

HTE# 14-5-34883

Harriet County Department of Public Health

28091

Improvement Permit

A building permit cannot be issued with only an Improvement Permit

ISSUED TO: Gregory + Linda Cox PROPERTY LOCATION: 50415 Rawls CA RD
NEW REPAIR EXPANSION SUBDIVISION: Hectors Creek LOT # 19
Type of Structure: EX SFD Site Improvements required prior to Construction Authorization Issuance:
Proposed Wastewater System Type:
Projected Daily Flow: 480 GPD
Number of bedrooms: 4 Number of Occupants: 8 max
Basement Yes No
Pump Required: Yes No May be required based on final location and elevations of facilities
Type of Water Supply: Community Public Well Distance from well _____ feet Permit valid for: Five years
Permit conditions: _____ No expiration

Authorized State Agent: [Signature] Date: 11-20-14 SEE ATTACHED SITE SKETCH
The issuance of this permit by the Health Department in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. This site is subject to revocation if the site plan, plat, or the intended use changes. The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to conditions of this permit.

Construction Authorization

(Required for Building Permit)

The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by references into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.

ISSUED TO: Gregory + Linda Cox PROPERTY LOCATION: 50415 Rawls (Havel) RD
Facility Type: EX SFD 3 to 4 Bn New Expansion Repair
Basement? Yes No Basement Fixtures? Yes No
Type of Wastewater System** CONVENTIONAL (Initial) Wastewater Flow: 360 GPD
(See note below, if applicable Pump to 25% reduction (Repair))

Installation Requirements/Conditions
Septic Tank Size 1000 Gallons Number of trenches 2
Exact length of each trench 66 feet Trench Spacing: 9 Feet on Center
Pump Tank Size _____ gallons Trenches shall be installed on contour at a Soil Cover: 6 inches
Maximum Trench Depth of: 24-16 inches (Maximum soil cover shall not exceed 36" above the trench bottom)
Pump Requirements: _____ ft. TDH vs. _____ GPM Aggregate Depth: 4 inches below pipe
Conditions: _____ 2 inches above pipe
12 inches total

WATER LINES (INCLUDING IRRIGATION) MUST BE 10FT. FROM ANY PART OF SEPTIC SYSTEM OR REPAIR AREA. NO UTILITIES ALLOWED IN INITIAL OR REPAIR DRAIN FIELD AREA.

**If applicable: I understand the system type specified is different from the type specified on the application. I accept the specifications of this permit.

Owner/Legal Representative Signature: _____ Date: _____

This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be transferred when there is a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit. SEE ATTACHED SITE SKETCH

Authorized State Agent: [Signature] Date: 11-20-14
Construction Authorization Expiration Date: 11-20-19

