

Improvement Permit

A building permit cannot be issued with only an Improvement Permit

ISSUED TO: Guillermo Palacios PROPERTY LOCATION: 280 Wyndham Place Dr.
 SUBDIVISION: Wyndham Place LOT # 11
 NEW REPAIR EXPANSION
 Type of Structure: existing SFD Site Improvements required prior to Construction Authorization Issuance:
 Proposed Wastewater System Type: pump to 10" LDP
 Projected Daily Flow: 360 GPD
 Number of bedrooms: 3 Number of Occupants: 6 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: Raya McSwain, RCHS Date: 6/8/2010 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: Guillermo Palacios PROPERTY LOCATION: 280 Wyndham Place
 SUBDIVISION: Wyndham Place LOT # 11
 Facility Type: existing SFD New Expansion Repair
 Basement? Yes No Basement Fixtures? Yes No
 Type of Wastewater System** _____ (Initial) Wastewater Flow: 360 GPD
 (See note below, if applicable Pump to 10" large Diameter Pipe (Repair))
Installation Requirements/Conditions
 Septic Tank Size existing gallons Exact length of each trench 300 feet Trench Spacing: 6 Feet on Center
 Pump Tank Size 1000 gallons Trenches shall be installed on contour at a Soil Cover: 6-12 inches
 Maximum Trench Depth of: 16 inches (Maximum soil cover shall not exceed 36" above the trench bottom)
 (Trench bottoms shall be level to +/- 1/4" in all directions)
 Pump Requirements: _____ ft. TDH vs. _____ GPM _____ inches below pipe
 Conditions: Contractor to meet on site to determine layout Aggregate Depth: _____ inches above pipe
6/14/2010 pm _____ inches total

**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: Raya McSwain, RCHS Date: 6/8/2010
 Construction Authorization Expiration Date: 6/8/2015

HTE# Attempt to Repair

Permit # 26000

Harnett County Department of Public Health Site Sketch

ISSUED TO: Guillermo Palacios

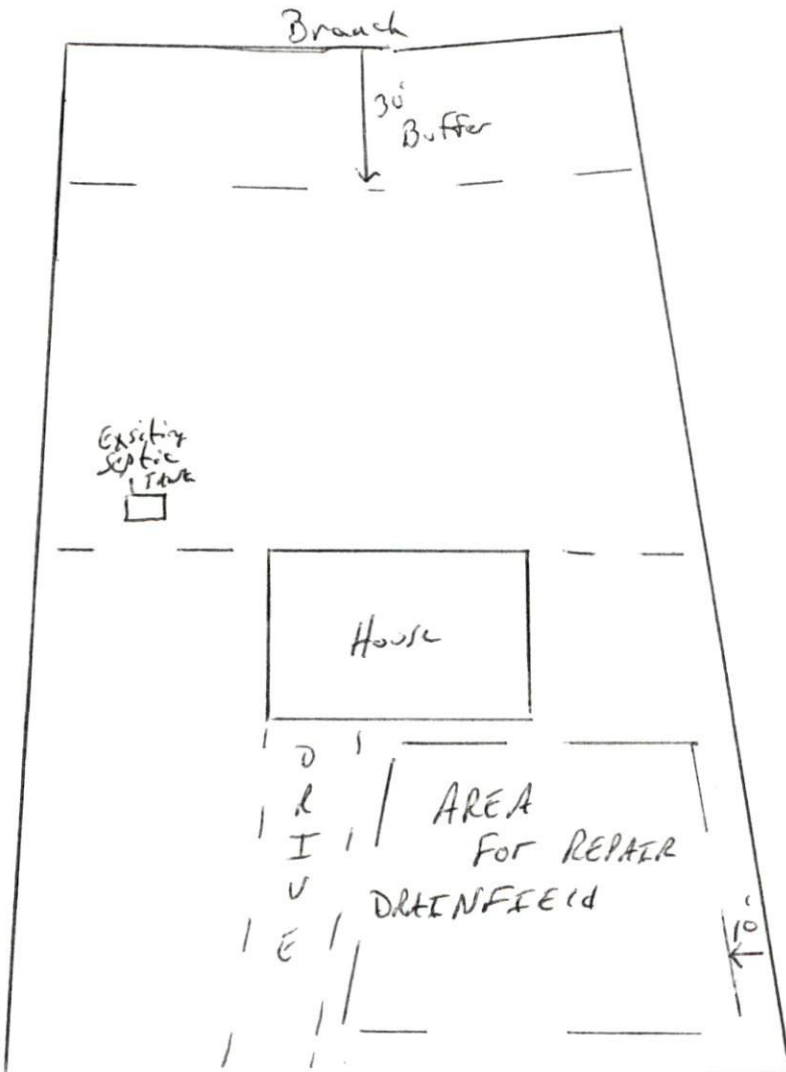
PROPERTY LOCATOR: 280 Wyndham Place Dr.

