



RESIDENTIAL WELL CONSTRUCTION RECORD

North Carolina Department of Environment and Natural Resources- Division of Water Quality

WELL CONTRACTOR CERTIFICATION # 2421-A

1. WELL CONTRACTOR:

James D Stephenson Jr.

Well Contractor (Individual) Name

Stephenson's Well Drilling Inc.

Well Contractor Company Name

1158 Cash Road

Street Address

Creedmoor

City or Town

NC

State

27522

Zip Code

(919) 528-1679

Area code Phone number

2. WELL INFORMATION:

WELL CONSTRUCTION PERMIT# 00236

OTHER ASSOCIATED PERMIT#(if applicable)

SITE WELL ID #(if applicable)

3. WELL USE (Check Applicable Box): Residential Water Supply ☒

DATE DRILLED 9-15-10

TIME COMPLETED 10:30 AM ☒ PM ☐

4. WELL LOCATION:

CITY: CREEDMOOR

COUNTY: GLAUVILLE

Blocks Bend, Old Brassfield Sub.
(Street Name, Numbers, Community, Subdivision, Lot No., Parcel, Zip Code)

TOPOGRAPHIC / LAND SETTING: (check appropriate box)

☐ Slope ☐ Valley ☒ Flat ☐ Ridge ☐ Other

LATITUDE 36 07.407 " DMS OR 3X.XXXXXXXX DD

LONGITUDE 78 33.691 " DMS OR 7X.XXXXXXXX DD

Latitude/longitude source: ☒ GPS ☐ Topographic map

(location of well must be shown on a USGS topo map and attached to this form if not using GPS)

5. WELL OWNER:

SMARTbuilt, Inc.

Owner Name

12324 HAMPTON WAY DR. Suite 104

Street Address

Wake Forest

City or Town

N.C.

State

27587

Zip Code

(919) 556-2002

Area code Phone number

6. WELL DETAILS:

a. TOTAL DEPTH: 325'

b. DOES WELL REPLACE EXISTING WELL? YES ☐ NO ☒

c. WATER LEVEL Below Top of Casing: 30 FT.
(Use "+" if Above Top of Casing)

d. TOP OF CASING IS 1 FT. Above Land Surface*
*Top of casing terminated at/or below land surface may require a variance in accordance with 15A NCAC 2C .0118.

e. YIELD (gpm): 10 METHOD OF TEST Gauge

f. DISINFECTION: Type HTH Amount 1 1/2 lbs.

g. WATER ZONES (depth):

Top 3/0 Bottom 3/0 Top Bottom

Top Bottom Top Bottom

Top Bottom Top Bottom

7. CASING: Depth Diameter Thickness/ Weight Material

Top 0 Bottom 77 Ft. 6 1/8" SDR21 POC

Top 77 Bottom 80 Ft. 6 1/8" 1/8" GAU.

Top Bottom Ft. Top Bottom

8. GROUT: Depth Material Method

Top 0 Bottom 20 Ft. Concrete PAUR

Top Bottom Ft. Top Bottom

Top Bottom Ft. Top Bottom

9. SCREEN: Depth Diameter Slot Size Material

Top N/A Bottom Ft. in. in.

Top Bottom Ft. in. in.

Top Bottom Ft. in. in.

10. SAND/GRAVEL PACK:

Depth Size Material

Top N/A Bottom Ft. Ft.

Top Bottom Ft. Ft.

Top Bottom Ft. Ft.

11. DRILLING LOG

Top Bottom Formation Description

0 1 Top Soil

1 1 Shallow Soil

73 1 325 ROCK

Top Bottom Formation Description

Top Bottom Formation Description

Top Bottom Formation Description

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12. REMARKS:

I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.

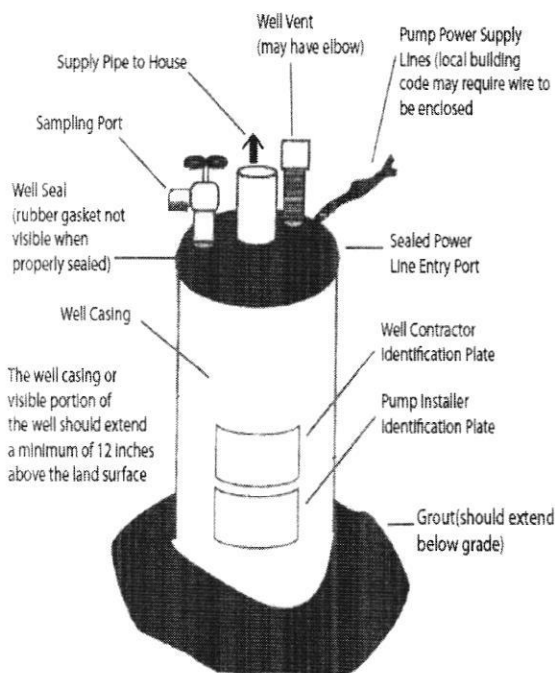
James D. Stephenson Jr. 9-15-10
SIGNATURE OF CERTIFIED WELL CONTRACTOR DATE

