

**AOWE ATO INSTALLATION REPORT**

**PACK-ONE PLLC  
Stephen Bristow  
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Selma NC 27576  
919-906-4737  
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December 26, 2024

RE: Cedar Point Subdivision Lot 5- Installation Revision- Pump Tank and Pressure Manifold Added  
126 Deodora Lane Cameron NC 28326  
PIN: 9574-21-0401

Ownership:  
Smith Douglas Builders  
Natascha Clark  
nclark@smithdouglas.com  
760.485.4115

Septic System Installer:  
Ricky Noto  
A and R Residential  
845-742-8576

Program Supervisor, Mark Osburne, REHS Harnett County Health Department:  
The plumbing stub was installed too deep for the trench depth specification to be met at Cedar Point Lot 5, so a pump tank and pressure manifold were added by the installer. See the attached 'as-built' revision diagram and pressure manifold tap sheet.  
Please let me know if you have any questions,



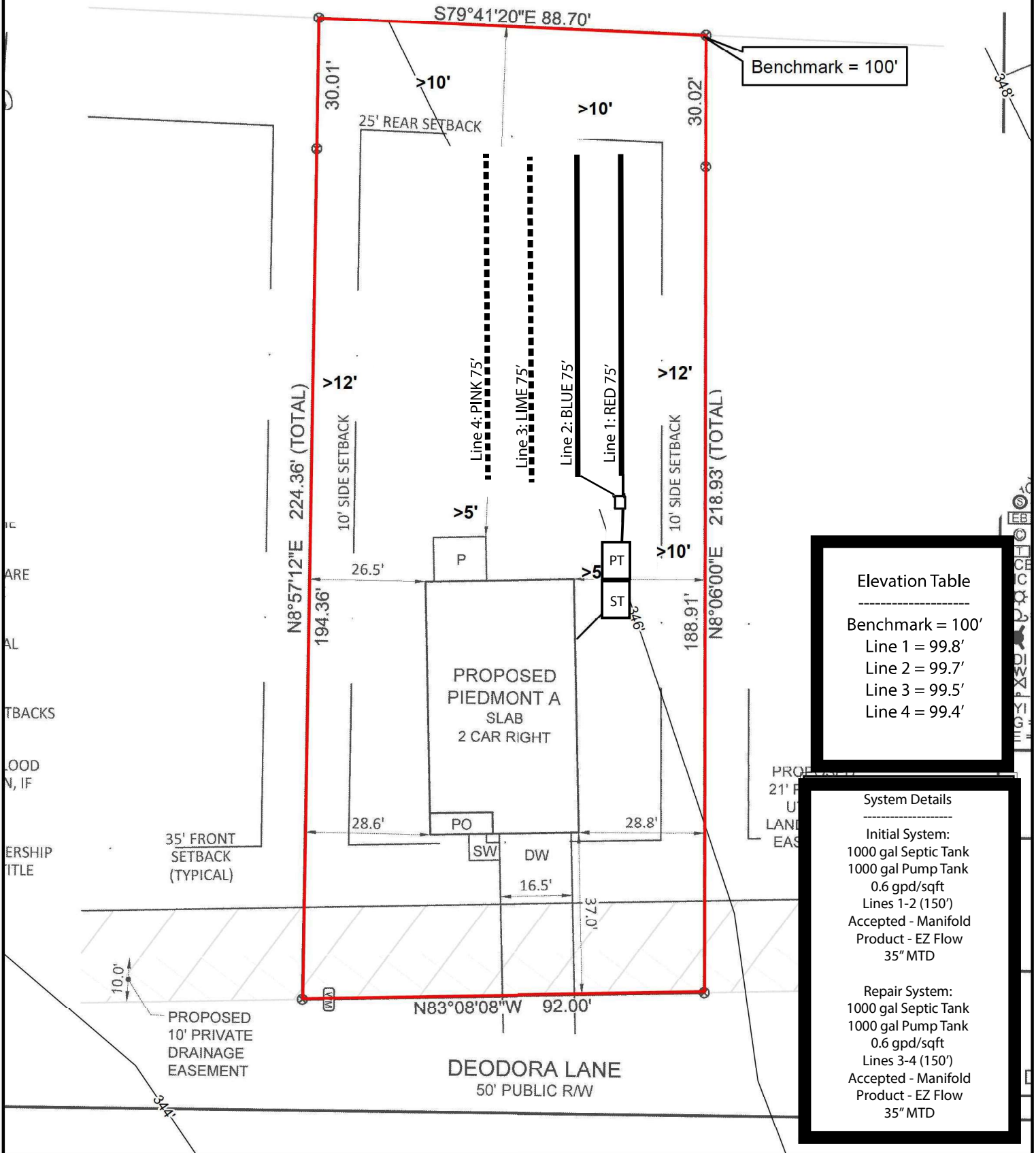
Stephen W. Bristow, NCLSS # 1167, NC AOWE # 12, NC REHS #904

