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

A

Permit Number HS001137

Onsite Wastewater Treatment System Permit Application

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

☒ Septic System ☐ Lagoon ☐ Other (Refer to Form C)

PLEASE PRINT OR TYPE

A. Onsite System Location

Address* 5320 Prairie Sage Dr City Roca, NE Zip 68430
(no rural route)

Legal Description SE SE 17 8N 7E Roca Ridge 1 1 3
1/4 1/4 Section Township Range Subdivison Addition Block Lot

PID 15-17-401-003-000 *Approx. Address (If to be determined)

B. Owner

Name Robert & Erin Lutz Signature

Address 2621 W Garfield St City/State/Zip Lincoln, NE, 68522

Home Phone 402-742-7064 Work Phone 402-649-2375

C. Certified Installer

Name: AWS Well Co, Inc - Don Anderson Signature

Address 1597 County Rd 10 City/State/Zip Mead/NE/68041

Work Phone 402-624-3895 AWS will be installing the system but I am applying for the permit under my PE License to save time

D. Engineer

☒ Check and complete if engineer designed system P.E. License Number: E-12996

Designer Name Robert J Lutz Jr PE Firm EA Engineering Work Phone 402-649-2375

E. This system will serve a

☒ Residential Dwelling Number of Bedrooms 5 Whirlpool Bathtub? ☐ Yes ☒ No Total Acres 3.01
Garbage Grinder? ☒ Yes ☐ No

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

Type of Wastewater ☐ Domestic ☐ Non-Domestic

DO NOT WRITE BELOW THIS LINE

Approval Process

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

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

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

Installation Final Written Approval
By
Date

Business Office Use Only
Date Received 9-10-15 Amount Paid $385.00
Received By SB Cash/Check No. 3056

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

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

B

Permit Number: #S001137

Onsite Wastewater Treatment System

Soil Evaluation Report

PLEASE PRINT OR TYPE

Onsite System Location

Address 5320 Prairie Sage Dr (no rural route) City Roca NE, Zip 68430

Owner Robert & Erin Lutz Address 2621 W. Garfield St. Lincoln NE 68522

Date of Tests 7/27/14 to 7/28/14 Weather: Precipitation Sunny, no precip Temperature 83°F

Percolation Test Data Table

A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.	M.	N.
		Saturation/Swelling Time				Water Level Drop Last 30 mins of 4 hr or last 10 mins of 1 hr					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	7/27	10:30	7/28	14:53	7/28	14:53	6	7/28	15:23	30	1/2"	60
2	36	7/27	10:31	7/28	14:58	7/28	14:58	6	7/28	15:28	30	1/2"	60
3	36	7/27	10:33	7/28	15:03	7/28	15:03	6	7/28	15:33	30	3/4"	40
4	36	7/27	10:40	7/28	15:40	7/28	15:40	6	7/28	16:10	30	1/2"	60
5	36	7/27	10:42	7/28	15:45	7/28	15:45	6	7/28	16:15	30	3/4"	40
6	36	7/27	10:43	7/28	15:49	7/28	15:49	6	7/28	16:19	30	3/4"	40
								6					
								6					

Person Conducting Percolation Test

Name: Robert J Lutz Jr, P.E.
Phone: 402-649-2375
Address 2621 W. Garfield St
Lincoln NE 68522

Sum of Percolation Rates: 300
Average of Rates: 50 mpi
Rate Used for Calculation: 60 mpi

Soil type (NRCS Maps/Other)
Groundwater Depth 80'

DO NOT WRITE BELOW THIS LINE

Reviewing Action

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

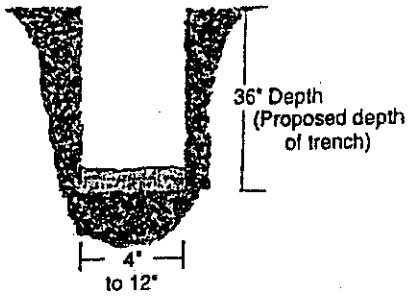
Signature of Reviewing Official Date

READ THOROUGHLY

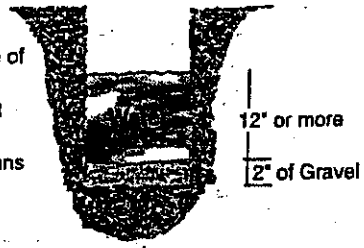
DIAGRAM OF PERCOLATION TEST PROCEDURE

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.