James D Stephenson Jr.
PRINTED NAME OF PERSON CONSTRUCTING THE WELL

Granville-Vance District Health Department

ENVIRONMENTAL HEALTH SECTION

WELL SAMPLING RESULTS REPORT



OWNER: Smart Built
 REQUESTEE: 12324 Hampton Way Dr, S 104 WF, NC
 TAX MAP #: 18260944322
 PROPERTY ADDRESS: Brooks Bend
Old Brassfield - lot # 65

SAMPLES COLLECTED: ☒ Bacteriological ☒ Inorganics
☐ Nitrates/Nitrites
 COLLECTION DATE: 6-13-11
 TIME COLLECTED: 3:30 pm
 SAMPLING POINT: well
 SAMPLE COLLECTED BY: DL (phone #: 919-693-2688)

BACTERIOLOGICAL RESULTS

Total Coliform: ☒ Absent ☐ Present
 Fecal Coliform: ☒ Absent ☐ Present

If either is present, we strongly recommend the following:

- *Disinfect your well in accordance with the enclosed disinfection procedures; and*
- *Do not drink your water as it is considered unsafe for drinking purposes.*

STAFF NOTED THE FOLLOWING DEFICIENCIES WHILE SAMPLING THIS WELL:

- ☐ Well casing does not extend at least 12" above land surface
- ☐ All openings for piping, wiring, and vents are not at least 12" above surface
- ☐ Approved sanitary well seals are not installed
- ☐ Well house is not free of storage
- ☐ Insufficient grout around well casing
- ☐ Unable to find the well head or remove the cover to inspect well head

If deficiencies are noted, please compare your well to the diagram above. Our Department strongly encourages you to correct these deficiencies as they can create water quality problems with your well, potentially making your well unsafe for drinking purposes. To correct these deficiencies, you must apply for a well repair permit with our Department. Only a Certified Well Contractor can perform repairs on your well.

WELL TYPE: ☒ Drilled ☐ Bored ☐ Hand-dug
☐ Spring ☐ Unknown

- Drilled wells collect water from water-bearing zones located in consolidated rock, and are considered a protected water supply.
- Springs, bored wells, and hand-dug wells do not usually collect water from zones in consolidated rock, therefore water quality problems are usually more prevalent in these types of water supplies.
- Because springs, bored wells, and hand-dug wells are usually influenced by surface water run-off, our Department cannot guarantee that the sampling results obtained will remain the same on a daily basis.

INORGANICS (including Nitrates/Nitrites)

Contaminant	Results (mg/l)	MCL (mg/l)
Arsenic	<u>< 0.005</u>	0.01
Barium	<u>< 0.1</u>	2.0
Cadmium	<u>< 0.001</u>	0.005
Calcium	<u>10</u>	No limit
Chromium	<u>< 0.01</u>	0.10
Copper	<u>< 0.05</u>	1.3
Fluoride	<u>< 0.20</u>	4.0
Iron	<u>< 0.10</u>	0.30
Hardness as CaCO ₃ (Ca, Mg)	<u>41 / 7.42 grains</u>	No limit
Lead	<u>< 0.005</u>	0.015
Magnesium	<u>4</u>	No limit
Manganese	<u>< 0.03</u>	0.05
Mercury	<u>< 0.0003</u>	0.002
Nitrate	<u>< 1.00</u>	10.0
Nitrite	<u>< 0.10</u>	1.0
pH	<u>6.9</u>	No less than 6.5
Selenium	<u>< 0.025</u>	0.05
Silver	<u>< 0.05</u>	0.10
Sodium	<u>7.40</u>	
Zinc	<u>1.72</u>	5.0

Compare your results to the MCL (Maximum Contaminant Level). Your results should not exceed the MCL. If they do, please refer to the attached "Guide to Water Quality Controls."
 ** Not tested for on new well samples

Everything looks great!
 (CC)

Granville - Vance District Health Department

00236

Environmental Health

Well Construction Permit

Owner/Applicant: Smart Built Date: 3-26-2010
Address or Location of Property: 13 Brooks Bend

