ADDENDUM NO. 3

DATE: July 31, 2025

PROJECT NO: RFB 2025-007

PROJECT: Howey-in-the-Hills Water Treatment Plant No. 3

ALL PROSPECTIVE BIDDERS ARE HEREBY NOTIFIED OF THE CHANGES OR ALTERATIONS IN THE ABOVE-REFERENCED PROJECT

General Information:

- The Town is sole sourcing the chlorination gas feeder and detection system as supplied by Guardian Equipment, Inc. Bidders shall utilize the equipment price quote provided by Guardian Equipment, Inc.
- Specification Section 11345 Gas Detection System is now obsolete. Gas detection system is included in the revised Specification Section 11245.
- Septic Tank shall be a minimum of 900 gallons and the drain field shall have a minimum of 334 square foot bed.

Attachments:

1. Revised Specification Section 11245.
2. Scope and Quote from Guardian Equipment for Section 11245 Gas Feeder.
3. FDOH Onsite Sewage Treatment and Disposal System Construction Permit and associated attachments.

ALL BIDDERS ARE REQUESTED TO ACKNOWLEDGE RECEIPT OF THIS ADDENDUM BY SIGNING BELOW AND SUBMITTING THE BID.

ACKNOWLEDGE RECEIPT- ADDENDUM NO. 3

NAME OF BIDDER _____

SIGNATURE _____

TITLE _____ DATE _____

SECTION 11245
GAS FEEDER

PART 1 - GENERAL

1.01 COMPLETENESS

A. The system shall be complete with all components, equipment, and appurtenances.

1.02 QUALITY ASSURANCE

A. All materials and components shall be new and unused of first quality by well-known manufacturers. Inferior materials or components shall not be allowed.

PART 2 – MANUFACTURER

2.01 MANUFACTURER

A. The manufacturer of the gas chlorination equipment shall be Hydro Instruments, Telford, PA, USA.

PART 3 – CHLORINATION SYSTEM

3.01 GENERAL

A. The Chlorination system shall be a vacuum operated, solution feed, and automatic switchover type for dispensing chlorine gas from industry standard one hundred fifty (150) pound cylinders.

B. The Chlorination system shall have a chlorine gas feed capacity of not less than 250 PPD (pounds per day).

C. The system shall convey the gas under vacuum from the cylinder mounted vacuum regulators to the ejector assemblies.

D. The chlorination system shall automatically switch the gas supply from an empty cylinder to a full one to maintain an uninterrupted supply of chlorine to maintain continuous disinfection of the water.

E. The system design shall permit the entire system to be vacuum checked in the field without the use of special tools.

F. The system shall be constructed of materials suitable for wet or dry chlorine gas service.

3.02 CYLINDER MOUNTED VACUUM REGULATORS

A. The four (4) vacuum regulators shall mount directly on the gas cylinder valve by means of a closed, corrosion resistant yoke assembly that complies with the standards set forth by The Chlorine Institute, Inc. The sealing of these mating surfaces shall be achieved using a lead gasket.

B. Each Vacuum Regulator shall have a maximum feed rate capacity of 250 PPD.

C. Each vacuum regulator shall use an inlet capsule constructed of solid Hastelloy C-276 material, which shall carry a lifetime warranty.

D. Each vacuum regulator shall have its bodies machined from solid PVC to avoid cracking and for maximum durability.

E. Injection molded PVC or ABS body parts (which possess insufficient wall thickness), shall not be accepted.

F. Vacuum regulator springs shall be Tantalum alloy and shall carry a lifetime warranty.

G. Each vacuum regulator shall have a two-layer ECTFE (Halar) diaphragm, which controls vacuum and a spring loaded, normally closed inlet valve, which closes upon loss of vacuum.

H. Each regulator shall possess an internal switchover mechanism to automatically shift from standby to in-service upon depletion of the on-line cylinder. The regulators shall have a clear status indicator (standby or in-service).

I. Each regulator shall incorporate a pressure relief (vent) valve with separate ports for chlorine feed and chlorine vent. Connections and tubing shall be provided for venting gas away from the pressure relief (vent) port of each vacuum regulator to the outside atmosphere (outside of the building). The outside end of the vent tubing shall be equipped with an insect screen.

J. Each regulator shall be equipped with a porous PTFE inlet filter to remove particulate matter from the gas before it enters the inlet safety valve.

K. Each regulator shall be designed to accept an optional flow meter tube to indicate feed rate and which cylinder is in use.

