ONSITE SEWAGE PROGRAM ACCELERATED CERTIFICATION TRAINING

Florida HEALTH

ONSITE SYSTEM CONSTRUCTION PERMITS AND INSPECTIONS (MASTER CONTRACTOR PART III)

Day 4 – Thursday 8:00 AM-4:00 PM (6 CEUs)

Objective:

To give a clear understanding of the permitting and inspection process for Onsite Sewage Treatment and Disposal Systems as provided for in 64E-6, FAC.

8:00 – 8:15

Welcome, Introduction and Course Overview

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Division of Disease Control and Health Protection
Bureau of Environmental Health
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Bart Harriss
Florida Department of Health
Division of Disease Control and Health Protection
Bureau of Environmental Health
Onsite Sewage Programs
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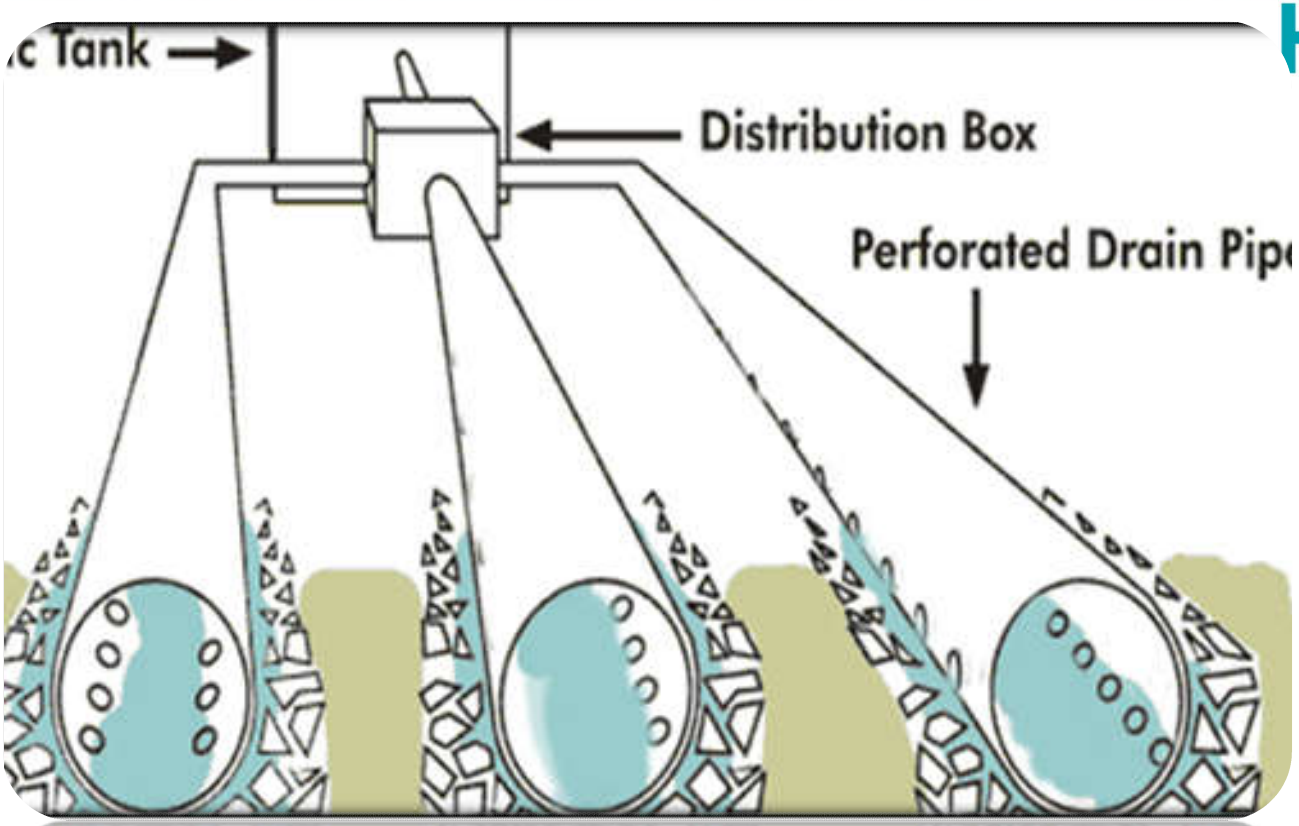


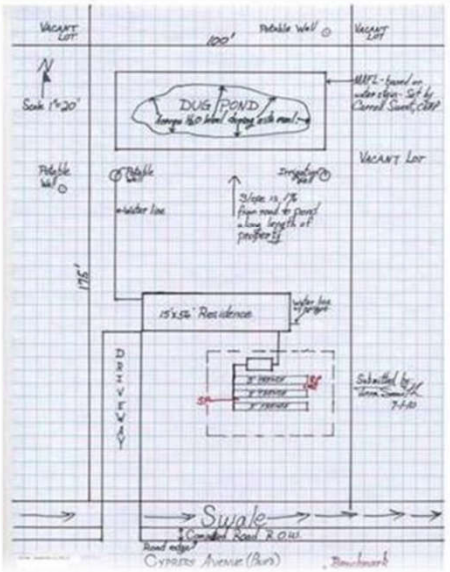
A - 8:15 – 10:15

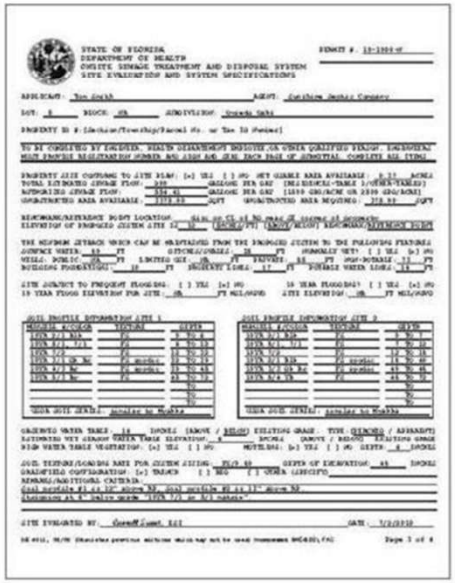
Construction Permits for Conventional Systems

Items Required for Permit Writing

- Completion of a New System Construction Permit (DH4016pg1) for a conventional system requires the following documents:
  - Application (DH4015pg1).
  - Site Plan (DH4015pg2).
  - Site Evaluation (DH4015pg3).
  - Floor Plan
  - (64E-6.004(3)(b))

Items Required for Permit Writing





- These are used to determine:
  - Tank Sizes.
  - Drainfield sizes.
  - Drainfield elevation.

On Form DH4016pg1 (System Construction Permit)

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

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

CONSTRUCTION PERMIT FOR:
[ ] New System [ ] Existing System [ ] Holding Tank [ ] Innovative
[ ] Repair [ ] Abandonment [ ] Temporary [ ] _____

APPLICANT: _____

PROPERTY ADDRESS: _____

LOT: _____ BLOCK: _____ SUBDIVISION: _____
[SECTION, TOWNSHIP, RANGE, PARCEL NUMBER]
PROPERTY ID #: _____ [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 [ ] GALLONS / GPD SEPTIC TANK/AEROBIC UNIT CAPACITY MULTI-CHAMBERED/IN-SERIES [ ]
A [ ] GALLONS / GPD _____ CAPACITY MULTI-CHAMBERED/IN-SERIES [ ]
N [ ] GALLONS GREASE INTERCEPTOR CAPACITY [MAXIMUM CAPACITY SINGLE TANK: 1250 GALLONS]
K [ ] GALLONS DOSING TANK CAPACITY [ ] GALLONS @ [ ] DOSES PER 24 HRS # PUMPS [ ]

D [ ] SQUARE FEET PRIMARY DRAINFIELD SYSTEM
R [ ] SQUARE FEET _____ SYSTEM
A TYPE SYSTEM: [ ] STANDARD [ ] FILLED [ ] MOUND [ ] _____
I CONFIGURATION: [ ] TRENCH [ ] BED [ ] _____
N
F LOCATION OF BENCHMARK: _____
I ELEVATION OF PROPOSED SYSTEM SITE [ ] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
E BOTTOM OF DRAINFIELD TO BE [ ] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
L
D FILL REQUIRED: [ ] INCHES EXCAVATION REQUIRED: [ ] INCHES

O _____
T _____
H _____
E _____
R _____

SPECIFICATIONS BY: _____ TITLE: _____

APPROVED BY: _____ TITLE: _____ _____ CHD

DATE ISSUED: _____ EXPIRATION DATE: _____

DH 4016, 08/09 (Obsoletes all previous editions which may not be used)
Incorporated: 64E-6.003, FAC Page 1 of 3

Items Determined **Location on Permit**

Conventional Systems

- Tank size determinations and permitting
- Drainfield size determinations and permitting
- Drainfield Elevation Permitting
- Fill, Mound and Excavation Permitting
- Maintenance Requirements

- Tank Size

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

PERMIT NO. _____
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CONSTRUCTION PERMIT FOR:
[ ] New System [ ] Existing System [ ] Holding Tank [ ] Innovative
[ ] Repair [ ] Abandonment [ ] Temporary [ ] _____

APPLICANT: _____

PROPERTY ADDRESS: _____

LOT: _____ BLOCK: _____ SUBDIVISION: _____
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D [ ] SQUARE FEET PRIMARY DRAINFIELD SYSTEM
R [ ] SQUARE FEET _____ SYSTEM
A TYPE SYSTEM: [ ] STANDARD [ ] FILLED [ ] MOUND [ ] _____
I CONFIGURATION: [ ] TRENCH [ ] BED [ ] _____
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F LOCATION OF BENCHMARK: _____
I ELEVATION OF PROPOSED SYSTEM SITE [ ] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
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L
D FILL REQUIRED: [ ] INCHES EXCAVATION REQUIRED: [ ] INCHES

O _____
T _____
H _____
E _____
R _____

SPECIFICATIONS BY: _____ TITLE: _____

APPROVED BY: _____ TITLE: _____ _____ CHD

DATE ISSUED: _____ EXPIRATION DATE: _____

DH 4016, 08/09 (Obsoletes all previous editions which may not be used)
Incorporated: 64E-6.003, FAC

Tank size determinations for conventional systems:

- Tank sizes for conventional systems are determined using:
  - 64E-6.008(2-4).
  - 64E-6.013(2 and 8).
  - The Site Evaluation Form (DH4015 pg.3).
  - Table II, 64E-6.008, F.A.C.

(2) Onsite wastewater treatment receptacle design requirements. The following details shall be incorporated into the design:

(a) Septic tanks and graywater tanks shall have multiple compartments, or single compartment tanks shall be placed in series to achieve the required effective capacity. Grease interceptors, laundry tanks, pump tanks, aerobic treatment unit tanks and retention tanks shall be either multi-compartment or single compartment tanks. All receptacle stiffening members such as ribs shall be a homogeneous integral part of the structure. When slide-in type compartment walls are proposed, the structural testing for such tanks shall be conducted without the slide-in wall in place. There shall be a maximum of two horizontal seams between the topside of the bottom of the receptacle and the underside of the lid. There shall be no vertical seams. Except as noted in this paragraph, the first chamber of a dual compartment septic or graywater tank or the first tank of single compartment tanks in series shall have a minimum effective capacity of at least 2/3 of the total required effective capacity. The second single compartment tank or chamber of a multi-compartment tank shall have a minimum effective capacity of at least 1/3 of the total required effective capacity. The combined effective capacities of the first and second chambers or the first and second single-compartment tanks shall equal or exceed the total required effective capacity. Systems with daily flows in excess of 1500 gallons per day may utilize two tanks to achieve the total required effective capacity, provided that the first tank shall provide no less than 1/2 of the total required effective capacity. The second tank shall provide no less than 1/5 of the total required effective capacity and the total effective capacities of the two tanks combined shall be no less than the total required effective capacity.

(b) The liquid depth of compartments for septic tanks and grease interceptors shall be at least 40 inches. The liquid depth of compartments for graywater tanks, laundry interceptors and pump tanks shall be at least 30 inches. Liquid depths greater than 84 inches shall not be considered in determining the effective capacity.

(c) A minimum free board or airspace of 15 percent by volume of the effective capacity of all blackwater, graywater and laundry tanks shall be provided. The volume of foam above the liquid level line cast as an integral part of the tank may be included as free board or airspace.

(d) The inlet invert of septic tanks, graywater tanks and laundry tanks shall enter the tank 3 to 5 inches above the liquid level of the tank. A vented inlet tee, vented sweep or a baffle may be provided at the discretion of the manufacturer to divert the incoming sewage. The inlet device, if utilized, shall have a minimum diameter of 4 inches and shall not extend below the liquid surface more than 35 percent of the liquid depth.

(e) In septic tanks, graywater tanks and laundry tanks, a minimum 4 inch diameter vented outlet tee, sweep or baffle shall extend below the liquid level of the tank so that the invert level of the outlet device is a distance not less than 30 percent nor greater than 40 percent of the liquid depth. The outlet device shall extend at least 4 inches above the liquid level. The submerged intake orifice of any outlet fixture not incorporating an approved outlet filter device shall be provided with an approved solids deflection device to outlaw, by a minimum of 90 percent, the intake area of the outlet fixture exposed to the vertical rise and fall of solid particles within the tank. Turning the intake orifice of an outlet tee or sweep 90 degrees from the vertical will satisfy the solids deflection device requirement.

(f) The inlet and outlet devices shall be located at opposite ends of the receptacle so as to be separated by the maximum distance practical and shall be in accordance with ASTM C 923-98, Standard Specification for Resilient Connectors Between Reinforced Concrete Manhole Structures, Pipes, and Laterals, herein incorporated by reference. The load practice noted in paragraph 7.1.1 of ASTM C 923-98 shall be reduced from 20 feet to 10 feet. Inlets and outlets on the sides of any treatment receptacle must be located no more than 12 inches from the wall of the receptacle.

(g) Compartment walls shall be designed to withstand the stresses induced by pumping out either of the compartments. There shall be no relief holes. However, the compartment walls may be inserted in grooves without grouting, filleting or otherwise permanently attaching in place, unless such attachment is required for proving structural integrity of either the receptacle or compartment wall.

(h) Sewage flow between the first and second chamber of a multi-chamber receptacle shall interconnect utilizing either a minimum 4 inch diameter hole or equivalent slot slot in the wall or with a minimum 4 inch diameter vented and inverted U-fitting or a tee. Receptacles in series shall interconnect utilizing a minimum 4 inch diameter vented, inverted U-fitting or a tee. The outlet device or slot shall extend below the liquid level of the receptacle so that the invert level is located not less than 30 percent nor greater than 40 percent of the liquid depth.

(i) Joints of receptacles, including mid-seams, risers, and lids shall be sealed using a bonding compound that meets ASTM C 990-98, Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections using Preformed Flexible Joint Sealants, herein incorporated by reference.

