HS000697

Application to Alter, Extend or Repair an Onsite Wastewater Treatment System

☐ Municipal Code 24.38 ☐ County Resolution Number 02-30

The undersigned hereby applies for a permit to: ☑ **ALTER** ☐ **EXTEND** ☐ **REPAIR** an existing wastewater treatment system, complying with appropriate Ordinance or Resolution, as marked above with drawings attached.

1. **Legal description of property:**
   Township_____ Range_____ 1/4_____ 1/4_____ Section _____
   Block_____ Lot_____ Addition_____
   Parcel ID____-____-_____-_____-_____ (i.e. 99-99-999-999-999)
   Street Address (no rural route) 13505 NW 112 (Malcolm)

2. **Property use:** ☑ residential ☐ commercial ☐ other use
   Number of bedrooms 4 Describe_____

3. **Type of Present Individual Disposal System** ☒ septic system ☐ lagoon ☐ other

4. **Description of proposed alteration, extension or repair** Extend Lateral System
   Tried to Attach existing Lats (Perf Pipe) Not Accessable to High to the
   Inst. Installed 260' of Chamber Bio Diffuser 30" wide 4' Length

5. **Work to be done by:** ☐ owner ☑ contractor's name Mark Taylor

6. **Estimated project:** a. Repair, replace, or minor extension with a cost less than $400 (no fee required).
   b. Total cost is greater than $400 (Return fee with this application)
   c. A permit is required if the use, operation, location, or type of system is changed.

Print Name _____ Address _____ Phone: _____

Applicant Signature (owner or lessee)_____

Please contact LLCHD for the permit fee for this application
Fee must be included before the application will be processed. Incomplete information will delay processing.

HEALTH DEPARTMENT USE ONLY

Date received 11/14/12 REVIEW: ☑ Approved ☐ Disapproved By: _____

Site visits
Date ____/____/____ By_____
Date ____/____/____ By_____
Date ____/____/____ By_____

Installation final written approval
Date 11/26/12 By _____

Return application to:
Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 "N" Street, Lincoln, NE 68510
Phone: 441-8643

Business Office Use Only

Received: Date: 11/27/12 Amount 195.00 Check No. 1182 Initials BM

Revised 3-09

NOV 26 2012

B

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

Permit Number:

Onsite Wastewater Treatment System
Soil Evaluation Report

PLEASE PRINT OR TYPE

Onsite System Location

Address 13505 NW 112 City Malcolm NE, Zip
(no rural route)

Owner Matt Thomas Address

Date of Tests 11-5 to 11-6 Weather: Precipitation 0 Temperature 65°

Percolation Test Data Table

A.	B.	C. D. E. F. Saturation/Swelling Time				G. H. I. J. K. Water Level Drop Last 30 mins of 4 hr or last 10 mins of 1 hr					L.	M.	N. Results
		Start		End		Start		Initial	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 Interval	Water Level Drop (in)	Percolation Rates (Min/in = mpi)
1	36	11-6	9:00am	11/6	1:00pm	11/6	1:00pm	6	11/6	1:30pm	30	7	4.28
2	40	11-6	9:00am	11/6	1:00pm	11/6	1:04pm	6	11/6	1:34pm	30	3	10
3	40	11-6	9:00am	11/6	1:00pm	11/6	1:08pm	6	11/6	1:38pm	30	2.66	11.30
4	42	11-6	9:00am	11/6	1:00pm	11/6	1:11pm	6	11/6	1:41pm	30	5	6
5	46	11-6	9:00am	11/6	1:00pm	11/6	1:15pm	6	11/6	1:45pm	30	2.4	12.5
								6					
								6					
								6					

Person Conducting Percolation Test

Name: Matt Taylor
Phone: 402 450-6599
Address 2610 S. 11th Ln

Sum of Percolation Rates: ~~11.28 = 8.56~~ 33.7 ÷ 3 = 11.24
Average of Rates: 11.24 min / 1"
Rate Used for Calculation: 11.24 min/1"

Soil type (NRCS Maps/Other)
Groundwater Depth

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Comments (Soil type, groundwater, floodplain, etc.)

Signature of Reviewing Official Date

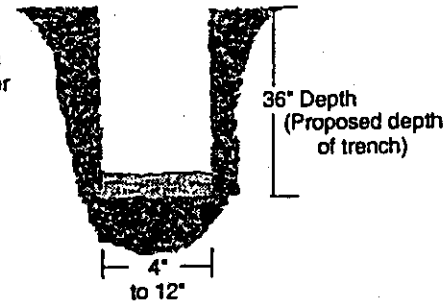
Onsite Form B 12_06

READ THOROUGHLY

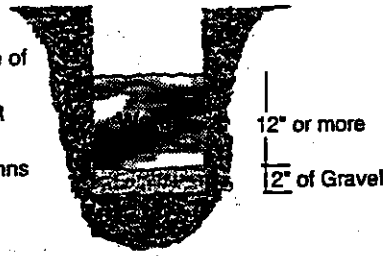
DIAGRAM OF PERCOLATION TEST PROCEDURE

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.