L. Each regulator shall have a mechanism to indicate when the cylinder is empty and requires replacement.

MANUFACTURER

The manufacturer shall be Hydro Instruments, Telford, PA, USA. The vacuum regulator shall be Hydro Instruments Model SVR-250-CL2.

3.03 GAS FLOW METER

A. Three (3) gas flow meters shall be provided to indicate the gas flow rate. The gas flow meter shall be suitable for wall mounting.

Location	Feed Rate
Well No.5	100 PPD
Well No.6	100 PPD
Post Chlorination	100 PPD

B. The gas flow meters shall be equipped with a rate control valve for manual feed rate adjustment.

C. Flow meter tubes shall be a minimum of six (6) inches in length and indicate flow rates up to their maximum capacity and down to a minimum of 1/10 of the maximum value.

MANUFACTURER

The manufacturer shall be Hydro Instruments, Telford, PA, USA. The gas flow meter shall be Hydro Instruments Model RM-702.

3.04 AUTOMATIC CONTROL VALVE (CHLORINATOR)

A. General

1. One (1) automatic control valve (chlorinator) shall be provided to control the chlorine gas feed.

Location	Feed Rate
Post Chlorination	100 PPD

2. The automatic control valve shall be comprised of a PID controller and variable area orifice rate valve. These devices shall be incorporated into one compact unit.
3. The microprocessor based automatic control valve shall adjust the gas feed rate based on up to three analog input signals or by means of one to four 12-24VDC inputs.
4. The automatic control valve shall allow for the following standard, field selectable control modes:
    a. Manual
    b. Proportional control (Flow)
    c. Set-Point control (Residual/ORP)
    d. Compound Loop control (PID)
    e. Step-Feed control
    f. Dual Input Feed Forward control
    g. Dual Set-Point control
5. Motion of the valve shall be achieved by means of a linear stepper motor.
6. Motion control shall be achieved without the use of a feedback potentiometer.
7. To ensure accurate feed rates throughout the range of operation, the software shall incorporate a 10-point valve linearization calibration.

B. Construction
1. The automatic valve shall be housed in a NEMA4X (IP66) rated enclosure.
2. Materials of construction shall be of the finest available for the use of chlorine gas.
3. For accurate feed rate control, the length of the variable area orifice portion of the rate valve stem shall be no less than 1.5 inches.
4. The automatic valve shall be installed onto a ½" thick high density polypropylene (HDPE) panel suitable for wall mounting.

C. User Interface
1. The automatic control valve shall include a 2-line, 20-character, alphanumeric, LCD display.
2. User controls shall be through a front panel 4-button keypad.
3. Menus and variables shall be displayed in plain English words using easy to read, alphanumeric characters for clear understanding.
4. Control mode and parameters shall be password protected and adjustable through the keypad while displayed on the screen.

D. Inputs and Outputs
1. The automatic control valve shall include three (3) analog input channels.
2. Each analog input signal shall be independently user selectable as either 4-20mA or 0-10V.

3. The first input channel shall be used only for proportional (flow) input signals. The second input channel shall be used only for set point (residual or ORP) input signals. The third input channel shall be used for one of the following:

    a. Remote adjustment of dosage

    b. Remote adjustment of set-point

    c. Remote valve positioning

    d. Additional input for Dual Set-Point control

4. Four 12-24VDC inputs shall be provided. These inputs can be used for:

    a. Step-Feed control

    b. External control of AUTO or MANUAL modes

    c. External control of DUTY or STANDBY modes

5. Two (2) relay outputs shall be provided for remote indication of alarm conditions or indication of whether the valve is in AUTO or MANUAL mode. The use of these relays is user adjustable.

6. Two 4-20 mA output signals, proportional to the chemical feed rate, shall be provided.

7. The automatic control valve shall have a half-duplex, two wire interface type connection for Modbus RS-485 communication.

E. Remote Meter Panel

1. One (1) remote meter panel shall be incorporated into the assembly to indicate the gas flow rate.

    NOTE: REFER TO SECTION 3.3 FOR DETAILS.

F. Bypass Piping Arrangement

1. The automatic control valve shall be provided with a bypass piping and valve arrangement to allow for the selection of automatic feed control or bypass (manual) feed control. The selection of manual feed control shall isolate the automatic control valve.