SUBDIVISION Wyndham Place

LOT # 11

Authorized State Agent: [Signature]

Date: 6/8/2010



* Pump Tank
can be placed
anywhere so
that fall can be
achieved.

* A Bull run valve
can be placed
between the septic
& pump tank if
original drainfield
can be saved

resist 500 pounds crushing strength, structurally sound, and shall be resistant to corrosion. Valves placed below ground level shall be provided with a valve box and suitable valve stem so that they may be operated from the ground surface.

*History Note: Authority G.S. 130A-335 (e)(f)(1)[2nd];
Eff. July 1, 1982;
Amended Eff. August 1, 1991; January 1, 1990; August 1, 1988; February 1, 1987;
Temporary Amendment Eff. January 1, 1999;
Amended Eff. August 1, 2000.*

15A NCAC 18A .1956 MODIFICATIONS TO SEPTIC TANK SYSTEMS

The following are modifications to septic tank systems or sites which may be utilized singly or in combination to overcome selected soil and site limitations. Except as required in this Rule, the provisions for design and installation of Rule .1955 and .1970 of this Section shall apply:

- (1) **SHALLOW SYSTEMS:** Sites classified UNSUITABLE as to soil depth or soil wetness may be reclassified as PROVISIONALLY SUITABLE with respect to soil depth or soil wetness conditions by utilizing shallow placement of nitrification trenches in the naturally occurring soil. Shallow trenches may be used where at least 24 inches of naturally occurring soil are present above saprolite, rock, or soil wetness conditions and all other factors are PROVISIONALLY SUITABLE or SUITABLE. Shallow trenches shall be designed and constructed to meet the vertical separation requirements in Rule .1955(m) or .1970 of this Section. The long-term acceptance rate shall be based on the most hydraulically limiting naturally occurring soil horizon within 24 inches of the ground surface or to a depth of one foot below the trench bottom, whichever is deeper. Soil cover above the original grade shall be placed at a uniform depth over the entire nitrification field and shall extend laterally five feet beyond the nitrification trench. The type and placement of soil cover shall be approved by the local health department.
- (2) **DRAINAGE AND RESTRICTIVE HORIZONS:** Sites classified UNSUITABLE as to soil wetness conditions or restrictive horizons may be reclassified PROVISIONALLY SUITABLE as to soil wetness conditions or restrictive horizons when:
 - (a) Soils are Soil Groups I or II with SUITABLE structure, and clay mineralogy;
 - (b) Restrictive horizons, if present, are less than three inches thick or less than 12 inches from the soil surface;
 - (c) Modifications can be made to meet the requirements in Rule .1955(m) of this Section for the separation between the water table and the bottom of the nitrification trench at all times and when provisions are made for maintenance of the drainage systems;
 - (d) Easements are recorded and have adequate width for egress and ingress for maintenance of drainage systems serving two or more lots; and
 - (e) Maintenance of the drainage system is made a condition of any permit issued for the use or operation of a sanitary sewage system.Drainage may be used in other types of soil when the requirements of Rule .1942, .1970 or .1948(d) in this Section are met.
- (3) **MODIFIED TRENCHES:** Modified nitrification trenches or lines, including large diameter pipe (greater than four inches I.D.), and specially designed porous block systems may be permitted by the local health department as follows:
 - (a) **GRAVELLESS TRENCHES:** Gravelless nitrification trench systems may be substituted for conventional trench systems on any site found to be SUITABLE or PROVISIONALLY SUITABLE in accordance with Rules .1940 to .1948 of this Section to eliminate the need for gravel, minimize site disturbance, or for other site planning considerations. Gravelless nitrification trench systems shall not be used, however, where wastes contain high amounts of grease and oil, such as restaurants. Large diameter pipe systems and porous block systems may be permitted by the local health department as follows:
 - (i) Large diameter pipe systems shall consist of eight-inch or 10-inch (inside diameter), corrugated, polyethylene tubing encased in a nylon, polyester, or nylon/polyester blend filter wrap installed in a nitrification trench, 12 or more inches wide and backfilled with soil classified as soil group I, II, or III. Nitrification area requirement shall be determined in accordance with Rules .1955(b) and .1955(c), or in Rule .1956(6)(b), Table III(a) of this Section, when applicable, with eight-inch tubing considered