(j) The State Health Office's designated approval number for the receptacle, and the effective capacity of the receptacle in gallons shall be cast or stamped into the wall or permanently stenciled or decaled onto the wall at the inlet end, to begin within 6 inches of the top of the wall. All identifying marks shall be inscribed or affixed at the point of manufacture only. All information supplied in the legend shall be provided with a minimum of two inch high lettering.

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(k) Each compartment shall have access using manholes, with each manhole having a minimum area of 225 square inches. Manholes shall be located so as to allow access to the inlet and outlet devices. A minimum 6-inch diameter opening shall be placed at the inlet and outlet ends of the lid if a minimum 225 square inch access port is placed in the middle of the lid. The access manhole over the inlet and outlet shall extend to within 8 inches of finished grade. If a riser is used, and if the riser access lid opens directly to the receptacle interior, joints around the riser and receptacle shall be sealed and made watertight as specified in paragraph 64E-6.013(2)(i), F.A.C., to prohibit intrusion of ground water into the receptacle. For multi-compartment receptacles or receptacles in series, manholes shall extend to within 8 inches of finished grade over the first compartment inlet and the last compartment outlet. An appropriate mechanism shall be provided to make access manholes vandal, tamper, and child resistant. Acceptable protection of openings shall consist of one or more of the following methods as specified by the manufacturer:

1. A padlock.
2. A twist lock cover requiring special tools for removal.
3. Covers weighing 50 pounds or more, net weight.
4. A hinge and hasp mechanism which uses stainless steel or other corrosion resistant fasteners to fasten the hinge and hasp to the lid and receptacle for fiberglass, metal or plastic lids.

(l) Receptacle designs that specify a monolithic compartment wall from the bottom of the receptacle up to the invert of the pass-through orifice and a drop-in section for the upper portion of the wall shall be approved for both single and multi-compartment use.

(m) Treatment receptacles shall have a one-piece lid or a lid with a maximum of three sections. All lids shall be designed by Licensed Engineer in accordance with paragraphs 64E-6.013(1)(n) and (o), F.A.C., and approved by the Department.

(2) Minimum effective septic tank capacity and total dosing tank capacity shall be determined from Table II. However, where multiple family dwelling units are jointly connected to a septic tank system, minimum effective septic tank capacities specified in the table shall be increased 75 gallons for each dwelling unit connected to the system. With the exception noted in paragraph 64E-6.013(2)(n), F.A.C., all septic tanks shall be multiple chambered or shall be placed in series to achieve the required effective capacity. The use of an approved outlet filter device shall be required. Outlet filters shall be installed within or following the last septic tank or septic tank compartment before distribution to the drainfield. The outlet filter device requirement includes blackwater tanks, but does not include graywater tanks or grease interceptors or laundry tanks. Outlet filter devices shall be placed to allow accessibility for routine maintenance. Utilization and sizing of outlet filter devices shall be in accordance with the manufacturers' recommendations. The approved outlet filter device shall be installed in accordance with the manufacturers' recommendations. The Bureau of Onsite Sewage Programs shall approve outlet filter devices per the department's Policy on Approval Standards For Onsite Sewage Treatment And Disposal Systems Outlet Filter Devices, November 2008, which is herein incorporated by reference.

TABLE II
SEPTIC TANK AND PUMP TANK CAPACITY

AVERAGE SEWAGE FLOW GALLONS/DAY	SEPTIC TANK MINIMUM EFFECTIVE CAPACITY GALLONS	PUMP TANK MINIMUM TOTAL CAPACITY GALLONS	
		Residential	Commercial
0-200	900	150	225
201-300	900	225	375
301-400	1050	300	450
401-500	1200	375	600
501-600	1350	450	600
601-700	1500	525	750
701-800	1650	600	900
801-1000	1900	750	1050
1001-1250	2200	900	1200
1251-1750	2700	1350	1800

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1751-2500	3200	1650	2700
2501-3000	3700	1900	3000
3001-3500	4300	2200	3000
3501-4000	4800	2700	3000
4001-4500	5300	2700	3000
4501-5000	5800	3000	3000

(3) Where a separate graywater tank and drainfield system is used, the minimum effective capacity of the graywater tank shall be 250 gallons with such system receiving not more than 75 gallons of flow per day. For graywater systems receiving flows greater than 75 gallons per day, minimum effective tank capacity shall be based on the average daily sewage flow plus 200 gallons for dosing storage. Design requirements for graywater tanks are described in subsection 64E-6.013(5), F.A.C. Where separate graywater and blackwater systems are utilized, the size of the blackwater system can be reduced, but in no case shall the blackwater system be reduced by more than 25 percent. However, the minimum capacity for septic tanks disposing of blackwater shall be 900 gallons.

(4) Where building codes allow separation of discharge pipes of the residence to separate stubouts and where lot sizes and setbacks allow system construction, the applicant may request a separate laundry waste tank and drainfield system. Where an aerobic treatment unit is used, all blackwater, graywater and laundry waste flows shall be consolidated and treated by the aerobic treatment unit. Where a residential laundry waste tank and drainfield system is used:

(a) The minimum laundry waste trench drainfield absorption area for slightly limited soil shall be 75 square feet for a one or two bedroom residence with an additional 25 square feet for each additional bedroom. If an absorption bed drainfield is used the minimum drainfield area shall be 100 square feet with an additional 50 square feet for each additional bedroom over two bedrooms. The DOH county health department shall require additional drainfield area based on moderately limited soils and other site specific conditions, which shall not exceed twice the required amount of drainfield for a slightly limited soil.

(b) The laundry waste interceptor shall meet requirements of subsections 64E-6.013(2) and (8), F.A.C.

(c) The drainfield absorption area serving the remaining wastewater fixtures in the residence shall be reduced by 25 percent.

(8) Laundry waste interceptor – when a separate system is installed to accept effluent from a single home washing machine only, the retention tank or interceptor for such system shall meet the following minimum standards:

(a) The minimum effective capacity shall be 225 gallons for establishments with an estimated sewage flow of up to 300 gallons per day and shall be increased by 50 gallons for every 100 gallons of additional daily sewage flow.

(b) The interceptor shall be provided with a vented inlet tee, vented sweep, or a baffle.

(c) The interceptor shall not receive waste flow from kitchen fixtures or be used as a grease trap.

(9) Pump tanks and pumps – when used as part of an onsite sewage treatment and disposal system, the following requirements shall apply to all pump tanks manufactured for use in Florida unless specifically exempted by other provisions of these rules:

(a) Pump tanks shall have a minimum effective capacity measured from the bottom of the tank to the top of the tank in accordance with Table II. At least 80% of the required effective capacity shall be contained below the invert of the inlet. Pump levels shall be set as low as practical to preserve as much reserve capacity as possible in the event of pump failure.

(b) Construction standards for pump tanks shall be the same as for treatment receptacles, except that single compartment tanks are allowed.

(c) The electrical conduit and effluent dosing pipe shall exit the dosing chamber:

1. Through the tank outlet using plumbing fittings and reducers to produce a watertight seal.

2. When risers are used, the electrical line and the effluent dosing pipe may penetrate the riser wall provided the penetration is above the wet season high water table elevation and there is a soil-tight seal around the penetrations. When the top of the dosing tank is placed more then 8 inches below the finished grade, risers shall be used to provide access within 8 inches of the finished grade. Where risers are used, risers shall be attached to the tank in accordance with paragraph 64E-6.013(2)(i), F.A.C. The unused tank outlet shall be sealed with a length of capped PVC pipe installed in accordance with paragraph 64E-6.013(2)(f), F.A.C., or

64E-6.008 (2-4), 64E-6.013(2), 64E-6.013(8)

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
SITE EVALUATION AND SYSTEM SPECIFICATIONS

PERMIT #. 10-1000-N

APPLICANT: Tom Smith AGENT: Sunshine Septic Company

LOT: 5 BLOCK: NA SUBDIVISION: Oviedo Oaks

PROPERTY ID #:[Section/Township/Parcel No. or Tax ID Number]

TO BE COMPLETED BY ENGINEER, HEALTH DEPARTEMENT EMPLOYEE,OR OTHER QUALIFIED PERSON. ENGINNEERS 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: 0.37 ACRES
TOTAL ESTIMATED SEWAGE FLOW: 200 GALLONS PER DAY [RESIDENCES-TABLE 1/OTHER-TABLE2]
AUTHORIZED SEWAGE FLOW: 554.41 GALLONS PER DAY [1500 GPD/ACRE OR 2500 GPD/ACRE]
UNOBSTRUCTED AREA AVAILABLE: 3375.00 SQFT UNOBSTRUCTED AREA REQUIRED: 375.00 SQFT

BENCHMARK/REFERENCE POINT LOCATION: disc on CL of RD near SE corner of property
ELEVATION OF PROPOSED SYSTEM SITE IS 12 [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT

THE MINIMUM SETBACK WHICH CAN BE MAINTAINED FROM THE PROPOSED SYSTEM TO THE FOLLOWING FEATURES
SURFACE WATER: 80 FT DITCHES/SWALES: 35 FT NORMALLY WET? [ ] YES [x] NO
WELLS: PUBLIC: NA FT LIMITED USE: NA FT PRIVATE: 85 FT NON-POTABLE: 73 FT
BUILDING FOUNDATIONS: 10 FT PROPERTY LINES: 17 FT POTABLE WATER LINES: 14 FT

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

SOIL PROFILE INFORMATION SITE 1

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 6
10YR 5/1, 7/1	FS	6 TO 12
10YR 7/2	FS	12 TO 32
10YR 3/1 Dk Br	FS spodic	32 TO 39
10YR 4/3 Br	FS spodic	39 TO 45
10YR 5/3 Br	FS	45 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

SOIL PROFILE INFORMATION SITE 2

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 7
10YR 5/1, 7/1	FS	7 TO 12
10YR 7/2	FS	12 TO 18
10YR 2/1 Blk	FS spodic	18 TO 40
10YR 3/3 Dk Br	FS spodic	40 TO 48
10YR 5/4 YB	FS	48 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

OBSERVED WATER TABLE: 16 INCHES [ABOVE / BELOW] EXISTING GRADE. TYPE:[PERCHED / APPARENT]
ESTIMATED WET SEASON WATER TABLE ELEVATION: 6 INCHES [ABOVE / BELOW] EXISTING GRADE
HIGH WATER TABLE VEGETATION: [x] YES [ ] NO MOTTLING: [x] YES [ ] NO DEPTH: 6 INCHES

SOIL TEXTURE/LOADING RATE FOR SYSTEM SIZING: FS/0.80 DEPTH OF EXCAVATION: 48 INCHES
DRAINFIELD CONFIGURATION: [x] TRENCH [ ] BED [ ] OTHER (SPECIFY)
REMARKS/ADDITIONAL CRITERIA:
Soil profile #1 is 12″ above RP, Soil profile #2 is 13″ above RP.
Stripping at 6″ below grade "10YR 7/1 in 5/1 matrix".

SITE EVALUATED BY: Carroll Sweet, ESI DATE: 7/2/2010

DH 4015, 08/09 (Obsoletes previous editions which may not be used) Incorporated: 64E-6.001, FAC Page 3 of 4

DH4015pg3

Site Evaluation Form

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
SITE EVALUATION AND SYSTEM SPECIFICATIONS

PERMIT #. 10-1000-N

APPLICANT: Tom Smith AGENT: Sunshine Septic Company

LOT: 5 BLOCK: NA SUBDIVISION: Oviedo Oaks

PROPERTY ID #:[Section/Township/Parcel No. or Tax ID Number]

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UNOBSTRUCTED AREA AVAILABLE: 3375.00 SQFT UNOBSTRUCTED AREA REQUIRED: 375.00 SQFT

Total Estimated Sewage Flow from form DH4015pg3 (Site Evaluation)

<u>200 Gallons Per Day</u>

- Total estimated sewage flow from the site evaluation form is <u>200 gallons per day</u>.
  - Use Table II [64E-6.008(2)] to determine the minimum required Septic Tank effective capacity.

TABLE II
SEPTIC TANK AND PUMP TANK CAPACITY

AVERAGE SEWAGE FLOW GALLONS/DAY	SEPTIC TANK MINIMUM EFFECTIVE CAPACITY GALLONS	PUMP TANK MINIMUM TOTAL CAPACITY GALLONS	
		Residential	Commercial
0-200	900	150	225
201-300	900	225	375
301-400	1050	300	450
401-500	1200	375	600
501-600	1350	450	600
601-700	1500	525	750

- Find the corresponding sewage flow in Column 1.
- Then look across the row to find the minimum required tank capacity in Column 2.

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801-1000	1900	750	1050
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1251-1750	2700	1350	1900
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2501-3000	3700	1900	3000
3001-3500	4300	2200	3000
3501-4000	4800	2700	3000
4001-4500	5300	2700	3000
4501-5000	5800	3000	3000

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Table II, 64E-6.008(2)

Septic Tank Size Specification:

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

PERMIT NO. 10-1000-N
DATE PAID: 7/1/2010
FEE PAID: _____
RECEIPT #: _____

CONSTRUCTION PERMIT FOR:

[x] New System [ ] Existing System [ ] Holding Tank [ ] Innovative
[ ] Repair [ ] Abandonment [ ] Temporary [ ] _____

APPLICANT: Tom Smith

PROPERTY ADDRESS: 312 Cypress Ave., Geneva, FL 32765

LOT: 5 BLOCK: NA SUBDIVISION: Oviedo Oaks
[SECTION, TOWNSHIP, RANGE, PARCEL NUMBER]
PROPERTY ID #: 293031000782 [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 SEPTIC TANK/AEROBIC UNIT CAPACITY MULTI-CHAMBERED/IN-SERIES [X]
A [ ] GALLONS / GPD _____ CAPACITY MULTI-CHAMBERED/IN-SERIES [ ]
N [ ] GALLONS GREASE INTERCEPTOR CAPACITY [MAXIMUM CAPACITY SINGLE TANK: 1250 GALLONS]
K [ ] GALLONS DOSING TANK CAPACITY [ ] GALLONS @ [ ] DOSES PER 24 HRS # PUMPS [ ]

- Drainfield Size and Configuration

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

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

CONSTRUCTION PERMIT FOR:
[ ] New System [ ] Existing System [ ] Holding Tank [ ] Innovative
[ ] Repair [ ] Abandonment [ ] Temporary [ ] _____

APPLICANT: _____

PROPERTY ADDRESS: _____

LOT: _____ BLOCK: _____ SUBDIVISION: _____
[SECTION, TOWNSHIP, RANGE, PARCEL NUMBER]
PROPERTY ID #: _____ [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 [ ] GALLONS / GPD SEPTIC TANK/AEROBIC UNIT CAPACITY MULTI-CHAMBERED/IN-SERIES [ ]
A [ ] GALLONS / GPD _____ CAPACITY MULTI-CHAMBERED/IN-SERIES [ ]
N [ ] GALLONS GREASE INTERCEPTOR CAPACITY [MAXIMUM CAPACITY SINGLE TANK: 1250 GALLONS]
K [ ] GALLONS DOSING TANK CAPACITY [ ] GALLONS @ [ ] DOSES PER 24 HRS # PUMPS [ ]

D [ ] SQUARE FEET PRIMARY DRAINFIELD SYSTEM
R [ ] SQUARE FEET _____ SYSTEM
A TYPE SYSTEM: [ ] STANDARD [ ] FILLED [ ] MOUND [ ] _____
I CONFIGURATION: [ ] TRENCH [ ] BED [ ] _____
N
F LOCATION OF BENCHMARK: _____
I ELEVATION OF PROPOSED SYSTEM SITE [ ] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
E BOTTOM OF DRAINFIELD TO BE [ ] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
L
D FILL REQUIRED: [ ] INCHES EXCAVATION REQUIRED: [ ] INCHES

O _____
T _____
H _____
E _____
R _____

SPECIFICATIONS BY: _____ TITLE: _____

APPROVED BY: _____ TITLE: _____ _____ CHD

DATE ISSUED: _____ EXPIRATION DATE: _____

DH 4016, 08/09 (Obsoletes all previous editions which may not be used)
Incorporated: 64E-6.003, FAC

Drainfield size and configuration determinations and permitting

- Drainfield size and configuration are determined using:
  - The estimated sewage flow documented on the site evaluation form (DH4015 pg 3).
  - The soil texture documented on the site evaluation form (DH4015 pg 3).
  - The drainfield configuration documented on the site evaluation form (DH4015 pg 3).
  - Table III, 64E-6.008(5).