2. The bypass piping arrangement shall be constructed of socket welded schedule 80 PVC pipe and pipe fittings.

3. The three (3) bypass valves shall be constructed with seals of suitable material for chlorine gas application.

G. Electronic Vacuum Monitoring

1. An electronic vacuum monitor shall be supplied and installed on the panel. The vacuum monitor shall have the following features:

    Input Voltage: 90-265 VAC, 50/60 Hz @ 0.1 Amps

    Alarm Relays (SPDT)

        240V AC at 5 Amps Resistive

        115V AC at 5 Amps General Use

        30V DC at 5 Amps General Use

Enclosure: NEMA 4X

Vacuum Measurement range: 0 to 30 in. Hg.

Low Alarm range: 0 to 15 in. Hg.

High Alarm range: 15 to 30 in. Hg.

Over Pressure: 85 PSI

Delay Timer: 1 to 100 seconds

Analog Output

Voltage: 0-3 VDC

Current: 0-3 mA DC (standard) or 4-20 mA DC with optional mA transmitter board installed

Reset Switch: IP 65 protection

External connectors: IP 68 protection

Indicators

Vacuum: 3 digit digital LED display

Alarms: 3 LED indicators – High, Low and Latch

Polarity: 1 LED

MANUFACTURER

The manufacturer shall be Hydro Instruments, Telford, PA, USA. The automatic control valve shall be Hydro Instruments Model WPOV-110.

3.05 EJECTORS

A. A total of three (3) ejectors shall be supplied. The ejector shall be water operated Venturi nozzle type. The Ejector shall provide the operating vacuum for the chlorination system.

B. The ejector shall incorporate a spring loaded, normally closed check valve to prevent the backflow of water into the chlorine gas equipment. The check valve shall be suitable for backpressures of no less than 140 psi.

C. The ejector check valve shall automatically close upon the loss of vacuum in the ejector.

D. Each ejector shall have body parts machined from solid PVC stock for maximum durability and to avoid cracking.

Injection molded PVC or ABS body parts (which possess insufficient wall thickness), shall not be accepted.

Location	Size	Nozzle/Throat	Feed Rate
Well No.5	¾”	#12	100 PPD
Well No.6	¾”	#12	100 PPD
Post Chlorination	¾”	#12	100 PPD

E. The ejectors shall be installed with a water inlet assemblies consisting of a true union ball valve, y-strainer, pressure gauge and union.

MANUFACTURER

The manufacturer shall be Hydro Instruments, Telford, PA, USA. The ejector shall be Hydro Instruments Model EJO-100-CL2. The water inlet assembly shall be Hydro Instruments Model WIA-PVC-100-BV.

3.06 GAUGES

A. Furnish and install gauges where shown on the plans.

B. All gauges shall be diaphragm protected and suitable for chlorine gas service.

MANUFACTURER

The manufacturer shall be Hydro Instruments, Telford, PA, USA or approved equal.

3.07 MAINTENANCE

A. Furnish operation & maintenance manuals with pertinent parts drawings for all equipment.

B. Where required, provide one (1) set of special tools for complete assembly and/or disassembly of system components for each type specified.

C. Spare Parts – Provide spare parts and maintenance kits in accordance with manufacturer's recommendations for the following items:

1. Vacuum regulators
2. Automatic control valve
3. Gas flow meter
4. Ejector

PART 4 – GAS ALARM

4.01 AUTOMATIC CONTROL VALVE (CHLORINATOR)

A. The gas detector shall be a device including a monitor and up to sixteen electrochemical gas sensors.

B. The gas detector shall include a microprocessor-based monitor operating the electrochemical sensors.

C. The microprocessor-based monitor shall be enclosed in a NEMA 4X (IP66) rated housing. The monitor shall include a two (2) line twenty (20) character, alphanumeric, backlit, liquid crystal, display, one alarm LED, a 90 dB audible alarm, and four front panel push buttons.

D. For every four gas sensors ordered, an additional enclosure will be provided. The single display will be mounted in the main enclosure (sensor enclosure 1-4). All enclosures will be mounted on a wall panel for easy access.

E. A self-diagnostic alarm shall be provided to detect any communication errors for the electrical hardware.

F. Alteration of the gas detector settings shall be password protected.

G. The gas detector monitor shall include an external acknowledge contact input to allow remote acknowledgement of alarms.

H. The gas detector shall provide an RS-485 (Modbus) digital output signal to allow external recording of the gas detector readings and alarms.

I. The gas detector shall provide an isolated 4-20 mA output signal for each sensor.

J. A standard twenty-five (25) feet of shielded signal cable shall be provided to connect each sensor to the monitor. Additional cable lengths may be provided up to 300 ft. as required.