Attached:  
Installation Diagram  
PM Tap Sheet

# Cedar Pointe Lot 5 :: Septic Layout Detail

"As Built"

COUS = 13.0776  
IMPERVIOUS = 5,683 SF



Elevation Table	
Benchmark = 100'	
Line 1	= 99.8'
Line 2	= 99.7'
Line 3	= 99.5'
Line 4	= 99.4'

System Details	
<b>Initial System:</b>	
1000 gal Septic Tank	
1000 gal Pump Tank	
0.6 gpd/sqft	
Lines 1-2 (150')	
Accepted - Manifold	
Product - EZ Flow	
35" MTD	
<b>Repair System:</b>	
1000 gal Septic Tank	
1000 gal Pump Tank	
0.6 gpd/sqft	
Lines 3-4 (150')	
Accepted - Manifold	
Product - EZ Flow	
35" MTD	

**Legend**

System
  Repair

Map provided by PAC-One LLC  
 [;] Locations are approximations and [;] [;] are provided for reference only [;] [;]  
 Parcel data provided by: Harnett County  
 Elevation data provided by: NCDOT

Coordinate System: NAD 1983 StatePlane North Carolina FIPS 3200  
 Projection: Lambert Conformal Conic  
 Datum: North American 1983  
 Units: Foot US

N

1 inch = 30 feet

0 5 10 20 30 40 Feet

## RESIDENTIAL PRESSURE MANIFOLD DESIGN

Permit # Cedar Point 5 Revision

# of BDR: 3 Daily Flow: 360 gal/day L.T.A.R.: 0.6000 gal/day/sq.ft

Septic Tank: 1000 gals Pump Tank: 1000 gals Sq. Foot: 450 System Type: Accepted

Number of Taps: 3 Length of Trenches: 150 ft(See Tap Chart for Details)

Depth of Trenches: 35 in Manifold Length: 36 in

Manifold Diameter: 4in sch 80pvc Tap Configuration: 6 in spacing 1 side(s) of manifold

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

Friction Loss + Fitting Loss: 1.64 ft(supply line length + 70' for fittings in pump tank)

Design Head: 2 ft Elevation Head: 6.00 ft

Total Head: 9.64 ft Pump to Deliver: 25.00 gals/min at 9.64 ft head

Dosing Volume: 68 gals,

Drawdown: 68 gals divided by 20 gals/in = 3.4 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.

### TAP CHART

line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	# of Panels (PPBPS)	Spacing of Panels (in)
Benchmark 6.4 is = 100.00 set at front left corner Design Head: 2 Pump tank elev. 6.6 99.80 Pump elev. 94.80 Manifold elev. 100.80											
1	Red	6.60	99.80	75	3/4in SCH 40	12.5	180.00	225	0.8000		
2	Blue	6.70	99.70	75	3/4in SCH 40	12.5	180.00	225	0.8000		
			#VALUE!			0	0.00		#VALUE!		
			106.40			0	0.00	0	#DIV/0!		
			106.40			0	0.00	0	#DIV/0!		
			106.40			0	0.00	0	#DIV/0!		
			106.40			0	0.00	0	#DIV/0!		
			106.40			0	0.00	0	#DIV/0!		
			106.40			0	0.00	0	#DIV/0!		
			106.40			0	0.00	0	#DIV/0!		
			Total Feet =	150	gal/min =	25.00			LTAR =	0.6000	
			Feet Required =	150	Velocity =	2.39			(ltar + 5%)	0.6300	
Total # of Panels (PPBPS)			Des. Flow			360			(ltar w/25% red)	0.8000	
% of Dose Vol.			Pump Run=			14.40			(ltar + 5%)	0.8400	
Dose Volume			Tank Gal/IN			20					
Dose Pump Time			Elev. Head			6.00					
Drawdown in Inches											

Comments: Install EZ Flow only-Do not install Chamber because of sandy soil.  
 Permit is void if chambers are installed



# Hydraulic Profile