- DH4015pg3
- Table III, 64E-6.008(5)

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
SITE EVALUATION AND SYSTEM SPECIFICATIONS

PERMIT #. 10-1000-N

APPLICANT: Tom Smith AGENT: Sunshine Septic Company

LOT: 5 BLOCK: NA SUBDIVISION: Oviedo Oaks

PROPERTY ID #:[Section/Township/Parcel No. or Tax ID Number]

TO BE COMPLETED BY ENGINEER, HEALTH DEPARTEMENT EMPLOYEE,OR OTHER QUALIFIED PERSON. ENGINNEERS 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: 0.37 ACRES
TOTAL ESTIMATED SEWAGE FLOW: 200 GALLONS PER DAY [RESIDENCES-TABLE 1/OTHER-TABLE2]
AUTHORIZED SEWAGE FLOW: 554.41 GALLONS PER DAY [1500 GPD/ACRE OR 2500 GPD/ACRE]
UNOBSTRUCTED AREA AVAILABLE: 3375.00 SQFT UNOBSTRUCTED AREA REQUIRED: 375.00 SQFT

BENCHMARK/REFERENCE POINT LOCATION: disc on CL of RD near SE corner of property
ELEVATION OF PROPOSED SYSTEM SITE IS 12 [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT

THE MINIMUM SETBACK WHICH CAN BE MAINTAINED FROM THE PROPOSED SYSTEM TO THE FOLLOWING FEATURES
SURFACE WATER: 80 FT DITCHES/SWALES: 35 FT NORMALLY WET? [ ] YES [x] NO
WELLS: PUBLIC: NA FT LIMITED USE: NA FT PRIVATE: 85 FT NON-POTABLE: 73 FT
BUILDING FOUNDATIONS: 10 FT PROPERTY LINES: 17 FT POTABLE WATER LINES: 14 FT

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

SOIL PROFILE INFORMATION SITE 1

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 6
10YR 5/1, 7/1	FS	6 TO 12
10YR 7/2	FS	12 TO 32
10YR 3/1 Dk Br	FS spodic	32 TO 39
10YR 4/3 Br	FS spodic	39 TO 45
10YR 5/3 Br	FS	45 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

SOIL PROFILE INFORMATION SITE 2

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 7
10YR 5/1, 7/1	FS	7 TO 12
10YR 7/2	FS	12 TO 18
10YR 2/1 Blk	FS spodic	18 TO 40
10YR 3/3 Dk Br	FS spodic	40 TO 48
10YR 5/4 YB	FS	48 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

OBSERVED WATER TABLE: 16 INCHES [ABOVE / BELOW] EXISTING GRADE. TYPE:[PERCHED / APPARENT]
ESTIMATED WET SEASON WATER TABLE ELEVATION: 6 INCHES [ABOVE / BELOW] EXISTING GRADE
HIGH WATER TABLE VEGETATION: [x] YES [ ] NO MOTTLING: [x] YES [ ] NO DEPTH: 6 INCHES

SOIL TEXTURE/LOADING RATE FOR SYSTEM SIZING: FS/0.80 DEPTH OF EXCAVATION: 48 INCHES
DRAINFIELD CONFIGURATION: [x] TRENCH [ ] BED [ ] OTHER (SPECIFY)
REMARKS/ADDITIONAL CRITERIA:
Soil profile #1 is 12" above RP, Soil profile #2 is 13" above RP.
Stripping at 6" below grade "10YR 7/1 in 5/1 matrix".

SITE EVALUATED BY: Carroll Sweet, ESI DATE: 7/2/2010

DH 4015, 08/09 (obsoletes previous editions which may not be used) Incorporated: 64E-6.001, FAC Page 3 of 4

TABLE III
For Sizing of Drainfields Other Than Mounds

U.S. DEPARTMENT OF AGRICULTURE SOIL TEXTURE CLASSIFICATION	SOIL TEXTURE LIMITATION (PERCOLATION RATE)	MAXIMUM SEWAGE LOADING RATE TO TRENCH & BED ABSORPTION SURFACE IN GALLONS PER SQUARE FOOT PER DAY TRENCH	BED
Sand; Coarse Sand not associated with a seasonal water table of less than 48 inches; and Loamy Coarse Sand	Slightly limited (Less than 2 Min/inch)	0.80	0.60
Loamy Sand; Sandy Loam; Coarse Sandy Loam; and Fine Sand	Slightly limited (2-4 min/inch)	0.80	0.60
Loam; Fine Sandy Loam; Silt Loam; Very Fine Sand; Very Fine Sandy Loam; Loamy Fine Sand; Loamy Very Fine Sand; and Sandy Clay Loam	Moderately limited (5-10 min/inch)	0.65	0.35
Clay Loam; Silty Clay Loam; Sandy Clay; Silty Clay; and Silt	Moderately limited (Greater than 15 Min/inch but not exceeding 30 min/inch)	0.35	0.20
Clay; Organic Soils; Hardpan; and Bedrock	Severely limited (Greater than 30 Min/inch)	Unsatisfactory for standard subsurface System	
Coarse Sand with an estimated wet season High water table within 48 inches of the bottom of the proposed drainfield; Gravel or Fractured Rock or Oolitic Limestone	Severely limited (Less than 1 Min/inch and a Water table less than 4 feet below The drainfield)	Unsatisfactory for standard subsurface System	

EFFECTIVE APRIL 28, 2010

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STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
SITE EVALUATION AND SYSTEM SPECIFICATIONS

PERMIT #. 10-1000-N

APPLICANT: Tom Smith AGENT: Sunshine Septic Company

LOT: 5 BLOCK: NA SUBDIVISION: Oviedo Oaks

PROPERTY ID #:[Section/Township/Parcel No. or Tax ID Number]

TO BE COMPLETED BY ENGINEER, HEALTH DEPARTEMENT EMPLOYEE,OR OTHER QUALIFIED PERSON. ENGINNEERS 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: 0.37 ACRES
TOTAL ESTIMATED SEWAGE FLOW: 200 GALLONS PER DAY [RESIDENCES-TABLE 1/OTHER-TABLE2]
AUTHORIZED SEWAGE FLOW: 554.41 GALLONS PER DAY [1500 GPD/ACRE OR 2500 GPD/ACRE]
UNOBSTRUCTED AREA AVAILABLE: 3375.00 SQFT UNOBSTRUCTED AREA REQUIRED: 375.00 SQFT

BENCHMARK/REFERENCE POINT LOCATION: disc on CL of RD near SE corner of property
ELEVATION OF PROPOSED SYSTEM SITE IS 12 [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT

THE MINIMUM SETBACK WHICH CAN BE MAINTAINED FROM THE PROPOSED SYSTEM TO THE FOLLOWING FEATURES
SURFACE WATER: 80 FT DITCHES/SWALES: 35 FT NORMALLY WET? [ ] YES [x] NO
WELLS: PUBLIC: NA FT LIMITED USE: NA FT PRIVATE: 85 FT NON-POTABLE: 73 FT
BUILDING FOUNDATIONS: 10 FT PROPERTY LINES: 17 FT POTABLE WATER LINES: 14 FT

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

SOIL PROFILE INFORMATION SITE 1

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 6
10YR 5/1, 7/1	FS	6 TO 12
10YR 7/2	FS	12 TO 32
10YR 3/1 Dk Br	FS spodic	32 TO 39
10YR 4/3 Br	FS spodic	39 TO 45
10YR 5/3 Br	FS	45 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

SOIL PROFILE INFORMATION SITE 2

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 7
10YR 5/1, 7/1	FS	7 TO 12
10YR 7/2	FS	12 TO 18
10YR 2/1 Blk	FS spodic	18 TO 40
10YR 3/3 Dk Br	FS spodic	40 TO 48
10YR 5/4 YB	FS	48 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

OBSERVED WATER TABLE: 16 INCHES [ABOVE / BELOW] EXISTING GRADE. TYPE:[PERCHED / APPARENT]
ESTIMATED WET SEASON WATER TABLE ELEVATION: 6 INCHES [ABOVE / BELOW] EXISTING GRADE
HIGH WATER TABLE VEGETATION: [x] YES [ ] NO MOTTLING: [x] YES [ ] NO DEPTH: 6 INCHES

SOIL TEXTURE/LOADING RATE FOR SYSTEM SIZING: FS/0.80 DEPTH OF EXCAVATION: 48 INCHES
DRAINFIELD CONFIGURATION: [x] TRENCH [ ] BED [ ] OTHER (SPECIFY)
REMARKS/ADDITIONAL CRITERIA:
Soil profile #1 is 12″ above RP, Soil profile #2 is 13″ above RP.
Stripping at 6″ below grade "10YR 7/1 in 5/1 matrix".

SITE EVALUATED BY: Carroll Sweet, ESI DATE: 7/2/2010

DH 4015, 08/09 (Obsoletes previous editions which may not be used) Incorporated: 64E-6.001, FAC Page 3 of 4

DH4015pg3

Site Evaluation Form

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
SITE EVALUATION AND SYSTEM SPECIFICATIONS

PERMIT #. 10-1000-N

APPLICANT: Tom Smith AGENT: Sunshine Septic Company

LOT: 5 BLOCK: NA SUBDIVISION: Oviedo Oaks

PROPERTY ID #:[Section/Township/Parcel No. or Tax ID Number]

TO BE COMPLETED BY ENGINEER, HEALTH DEPARTEMENT EMPLOYEE,OR OTHER QUALIFIED PERSON. ENGINNEERS 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: 0.37 ACRES
TOTAL ESTIMATED SEWAGE FLOW: 200 GALLONS PER DAY [RESIDENCES-TABLE 1/OTHER-TABLE2]
AUTHORIZED SEWAGE FLOW: 554.41 GALLONS PER DAY [1500 GPD/ACRE OR 2500 GPD/ACRE]
UNOBSTRUCTED AREA AVAILABLE: 3375.00 SQFT UNOBSTRUCTED AREA REQUIRED: 375.00 SQFT

Total Estimated Sewage Flow from form DH4015pg3 (Site Evaluation)

<u>200 Gallons Per Day</u>

SOIL PROFILE INFORMATION SITE 1

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 6
10YR 5/1, 7/1	FS	6 TO 12
10YR 7/2	FS	12 TO 32
10YR 3/1 Dk Br	FS spodic	32 TO 39
10YR 4/3 Br	FS spodic	39 TO 45
10YR 5/3 Br	FS	45 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

SOIL PROFILE INFORMATION SITE 2

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 7
10YR 5/1, 7/1	FS	7 TO 12
10YR 7/2	FS	12 TO 18
10YR 2/1 Blk	FS spodic	18 TO 40
10YR 3/3 Dk Br	FS spodic	40 TO 48
10YR 5/4 YB	FS	48 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

OBSERVED WATER TABLE: 16 INCHES [ABOVE / BELOW] EXISTING GRADE. TYPE: [PERCHED / APPARENT]
ESTIMATED WET SEASON WATER TABLE ELEVATION: 6 INCHES [ABOVE / BELOW] EXISTING GRADE
HIGH WATER TABLE VEGETATION: [x] YES [ ] NO MOTTLING: [x] YES [ ] NO DEPTH: 6 INCHES

SOIL TEXTURE/LOADING RATE FOR SYSTEM SIZING: FS/0.80 DEPTH OF EXCAVATION: 48 INCHES
DRAINFIELD CONFIGURATION: [x] TRENCH [ ] BED [ ] OTHER (SPECIFY)
REMARKS/ADDITIONAL CRITERIA:

Soil Texture/Loading Rate from form DH4015pg3 (Site Evaluation)

<u>Fine Sand/0.80</u>

SOIL PROFILE INFORMATION SITE 1

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 6
10YR 5/1, 7/1	FS	6 TO 12
10YR 7/2	FS	12 TO 32
10YR 3/1 Dk Br	FS spodic	32 TO 39
10YR 4/3 Br	FS spodic	39 TO 45
10YR 5/3 Br	FS	45 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

SOIL PROFILE INFORMATION SITE 2

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 7
10YR 5/1, 7/1	FS	7 TO 12
10YR 7/2	FS	12 TO 18
10YR 2/1 Blk	FS spodic	18 TO 40
10YR 3/3 Dk Br	FS spodic	40 TO 48
10YR 5/4 YB	FS	48 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

OBSERVED WATER TABLE: 16 INCHES [ABOVE / BELOW] EXISTING GRADE. TYPE: [PERCHED / APPARENT]
ESTIMATED WET SEASON WATER TABLE ELEVATION: 6 INCHES [ABOVE / BELOW] EXISTING GRADE
HIGH WATER TABLE VEGETATION: [x] YES [ ] NO MOTTLING: [x] YES [ ] NO DEPTH: 6 INCHES

SOIL TEXTURE/LOADING RATE FOR SYSTEM SIZING: FS/0.80 DEPTH OF EXCAVATION: 48 INCHES
DRAINFIELD CONFIGURATION: [x] TRENCH [ ] BED [ ] OTHER (SPECIFY)
REMARKS/ADDITIONAL CRITERIA:

Drainfield Configuration from form DH4015pg3 (Site Evaluation)

Trench

- The Total Estimated Sewage Flow from form DH4015pg3 is:
  - **200GPD**
- The Soil Texture/Loading Rate from form DH4015pg3 is:
  - **Fine Sand/0.80**
- The Drainfield Configuration from form DH4015pg3 is:
  - **Trench**

To determine the minimum required drainfield size, we divide:

- The Total Estimated Flow: 200gpd
- By the Loading Rate: 0.80 (for trenches in fine sand)

So: 200gpd / 0.80 = 250 square feet of drainfield in trenches required

Drainfield Size and Configuration as entered onto the system construction permit form (DH4016pg1).

```
D [ 250  ] SQUARE FEET PRIMARY DRAINFIELD SYSTEM
R [      ] SQUARE FEET _________________ SYSTEM
A TYPE SYSTEM:    [  ] STANDARD   [  ] FILLED    [ x] MOUND    [  ] _____________________
I CONFIGURATION:  [ x] TRENCH    [  ] BED    [  ] _____________________________________
N
```

The required drainfield size and configuration go into the appropriate section of the system construction permit form.