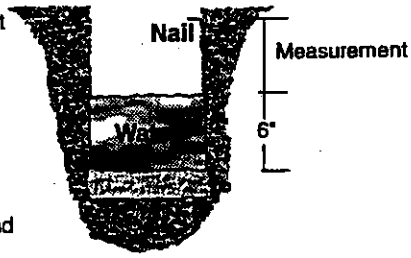


II. Saturation of Soil (Pre-soak)
   - A. Fill hole with 12" or more of water.
   - B. MAINTAIN THIS WATER LEVEL FOR 4 HOURS.
   - C. Record on Form B columns a thru f.



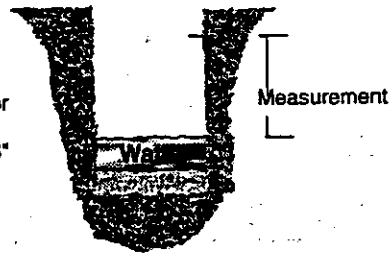
24 Hours Later

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.

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

D

Permit Number:

Onsite Wastewater Treatment System

As Built Plans & Specifications

Date 11-19-12 Legal Description _____ 1/4 1/4 Section Township Range

Onsite System Location

Address (no rural route) 13505 NW 112 City Malcolm NE, Zip _____

Owner Matt Thomas Address _____

A. Sewer Pipe

1. Material: _____
   Diameter: _____ in.
2. Distance above basement floor: _____ in.
   or distance below basement floor: _____ in.
3. Distance between dwelling and septic tank: _____ ft.
4. Number of clean-outs: _____
5. Distances to: well or suction line _____ ft.
   stream _____ ft.
   pressure line _____ ft.
   property line _____ ft.

B. Septic Tank

☐ Label with Manufacturer, address and gallon capacity

1. Material: Concrete
   Number of compartments: _____
2. Capacity: 1000 gal.
3. Factory built: ☐ Yes ☐ No
4. Manholes: Over inlet, diameter _____ in.
   Over outlet, diameter _____ in.
   Riser: ☐ above ☐ below grade _____ in.
5. Inlet: ☐ baffle ☐ tee ☐ 6" dia. inspection pipe
6. Outlet: ☐ baffle ☐ tee ☐ 6" dia. inspection pipe
7. Depth to top of tank, below unfinished grade: _____ in.
8. Distances to: Well or suction line _____ ft.
   Stream _____ ft.
   Pressure line _____ ft.
   Property line _____ ft.

C. ☒ Distribution Box ☐ Drop Boxes

(≥ 12" inspection opening) (removable lid to inspect)

1. Material: _____
   Number available outlets: 11
2. Factory built: ☒ Yes ☐ No
3. Distance from septic tank: 10 ft.

D. Drainfield Absorption

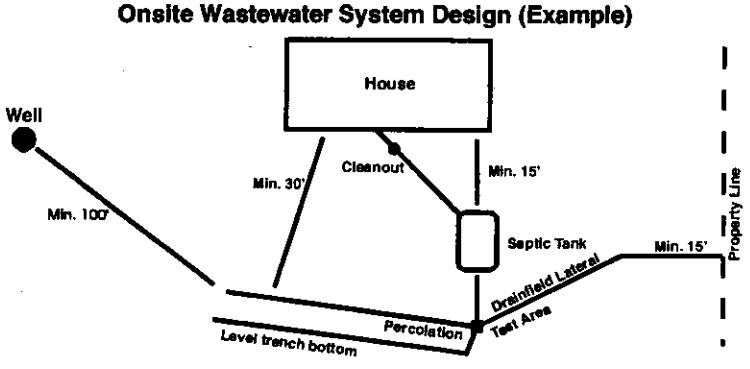
☒ Trench ☐ Bed ☐ Level Bottom

1. Type: ☐ Half rounds ☐ Perforated pipe ☒ Chambers
   Diameter or width: 30"
   Number of distribution lines in bed _____
   Material: ☐ fiberglass ☒ plastic ☐ concrete
   ☐ other _____
2. Drainfield Laterals: Number 4
   Length of each line: 30 ft. 100 ft.
   45 ft. 75 ft., _____ ft.
3. Drainfield dimensions: Width _____ ft.
   Distribution Pipe Slope _____ in/100 ft.
   Average depth 4 ft. in
4. Filter material: None
   Depth of material _____ in.
5. Distances to: Well or suction line 300 ft.
   Pressure line ~ ft.
   Property line 200 ft.
   House or building 200 ft.
   Lake or Stream ~ ft.

Complete As-Built drawing on the back fo this form.