K. The gas detector shall operate from 85 to 264 Volts (50-60 Hz) AC Power.

4.01 ALARM RELAYS

A. The gas detector shall be provided with two selectable common alarm outputs standard. These two common alarm outputs shall be capable of monitoring the following conditions: any sensor low, any sensor high, any sensor signal loss, AC power loss, and low battery.

B. For every four sensors ordered an additional eight relays shall be provided.

C. The two adjustable relays per sensor shall indicate low-level alarm reading (odd relays) and high-level alarm reading (even relays). The low and high level settings shall be adjustable using the password protected keypad/display interface. Each relay may also be programmed to indicate: any sensor low, any sensor high, any signal loss, AC power loss, and low battery.

D. The high-level alarm relay shall be user selected as either latching or non-latching and either failsafe or non-failsafe.

E. The low-level and common alarm relays shall always be non-latching and non-failsafe.

F. Relays shall be dry contacts and rated for a maximum power of 10 A at 250 VAC / 10A at 24 VDC.

4.02 GAS SENSORS

A. All gas sensors will be of the electrochemical type capable of monitoring the specified gas.

B. All gas sensors will operate with a 4-20 mA output loop powered signal.

C. The chlorine gas sensor will have a measurement range of 0.0 to 10.0 ppm and a resolution of 0.1 ppm.

D. The chlorine gas sensors will have a zero drift of less than 0.03 PPM change per year and an accuracy of within +/- 0.2 PPM.

E. The gas sensor response time will allow the reading to reach 90% of scale within 30 seconds or less.

F. The gas sensor recovery time will be such that after exposure to the target gas, the sensor reading will recover to 90% or less within 3 minutes or less.

G. The gas sensors will not require the addition or replacement of electrolyte.

H. Gas sensor and transmitter boards will be housed in a NEMA4X enclosure.

4.03 BATTERY BACKUP

A. The gas alarm will be capable of including an integral battery backup. The integral battery backup will be mounted inside the monitor and enabled or disabled in the password protected setup.

B. The battery backup will be able to power the gas alarm without AC power for at least 12 hours. For units using more than four sensors, one battery will be provided for each set of four sensors.

4.04 TEMPERATURE MONITORING

A. The gas alarm monitor will be capable of monitoring and displaying air temperature with up to two (2) Type K thermocouples.

B. The Type K thermocouple will have ten (10) feet of shielded copper wire provided to connect to the monitor.

C. The monitor will provide two (2) adjustable temperature alarm trip points. One rising alarm for high temperature and one falling alarm for low temperature.

D. One (1) dedicated alarm relay will be provided for high temperature alarm indication. The common alarm relays and gas sensor alarm relays will be programmable to also indicate a high temperature alarm or a low temperature alarm.

4.05 DATA LOGGING

A. The gas alarm will be capable of automatically recording and storing data for: Date, Time, Gas sensor reading and Temperature.

B. The frequency at which data is collected and stored will be adjustable, with a minimum setting of every 5 seconds.

C. Data will be written to and stored on a MicroSDHC memory card. The memory card will be installed and physically accessed from inside the gas alarm monitor without the need for perforations in the enclosure that would compromise its NEMA (IP) rating.

D. Data will be written in a comma separated value format and able to be read by simple text readers and able to be imported into spreadsheet programs.

MANUFACTURER

The manufacturer shall be Hydro Instruments, Telford, PA, USA. The gas alarm shall be Hydro Instruments Model GA-180.

PART 5 – GAS ALARM

5.01 INSTALLATION

A. Install equipment and accessories in accordance with manufacturer's recommendations.

5.02 SERVICES

A. Provide on-site startup, operator training and final equipment adjustment services for a minimum of one day. These services shall be provided by a factory trained and certified technician.

B. Installing contractor must have a minimum of 5 years of experience installing gaseous chlorination systems and provide at least three references.

C. Demolition of existing system(s) and installation of the new chlorination system(s) must be coordinated with the City of Howey. If necessary, the successful bidder / installer shall provide a temporary chlorination system to ensure that the treatment system can provide disinfected potable water to the City without interruption.

END OF SECTION

GUARDIAN EQUIPMENT, INC.

330 Hickman Drive, Sanford, FL 32771 PH:888-928-3700 / 407-936-2216 FX:407-936-2217

July 29th, 2025

Ref: Howey-in-the-Hills
Water Treatment Plant No. 3
Project No. 055783.001
Owner/Bid No. RFB2025-007

Ladies & Gentlemen:

We are pleased to offer the following information for your review and consideration.