- Benchmark location and Minimum Required Drainfield Elevation

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

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

CONSTRUCTION PERMIT FOR:
[ ] New System [ ] Existing System [ ] Holding Tank [ ] Innovative
[ ] Repair [ ] Abandonment [ ] Temporary [ ] _____

APPLICANT: _____

PROPERTY ADDRESS: _____

LOT: _____ BLOCK: _____ SUBDIVISION: _____
[SECTION, TOWNSHIP, RANGE, PARCEL NUMBER]
PROPERTY ID #: _____ [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 [ ] GALLONS / GPD SEPTIC TANK/AEROBIC UNIT CAPACITY MULTI-CHAMBERED/IN-SERIES [ ]
A [ ] GALLONS / GPD _____ CAPACITY MULTI-CHAMBERED/IN-SERIES [ ]
N [ ] GALLONS GREASE INTERCEPTOR CAPACITY [MAXIMUM CAPACITY SINGLE TANK: 1250 GALLONS]
K [ ] GALLONS DOSING TANK CAPACITY [ ] GALLONS @ [ ] DOSES PER 24 HRS # PUMPS [ ]

D [ ] SQUARE FEET PRIMARY DRAINFIELD SYSTEM
R [ ] SQUARE FEET _____ SYSTEM
A TYPE SYSTEM: [ ] STANDARD [ ] FILLED [ ] MOUND [ ] _____
I CONFIGURATION: [ ] TRENCH [ ] BED [ ] _____
N
F LOCATION OF BENCHMARK: _____
I ELEVATION OF PROPOSED SYSTEM SITE [ ] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
E BOTTOM OF DRAINFIELD TO BE [ ] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
L
D FILL REQUIRED: [ ] INCHES EXCAVATION REQUIRED: [ ] INCHES

O _____
T _____
H _____
E _____
R _____

SPECIFICATIONS BY: _____ TITLE: _____

APPROVED BY: _____ TITLE: _____ _____ CHD

DATE ISSUED: _____ EXPIRATION DATE: _____

DH 4016, 08/09 (Obsoletes all previous editions which may not be used)
Incorporated: 64E-6.003, FAC

Drainfield Elevation Permitting

- The drainfield elevation and type are determined using:
  - The WSWT documented on the Site Evaluation Form (DH4015pg3).
  - The elevation of the proposed system site documented on the Site Evaluation Form (DH4015pg3).
  - The WSWT separation specified in 64E-6.006(2).

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
SITE EVALUATION AND SYSTEM SPECIFICATIONS

PERMIT #. 10-1000-N

APPLICANT: Tom Smith AGENT: Sunshine Septic Company

LOT: 5 BLOCK: NA SUBDIVISION: Oviedo Oaks

PROPERTY ID #:[Section/Township/Parcel No. or Tax ID Number]

TO BE COMPLETED BY ENGINEER, HEALTH DEPARTEMENT EMPLOYEE,OR OTHER QUALIFIED PERSON. ENGINNEERS 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: 0.37 ACRES
TOTAL ESTIMATED SEWAGE FLOW: 200 GALLONS PER DAY [RESIDENCES-TABLE 1/OTHER-TABLE2]
AUTHORIZED SEWAGE FLOW: 554.41 GALLONS PER DAY [1500 GPD/ACRE OR 2500 GPD/ACRE]
UNOBSTRUCTED AREA AVAILABLE: 3375.00 SQFT UNOBSTRUCTED AREA REQUIRED: 375.00 SQFT

BENCHMARK/REFERENCE POINT LOCATION: disc on CL of RD near SE corner of property
ELEVATION OF PROPOSED SYSTEM SITE IS 12 [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT

THE MINIMUM SETBACK WHICH CAN BE MAINTAINED FROM THE PROPOSED SYSTEM TO THE FOLLOWING FEATURES
SURFACE WATER: 80 FT DITCHES/SWALES: 35 FT NORMALLY WET? [ ] YES [x] NO
WELLS: PUBLIC: NA FT LIMITED USE: NA FT PRIVATE: 85 FT NON-POTABLE: 73 FT
BUILDING FOUNDATIONS: 10 FT PROPERTY LINES: 17 FT POTABLE WATER LINES: 14 FT

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

SOIL PROFILE INFORMATION SITE 1

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 6
10YR 5/1, 7/1	FS	6 TO 12
10YR 7/2	FS	12 TO 32
10YR 3/1 Dk Br	FS spodic	32 TO 39
10YR 4/3 Br	FS spodic	39 TO 45
10YR 5/3 Br	FS	45 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

SOIL PROFILE INFORMATION SITE 2

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 7
10YR 5/1, 7/1	FS	7 TO 12
10YR 7/2	FS	12 TO 18
10YR 2/1 Blk	FS spodic	18 TO 40
10YR 3/3 Dk Br	FS spodic	40 TO 48
10YR 5/4 YB	FS	48 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

OBSERVED WATER TABLE: 16 INCHES [ABOVE / BELOW] EXISTING GRADE. TYPE:[PERCHED / APPARENT]
ESTIMATED WET SEASON WATER TABLE ELEVATION: 6 INCHES [ABOVE / BELOW] EXISTING GRADE
HIGH WATER TABLE VEGETATION: [x] YES [ ] NO MOTTLING: [x] YES [ ] NO DEPTH: 6 INCHES

SOIL TEXTURE/LOADING RATE FOR SYSTEM SIZING: FS/0.80 DEPTH OF EXCAVATION: 48 INCHES
DRAINFIELD CONFIGURATION: [x] TRENCH [ ] BED [ ] OTHER (SPECIFY)
REMARKS/ADDITIONAL CRITERIA:
Soil profile #1 is 12" above RP, Soil profile #2 is 13" above RP.
Stripping at 6" below grade "10YR 7/1 in 5/1 matrix".

SITE EVALUATED BY: *Carroll Sweet*, ESI DATE: 7/2/2010

DH 4015, 08/09 (obsoletes previous editions which may not be used) Incorporated: 64E-6.001, FAC Page 3 of 4

- DH4015pg3
- 64E-6.006(2)

64E-6.006 Site Evaluation Criteria.

Onsite sewage treatment and disposal systems may be utilized where lot sizes are in compliance with requirements of subsection 64E-6.005(7), F.A.C., and all of the following criteria are met:

(1) The effective soil depth throughout the drainfield installation site extends 42 inches or more below the bottom surface of the drainfield. Paragraphs (a), (b) and (c) list soil texture classes with their respective limitation ratings.

(a) Coarse sand not associated with an estimated wet season high water table within 48 inches below the absorption surface, sand, fine sand, loamy coarse sand, coarse sandy loam, loamy sand, and sandy loam are considered to be slightly limited soil materials.

(b) Very fine sand, loamy fine sand, loamy very fine sand, silt loam, silt, loam, fine sandy loam, very fine sandy loam, sandy clay loam, clay loam, silty clay loam, sandy clay and silty clay soil are considered to be moderately limited soil materials and are subject to evaluation with other influencing factors and local conditions.

(c) Clay, bedrock, oolitic limestone, fractured rock, hardpan, organic soil, gravel and coarse sand, when coarse sand is associated with an estimated wet season high water table within 48 inches of the absorption surface are severely limited soil materials. If severely limited soil material can be replaced with slightly limited soil material, see Footnotes 3 and 4 of Table III for minimum requirements. Where limestone is found to be discontinuous along the horizontal plane and is dispersed among slightly or moderately limited soils, the Department Policy for Drainfield Sizing in Areas With Discontinuous Limestone, August 1999, herein incorporated by reference, shall be used.

(2) The water table elevation at the wettest season of the year is at least 24 inches below the bottom surface of the drainfield. In addition, systems shall not be located where the undrained, naturally occurring wet season water table elevation in the area of the proposed system installation is determined to be at or above the elevation of the existing ground surface. However, when sufficient slightly limited fill material is permitted to be placed on the property to construct a properly designed onsite sewage treatment and disposal system, the department shall authorize construction based on the final lot elevation. This provision does not authorize a property owner to fill or modify the site without first obtaining necessary permits for site preparation work from other agencies of government having jurisdiction. The following information shall be used in

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
SITE EVALUATION AND SYSTEM SPECIFICATIONS

PERMIT #. 10-1000-N

APPLICANT: Tom Smith AGENT: Sunshine Septic Company

LOT: 5 BLOCK: NA SUBDIVISION: Oviedo Oaks

PROPERTY ID #:[Section/Township/Parcel No. or Tax ID Number]

TO BE COMPLETED BY ENGINEER, HEALTH DEPARTEMENT EMPLOYEE,OR OTHER QUALIFIED PERSON. ENGINNEERS 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: 0.37 ACRES
TOTAL ESTIMATED SEWAGE FLOW: 200 GALLONS PER DAY [RESIDENCES-TABLE 1/OTHER-TABLE2]
AUTHORIZED SEWAGE FLOW: 554.41 GALLONS PER DAY [1500 GPD/ACRE OR 2500 GPD/ACRE]
UNOBSTRUCTED AREA AVAILABLE: 3375.00 SQFT UNOBSTRUCTED AREA REQUIRED: 375.00 SQFT

BENCHMARK/REFERENCE POINT LOCATION: disc on CL of RD near SE corner of property
ELEVATION OF PROPOSED SYSTEM SITE IS 12 [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT

THE MINIMUM SETBACK WHICH CAN BE MAINTAINED FROM THE PROPOSED SYSTEM TO THE FOLLOWING FEATURES
SURFACE WATER: 80 FT DITCHES/SWALES: 35 FT NORMALLY WET? [ ] YES [x] NO
WELLS: PUBLIC: NA FT LIMITED USE: NA FT PRIVATE: 85 FT NON-POTABLE: 73 FT
BUILDING FOUNDATIONS: 10 FT PROPERTY LINES: 17 FT POTABLE WATER LINES: 14 FT

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

SOIL PROFILE INFORMATION SITE 1

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 6
10YR 5/1, 7/1	FS	6 TO 12
10YR 7/2	FS	12 TO 32
10YR 3/1 Dk Br	FS spodic	32 TO 39
10YR 4/3 Br	FS spodic	39 TO 45
10YR 5/3 Br	FS	45 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

SOIL PROFILE INFORMATION SITE 2

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 7
10YR 5/1, 7/1	FS	7 TO 12
10YR 7/2	FS	12 TO 18
10YR 2/1 Blk	FS spodic	18 TO 40
10YR 3/3 Dk Br	FS spodic	40 TO 48
10YR 5/4 YB	FS	48 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

OBSERVED WATER TABLE: 16 INCHES [ABOVE / BELOW] EXISTING GRADE. TYPE:[PERCHED / APPARENT]
ESTIMATED WET SEASON WATER TABLE ELEVATION: 6 INCHES [ABOVE / BELOW] EXISTING GRADE
HIGH WATER TABLE VEGETATION: [x] YES [ ] NO MOTTLING: [x] YES [ ] NO DEPTH: 6 INCHES

SOIL TEXTURE/LOADING RATE FOR SYSTEM SIZING: FS/0.80 DEPTH OF EXCAVATION: 48 INCHES
DRAINFIELD CONFIGURATION: [x] TRENCH [ ] BED [ ] OTHER (SPECIFY)
REMARKS/ADDITIONAL CRITERIA:
Soil profile #1 is 12″ above RP, Soil profile #2 is 13″ above RP.
Stripping at 6″ below grade "10YR 7/1 in 5/1 matrix".

SITE EVALUATED BY: Carroll Sweet, ESI DATE: 7/2/2010

DH 4015, 08/09 (Obsoletes previous editions which may not be used) Incorporated: 64E-6.001, FAC Page 3 of 4

DH4015pg3

Site Evaluation Form

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
SITE EVALUATION AND SYSTEM SPECIFICATIONS

PERMIT #. 10-1000-N

APPLICANT: Tom Smith AGENT: Sunshine Septic Company

LOT: 5 BLOCK: NA SUBDIVISION: Oviedo Oaks

PROPERTY ID #:[Section/Township/Parcel No. or Tax ID Number]

TO BE COMPLETED BY ENGINEER, HEALTH DEPARTEMENT EMPLOYEE,OR OTHER QUALIFIED PERSON. ENGINNEERS 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: 0.37 ACRES
TOTAL ESTIMATED SEWAGE FLOW: 200 GALLONS PER DAY [RESIDENCES-TABLE 1/OTHER-TABLE2]
AUTHORIZED SEWAGE FLOW: 554.41 GALLONS PER DAY [1500 GPD/ACRE OR 2500 GPD/ACRE]
UNOBSTRUCTED AREA AVAILABLE: 3375.00 SQFT UNOBSTRUCTED AREA REQUIRED: 375.00 SQFT

BENCHMARK/REFERENCE POINT LOCATION: disc on CL of RD near SE corner of property
ELEVATION OF PROPOSED SYSTEM SITE IS 12 [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT

THE MINIMUM SETBACK WHICH CAN BE MAINTAINED FROM THE PROPOSED SYSTEM TO THE FOLLOWING FEATURES

Disc on CL of RD near SE corner of property

- And the elevation of the proposed system site on the Site Evaluation Form (DH4015pg3):

12 Inches above the reference point

SOIL PROFILE INFORMATION SITE 1

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 6
10YR 5/1, 7/1	FS	6 TO 12
10YR 7/2	FS	12 TO 32
10YR 3/1 Dk Br	FS spodic	32 TO 39
10YR 4/3 Br	FS spodic	39 TO 45
10YR 5/3 Br	FS	45 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

SOIL PROFILE INFORMATION SITE 2

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 7
10YR 5/1, 7/1	FS	7 TO 12
10YR 7/2	FS	12 TO 18
10YR 2/1 Blk	FS spodic	18 TO 40
10YR 3/3 Dk Br	FS spodic	40 TO 48
10YR 5/4 YB	FS	48 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

OBSERVED WATER TABLE: 16 INCHES [ABOVE / BELOW] EXISTING GRADE. TYPE: [PERCHED / APPARENT]

ESTIMATED WET SEASON WATER TABLE ELEVATION: 6 INCHES [ABOVE / BELOW] EXISTING GRADE

HIGH WATER TABLE VEGETATION: [x] YES [ ] NO MOTTLING: [x] YES [ ] NO DEPTH: 6 INCHES

Wet Season Water Table from the Site Evaluation Form (DH4015pg3).