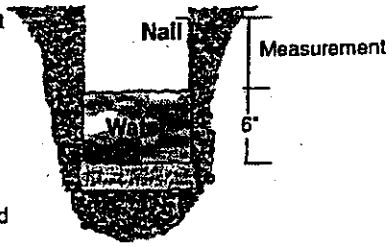


II. Saturation of Soil (Pre-soak)
   - A. Fill hole with 12" or more of water.
   - B. MAINTAIN THIS WATER LEVEL FOR 4 HOURS.
   - C. Record on Form B columns a thru f.



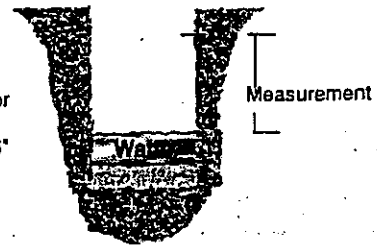
24 Hours Later

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.

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

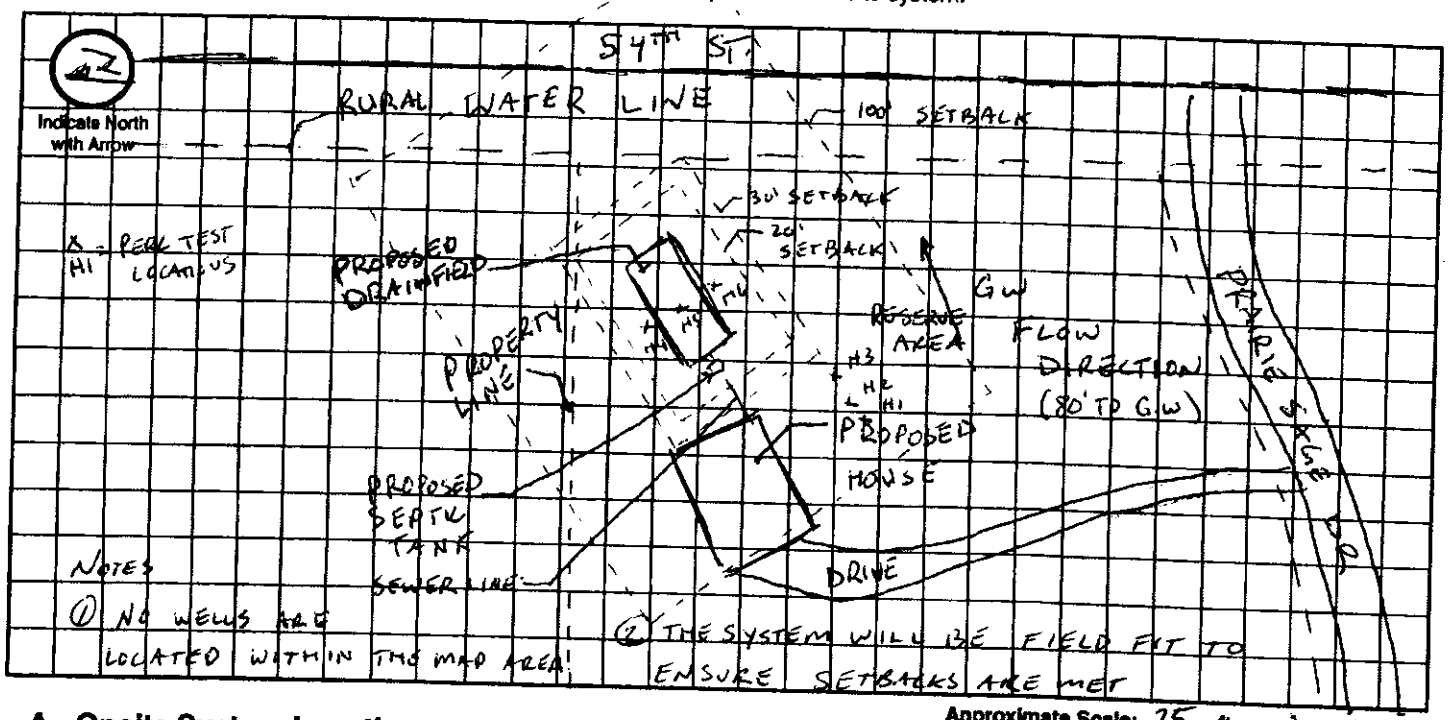
C

Permit Number: HS001137

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: 25 ft. = 1 grid line/s

A. Onsite System Location

Address (no rural route) 5320 Prairie Sage Dr City Roca NE, Zip ~~68355~~ 68430

B. Proposed Septic Tank/s

Septic Tank Cap. 1500 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 50 (min/inch = mpi) No. of Bedrooms 5 Soil Type Silty Clay Loam Land Slope 1 %

☒ Trench ☐ Bed ☐ Non-Standard (engineer designed and NDEQ approved Total Square feet of drainfield 1700 sq.ft.

Total length of laterals 68' Type of distribution: ☐ Perforated pipe ☐ Half-Round ☒ Chamber ☐ Other

No. of absorption trenches 5 Width 5' No. of drop boxes 0 Distrubtion Box X

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 _____ Date 9-8-15

Installer _____ Date 9/9/15

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. HS001137

System Type: Standard

Situs: No Site Address Specified

Issued: 9/21/2015

Expires: 9/21/2016

Description: ROCA RIDGE ADDITION, BLOCK 1, Lot 3

Owner: LUTZ, ROBERT J JR & ERIN M
5500 PRAIRIE SAGE DR
ROCA, NE 68430

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