SECTION 11245 GAS FEEDER

ONE (1) WPOV-110-C-3-100M6-2-0-M Hydro Instruments Wall Panel Omni Valve
½" NPT Inlet/Outlet, Flowmeter & V-Notch Stem, Manual Bypass w/ vacuum monitor, 6" Meter

TWO (2) RM-702-CL2 Hydro Instruments 100 PPD 6" Remote Meter Panel

FOUR (4) SVR-250-CL2-250-0-US-0 Hydro Instruments Automatic Switchover Vacuum Regulator 250 PPD
25' vacuum tubing, 25' vent tubing, 10 lead gasket, vent tube insect screen & cap, small squeeze bottle for ammonia (ammonia not included), filter media, twisted cylinder wrench

THREE (3) Hydro Instruments EJH-250-CL2 Injector

TWO (2) Force Flow Model GR150-2 Electronic Dual Chlor-Scale 150
2-Channel SOLO G2 Digital Indicator w/4-20mA Outputs, PVC Platforms, Chaining Brackets, Electronic Load Cells

TWO (2) Hydro Instruments VM-150 Vacuum Monitor
1/4" ID Tube Barb Vacuum Connection, 0-30" Hg, Adjustable Alarms, 90-265VAC

ONE (1) Lot of Spare Parts
Kit # KT9-250-CL2 Vacuum Regulator Kit – two each
Kit # KTI-250-OV Omni Valve Kit – two each
Kit # MPH-250-CL2 – Meter Kit – two each

SECTION 11345 GAS DETECTION SYSTEM

ONE (1) Hydro Instruments GA-180 Gas Detector, Model GA-180-1-0-0-0-1-2-1-1-1
One Sensor, battery back-up, light and horn, 25' sensor cable, 120V AC input

ONE (1) Hydro Instruments GA-AL-110 Remote alarm light with 90 dB horn (120VAC)

ASSOCIATED ACCESSORIES

TWO (2) 0-160 PSI Pressure Gauges
Stainless steel body, 2-1/2" dial

TWO (2) 0-160 PSI Pressure Gauges with Isolators
½" CPVC Isolator, stainless steel body, 2-1/2" dial

THREE (3) ¾" Thick White Polypropylene Mounting Panels
(2) 4' x 8' (1) 8' x 2'

ONE (1) 3" Wye-Strainer Hayward
Sch 80 PVC, Grey

ONE (1) 2" Wye-Strainer Hayward
Sch 80 PVC, Grey

TWO (2) 1" ASCO Solenoid Valves 8210G004-120V
120 VAC, Normally Closed

THREE (3) Hydro Instruments Injection Quill
1-1/2" corporation stop, 1" Sch 80 PVC quill

ONE (1) 2" Asahi True Union Ball Valve
Sch 80 PVC/Viton

EIGHT (8) ½" Asahi True Union Ball Valves
Sch 80 PVC/Viton

SIXTEEN (16) ½" Asahi True Union Ball Valves
Sch 80 PVC/Viton

ONE (1) Booster Pump Goulds 25GBC10
1" Discharge, 1" Suction, NPT, 1 HP, 1 Phase, 115/230V, 3500 RPM, ODP, 7 Stage, Cast Iron, GB Series

TOTAL FOR ABOVE……$47,000.00

***Guardian Equipment does not offer the Halogen valve shut off system.**

- **Freight has been included.**
- **No sales or use taxes have been included.**
- **Start up and training has been included in the above pricing.**
- **Please allow 4-6 weeks for delivery after receipt of approved submittals.**

Please feel free to contact me if you have any questions.

Sincerely,

Alan Cliburn/Kim Newman

Guardian Equipment Inc.

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
CONSTRUCTION PERMIT

PERMIT #: 35-ST-3167460
APPLICATION #: AP2239982
DATE PAID: _____
FEE PAID: _____
RECEIPT #: _____
DOCUMENT #: PR2295685

CONSTRUCTION PERMIT FOR: OSTDS New

APPLICANT: (TOWN OF HOWEY IN THE HILLS-WTP#3 BLG)

PROPERTY ADDRESS: CR 48 Howey In The Hills, FL 34737

LOT: _____ BLOCK: _____ SUBDIVISION: METES & BOUNDS

PROPERTY ID #: 3018273 [SECTION, TOWNSHIP, RANGE, PARCEL NUMBER] [OR TAX ID NUMBER]

SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATIONS AND STANDARDS OF SECTION 381.0065, F.S., AND CHAPTER 64E-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

