

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER PERMIT

NO PERMIT(S) FOR CONSTRUCTION, LOCATION OR RELOCATION ACTIVITY SHALL BE ISSUED UNTIL AN AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION AUTHORIZATION HAS BEEN ISSUED

PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/OR IF SITE IS ALTERED OR INTENDED USE CHANGED

CONSTRUCTION AUTHORIZATION PERMIT**PERMIT # WREP-050924-2020****APPLICATION DATE:** 12/22/2020**BLDG. PERMIT#:****PIN:** 0679294349**RECORDED:****TOWNSHIP:** 18 - Swift Creek**JURISDICTION:** Wake County**ZONING:** R-30**APPLICANT:** Bobby Mills

4616 JERNIGAN DR

APEX, NC 27539-6856

BUSINESS PHONE:**HOME PHONE:****MOBILE PHONE:** (919) 801-0681**HD USE:** 0001 REPAIR/EXISTING SYSTEM**EXISTING USE:** 101A CONVENTIONAL ONE-FAMILY HOUSE**SITE ADDRESS:** 4616 JERNIGAN DR**SUBDIVISION:** LANGSTON SUB PH3**LOT:** 70**ACRES:** 0.71

DIRECTIONS: Take Lake Wheeler Rd South of Raleigh. Turn Right onto Penny Rd, Turn left onto Graham Newton Rd, Turn Right onto Ten Ten Rd then Left onto West Lake Rd. Turn left onto Langston Cir then Left onto Jernigan Dr. 4616 on Left.

Contractors shall install system on contour. See attached SITE PLAN for wastewater system design and well location. No underground utilities, water lines or sprinklers systems may be located in the original system, or permit areas. A septic tank filter with two risers for access is required. The wastewater system shall not be covered or placed into use until inspected by the Wake County Department of Environmental Services and Operations Permit issued. An Accepted Status System may be used in place of conventional system, if it can be placed in the permitted/authorized trench footprint (except reduction in line length and/or number as allowed for in approval) and the installation in accordance with the accepted system approval, without unauthorized product alteration. If permit required use of an Accepted Status System, substitution with another accepted status system may be made, as long as no changes are necessary in the location of each nitrifications line (including any increase in line length), trench depth or effluent distribution method. If changes are necessary, prior approval by this office is required before system installation. Maximum depth of line is calculated using the downhill side of the trench and includes slope correction.

CONSTRUCTION AUTHORIZATION PERMIT VALID FOR: Five Years**CONSTRUCTION AUTHORIZATION PERMIT: CA STATUS:** Issued**BY:** Corey Shive**DATE:** 12/22/2020**CA VALID FOR:** Five Years**DESIGN FLOW:** 360 GALLONS**BASEMENT:** No**BASEMENT FIXTURES:** No**SEPTIC TANK:** 1000 GALLONS**SEPTIC TANK FILTER:** Yes**DOSING PUMP TANK:** 1000 GALLONS**DOSING PUMP TANK FILTER:** No**GREASE TRAP:****GREASE TRAP FILTER:****RECIRCULATION PUMP TANK:****RECIRCULATION PUMP TANK FILTER:****PROPOSED SYSTEM:** 0.25 - 25% Reduction (Innovative or Accepted)**EXISTING SYSTEM:** Yes**DRAINFIELD SQ. FT:** 990**AGGREGATE DEPTH:** 12**MAX. TRENCH DEPTH:** 21 INCHES**DISTRIBUTION DEVICE:** PM - Pressure Manifold**TRENCH #:** 3**TRENCH LENGTH:** 110 FEET**TRENCH WIDTH:** 36 INCHES**TOTAL TRENCH LENGTH:** 330 FEET