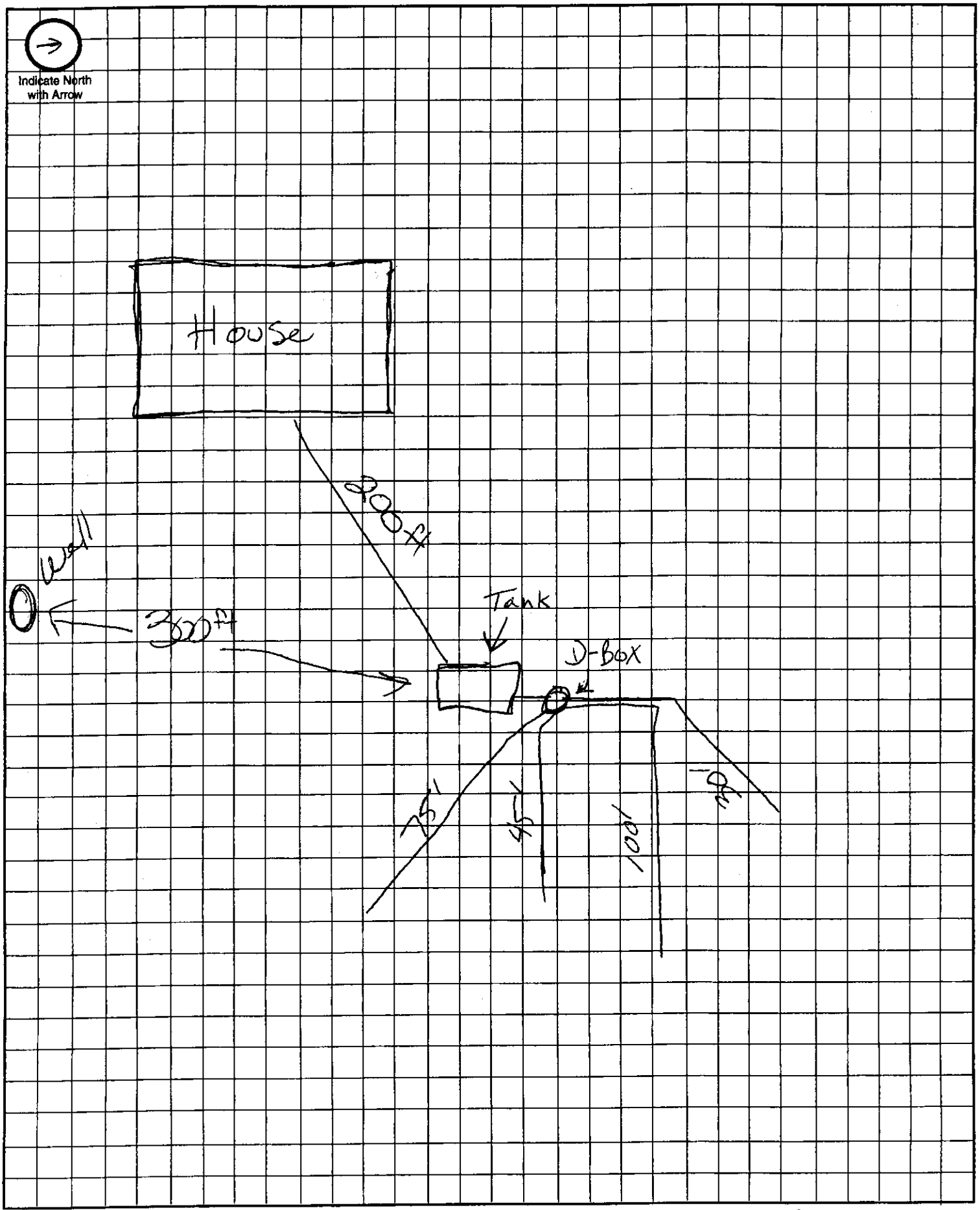
Onsite Wastewater System Design (Example)

Indicate North with Arrow



LLCHD HS000697

As Built Drawing



Approximate Scale: 20 ft. = 1 grid line/s

11-28-2012 11: 7: 4

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

ON-SITE WASTE WATER SYSTEM
REPAIR PERMIT

No. HS000697

System Type:	STANDARD
Situs:	13505 NW 112 ST
Legal Description:	T11N-R05E-S05-Lot 8
Owner:	THOMAS, MATTHEW J & KEALIE S 13505 NW 112 ST MALCOLM NE 68402

Permit Fee:	$195.00
Total Fees:	$195.00
Issued:	11/27/2012
Expires	11/27/2013

Judith A Halstead

Judith A. Halstead, MS, Health Director

Dear Applicant:

The above document is your permit to repair an existing On-site Waste Water System at the location listed. Please contact this office once repairs are complete to obtain final approval before use.

Judith A Halstead

Judith A. Halstead, MS
Health Director

MATTEW TAYLOR
2610 S 11TH ST
LINCOLN NE 68502-3551