T [900] GALLONS / GPD Baffled Septic Tank with filter CAPACITY
A [ ] GALLONS / GPD _____ CAPACITY
N [ ] GALLONS GREASE INTERCEPTOR CAPACITY [MAXIMUM CAPACITY SINGLE TANK:1250 GALLONS]
K [ ] GALLONS DOSING TANK CAPACITY [ ]GALLONS @[ ]DOSES PER 24 HRS #Pumps [ ]

D [250] SQUARE FEET Drainfield SYSTEM
R [ ] SQUARE FEET _____ SYSTEM
A TYPE SYSTEM: [x] STANDARD [ ] FILLED [ ] MOUND [ ] _____
I CONFIGURATION: [x] TRENCH [ ] BED [ ] _____
N
F LOCATION OF BENCHMARK: FINISHED FLOOR OF BLG (ELEV. 137.64' NAVD)
I ELEVATION OF PROPOSED SYSTEM SITE [43.00] [INCHES / FT] [ABOVE / BELOW] BENCHMARK/REFERENCE POINT
E BOTTOM OF DRAINFIELD TO BE [73.00] [INCHES / FT] [ABOVE / BELOW] BENCHMARK/REFERENCE POINT
L
D FILL REQUIRED: [0.00] INCHES EXCAVATION REQUIRED: [ ] INCHES

O
T
H
E
R

SPECIFICATIONS BY: John Charles Katsantonis TITLE: Owner

APPROVED BY: Steven Bunkley TITLE: Environmental Specialist I Lake CHD

DATE ISSUED: 07/28/2025 EXPIRATION DATE: 01/28/2027

DEP 4015, 06-21-2022 (Obsoletes previous editions which may not be used)
Incorporated 62-6.004, FAC

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM (OSTDS)

PERMIT NO. _____
DATE PAID: _____
FEE PAID: _____
RECEIPT #: _____

APPLICATION FOR CONSTRUCTION PERMIT

APPLICATION FOR:
(x) New System [ ] Existing System [ ] Holding Tank [ ] Innovative
[ ] Repair [ ] Abandonment [ ] Temporary [ ] _____

APPLICANT: Town of Howey in the Hills - WTP #3 blg EMAIL: jkenvironmental@gmail.com

AGENT: JK ENVIRONMENTAL SERVICES, LLC TELEPHONE: 352-406-6879

MAILING ADDRESS: PO BOX 2107, MINNEOLA, FL 34755

==========

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.

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PROPERTY INFORMATION OSTDS REMEDIATION PLAN? [Y / (N)]

LOT: N/A BLOCK: N/A SUBDIVISION: METES & BOUNDS PLATTED: N/A

PROPERTY ID #: 3018273 ZONING: A I/M OR EQUIVALENT: [Y / (N)]

PROPERTY SIZE: 3.23 ACRES WATER SUPPLY: [ ] PRIVATE PUBLIC [ ]<=2000GPD [x]>2000GPD

IS SEWER AVAILABLE AS PER 381.0065, FS? [Y / (N)] DISTANCE TO SEWER: >500 FT

PROPERTY ADDRESS: COUNTY ROAD 48, HOWEY IN THE HILLS, FL 34737

DIRECTIONS TO PROPERTY: -SEE MAP-

BUILDING INFORMATION [ ] RESIDENTIAL (x) COMMERCIAL

Unit No.	Type of Establishment	No. of Bedrooms	Building Area Sqft	Commercial/Institutional System Design Table I, Chapter 62-6, FAC
1	Proposed water	N/A	3,814	-This is a building housing the water
2	treatment plant blg			treatment plant no. 3 for the town, including
3				-Includes 198 sf office (30 gpd) or max.4
4				employees (60 gpd). Therefore use min.200 gpd for system sizing (62-6fac)

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

SIGNATURE: _____ DATE: 6/15/25

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM

PERMIT NO. _____

SITE EVALUATION AND SYSTEM SPECIFICATIONS

APPLICANT: Town of Howey in the Hills - WTP #3 big AGENT: JK ENVIRONMENTAL SERVICES, LLC

LOT: N/A BLOCK: N/A SUBDIVISION: METES & BOUNDS

PROPERTY ID #: 3018273 [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: [×] YES [ ] NO NET USABLE AREA AVAILABLE: 3.23 ACRES
TOTAL ESTIMATED SEWAGE FLOW: 200 (MIN. PER 62-6 FAC) GALLONS PER DAY [TABLE I / OTHER]
AUTHORIZED SEWAGE FLOW: 8,075 GALLONS PER DAY [1500 GPD/ACRE OR 2500 GPD/ACRE]
UNOBSTRUCTED AREA AVAILABLE: >800 SQFT UNOBSTRUCTED AREA REQUIRED: 350 SQFT

