Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 N Street • Lincoln NE 68510-1514
Phone: 402-441-8643

A

Permit Number
HS000907

Onsite Wastewater Treatment System
Request for Site Clearance and Permit

Include Form B and C. Submit correct fee with this Application

3 acres or more required for: ☒ Septic System ☐ Lagoon ☐ Other (Refer to Form C)

The undersigned hereby requests site clearance and permit to construct a Wastewater Treatment System in conformance with appropriate regulations.

PLEASE PRINT OR TYPE

A. Onsite System Location

Address 9800 Breagan Rd (no rural route) City Lincoln, NE Zip 68526

Legal Description 25 9 7 SB 17

1/4 1/4 Section Township Range Subdivison Addition Block Lot

Geographical Location (if known): Lat/Long: PID 16-25-100-009-000 SB

B. Owner

Name Scott & Marcie Haes Signature Scott Haes

Address 9800 Breagan Rd City/State/Zip Lincoln, NE 68526

Home Phone 402-423-3553 Work Phone 402-499-1166

C. Certified Installer

Name: Scott Haes Signature Scott Haes

Address 9800 Breagan Rd City/State/Zip Lincoln, NE 68526

Work Phone 402-499-1166

D. Engineer

☐ **Check and complete if engineer designed system** P.E. License Number:

Designer Name Firm Work Phone

E. This system will serve a

☒ Residential Dwelling Number of Bedrooms 5 Is there a Whirlpool Bathtub? ☐ Yes ☒ No Total Acres 12.9

☐ Commercial Establishment/Other Facility Specify Design flow in gallons per day 600

Type of Wastewater ☒ Domestic ☐ Non-Domestic Well Permit Applied for ☐ Yes ☐ No ☐ Not Applicable

DO NOT WRITE BELOW THIS LINE

Approval Process ☐ Municipal Code 24.38 ☐ County Resolution No. 02-30

1. Health Department Date rec'd **ACTION** ☐ Approved ☐ Disapproved
Site visits Date frwd Signature

2. Supt. Bldg. Insp. or Village Clerk Date rec'd **ACTION** ☐ Approved ☐ Disapproved
Comments Date frwd Signature

3. City or County Engineer Date rec'd **ACTION** ☐ Approved ☐ Disapproved
Comments Date frwd Signature

Installation Final Written Approval
By

Date

Business Office Use Only
Date Received 4/2/14 Amount Paid $305.00
Received By SB Cash/Check No. 5579

White - Health Department Yellow - Engineer Pink - Building & Safety

Lincoln-Lancaster County Health Department
Environmental Health Division
3140 "N" Street • Lincoln, NE 68510-1514
Phone: 402-441-8022

B

Permit Number: HS000907

Sewage Disposal System
Soil Absorption Test Data Report
Annex to Application

PLEASE PRINT OR TYPE

System Location (Indicate correct number and street)

Address 9800 Breagan Rd (no rural route) City Lincoln NE, Zip 68526

Owner Scott & Marcie Haes Addresss 9800 Breagan Rd

Soil Type (SCS): Wymore Percolation Rate: 36 min./inch

Date of Tests 5-28-14 to 5-29-14 Weather: Precipitation -0- Temperature 90°

Percolation Test Data Table

A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.	M.	N.
		Pre-Saturation Period				Percolation Readings					Results		
		Start		End		Start			End				
Hole No.	Hole Depth (in)	Date (Mo/Da)	Time (Hr/Min)	Date (Mo/Da)	Time (Hr/Min)	Date (Mo/Da)	Time (Hr/Min)	Water Lev (in.)	Date (Mo/Da)	Time (Hr/Min)	Elapsed Time (Min)	Water Level Drop (in)	Percolation Rates (Min/in)
1	24"	5-28	8 am	5-29	9am	5-29	9am	18"	5-29	1 pm	30	7/8	34
2	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	7/8	34
3	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	3/4	40
4	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	7/8	34
5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	7/8	34
6	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	3/4	40

Person Conducting Percolation Tests

Name: Scott Haes
Phone: 9800 Breagan Rd
Address Lincoln, NE 68526
402-499-1166

Sum of Percolation Rates: 216
Average of Rates: .36
Rate Used for Calculation: .36