6 inches below grade

64E-6.006 Site Evaluation Criteria.

Onsite sewage treatment and disposal systems may be utilized where lot sizes are in compliance with requirements of subsection 64E-6.005(7), F.A.C., and all of the following criteria are met:

(1) The effective soil depth throughout the drainfield installation site extends 42 inches or more below the bottom surface of the drainfield. Paragraphs (a), (b) and (c) list soil texture classes with their respective limitation ratings.

(a) Coarse sand not associated with an estimated wet season high water table within 48 inches below the absorption surface, sand, fine sand, loamy coarse sand, coarse sandy loam, loamy sand, and sandy loam are considered to be slightly limited soil materials.

(b) Very fine sand, loamy fine sand, loamy very fine sand, silt loam, silt, loam, fine sandy loam, very fine sandy loam, sandy clay loam, clay loam, silty clay loam, sandy clay and silty clay soil are considered to be moderately limited soil materials and are subject to evaluation with other influencing factors and local conditions.

(c) Clay, bedrock, oolitic limestone, fractured rock, hardpan, organic soil, gravel and coarse sand, when coarse sand is associated with an estimated wet season high water table within 48 inches of the absorption surface are severely limited soil materials. If severely limited soil material can be replaced with slightly limited soil material, see Footnotes 3 and 4 of Table III for minimum requirements. Where limestone is found to be discontinuous along the horizontal plane and is dispersed among slightly or moderately limited soils, the Department Policy for Drainfield Sizing in Areas With Discontinuous Limestone, August 1999, herein incorporated by reference, shall be used.

(2) The water table elevation at the wettest season of the year is at least 24 inches below the bottom surface of the drainfield. In addition, systems shall not be located where the undrained, naturally occurring wet season water table elevation in the area of the proposed system installation is determined to be at or above the elevation of the existing ground surface. However, when sufficient slightly limited fill material is permitted to be placed on the property to construct a properly designed onsite sewage treatment and disposal system, the department shall authorize construction based on the final lot elevation. This provision does not authorize a property owner to fill or modify the site without first obtaining necessary permits for site preparation work from other agencies of government having jurisdiction. The following information shall be used in

The <u>WSWT separation</u> required in 64E-6.006(2).

<u>24 Inches</u>

- So we've determined a starting point for our calculations:
  - **"12 inches" above** the elevation of the "disc on CL of RD near SE corner of property…"

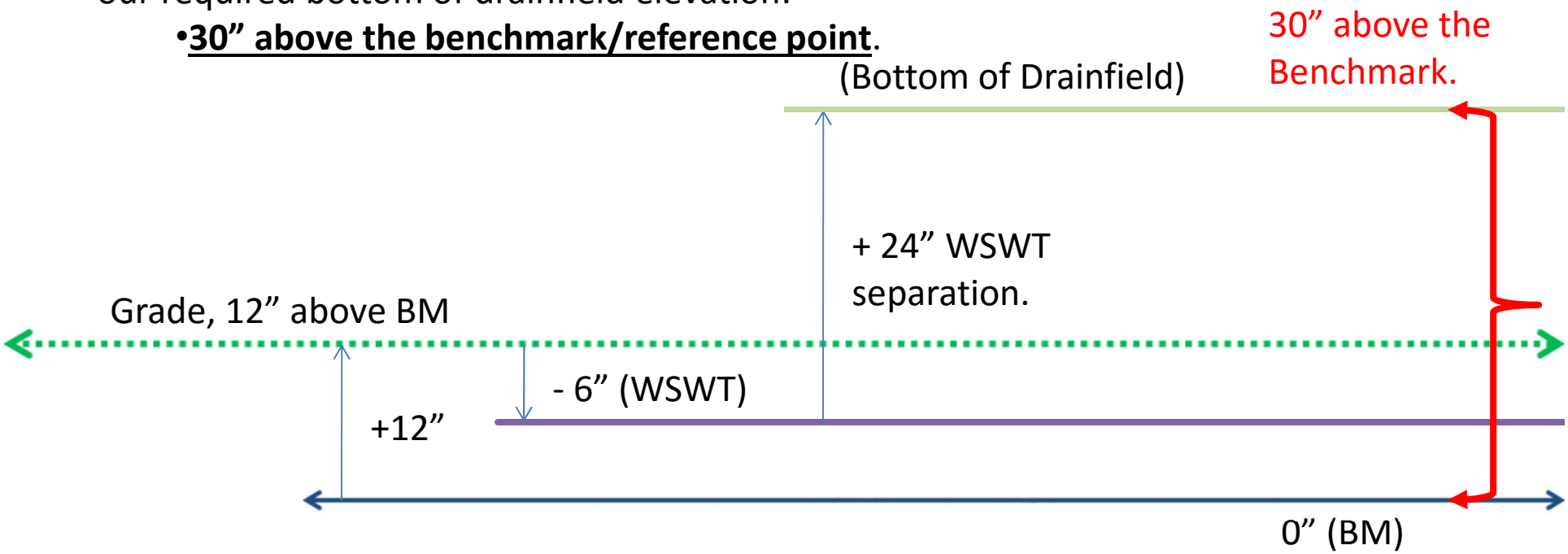
- We've determined our WSWT elevation:
  - **"6 inches below** grade..."

- …And we've determined the required WSWT separation to the bottom surface of the drainfield:
  - **"24 inches**…"

- So, now we must **use this information to calculate** the minimum required elevation for the bottom surface of the proposed drainfield.

To calculate the bottom of drainfield elevation relative to the BM:

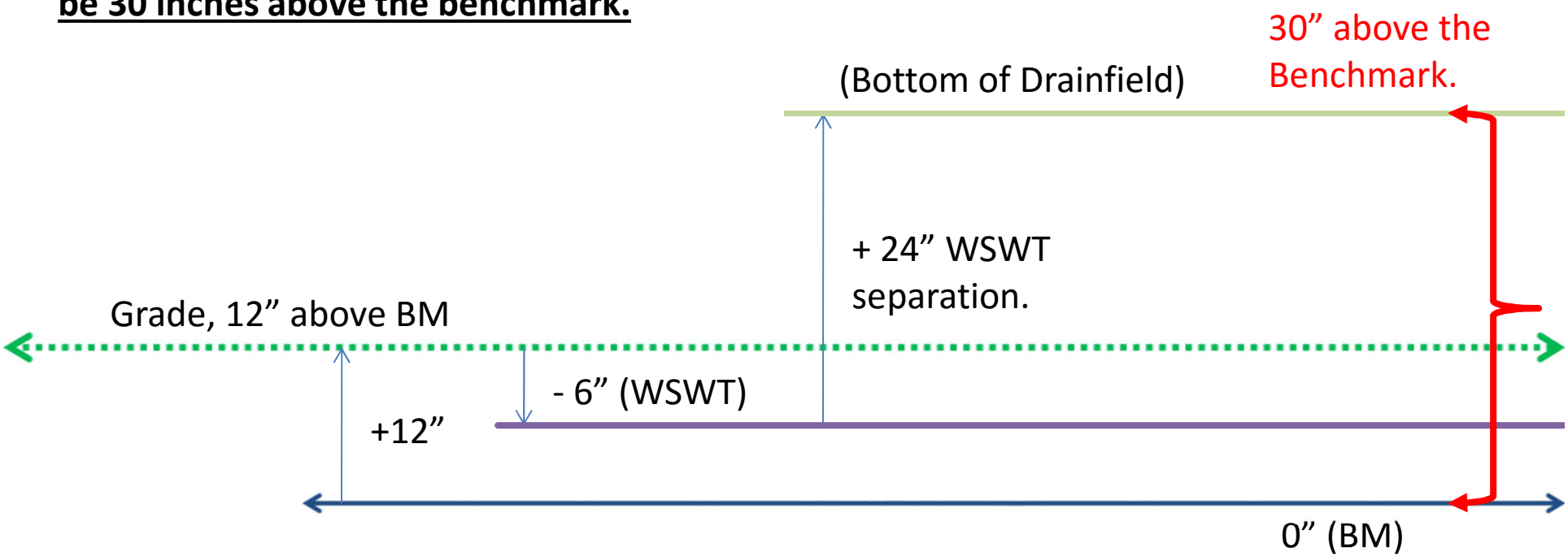
- Start at the benchmark (BM)/reference point (RP) elevation.
  - Consider this to be "**zero** inches above the benchmark."
  - Next, add or subtract to get to the proposed site, which is 12" above the benchmark, meaning we went "uphill" from the BM location:
    - **Add 12 inches**. This is grade, 12" above the BM.
  - Next, add or subtract to get to the WSWT elevation.
    - Our WSWT is 6" below grade, so **subtract 6"**. We are now at the WSWT, 6" above the BM.
  - Last, we **add 24"**, the required WSWT separation, and this takes us to our required bottom of drainfield elevation:
    - **<u>30" above the benchmark/reference point</u>**.



To calculate the bottom of drainfield elevation relative to the BM:

- Start at the benchmark (BM)/reference point (RP) elevation.
  - 0 (Benchmark = Starting Point)
  - + 12 (Add or subtract to go uphill or downhill to grade)
  - - 6 (Add or subtract to get to the WSWT above or below grade)
  - + 24 (Add to raise the drainfield above the WSWT)
  - = 30” (Elevation of the bottom of the drainfield, above or below the benchmark/reference point)

We enter this number on the permit: “**<u>Bottom of drainfield to be 30 inches above the benchmark.</u>**”



Benchmark and Drainfield Elevation as entered onto the system construction permit form (DH4016pg1).

N
F LOCATION OF BENCHMARK: Disc in CL of Road near SE property corner
I ELEVATION OF PROPOSED SYSTEM SITE [12.00] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
E BOTTOM OF DRAINFIELD TO BE [30.00] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
L
D FILL REQUIRED: [36.00] INCHES EXCAVATION REQUIRED: [48.00] INCHES

O The licensed contractor installing the system is responsible for installing the minimum

The benchmark location and minimum bottom of drainfield elevation are entered into the appropriate section of the system construction permit form.

- Drainfield Type, Fill, and Excavations.

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

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

CONSTRUCTION PERMIT FOR:
[ ] New System [ ] Existing System [ ] Holding Tank [ ] Innovative
[ ] Repair [ ] Abandonment [ ] Temporary [ ] _____

APPLICANT: _____

PROPERTY ADDRESS: _____

LOT: _____ BLOCK: _____ SUBDIVISION: _____
[SECTION, TOWNSHIP, RANGE, PARCEL NUMBER]
PROPERTY ID #: _____ [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 [ ] GALLONS / GPD SEPTIC TANK/AEROBIC UNIT CAPACITY MULTI-CHAMBERED/IN-SERIES [ ]
A [ ] GALLONS / GPD _____ CAPACITY MULTI-CHAMBERED/IN-SERIES [ ]
N [ ] GALLONS GREASE INTERCEPTOR CAPACITY [MAXIMUM CAPACITY SINGLE TANK: 1250 GALLONS]
K [ ] GALLONS DOSING TANK CAPACITY [ ] GALLONS @ [ ] DOSES PER 24 HRS # PUMPS [ ]

D [ ] SQUARE FEET PRIMARY DRAINFIELD SYSTEM
R [ ] SQUARE FEET _____ SYSTEM
A TYPE SYSTEM: [ ] STANDARD [ ] FILLED [ ] MOUND [ ] _____
I CONFIGURATION: [ ] TRENCH [ ] BED [ ] _____
N
F LOCATION OF BENCHMARK: _____
I ELEVATION OF PROPOSED SYSTEM SITE [ ] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
E BOTTOM OF DRAINFIELD TO BE [ ] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
L
D FILL REQUIRED: [ ] INCHES EXCAVATION REQUIRED: [ ] INCHES

O _____
T _____
H _____
E _____
R _____

SPECIFICATIONS BY: _____ TITLE: _____

APPROVED BY: _____ TITLE: _____ _____ CHD

DATE ISSUED: _____ EXPIRATION DATE: _____

DH 4016, 08/09 (Obsoletes all previous editions which may not be used)
Incorporated: 64E-6.003, FAC

Fill, Mound and Excavation Permitting

- Filled systems, mounded systems, and excavations are permitted per:
  - 64E-6.009(3-4)…
  - … And footnotes 3 and 4 to Table III, 64E-6.008(5).

(3) Mound systems – are used to overcome certain limiting site conditions such as an elevated seasonal high water table, shallow permeable soil overlying slowly permeable soil and shallow permeable soil located over unbroken or porous bedrock. Special installation instructions or design techniques to suit a particular site shall, using the criteria in subsection 64E-6.004(6), F.A.C., be specified on the construction permit in addition to the following general requirements.

(a) Site preparation must render the site in compliance with requirements of subsections 64E-6.004(1)-(6), F.A.C.

(b) Prior to the construction of a mound system, the applicant may fill all or a portion of a lot utilizing slightly limited soil.

(c) The O horizon of original topsoil and vegetation must be removed from beneath the drainfield, shoulder and slope area and the exposed underlying soil plowed or roughened to prevent formation of an impervious barrier between the fill and natural soil. Moderately limited soil material may be used in the construction of mound systems, but shall only be used in the construction of mound slopes and the soil cap. If moderately or severely limited soil is to be replaced beneath the mound, Rule 64E-6.008, F.A.C., Table III, footnote 3, shall be followed.

(d) Where the soil material underlying a mound system is of a similar textural material as that used in system construction, the mound drainfield size shall be based on estimated sewage flows as specified in Rule 64E-6.008, F.A.C., Table I and upon the quality of fill material utilized in the mound system. When estimated sewage flows are calculated to be less than 200 gallons per day, specifications for system design shall be based on a minimum flow of 200 gallons per day. Maximum sewage loading rates for soils used in mound construction shall be in compliance with the following:

Fill Material	Maximum Sewage Loading Rate to Mound Drain Trench Bottom Surface in gallons per square foot per day	Maximum Sewage Loading Rate to Mound Absorption Bed Bottom Surface in gallons per square foot per day
Sand, Coarse Sand, and Loamy Coarse Sand	0.80	0.60
Fine Sand	0.80	0.60
Sandy Loam, Coarse Sandy Loam, and Loamy Sand	0.65	0.40
Fine Sandy Loam, Very Fine Sand, Loamy Fine Sand, and Loamy Very Fine Sand	0.35	0.25

(e) Where moderately limited soils underlie the mound within 36 inches of the bottom of the drainfield, drainfield sizing shall be based on the most restrictive soil texture existing in the profile to a depth of 36 inches below the bottom of the drainfield, using Table III for soil loading rates.