equivalent to a two-foot-wide conventional trench and 10-inch tubing considered equivalent to a two and one-half-foot-wide conventional trench. The long-term acceptance rate shall not exceed 0.8 gallons per day per square foot. Tubing and fittings shall comply with the requirements of ASTM F-667, "Standard Specification for Large Diameter Corrugated Polyethylene Pipe and Fittings," which is hereby incorporated by reference including any subsequent amendments and editions. Copies of the standards may be inspected at the Division of Environmental Health Central Office, located at 2728 Capital Blvd., Raleigh, NC, and copies may be downloaded from the Internet at <http://www.astm.org>, or obtained from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19438-2959, at a cost of thirty dollars (\$30.00). The corrugated tubing shall have two rows of holes, each hole between three-eighths and one-half-inch in diameter, located 120 degrees apart along the bottom half of the pipe (each 60 degrees from the bottom center line) and staggered so that one hole is present in the valley of each corrugation. The tubing shall be marked with a visible top location indicator, 120 degrees away from each row of holes. Filter wrap shall be spun, bonded, or spunlaced nylon, polyester, or nylon/polyester blend nylon filter wrap meeting the minimum requirements in Table III(a):

PROPERTY	VALUE
Unit Weight	1.0 ounce per square yard
Sheet Grab Tensile Strength	Machine Direction: 23 pounds
Trapezoid Tear Strength	Machine Direction: 6.2 pounds Cross Direction: 5.1 pounds
Mullen Burst Strength	40 pounds per square inch or 276 kilopascals
Frazier Air Permeability	500 cubic feet per minute per square foot at pressure differential of 0.5 inches of water

Corrugated tubing shall be covered with filter wrap at the factory and each joint shall be immediately encased in a black polyethylene sleeve which shall continue to encase the large diameter pipe and wrap until just prior to installation in the trench to prevent physical damage and ultraviolet radiation deterioration of the filter wrap. Large diameter pipe systems shall be installed in accordance with this Rule and the manufacturer's guidelines. The trench bottom and pipe shall be level (with a maximum fall of one inch in 100 feet). Rocks and large soil clumps shall be removed from backfill material prior to being used. Clayey soils (soil group IV) shall not be used for backfill. The near end of the large diameter pipe shall have an eight-inch by four-inch offset adapter (small end opening at top) suitable for receiving the pipe from the septic tank or distribution device and making a mechanical joint in the nitrification trench.

- (ii) A Prefabricated, Permeable Block Panel System (PPBPS), utilizing both horizontal and vertical air chambers and constructed to promote downline and horizontal distribution of effluent, may be used under the following conditions:
- (A) the soil and site criteria of this Section shall be met;
 - (B) in calculating the required linear footage for a PPBPS's nitrification field, the linear footage for the nitrification line as determined in Rule .1955 (b) and (c), or in Rule .1956 (6)(b), Table III(a) of this Section when applicable, shall be multiplied by 0.5 for a 16 inch PPBPS;
 - (C) installation of the PPBPS shall be in accordance with Rule .1955 except:
 - (I) the PPBPS trench shall be located not less than eight feet on centers;
 - (II) the installation shall be in accordance with the manufacturer's specifications; and
 - (III) the sidewalls of nitrification trenches placed in Group IV soils shall be raked to open pores which were damaged or sealed during excavation;