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Remarks

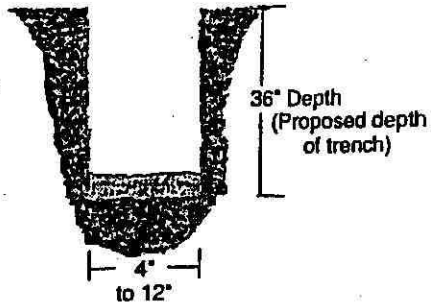
Signature of Reviewing Official Date

READ THOROUGHLY

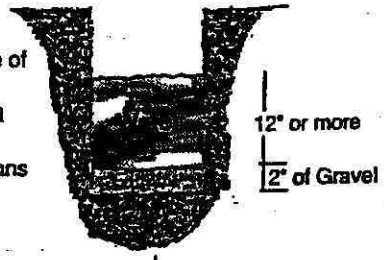
DIAGRAM OF PERCOLATION TEST PROCEDURE

Finished Grade or Natural Ground Level

I. Size, Number, and Location or Test Holes
   - A. Dig six or more holes spaced uniformly over proposed lateral field site.
   - B. Scratch smeared spots on sides of hole.
   - C. Remove loose material from hole.
   - D. Add 2" of gravel to hole.

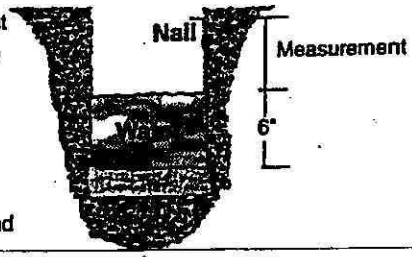


II. Saturation of Soil (Pre-soak)
   - A. Fill hole with 12" or more of water.
   - B. MAINTAIN THIS WATER LEVEL FOR 4 HOURS.
   - C. Record on Form B columns a thru f.



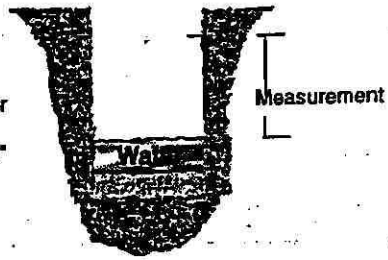
24 Hours Later

III. Percolation-rate Measurement **(refer to Instructions 5a, 5b, or 5c.)**
   - A. Add 6" of water.
   - B. Measure from fixed reference point (nail) to water.
   - C. Record measurement and time on front of Form B.



½ hour later (30 minutes)

   - D. 30 minutes later remeasure and record time.
   - E. If water will be too low for another reading 30 minutes later, adjust to 6" of water and remeasure and record time.



   - F. Continue for 3½ hours taking readings every 30 minutes.
   - G. Last 30 minute reading is used in filling out Form B. Record date, time, intervals and water level drops in column g thru m.

Instructions

1. **Number and location of tests.** Percolation tests shall be made in 6 or more separate test holes which shall be spaced uniformly over the proposed lateral field site.
2. **Type of test hole.** Dig or bore a hole 3 feet deep with a diameter of 4 to 12 inches. (To save time, labor and the volume of water required per test, a 4-inch auger hole is recommended).
3. **Preparation of the test hole.** Scratch or roughen any smeared spots on the sides of the hole with a knife blade or sharp pointed instrument to provide a natural soil interface into which water may percolate. Remove all loose material from the hole. Add 2 inches of gravel to protect the bottom from scouring when water is poured into the hole.
4. **Saturation and swelling of the soil.** Fill the hole with clear water to a depth of 12 inches or more above the gravel and maintain this water level at least 4 hours and preferably overnight. The accuracy and true value of the percolation data depends on thorough saturation and swelling of the soil.
5. **Percolation-rate measurement.** Percolation-rate measurements shall be made 24 hours after starting the saturation and swelling procedure described above. Record results on the front of this form and complete all calculations.
   a. If water remains in the test hole after the overnight swelling period, adjust the depth to approximately 6 inches over the gravel. From a fixed reference point, measure the drop in water level over a 30 minute period to the nearest 1/8 of an inch. This drop is used to calculate the percolation rate.
   b. If no water remains in the test hole after the overnight swelling period, add clear water to bring the depth to approximately 6 inches over the gravel. From a fixed point, measure the drop in water level to the nearest 1/8 of an inch at 30-minute intervals for 4 hours. Refill to the 6 inch level over the gravel as often as necessary. The drop that occurs during the final 30 minutes is used to calculate the percolation rate.
   c. In sandy soils (or other soils in which the first 6 inches of water seeps away in less than 30 minutes after the overnight swelling period) the time interval between measurements shall be 10 minutes instead of 30 minutes and the test run for 1 hour instead of 4 hours. The drop that occurs during the final 10 minutes is used to calculate the percolation rate.
6. **Record the test results and complete all calculations on the front of this form.** The average of the percolation rates calculated for all holes in the last 30 (10) minutes will normally be the rate used for calculations to size the system. ***Exceptions are the use of the greatest percolation rate when rates vary more than 20 min/in between holes or when other soil analysis indicates potential percolation problems.***