BENCHMARK/REFERENCE POINT LOCATION: FINISHED FLOOR OF BLG (ELEV. 137.64' NAVD)
ELEVATION OF PROPOSED SYSTEM SITE IS 43 [INCHES/FT] [ABOVE/BELOW] [BENCHMARK/REFERENCE POINT

THE MINIMUM SETBACK WHICH CAN BE MAINTAINED FROM THE PROPOSED SYSTEM TO THE FOLLOWING FEATURES
SURFACE WATER: N/A FT DITCHES/SWALES: 15+ FT NORMALLY WET? [ ] YES [×] NO
WELLS: PUBLIC: 200+ FT LIMITED USE: N/A FT PRIVATE: N/A FT NON-POTABLE: N/A FT
BUILDING FOUNDATIONS: 5+ FT PROPERTY LINES: 10+ FT POTABLE WATER LINES: 20+ FT

SITE SUBJECT TO FREQUENT FLOODING: [ ] YES [×] NO 10 YEAR FLOODING? [ ] YES [×] NO
10 YEAR FLOOD ELEVATION FOR SITE: N/A FT MSL/NGVD SITE ELEVATION: N/A FT MSL/NGVD

SOIL PROFILE INFORMATION SITE 1

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 4/1	SAND	0 TO 3
10YR 5/4	SAND	3 TO 8
10YR 6/6	SAND	8 TO 72
		TO
		TO
		TO
		TO
		TO
		TO

USDA SOIL SERIES: 8-CANDLER SAND, 0-5% SLOPES

SOIL PROFILE INFORMATION SITE 2

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1	SAND	0 TO 3
10YR 3/2	SAND	3 TO 8
10YR 6/6	SAND	8 TO 72
		TO
		TO
		TO
		TO
		TO
		TO

USDA SOIL SERIES: 8-CANDLER SAND, 0-5% SLOPES

OBSERVED WATER TABLE: >72 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 [×] NO WSWT INDICATOR: [ ] YES [×] NO DEPTH: N/A INCHES

SOIL TEXTURE/LOADING RATE FOR SYSTEM SIZING: 0.80 (SAND) DEPTH OF EXCAVATION: N/A INCHES
DRAINFIELD CONFIGURATION: [×] TRENCH [ ] BED [ ] OTHER (SPECIFY) _____
REMARKS/ADDITIONAL CRITERIA: NO CONTEMPORARY REDOX FEATURES

SITE EVALUATED BY: JOHN C. KATSANTONIS CEHP# 23-1058 DATE: 6/1/25

AUTHORIZATION LETTER
(Please print)

I TOWN OF HOWEY IN THE HILLS give
(owner of property)

authorization to JK ENVIRONMENTAL SERVICES LLC
(name of agent)
to act on my behalf in all aspects of an application for an Onsite Sewage Treatment & Disposal System .

(OSTDS) for lot N/A Block N/A Unit N/A
Subdivision METES & BOUNDS
Section 23 Township 20 Range 25
Alternate Key # 3946511

Metes & Bounds (Please attach legal description)

Signature of Owner

1/9/2025
Date

If any questions please call (352) 253-6130. This form can be Faxed to (352) 253-6133 or, mailed or hand delivered to:

Lake County Environmental Health
315 W. Main Street
P.O. Box 1305
Tavares, FL 32778

Authorization 10/2005

REVISED 05/14/2007

EHShare/OSTDS Forms/Authorization Letter 2007

Lake County Health Department
Septic System Permit Application Addendum

Any features marked "Yes" below must be indicated on the site plan. Failure to indicate such features will cause your application to be delayed. For "new" or "existing evaluations" the site plan MUST be to scale. All site plans must show all property dimensions.

1. Are there any public wells within 200' of your property line? Yes__ No✓
2. Are there any EXISTING OR PROPOSED wells on your property? Yes✓ No__
3. Are there any neighboring wells within 75' of your property line? Yes__ No✓
4. Are there any EXISTING OR PROPOSED septic systems on your property? Yes✓ No__
5. Are there any existing NEIGHBORING septic systems within 75' of your property? Yes__ No✓
6. Are there bodies of water on or within 100' of your property line? Included are any lakes, streams, canals or standing water bodies. Yes__ No✓
7. Are there any drainage features on or within 100' of your property? Included are any ditches, swales or water retention areas. Yes✓ No__
8. Are there any easements or right-of-ways that are on or abut your property? Yes✓ No__
9. Are there any EXISTING OR PROPOSED driveways, sidewalks, pools or other impervious areas on your property? Yes✓ No__
10. Is there any slope on your property? Yes✓ No__
    What is the slope? 1-3 % (eg 1' fall in 100' is 1% slope)
11. Is the property served by public water? If so, mark the location of the water meter and service line into the house. Yes✓ No__ (PUBLIC WELL)