(f) There shall be a minimum 4 foot separation between the shoulder of the fill and the nearest trench or absorption bed sidewall. Where a portion of the mound slope will be placed adjacent to building foundations, pilings or supports for elevated structures, mobile home walls, swimming pool walls, retaining walls, or similar obstructions there shall be a minimum 5 foot separation between the sidewall of the absorption area and the obstruction. Such obstructions shall impact the slope on no more than 50 percent of the shoulder perimeter. Retaining walls must be designed by a professional engineer licensed in the State of Florida to withstand the lateral earth forces under saturated conditions and to prevent seepage. Where mounds are placed on slopes exceeding 2 percent, the toe of the slope or the downslope side of the mound shall extend an additional 4 inches for

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each additional 1 percent of slope. To taper the maximum elevation of the mound at the outer perimeter of the shoulder down to the toe of the slope, additional moderately or slightly limited fill shall be placed at a minimum 2 feet horizontal to 1 foot vertical grade where mound height does not exceed 36 inches. Mound heights which exceed 36 inches shall have a slope not steeper than 3 feet horizontal to 1 foot vertical. The entire mound including slopes, shoulder and the soil cap shall be stabilized with vegetation. Slopes steeper than 5:1 shall be sodded or hydroseeded. Soil caps and mounded slopes must, at a minimum, be hydroseeded or seeded with grass and a layer of hay or similar cover. Where fill material is present in the amount so as to provide a level surface from the top of the required cover over the system over the area where the slopes would normally be located, no slopes shall be required. For example, if the neighboring lot has been permanently filled to the same level as the applicant's lot, a five-foot separation from the property line to the system will be required, as opposed to requiring the slope area. Stabilization of a mound shall be the responsibility of the septic tank contractor who constructed the mound system unless the written agreement for system construction clearly states the system owner is responsible. Mound slopes which do not conform to permit requirements shall at a minimum be restored to permit specifications prior to stabilizing. Other synthetic or vegetative covers providing protection from mound erosion equal to or better than soil shall be approved by the State Health Office. Final satisfaction approval shall not be granted until sodding, hydroseeding, seeding and laying or other approved stabilization of the mound has occurred. No portion of the drainfield or shoulder area shall be covered with asphalt or a concrete driveway or be subject to vehicular traffic. Landscaping features such as boulders or trees which obstruct drainfield or fill shoulder area shall not be used. Hydroseeding shall be performed in accordance with the product manufacturer's instructions and Section 7.5, Permanent Seeding, of the Florida Erosion and Sedimentation Control Inspector's Manual, July 2008, herein incorporated by reference.

(g) There shall be a soil cap of slightly or moderately limited soil material over the drainfield and shoulder area. The soil cap shall be no less than 6 inches thick at the outer perimeter of the shoulder. Additional soil cap material shall be placed over the mound and graded to provide drainage off and away from the mound. The maximum depth from the bottom of the drainfield to the finished ground surface shall not exceed 30 inches after natural settling.

(h) The site shall be landscaped according to permit specifications and shall be protected from automotive traffic or other activity that could damage the system. Swales or other surface drainage structures shall be utilized to prevent water shed from outside draining onto neighboring property.

(i) All fill material used in the construction of systems shall be free of extraneous non-soil material such as grass, roots and any other debris. Shell fragments less than 2.0 mm in diameter are excluded from the classification of extraneous non-soil materials and are considered to be soil particles. Severely limited soil material shall not be used in system construction. Fill material consisting of mechanically crushed and sieved rock shall not be used in system construction.

(j) Where moderately limited soil is used to construct a mound system, a low pressure distribution network is required.

(4) Filled systems – filled systems shall be constructed in accordance with the minimum requirements for mounds, except as provided for in footnote 5, Table III, and that sewage loading rates to trench or absorption bed bottom areas shall be based on values found in Table III.

- 64E-6.009(3-4)
- 64E-6.008(5), Table III, footnotes 3 and 4

Footnotes to Table III:

1. U.S. Department of Agriculture major soil textural classification groupings and methods of field identification are explained in Rule 64E-6.016, F.A.C. Laboratory sieve analysis of soil samples may be necessary to confirm field evaluation of specific soil textural classifications. The USDA Soil Conservation Service "Soil Textural Triangle" shall be used to classify soil groupings based on the proportion of sand, silt and clay size particles.

2. The permeability or percolation rate of a soil within a specific textural classification may be affected by such factors as soil structure, cementation and mineralogy. Where a percolation rate is determined using the falling head percolation test procedure described in the United States Environmental Protection Agency Design Manual for Onsite Wastewater Treatment and Disposal Systems, October, 1980, incorporated by reference into this rule, the calculated percolation test rate shall be used with Table III and evaluated by the DOH county health department with other factors such as history of performance of systems in the area in determining the minimum sizing for the drainfield area.

3. When all other site conditions are favorable, horizons or strata of moderately or severely limited soil may be replaced with slightly limited soil or soil of the same texture as the satisfactory slightly limited permeable layer lying below the replaced layer. The slightly limited permeable layer below the replaced layer shall be identified within the soil profile which was submitted as part of the permit application. The resulting soil profile must show complete removal of the moderately or severely limited soil layer being replaced and must be satisfactory to a minimum depth of 54 inches beneath the bottom surface of the proposed drainfield. The width of the replacement area shall be at least 2 feet wider and longer than the drain trench and for absorption beds shall include an area at least 2 feet wider and longer than the proposed bed. Drainfields shall be centered in the replaced area. Where at least 33 percent of the moderately limited soils at depths greater than 54 inches below the bottom of the drainfield have been removed to the depth of slightly limited soil, drainfield sizing shall be based on the following sewage loading rates. Where severely limited soils are being removed at depths greater than 54 inches below the bottom of the drainfield, 100 percent of the severely limited soils at depths greater than 54 inches shall be removed down to the depth of an underlying slightly limited soil. Maximum sewage loading rates for standard subsurface systems installed in replacement areas shall be 0.80 gallons per square foot per day for trench systems and 0.60 gallons per square foot per day for absorption beds in slightly limited soil textures. Where moderately limited soil materials are found beneath the proposed drainfield, and where system sizing is based on that moderately limited soil, soil replacements of less than 33% may be permitted.

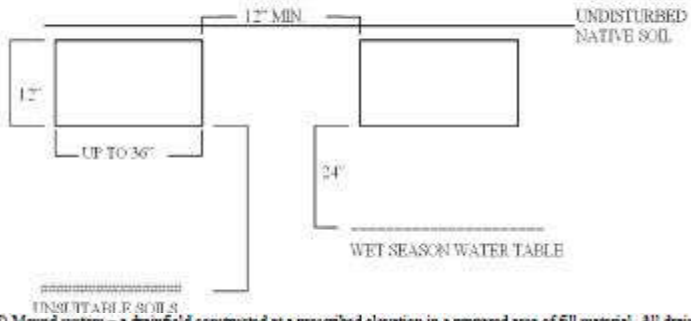
4. Where coarse sand, gravel, or oolitic limestone directly underlies the drainfield area, the site shall be approved provided a minimum depth of 42 inches of the rapidly percolating soil beneath the bottom absorption surface of the drainfield and a minimum 12 inches of rapidly percolating soil contiguous to the drainfield sidewall absorption surfaces, is replaced with slightly limited soil material. Where such replacement method is utilized, the drainfield size shall be determined using a maximum sewage application rate of 0.80 gallons per square foot per day of drainfield in trenches and 0.60 gallon per square foot per day for drainfield absorption beds.

Fill, Mound and Excavation Permitting

– Subsurface, filled and mound systems are defined in 64E-6.002(24, 37, and 51).

(51) Standard subsurface drainfield system – an onsite sewage treatment and disposal system drainfield consisting of a distribution box or header pipe and a drain trench or absorption bed with all portions of the drainfield sidewalls installed below the elevation of undisturbed native soil (see Figure 3).

STANDARD TRENCH DRAINFIELD SYSTEM



(37) Mound system – a drainfield constructed at a prescribed elevation in a prepared area of fill material. All drainfields where any part of the bottom surface of the drainfield is located at or above the elevation of undisturbed native soil in the drainfield area is a mound system (see Figure 2).

MOUND TRENCH DRAINFIELD SYSTEM

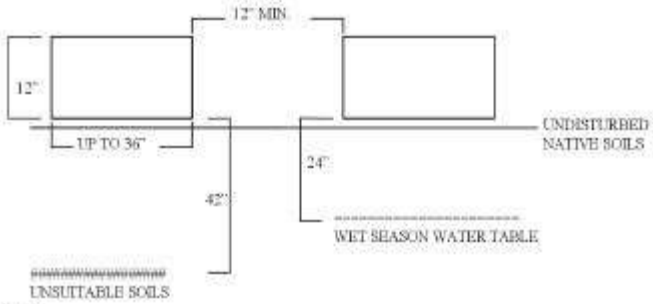


FIGURE 2

(24) Filled System – a drainfield system where a portion, but not all, of the drainfield sidewalls are located at an elevation above the elevations of undisturbed native soil on the site (see Figure 1).

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FILLED TRENCH DRAINFIELD SYSTEM

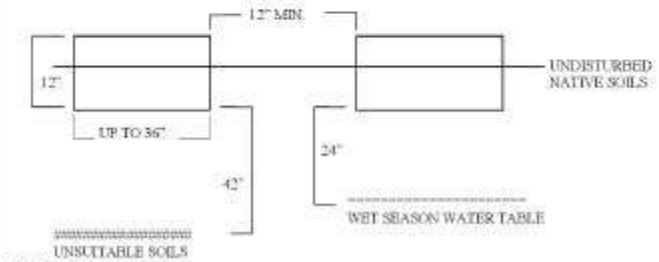
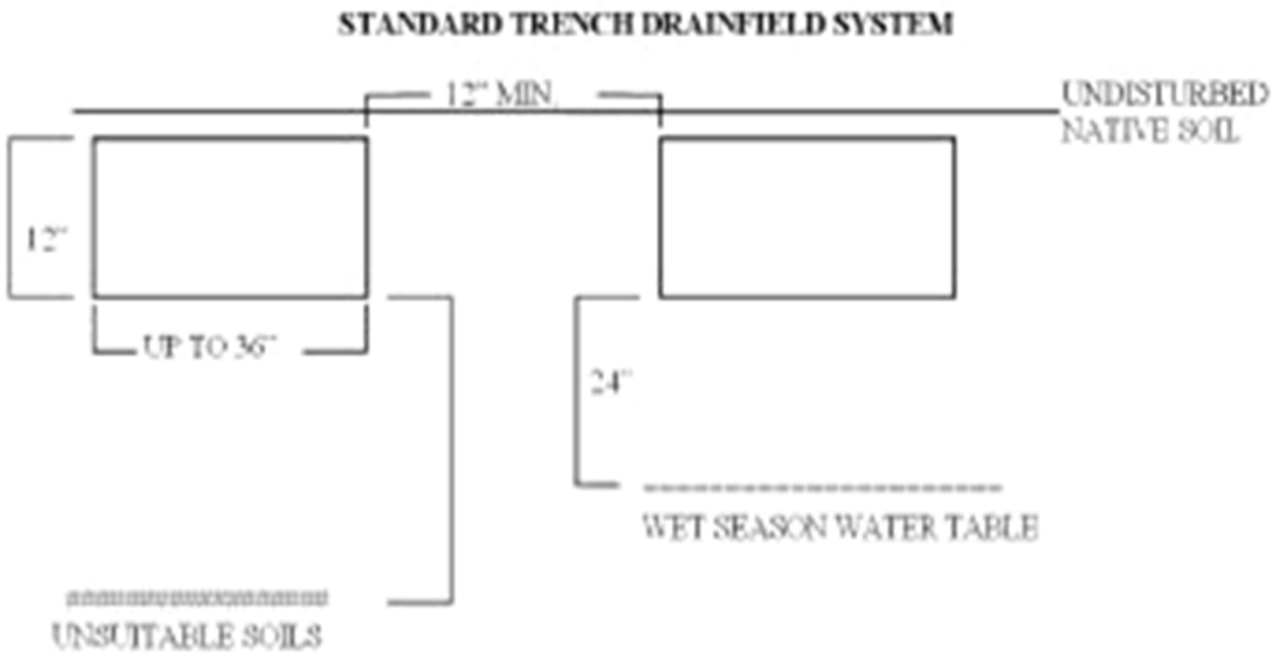
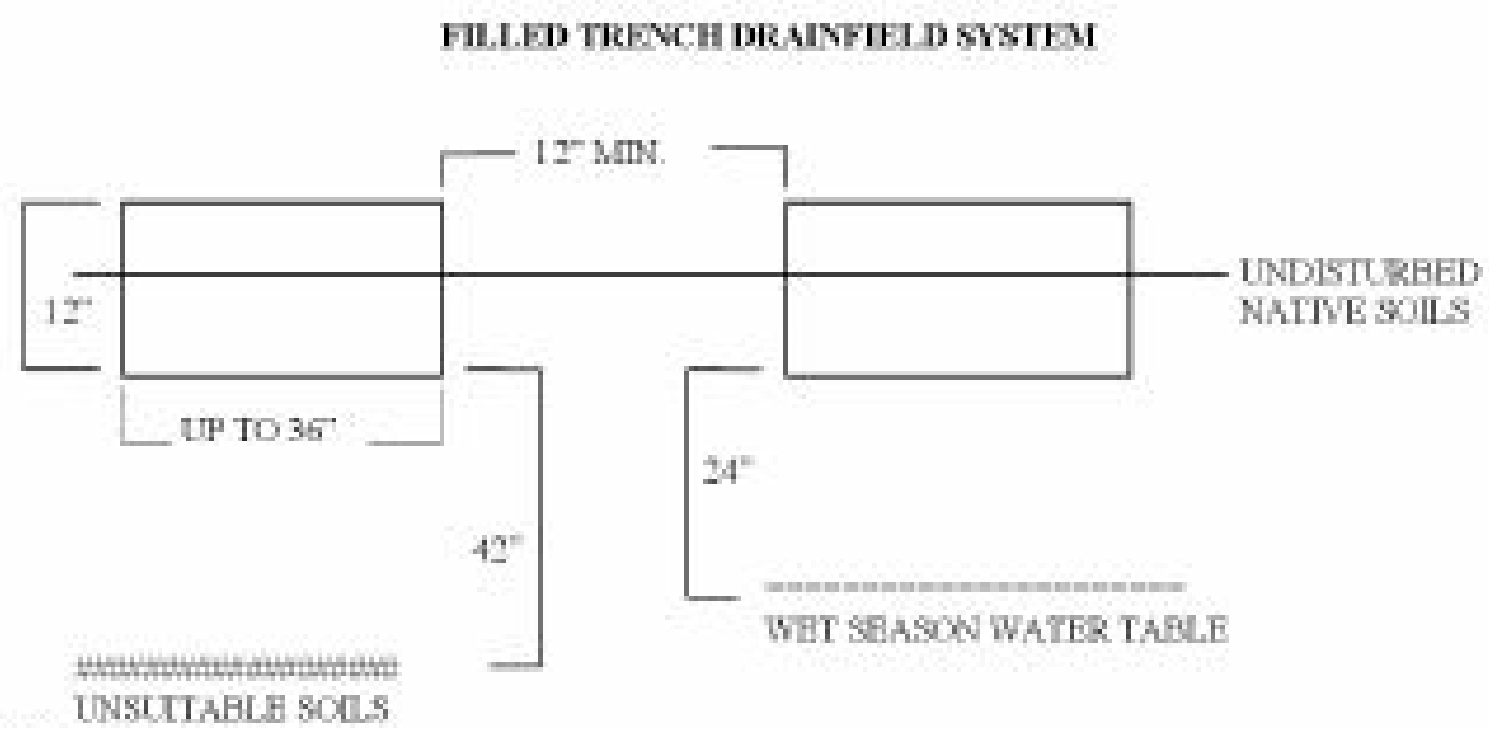