LLCHD reserves the right to require additional testing based on knowledge of soil types, percolation tests results on nearby properties, or due to concerns with procedures followed. In some situations, LLCHD staff will require and perform on-site observation of percolation tests.

C

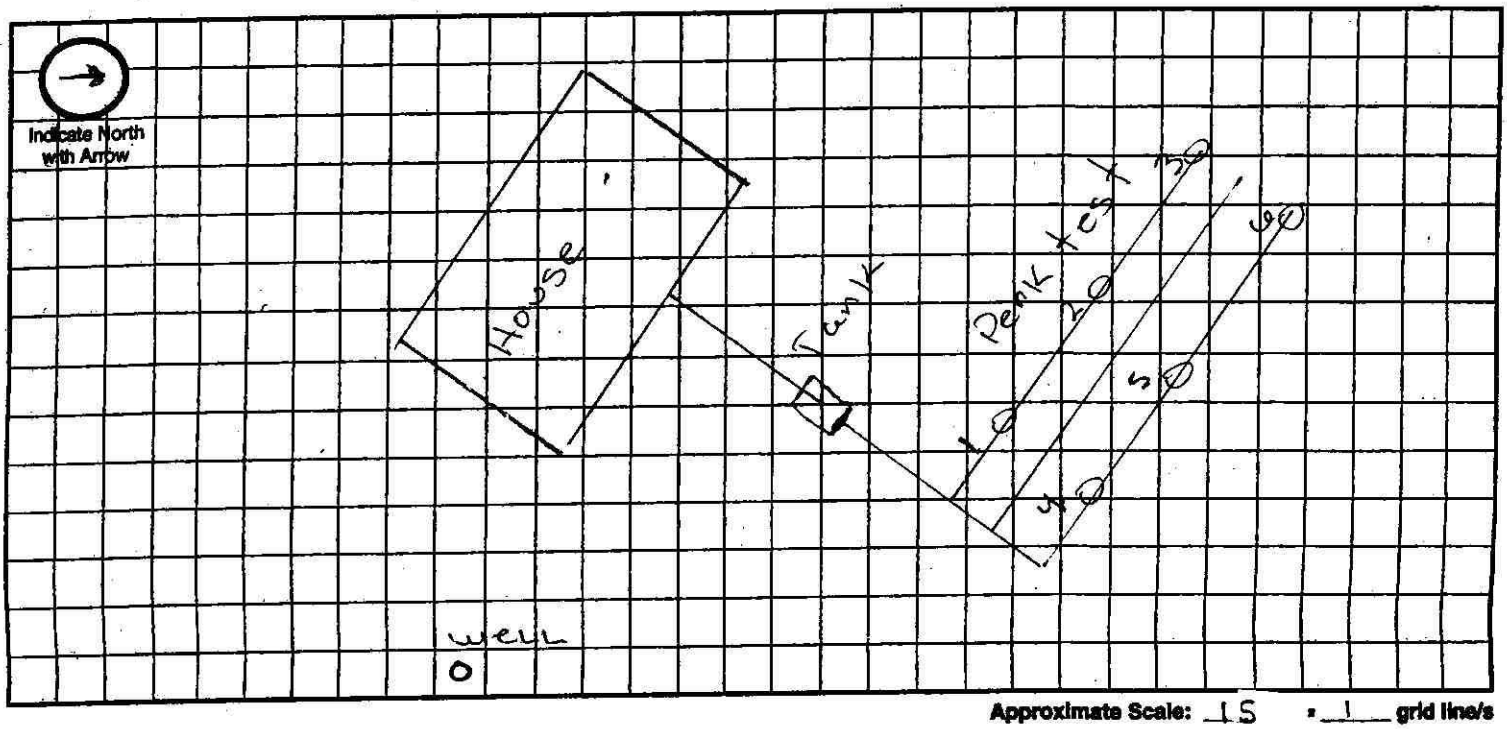
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Permit Number: HS000907