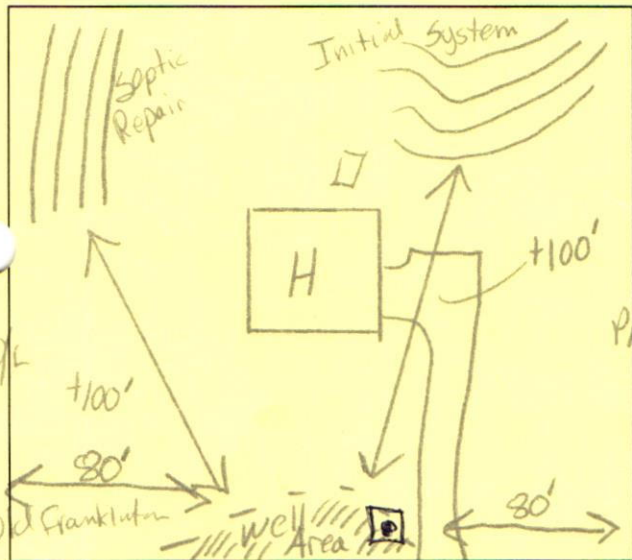
Subdivision & Lot #: Olde Brassfield 65 Septic Permit #: 6824
Zoning Permit #: 16658 Environmental Health Specialist: David Cumbee

This well permit is to locate and site the area that a private groundwater well may be established on the property listed above by the Environmental Health Specialists of Granville County. If one does not locate the well in the approved area and complete the well as specified by the 15A NCAC .02C rules, then permits may be revoked. At completion of drilling of the well, grout must be witnessed by EHS and a well log turned into Environmental Health.

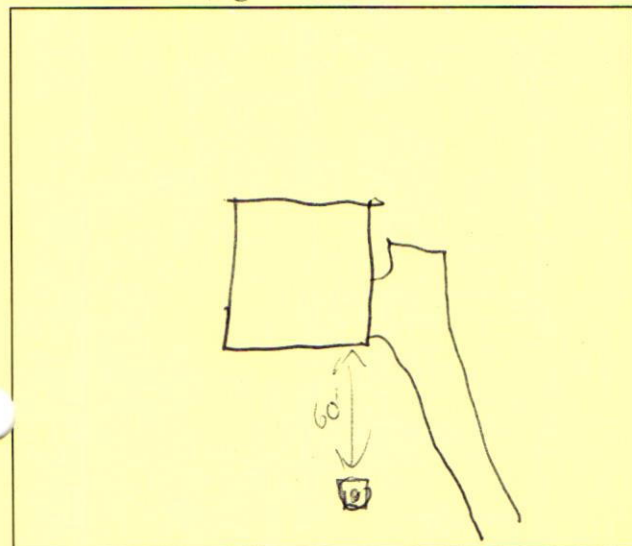
Minimum Setbacks: (these are the main setbacks, but not all required setbacks)

Setback from property lines – 10 ft Setback from septic tank and drain field, including repair area – 100 ft
Setback from structural foundations – 25 ft Setback from ponds, lakes or other bodies of water – 50 ft

Site Sketch:



As Built Drawing:



Conditions: Call 693-2688
With any questions -

Authorized Agent: David Cumbee
Date: 3-26-2010

Well Grout: (Circle or write in)

Witnessed: Yes or No EHS Agent: David Cumbee
Date: 9-15-10 Annular Space Open: Yes or No
Over reamed: Yes or No
Method: Pump ☒ Poured ☐ Pressure
Depth Grouted: 20' ft
Well Log received: Yes or No (EHS to Attach to Permit)

Well Final: (Place a check mark when finalized)

Seal Present and Intact: ☒ Air Vent: ☒
Hose Spigot: ☒ Electrical Box: ☒
Pump Installer Tag: ☒ Well Installer Tag: ☒
All holes sealed: ☒ 12" above grade: ☒

Comments: Knott Pump Service
Red Jacket depth 280'
Installed 9-19-10

Well Completion Permit: David Cumbee, EHS
Date Completed: 9-24-10

Water Samples Taken: Date: 6-13-11
EHS: David Cumbee **Results:** _____
Retest: _____ **Results:** _____

Granville - Vance District Health Department
Environmental Health

Pin 18260944322

Permit Number 6824

☒ Improvement Permit

☒ Construction Authorization

Final Sketch

Smart Built
Applicants Name

Olde Brassfield 65
Subdivision - Section - Lot

Physical Address: Brooks Bend

True Works
System Installer

9-24-10
Date

System design and details as installed.