FIGURE 1

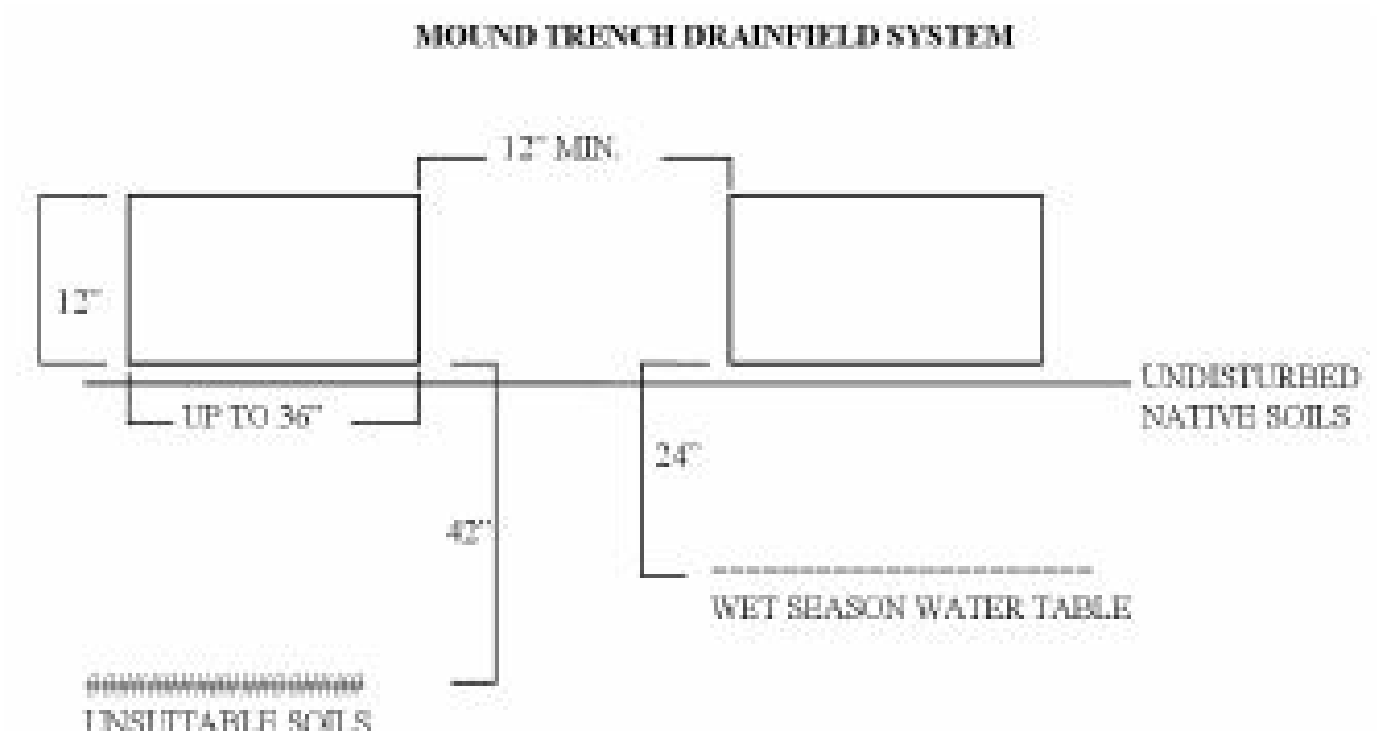
- A system is considered subsurface if the entire drainfield area is below natural grade. The definition reads:
  - "An onsite sewage treatment and disposal system drainfield consisting of a distribution box or header pipe and a drain trench or absorption bed with all portions of the drainfield sidewalls installed below the elevation of undisturbed native soil." (64E-6.002(51)



- A system is considered filled if any portion of the drainfield side-wall area is above natural grade. The definition reads:
  - "An drainfield system where a portion, but not all, of the drainfield sidewalls are located at an elevation above the elevations of undisturbed native soil on the site." (64E-6.002(24)



- A system is considered a mound system if any portion of the bottom surface of the drainfield is at or above natural grade. The definition reads:
  - "An drainfield constructed at a prescribed elevation in a prepared area of fill material. All drainfields where any part of the bottom surface of the drainfield is located at or above the elevation of undisturbed native soil in the drainfield area is a mound system." (64E-6.002(37)



Fill, Mound and Excavation Permitting

- These options are permitted in order to keep the OSTDS drainfield in compliance with:
  - The required WSWT separation.
  - Effective soil depth requirements.

For example, to attain the required WSWT separation:

- If the WSWT is 6 inches below grade, and the bottom of the drainfield must maintain a 24-inch separation to it, what are the options?
  - 1 – The drainfield area can be raised 24 inches above the WSWT by placing sufficient fill on site to construct a mound.
    - This would be considered a mound because the bottom of the drainfield is 18 inches above natural grade.
  - 2 – The entire lot can be filled to raise the elevation of both the structure and the drainfield area.
    - This would also be considered a mound because the bottom of the drainfield is still 18-inches above natural grade.
- In both of these cases, the bottom of the drainfield is above natural grade, and so mound specifications will apply, requiring proper:
  - Shoulders.
  - Slopes.
  - Amount of cover.
  - Stabilization material.

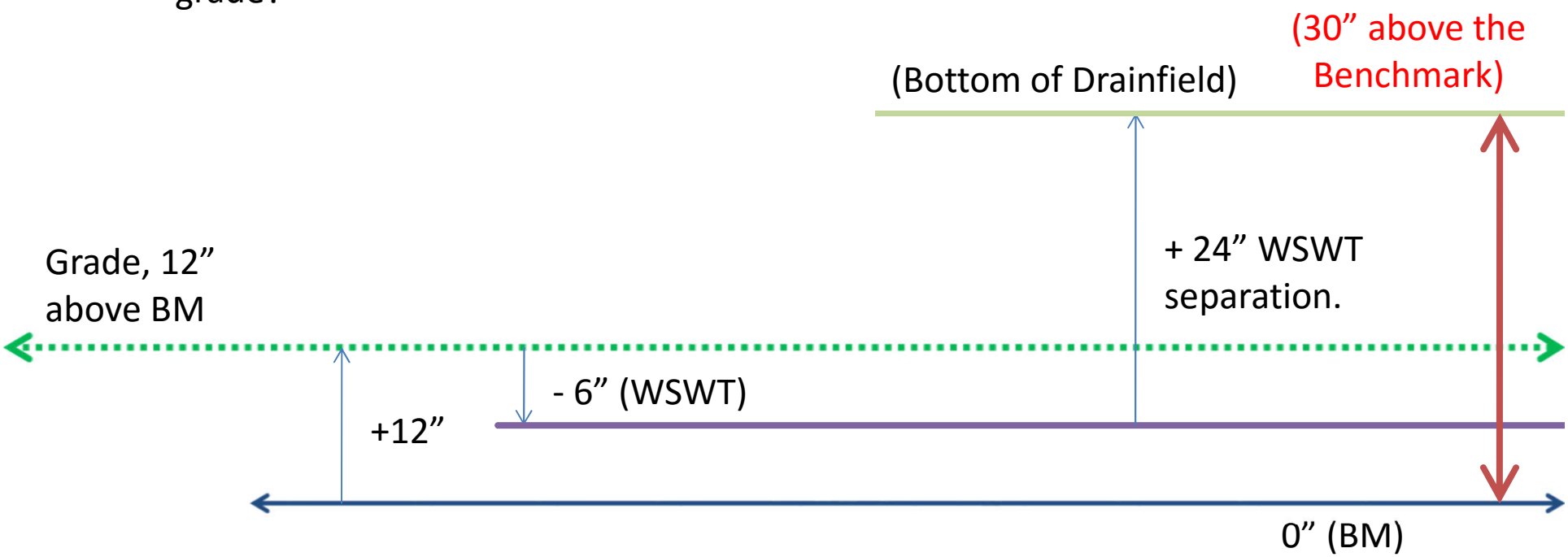
Example: to keep the bottom of the drainfield out of areas subject to frequent flooding:

- If the WSWT is above natural grade, and the OSTDS is not being installed in a surface water body, what are the options?
  - 1 – The drainfield area or the entire lot can be raised above the unsuitable soil by placing sufficient fill on site to keep the bottom of the drainfield 24 inches above the WSWT.
    - This would be considered a mound because the bottom of the drainfield is 24 inches or more above natural grade.
    - In this circumstance, the CHD employee must notify all parties that there may be jurisdictional wetlands area impacted, however, this would not delay the issuance of the OSTDS permit if all other rule and statute requirements can be met.

So we know we will need to maintain the WSWT separation:

- How do we know if it will it require a subsurface, filled, or mound system?
  - First, determine where natural grade (the undisturbed native soil) is in relation to the bottom of the proposed drainfield.
  - Second, compare this to the definition of subsurface, filled, or mound system.

How do we determine the bottom of drainfield elevation relative to natural grade?

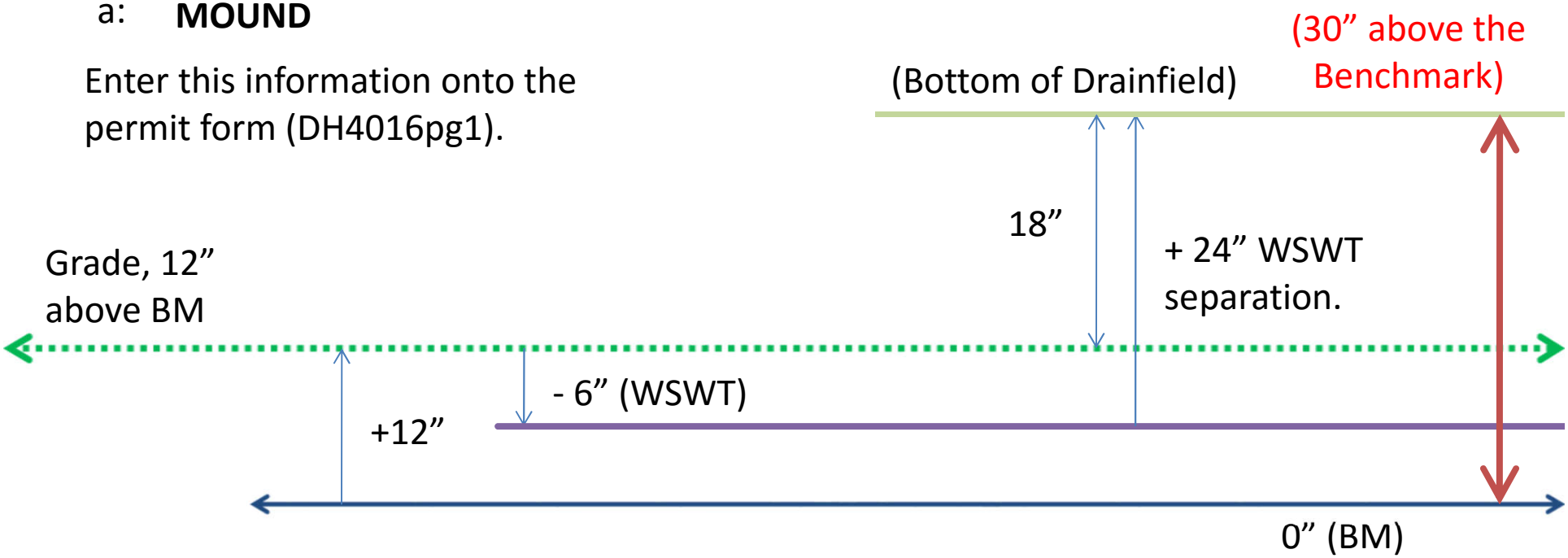


To calculate the bottom of drainfield elevation relative to grade:

- How would we determine how far above natural grade the bottom of the drainfield is?
  - First, find the elevation of the bottom of the drainfield relative to the benchmark:
    - In this case, it is 30 inches above the benchmark.
  - Next, find the elevation of grade relative to the benchmark:
    - In this case, it is 12 inches above the benchmark.
  - Last, find the difference between the two elevations.
    - In this case, the difference is 18 inches.

This means the system will be18 inches above undisturbed native soil, so it is a: **MOUND**

Enter this information onto the permit form (DH4016pg1).



System Type as entered onto the system construction permit form (DH4016pg1).

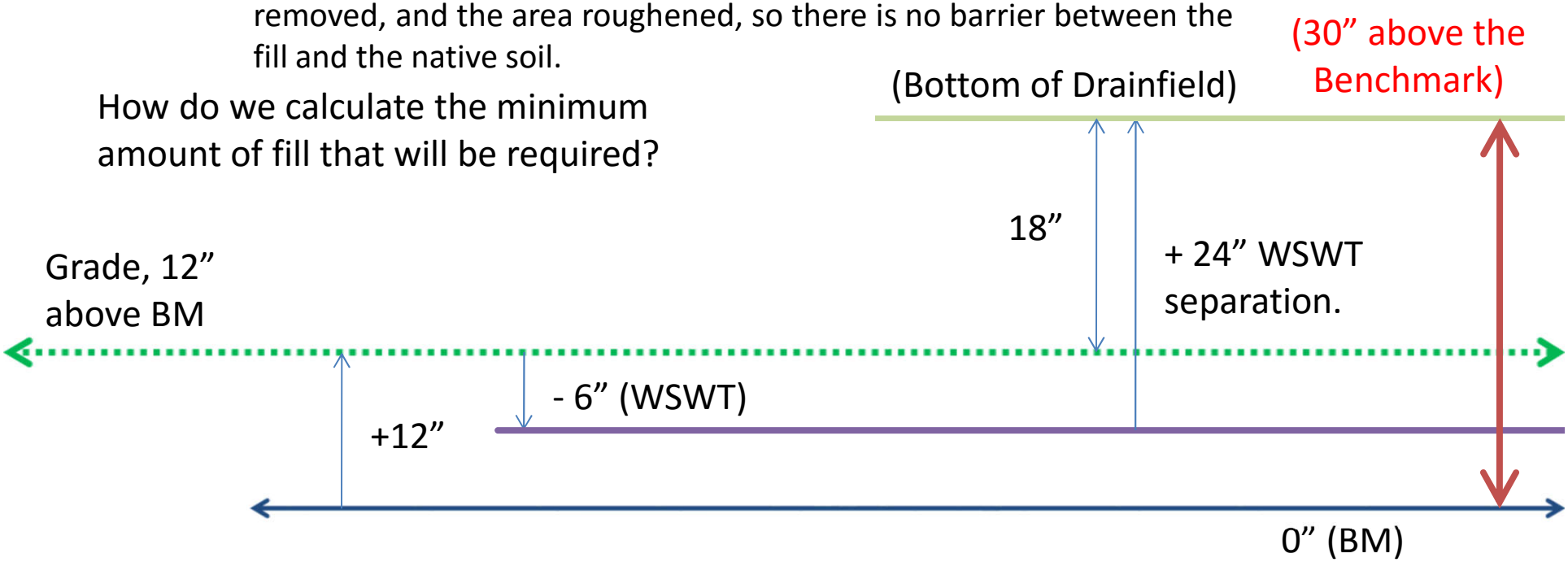
```
D [ 250  ] SQUARE FEET PRIMARY DRAINFIELD SYSTEM
R [      ] SQUARE FEET _________________ SYSTEM
A TYPE SYSTEM:     [  ] STANDARD    [  ] FILLED     [ x] MOUND     [  ] _____________________
I CONFIGURATION:   [ x] TRENCH     [  ] BED     [  ] ____________________________________________
N
```

The type of system is entered into the appropriate section of the system construction permit form.