Onsite Wastewater Treatment System

Preliminary Plan Specifications

Draw a plot plan showing onsite system sewer lines, drop of distribution boxes, tank, drainfields, percolation test holes, well, residence, direction of groundwater flow, property lines, and reserve area for replacement onsite system.



Approximate Scale: 15 = 1 grid line/s

A. Onsite System Location

Address (no rural route) 9800 Breagan RD City Lincoln NE, Zip 68526

B. Proposed Septic Tank/s

Septic Tank Cap. 2000 gals Tank Material: ☒ Concrete ☐ Plastic ☐ Other_____ ☐ Lagoon(Max. seepage 1/8" per day)

C. Reserve Area for Replacement Onsite System

☒ Drainfield Absorption Area (percolation test required) ☐ Lagoon

D. Drainfield Absorption System

Percolation Rate 36 (min/inch = mpi) No. of Bedrooms 5 Soil Type Wymore Land Slope < 1 %

☒ Trench ☐ Bed ☐ Non-Standard (engineer designed and NDEQ approved Total Square feet of drainfield 1375 sq.ft.

Total length of laterals 110 Type of distribution: ☐ Perforated pipe ~~☐~~ Half-Round ☒ Chamber ☐ Other

No. of absorption trenches_____ Width 36" No. of drop boxes -0- Distrubtion Box -0-

No. of absorption beds_____ Width_____ No of Distribution lines per bed_____

E. Setbacks Check the Boxes Below If the Required Setback has been Satisfied

Distance From	Private Well	Public Well	Surface Water	Gound Water	Pressure Water Lines	Property Lines	Foundations Yours	Foundations Neighbors	All Other Setbacks
Tank (ft)	50 ☒	500 ☒	50 ☒	NA ☐	25 ☒	20 ☒	15 ☒	25 ☐	☒
Field (ft)	100 ☒	500 ☒	50 ☒	4 ☒	30 ☒	20 ☒	30 ☒	40 ☐	☒
Lagoon (ft)	100 ☐	500 ☐	50 ☐	N/A ☐	30 ☐	50 ☐	100 ☐	200 ☐	☐

F. Required Signatures

Home Building Contractor Scott Dam Date 5-30-14

Installer Scott Dam Date 5-30-14

Lincoln-Lancaster County Health Department
Environmental Public Health Division (402) 441-8027
3140 N Street Lincoln, Nebraska 68510-1514

ON-SITE WASTE WATER SYSTEM
CONSTRUCTION - INSTALLATION PERMIT
No. HS000907

System Type: Standard

Situs: 9800 BREAGAN RD., RURAL, NE

Issued: 6/3/2014

Expires: 6/3/2015

Description: S25, T9, R7, 6th Principal Meridian, LOT 17 NW

Owner: HAES, SCOTT & MARCIE D
4760 UNION HILL RD
LINCOLN, NE 68516

Judith A Halstead
Judith A. Halstead, MS, Health Director

Dear Applicant:

The above document is your permit to construct a new On-site Waste Water System at the location listed. Please contact this office once the sytem is complete in order to schedule a final inspection before use.

Judith A Halstead
Judith A. Halstead, MS
Health Director

HAES CONTRACTING INC
4760 UNION HILL RD
LINCOLN, NE 68516