PROPERTY RECORD CARD

General Information

Name:	TOWN OF HOWEY IN THE HILLS	**Alternate Key:**	3946511
Mailing Address:	PO BOX 128 HOWEY IN THE HILLS, FL 34737-0128 *Update Mailing Address*	**Parcel Number:**	23-20-25-0004-000-01400
		Millage Group and City:	000H Howey in the Hills
		2024 Total Certified Millage Rate:	20.5764
		Trash/Recycling/Water/Info:	*My Public Services Map*
Property Location:	COUNTY ROAD 48 HOWEY IN THE HILLS FL, 34737	**Property Name:**	-- *Submit Property Name*
		School Information:	*School Locator & Bus Stop Map* *School Boundary Maps*

Property Description: FROM THE SOUTHWEST CORNER OF THE SOUTHWEST 1/4 OF SECTION 23 TOWNSHIP 20 SOUTH RANGE 25 EAST RUN NORTH 00-53-14 EAST 1171.08 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY LINE OF COUNTY ROAD 48, SAID POINT LYING ON A CURVE CONCAVE NORTHEASTERLY HAVING A RADIUS OF 5679.58 FEET AND A CHORD BEARING AND DISTANCE OF SOUTH 69-35-43 EAST 1186.12 FEET, THENCE ALONG THE ARC OF SAID CURVE TO THE LEFT AND SAID NORTHERLY RIGHT OF WAY LINE 1188.29 FEET, SOUTH 75-35-20 EAST ALONG SAID NORTHERLY RIGHT OF WAY LINE 1460.31 FEET TO A OINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 2341.83 FEET AND A CHORD BEARING AND DISTANCE OF SOUTH 72-35-58 EAST 223.25 FEET, THENCE ALONG THE ARC OF SAID CURVE TO THE RIGHT AND ALONG SAID NORTHERLY RIGHT OF WAY LINE 223.33 FEET TO THE POINT OF BEGINNING, THENCE LEAVING SAID NORTHERLY RIGHT OF WAY LINE NORTH 15-36-38 EAST 52.62 FEET, NORTH 75-08-12 EAST 258.80 FEET, NORTH 75-51-45 EAST 298.35 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE NORTHWESTERLY HAVING A RADIUS OF 133.42 FEET AND A CHORD BEARING AND DISTANCE OF NORTH 62-15-27 EAST 62.77 FEET, THENCE ALONG THE ARC OF SAID CURVE TO THE LEFT, A DISTANCE OF 63.36 FEET, THENCE SOUTH 41-20-52 EAST 270.88 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY LINE OF STATE ROAD 19, THENCE SOUTH 75-06-54 WEST ALONG SAID NORTHERLY RIGHT OF WAY LINE 531.94 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY LINE OF COUNTY ROAD 48 AND A POINT ON A CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 2341.83 FEET AND A CHORD BEARING AND DISTANCE OF NORTH 66-12-04 WEST 299.49 FEET, THENCE ALONG THE ARC OF SAID CURVE TO THE LEFT AND ALONG SAID NORTHERLY RIGHT OF WAY LINE 299.69 FEET TO THE POINT OF BEGINNING ORB 6068 PG 2222

Land Data

Line	Land Use	Frontage	Depth	Notes	No. Units	Type	Class Value	Land Value

SEPTIC SITE PLAN FOR
Town of Howey WTP #3

1"=50'

6/15/2025

200 FT WELL SETBACK

200 FT WELL SETBACK

PROPOSED BLG

VACANT

MIN. 900 GAL SEPTIC TANK

MIN. 334 SF BED DRAINFIELD

TOP OF BANK
OF EROSION
WASHOUT AREA

MONITORING
WELL NO. UFA-Obs-1

MONITORING
WELL NO. SA-Obs-2

PROPOSED WELLS

SB2

SB1

OSTDS BM

DRY WRA

EDGE OF PAVEMENT

CENTERLINE OF ROAD

SIGN "SPEED LIMIT 40"

COUNTY ROAD 48 (100'

8" WATER LINE

EYEWASH STATION

TANK