So we must build a mound system:

- <u>How do we keep the drainfield elevated 18 inches above natural grade?</u>
  - We must add fill to the site.
    - Fill requirements only consider the amount of fill above natural grade.
    - Fill must be of slightly limited material for standard system construction.
    - (If moderately limited material is to be used, a Low-Pressure Dosing System must be designed and installed)
    - Before fill can be placed in the drainfield area, the O-horizon must be removed, and the area roughened, so there is no barrier between the fill and the native soil.

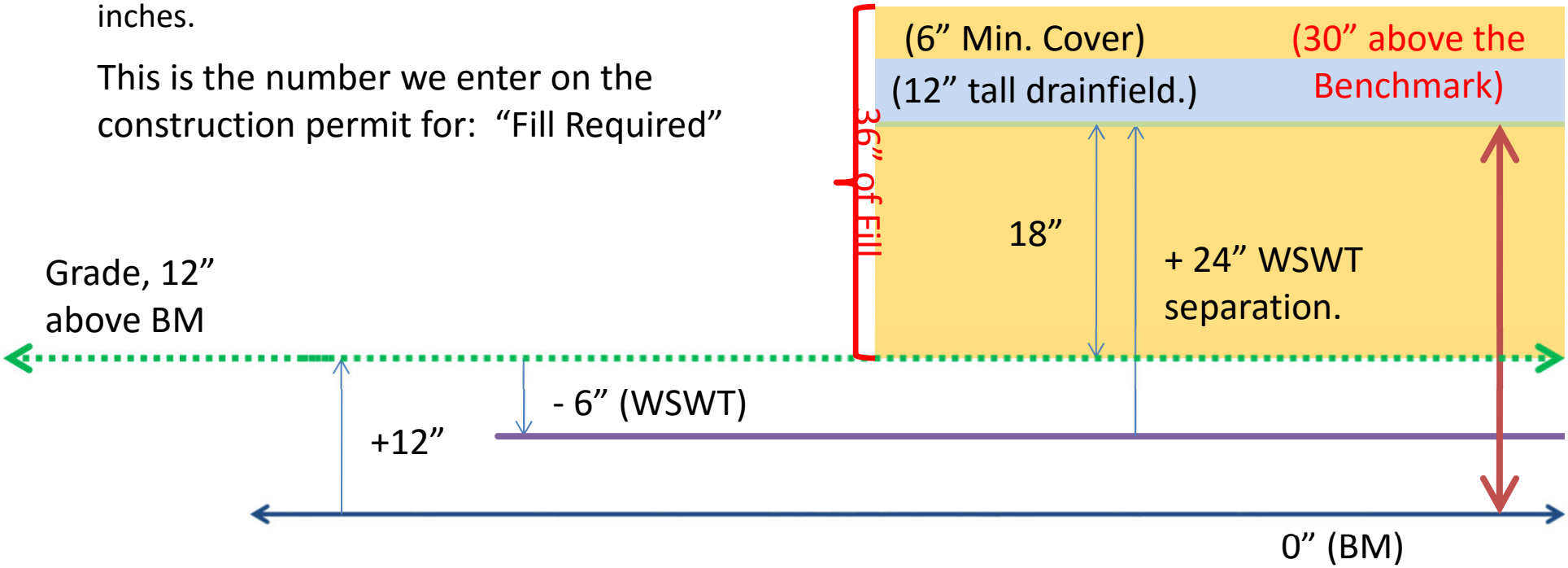
How do we calculate the minimum amount of fill that will be required?



Calculate the amount of Fill Required:

- In order to keep the drainfield elevated 18 inches above natural grade, the installer must add fill material to the lot. In order to do so, they must:
  - Remove the 0-horizon, vegetation, and roughen the area to be filled.
  - Next, add sufficient fill to raise the drainfield elevation (18”).
- Is this all the fill material that is needed?
  - No, there must also be enough fill to cover the drainfield.
  - To calculate the additional fill:
    - Add the height of the drainfield (standard is 12”).
    - Next add the minimum amount of drainfield cover (6” minimum).
- The sum of these numbers is the amount of fill required on the permit: 36 inches.

This is the number we enter on the construction permit for: “Fill Required”



Fill Required as entered onto the system construction permit form (DH4016pg1).

```
N
F LOCATION OF BENCHMARK: Disc in CL of Road near SE property corner
I ELEVATION OF PROPOSED SYSTEM SITE [12.00] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
E BOTTOM OF DRAINFIELD TO BE        [30.00] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
L
D FILL REQUIRED: [36.00] INCHES    EXCAVATION REQUIRED: [48.00] INCHES

O The licensed contractor installing the system is responsible for installing the minimum
```

The minimum amount of fill required for system construction is entered into the appropriate section of the system construction permit form.

Methods for attaining the required effective soil depth:

- If there is unsuitable soil 18 inches below grade, what are the options?
  - 1 – The drainfield area or the entire lot can be raised above the unsuitable soil by placing sufficient fill on site to keep the bottom of the drainfield 42 inches above the unsuitable soil.
    - This would be considered a mound, as the bottom of the drainfield is above natural grade (24 inches above).
  - 2 – ? What other option is available?

A second option in this case would be: excavation.

Excavation:

•If the site evaluation shows that there is a strata of slightly-limited soil below the unsuitable layer…

SOIL PROFILE INFORMATION SITE 1

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 6
10YR 5/1, 7/1	FS	6 TO 12
10YR 7/2	FS	12 TO 32
10YR 3/1 Dk Br	FS spodic	32 TO 39
10YR 4/3 Br	FS spodic	39 TO 45
10YR 5/3 Br	FS	45 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

SOIL PROFILE INFORMATION SITE 2

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 7
10YR 5/1, 7/1	FS	7 TO 12
10YR 7/2	FS	12 TO 18
10YR 2/1 Blk	FS spodic	18 TO 40
10YR 3/3 Dk Br	FS spodic	40 TO 48
10YR 5/4 YB	FS	48 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

•… the unsuitable layer can be excavated and replaced with slightly-limited soil so that there is no unsuitable soil within 54-inches of the bottom of the drainfield [footnote 3, 64E-6.008(5)].

•In cases where the WSWT separation does not cause a mound, this could negate the need for a mounded system.

Excavation:

- If the site evaluation shows that there is a strata of slightly-limited soil below the unsuitable layer…

SOIL PROFILE INFORMATION SITE 1

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 6
10YR 5/1, 7/1	FS	6 TO 12
10YR 7/2	FS	12 TO 32
10YR 3/1 Dk Br	FS spodic	32 TO 39
10YR 4/3 Br	FS spodic	39 TO 45
10YR 5/3 Br	FS	45 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

SOIL PROFILE INFORMATION SITE 2

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 7
10YR 5/1, 7/1	FS	7 TO 12
10YR 7/2	FS	12 TO 18
10YR 2/1 Blk	FS spodic	18 TO 40
10YR 3/3 Dk Br	FS spodic	40 TO 48
10YR 5/4 YB	FS	48 TO 72
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

- … the unsuitable layer can be excavated and replaced with slightly-limited soil so that there is no unsuitable soil within 54-inches of the bottom of the drainfield [footnote 3, 64E-6.008(5)].
  - In cases where the WSWT separation does not cause a mound, this could negate the need for a mounded system.

Excavation:

•If the site evaluation **does not** document a strata of slightly-limited soil below the unsuitable layer…

SOIL PROFILE INFORMATION SITE 1

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 6
10YR 5/1, 7/1	FS	6 TO 12
10YR 7/2	FS	12 TO 32
10YR 3/1 Dk Br	FS spodic	32 TO 39
10YR 4/3 Br	FS spodic	39 TO 45
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

SOIL PROFILE INFORMATION SITE 2

MUNSELL #/COLOR	TEXTURE	DEPTH
10YR 2/1 Blk	FS	0 TO 7
10YR 5/1, 7/1	FS	7 TO 12
10YR 7/2	FS	12 TO 18
10YR 2/1 Blk	FS spodic	18 TO 40
10YR 3/3 Dk Br	FS spodic	40 TO 48
		TO
		TO
		TO

USDA SOIL SERIES: similar to Myakka

Spodic Layer to 72” or refusal

(never got through either unsuitable layer).

•… the permit cannot be written for an excavation.

Excavation Required as entered onto the system construction permit form (DH4016pg1).

N
F LOCATION OF BENCHMARK: Disc in CL of Road near SE property corner
I ELEVATION OF PROPOSED SYSTEM SITE [12.00] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
E BOTTOM OF DRAINFIELD TO BE [30.00] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
L
D FILL REQUIRED: [36.00] INCHES EXCAVATION REQUIRED: [48.00] INCHES

O The licensed contractor installing the system is responsible for installing the minimum

The depth of excavation required for system construction is entered into the appropriate section of the system construction permit form.

“Other” specifications noted on the construction permit form (DH4016pg1).

OTHER

The licensed contractor installing the system is responsible for installing the minimum category of tank in accordance with s. 54E-6.013(3)(f), FAC.

The system is sized for xx bedrooms with a maximum occupancy of xx persons (2 per bedroom), for a total estimated sewage flow of xx.

Additional information required for installation and notification of the parameters used to determine the system size are documented on the permit.

- Permit Approval and Issue/Expiration Dates..

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

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

CONSTRUCTION PERMIT FOR:
[ ] New System [ ] Existing System [ ] Holding Tank [ ] Innovative
[ ] Repair [ ] Abandonment [ ] Temporary [ ] _____

APPLICANT: _____

PROPERTY ADDRESS: _____

LOT: _____ BLOCK: _____ SUBDIVISION: _____
[SECTION, TOWNSHIP, RANGE, PARCEL NUMBER]
PROPERTY ID #: _____ [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 [ ] GALLONS / GPD SEPTIC TANK/AEROBIC UNIT CAPACITY MULTI-CHAMBERED/IN-SERIES [ ]
A [ ] GALLONS / GPD _____ CAPACITY MULTI-CHAMBERED/IN-SERIES [ ]
N [ ] GALLONS GREASE INTERCEPTOR CAPACITY [MAXIMUM CAPACITY SINGLE TANK: 1250 GALLONS]
K [ ] GALLONS DOSING TANK CAPACITY [ ] GALLONS @ [ ] DOSES PER 24 HRS # PUMPS [ ]

D [ ] SQUARE FEET PRIMARY DRAINFIELD SYSTEM
R [ ] SQUARE FEET _____ SYSTEM
A TYPE SYSTEM: [ ] STANDARD [ ] FILLED [ ] MOUND [ ] _____
I CONFIGURATION: [ ] TRENCH [ ] BED [ ] _____
N
F LOCATION OF BENCHMARK: _____
I ELEVATION OF PROPOSED SYSTEM SITE [ ] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
E BOTTOM OF DRAINFIELD TO BE [ ] [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT
L
D FILL REQUIRED: [ ] INCHES EXCAVATION REQUIRED: [ ] INCHES

O _____
T _____
H _____
E _____
R _____

SPECIFICATIONS BY: _____ TITLE: _____

APPROVED BY: _____ TITLE: _____ _____ CHD

DATE ISSUED: _____ EXPIRATION DATE: _____

DH 4016, 08/09 (Obsoletes all previous editions which may not be used)
Incorporated: 64E-6.003, FAC

Permit Specifications:

- Permit specifications are attributed to the person establishing tank size, drainfield size, elevation, configuration, etc.
  - Usually, it is the health department employee completing the permit form (DH4016pg1).
    - DOH employees may only write a permit containing the minimum specifications required by rule.
  - An applicant or their agent may request a permit with specifications exceeding the minimum requirements of the rule. This is often provided on form DH4016pg1 or DH4015pg3 but may be on the site evaluation or other sheet.
    - The "specifications by" line would reference that party if they provide the permit specifications – not just site evaluations.
    - A note in the comments section should be added to indicate the rule requirements are being exceeded per the applicant or their agent.
    - On inspection, the system must meet the requested standards or it cannot be approved without amendment of the permit.

Permit Approval:

- Permit approval is always attributed to the DOH employee issuing the permit.
  - This person must be certified in the OSTDS program per Section 381.0101, FS.
    - This person also specifies:
      - The Date Issued.
      - The Expiration Date.
  - The length of time a permit is valid is specified in 64E-6.001(4), FAC and 381.0065(4), FS.
      - (18 months)
      - These sections also specify that, at the end of the 18-month period, the permit may be extended by 90 additional days.
        - » Per 64E-6.001(4), FAC, this only applies if building construction has commenced.
    - An expired permit cannot be “re-issued;” once a permit has expired, a new permit must be applied for.

Permit Specifications, Approval, Date Issued, and Expiration Date as entered onto the system construction permit form (DH4016pg1).

O The licensed contractor installing the system is responsible for installing the minimum
T category of tank in accordance with s. 64E-6.013(3)(f), FAC.
H
E
R

SPECIFICATIONS BY: Carroll Sweet TITLE: Environmental Specialist I

APPROVED BY: John Forest, RS TITLE: Environmental Manager Sunshine CHD

DATE ISSUED: 7/6/2010 EXPIRATION DATE: 1/2/2012

DH 4016, 08/09 (Obsoletes all previous editions which may not be used)
Incorporated: 64E-6.003, FAC Page 1 of 3

The names of who determined permit specifications, who approved the permit, its issue date, its expiration date, are entered into the appropriate section of the system construction permit form.

Maintenance Requirements:

- Minimum recommended maintenance for conventional systems.
  - Pump the septic tank at least once every 3 to 5 years.
  - Service the outlet filter as needed between pump-outs.
  - Maintain the original site conditions as permitted and approved by the department.
  - Operate the system without exceeding the design parameters.