemicals, filter media, etc. unless referenced below.
- Provide for cleaning of effluent filter or pumpout of any tanks.
- Provide for payment of any effluent sampling costs required, other than described below.

Non-routine maintenance visits may be necessary if the system alarms sound. In this event, the **ME** shall be notified immediately in order to investigate the alarm. **ME**, at its sole discretion will determine whether to make an emergency visit to ascertain nature of alarm or to send a repair company, or both. **ME** may charge for such a visit, not to exceed per visit, based on the nature of the alarm. **Property Owner** hereby agrees to pay the charge for this visit within 10 days of the emergency visit. Should this charge not be paid, **Property Owner** agrees to pay a late fee of $2.50 per day (at the discretion of the Maintenance Entity) until the **ME** or their designated representative receives payment in good funds. Should the **ME** determine that an outside repair company is needed, reasonable effort will be made to notify Property Owner of required repair. Maintenance Entity is hereby authorized to make such repair or cause an outside repair company to make such repair

as necessary to maintain the sanitary function of the system. Failure of **Property Owner** to make sure that the **ME** and/or outside repair company is paid may result in a lien against this property. **Property Owner** is solely responsible for any charges or costs from recommended repair companies.

The cost for any sampling or testing required will be borne by the **Property Owner**. **ME** shall make recommendations as to pumpout needs based on observed system function at scheduled inspection visits. **ME** shall supervise the pumpout of sludge from treatment tank so long as pumpout occurs during a scheduled maintenance visit as set forth herein and takes not more than one hour.

The **Property Owner** shall provide the **ME** with reasonable access to the wastewater treatment system for the purpose of inspection visits. If **ME** attempts to complete an inspection and is unable to do so because of lack of access, **ME** will make reasonable efforts to complete the missed visit at a later date during the agreement period. In this instance, Property Owner waives right to credit for the incomplete visit. The **Property Owner** shall also notify the **ME** and Engineer of Record if the occupancy changes or if there is any notable difference in use of the facilities serviced by this treatment system.

This Maintenance Inspection Agreement may be assigned in case of sale of this property, with proper notification to **ME** in advance. This Maintenance Inspection Agreement and the terms herein are specific to this real estate parcel and the equipment named herein.

In no event shall Wastewater Technologies, Inc. (or their agents and workers) be responsible for special or consequential damages, including but not limited to, loss of time, injury to person or property or any other consequential damages or incidental or economic loss due to equipment failure or for any other reason. If **ME** fails to perform any portion of this agreement, WTI will either issue a credit toward future agreements or issue a refund, at the sole discretion of WTI.

Expiration Date: tbd

Equipment/Sampling Covered Under This Agreement

Nomenclature	Serial Number	Location	# annual trips	Annual Rate
		11627 SW US Highway 27	4	
Sampling	If applicable	not required		

State of Florida, Property Owner		Wastewater Technologies, Inc.
Sign	date	Sign

Email address to send reports _____

WASTEWATER TECHNOLOGIES, INC.
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850-385-1832 FAX