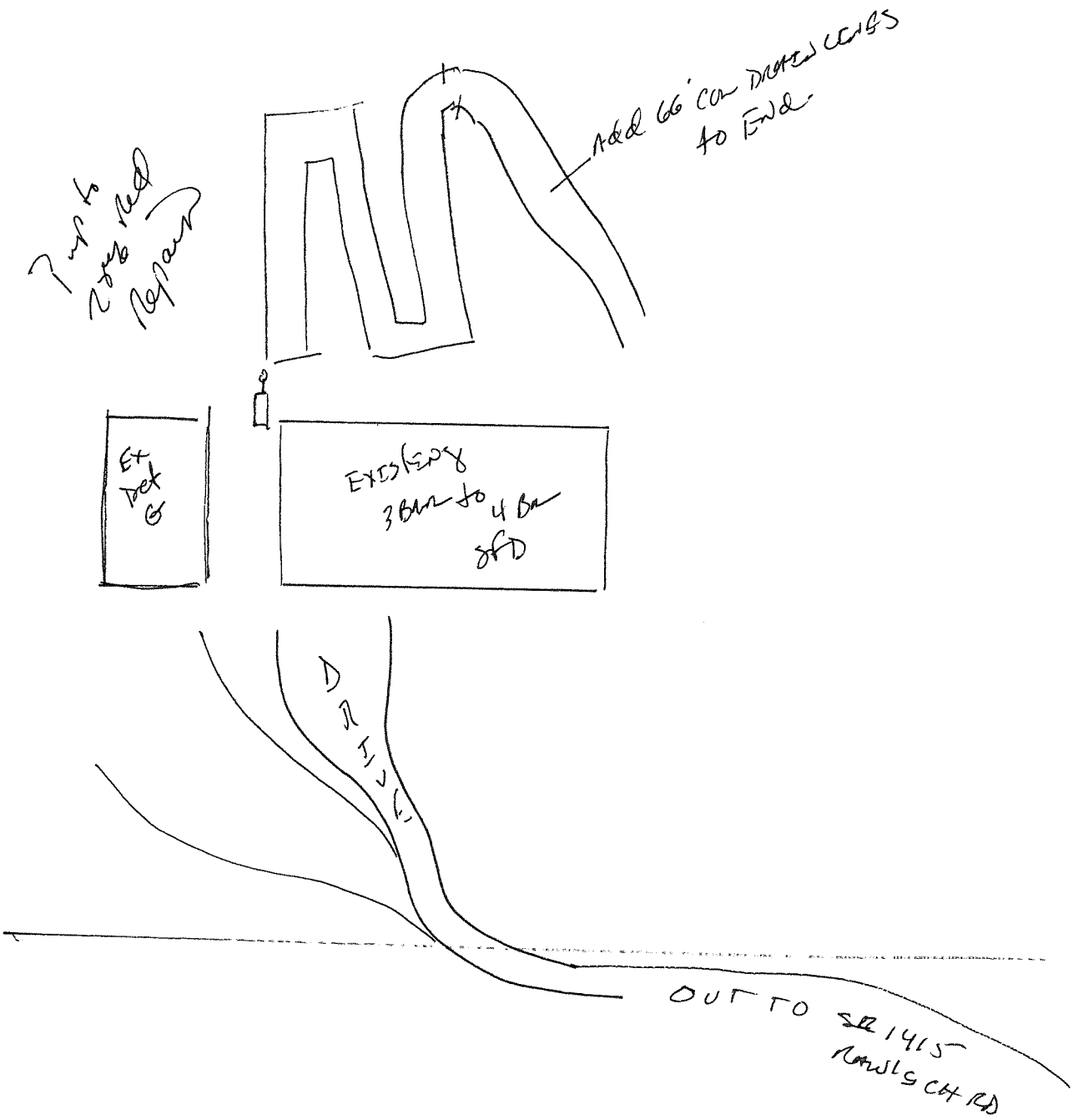
HTE# 14-5-34883

Permit # 28091

Harnett County Department of Public Health Site Sketch

ISSUED TO: Gregory + Linda Cox PROPERTY LOCATION: SR 1415 Pauls CH RD
SUBDIVISION Hectors Creek LOT # A

Authorized State Agent: [Signature] Date: 11-20-14



HAL OWEN & ASSOCIATES, INC.

SOIL & ENVIRONMENTAL SCIENTISTS

P.O. Box 400, Lillington NC 27546-0400
Phone (910) 893-8743 / Fax (910) 893-3594
www.halowensoil.com

13 November 2014

Mr. Greg Cox
397 Hectors Creek Lane
Fuquay Varina, NC 27526

Reference: Soil Investigation and Septic System Design
Lot 19 Hectors Creek Subdivision (8.63 Acres)

*Repair
for 4 BR only*

Dear Mr. Greg Cox,

A site investigation was conducted on 12 November 2014 for the above referenced property, which is located at 397 Hectors Creek Lane in the Hector's Creek Township of Harnett County, North Carolina. The purpose of this investigation was to determine the feasibility of modifying the existing septic system and repair area for the existing three-bedroom home to support a four-bedroom home. A soil and site investigation was conducted, and it appears that this lot is capable of supporting the septic needs of a four bedroom home. This report represents my professional opinion but does not guarantee or represent permit approval for any lot by the local Health Department.

Hal Owen & Associates Inc. reviewed the septic permits issued by the Harnett County Health Department and identified the existing septic system at the site. The home is connected to the public water supply. The existing septic system utilizes a 1000 gallon septic tank from which effluent is distributed by gravity to two 200-foot long gravel conventional drainlines located in the back yard. The soils were investigated and found to be provisionally suitable for subsurface sewage waste disposal in the vicinity of the existing system.

It appears the initial septic system can be modified to support the septic needs of a four bedroom home. The storage capacity of the existing septic tank is adequate to handle the additional daily flow, and it will not need to be replaced. An additional 133 feet of drainline will need to be added to the system by extending each existing drainline by 66 feet. The new drainlines will be added below the existing lines, and step-downs will be necessary to connect the old lines to the new lines. The new drainlines should be installed on contour with trench depths at 24 inches below surface. The modified system will utilize gravity distribution to two 266-foot conventional drainlines and have a corresponding long term application rate of 0.3 gal/day/ft².

HAL OWEN & ASSOCIATES, INC.