Septic Tank Information:

Date: 5-25-10

Manufacture: D-13 1000gal

ID #: STB-646

Pump Tank Information:

Date: _____

Manufacturer: _____

ID #: _____

Distribution Box ☒

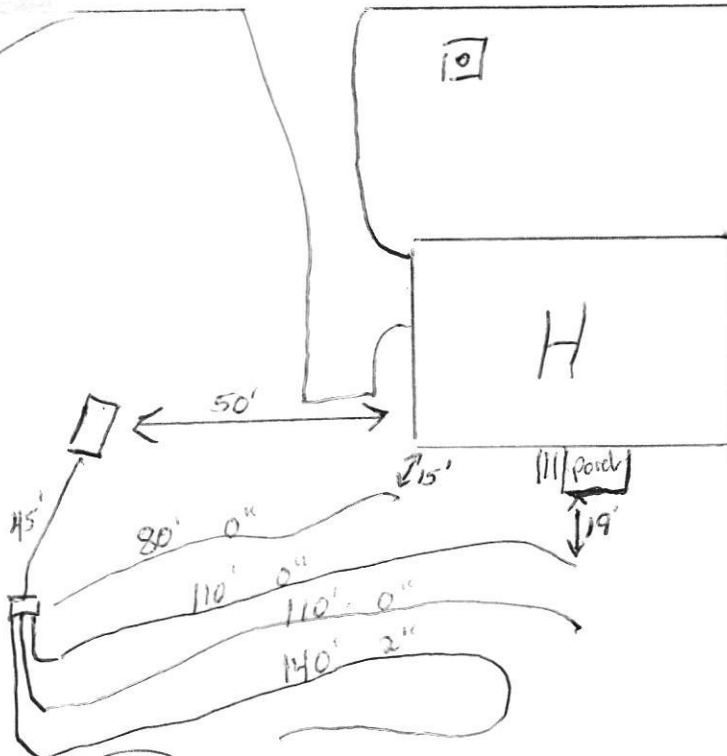
Pressure Manifold _____

Serial Distribution _____

Type of Facility: House

Number of Bedrooms: 4

Type of System: gravity - 2 flow



David Anderson
Authorized Signature

9-24-10
Date

PERMIT NUMBER 06824

GRANVILLE-VANCE DISTRICT HEALTH DEPARTMENT
IMPROVEMENT AND OPERATION PERMITS

COUNTY:	TAX NO.	TYPE OF ESTABLISHMENTS			*THIS PERMIT SHALL BE ACCOMPANIED BY A LAYOUT SHOWN ON A PLAT, INCLUDING SYSTEM REQUIREMENTS.
Granville	18260944322	RESIDENCE ☒	NUMBER OF BEDROOMS:	NUMBER OF OCCUPANTS:	
OWNER:	SR. NO.	BUSINESS ☐	4	8 max	
Smart Built	1705	OTHER ☐			
APPLICANT'S ADDRESS:		WATER SUPPLY	WELL ☐	OTHER ☐	*THIS IMPROVEMENT PERMIT IS SUBJECT TO REVOCATION IF THE INTENDED USES CHANGE FROM THOSE SHOWN ON THE IMPROVEMENT PERMIT. CHANGES SHALL REQUIRE HEALTH DEPARTMENT APPROVAL.
12324 Hamptonway Dr		TYPE OF WASTEWATER SYSTEM	INITIAL INSTALLATION	REPAIR (Pump)	
56104 Wake Forest, 21587			Type III g	Type III h, g	
		DESIGN FLOW:	450 gpd		
PROPERTY ADDRESS/LOCATION:		LTAR:	25 gpd/ft ²	3 gpd/ft ²	PERMIT VALID FOR: 5 YEARS YES ☒ NO ☐
13000 S Bend		ABSORPTION AREA:	1745 ft ²		
SUBDIVISION:		TRENCH WIDTH:	3'		
Older Crossfield		TRENCH DEPTH:	24"		
LOT NUMBER:		TRENCH SPACING:	9' o.c.		NO EXPIRATION YES ☐ NO ☒
65		TOTAL TRENCH LENGTH:	440'		
REFERENCE SKETCH (SEE PLAT FOR DETAILS)		NUMBER OF TRENCHES:	4		
		GRAVEL DEPTH:	Accepted Status		
		TANK SIZE:	1000 gal		
		PUMP TANK SIZE:			
		DISTRIBUTION DEVICE:	Distribution Box		

IMPROVEMENT PERMIT DATE: 3-25-2010 / updated 7-2-10
FOR: Smart Built Inc.
ISSUED BY: David Cumber

CONSTRUCTION AUTHORIZATION FOR IMPROVEMENT PERMIT# 6824

Unless otherwise indicated, the same conditions above apply regarding system type, layout, location and installation requirements.
(The wastewater system cannot be installed until authorization is signed)

Comments: Divert foundation drain and gutters to left back corner of house

Date: 3-25-2010 Environmental Health Specialist: David Cumber
Construction Authorization Addendum ☐ Yes ☒ No

OPERATION PERMIT

DATE: 9-24-10

SYSTEM INSTALLED BY: Trueworks
ISSUED BY: David Cumber

PERFORMANCE, MONITORING, MAINTENANCE AND OPERATION
AS REQUIRED BY RULE .1961