CENTER SPACING: 9 FEET
PRETREATMENT:
SUBFIELDS #:
PUMP TDH: 3 FEET

MINIMUM SOIL COVER: 6 INCHES
APPROVAL #:
PUMP DESIGN FLOW: 26.13
ZONE VALVE: No

ASDMS REQUIRED: No

LINE OF CREDIT REQUIRED: No

OPERATOR REQUIRED: No

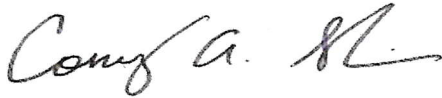
P.E. SIGN OFF/ASBUILT REQUIRED: No

TRIPARTY AGREEMENT REQUIRED: No

SPECIFIC CONSTRUCTION AUTHORIZATION REQUIREMENTS:

Permit issued for 3 bedroom home at 360 gal/day. (3) 110'x3' Accepted status lines should be installed as shown on CA Site plan and connected to a new pressure manatee. Lines must meet all required setbacks and should be installed on contour. Max Trench depth is 21". Tap sheet is included with CA. New manatee and lines should be connected to existing septic and pump tanks. A drawdown test will need to be performed at time of installation to ensure correct dosing. Call WCES with any questions prior to installation. 919-614-7175.

Issued By:



Date: 12/22/2020

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES

3 TAP PRESSURE MANI-TEE DESIGN

Name: Bobby Mills P.I.N. #: 0679 29 4349 D#: REP-050924-2020

Address: 4616 Jernigan Dr Subdiv: Langston Ph 3 Lot#: 70

of BDR: 3 Daily Flow: 360 gal/day L.T.A.R.: 0.28 gal/day/sq.ft

Septic Tank: 1000 gals Pump Tank: 1000 gals Sq. Foot: 990 Stone Depth: AS

Number of Taps: 3 Length of Trenches: 330 ft(See Tap Chart for Details)

Depth of Trenches: 21 in Manifold Length: 36 in

Manifold Diameter: 2in sch 40pvc Mani-Tee Tap Configuration: 6 in spacing 1 side(s) of manifold

Supply Line: length: 160 ft Diameter: 2 in sch 40pvc

Friction Loss + Fitting Loss: 3.72 ft(supply line length + 70' for fittings in pump tank)

Design Head: 3 ft Elevation Head: 8.00 ft

Total Head: 14.72 ft Pump to Deliver: 26.13 gals/min at 14.72 ft head

Dosing Volume: 150 gals,

Drawdown: 150 gals divided by 20 gals/in = 7.5 inches

Simplex Control Panel required; elapsed time meter and cycle counter required; Floats to be determined by type of pump tank used. A septic tank filter is required, see permit details for specifics.

TAP CHART

Bench Mark	<u>4</u>	is = 100.00	set at	PT			Design Head:	<u>3</u>	
Pump tank elev.	<u>4</u>		100.00	Pump elev.	<u>95.00</u>		Manifold elev.	<u>103.00</u>	
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
1	Blue	2.0	102.00	<u>110</u>	1/2in SCH 40	8.71	120.00	330	0.364
2	Pink	2.5	101.50	<u>110</u>	1/2in SCH 40	8.71	120.00	330	0.364
3	Red	3.0	101.00	<u>110</u>	1/2in SCH 40	8.71	120.00	330	0.364
		total	feet =	<u>330</u>	gal/min =	<u>26.13</u>		<u>LTAR =</u>	<u>0.28</u>
% of Dose Vol.	<u>70</u>			<u>Des. Flow</u>	<u>360</u>			(ltar + 5%)	0.29
Dose Volume	<u>150</u>			<u>Pump Run=</u>	<u>13.78</u>			(ltar W/ INOV)	0.37
Dose Pump Time	<u>5.75</u>			<u>Tank Gal/IN</u>	<u>20</u>			(ltar + 5%)	0.39
Drawdown in Inches	<u>7.5</u>			<u>Elev. Head</u>	<u>8.00</u>				
Supply Line Length	<u>160</u>								
Comments:									

Hydraulic Profile

Manifold Elevation	<u>103.00</u>	<u>160</u>
Pump tank elev.	<u>100.00</u>	<u>2</u>
Pump elev.	<u>95.00</u>	<u>0</u>