A soil investigation was conducted in the northern part of the property, which was observed to be underlain by soils rated as provisionally suitable soils for subsurface sewage waste disposal (see attached map). These provisionally suitable soils were observed to be firm clays to greater than 36 inches and will support long term acceptance rates of 0.3 gal/day/sqft. This usable soil area is approximately 1.5 acres in size, and it appears adequate to support the repair area for a four bedroom home.

This report and the attached septic system design information will need to be submitted to the County Health Department for review and the permitting process. I appreciate the opportunity to provide this service and hope to be allowed to assist you again in the future. If you have any questions or need additional information, please contact me at your convenience.



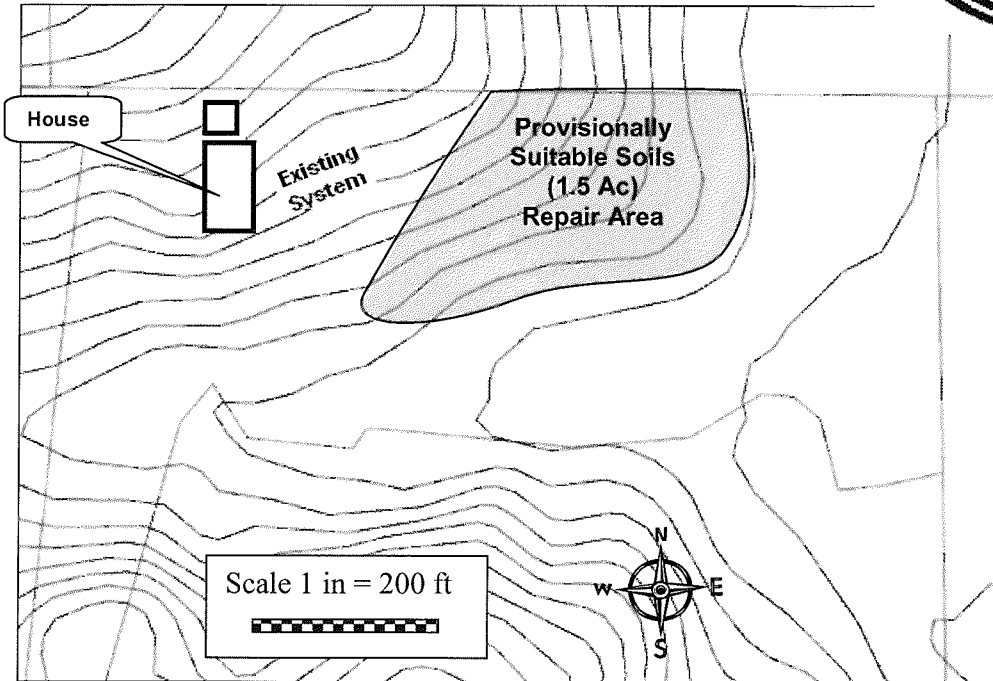
Sincerely,

Hal Owen
Licensed Soil Scientist

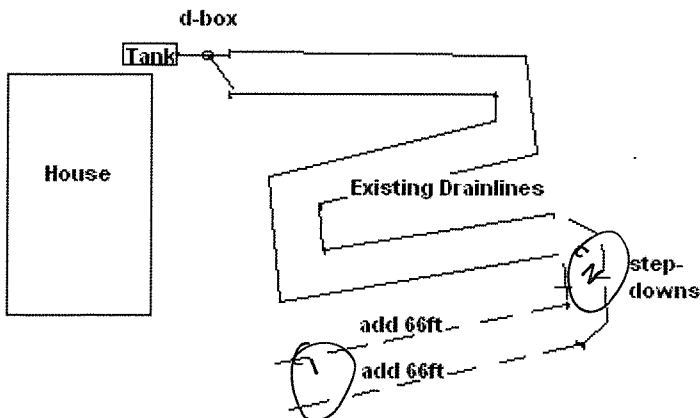
* REPAIR COUL @ USE Pump -
UNFINISHED OVERSPO AND lower GARAGE ^{connected by breezeway} OWNED SAED
* 3 BR Home + Two Bonus Rooms = 5 BR - only FINISH ONE?
Detached Garage connected to Septic System? 2 BR minimum
that would be 7 total?
Water Flow for Detached Garage NOT checked or mentioned
in Report



Soil Investigation and Septic System Design
 Lot 19 Hectors Creek Subdivision (8.63 Acres)
 13 November 2014



Modify the existing system as shown in the diagram below
 (drawing not to scale)



Handwritten notes:
 1, L-4% 0.5-1.0m Regen NWP
 5.30 CIM Analysis 45.4P
 est at 28' 1/2" 2-1
 2 L-4% 0.6-1.0m Regen NWP
 6.40 CIM Analysis 45.4P
 24+36 3/2 - 3
 2-1
 LWP