ROBERT LUTZ
2621 W GARFIELD ST
LINCOLN, NE 68522

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

OK 6-13-16 gp

Exhibit 5

Permit Number: H500437

Onsite Wastewater Treatment System

Inspection Sheet

Date 6/13/16

Legal Description Rock Ridge 1st Add Blk 1, Lot 3

¼ ¼ Section/Township/Range

Onsite System Location

Address (no rural route) 5320 Prairie Sage City _____

Owner _____ Address _____

Mark One: ☒ Dwelling ☐ Non-dwelling

☒ New System ☐ Alteration [☐ Tank Only ☐ Trench Only] ☐ Lateral Only

☐ Temporary modification (Describe problem causing discharge and reason for temporary modification): _____

Drainfield Absorption System:

☒ Lateral ☐ Bed ☐ Non-standard (engineer-designed and NDEQ approved) ☐ Holding Tank ☐ Trench

Total square feet of drainfield 2000 Sq. Ft. Tank Size 2000 gals

Total length of laterals 480 Type of Distribution: ☐ Chamber ☐ Perforated Pipe ☐ Other (describe) _____

No. of Absorption Laterals 3 Width 5' No. of Drop Boxes 2 Distribution Box 1

Leveling Method Used Laser Level

Setbacks (Check the Boxes Below if the Required Setback has been Satisfied):

Distance From	Private Well	Public Well	Surface Water	Ground water	Pressure Water Lines	Property Lines
Tank (ft)	50 ☐	500 ☐	50 ☐	NA ☐	10 ☐	5 ☐
Field (ft)	100 ☐	500 ☐	50 ☐	4 ☐	25 ☐	5 ☐

Geographical Coordinates to 6 Decimals:

Tank _____

Lateral #1 _____ Lateral #3 _____

Lateral #2 _____ Lateral #4 _____

Comments: 2000 Sq. ft - 1750 Req'd

Inspections prior to Final Approval

Initial 6/10/16 Date 2014

Follow-Up _____ Date _____

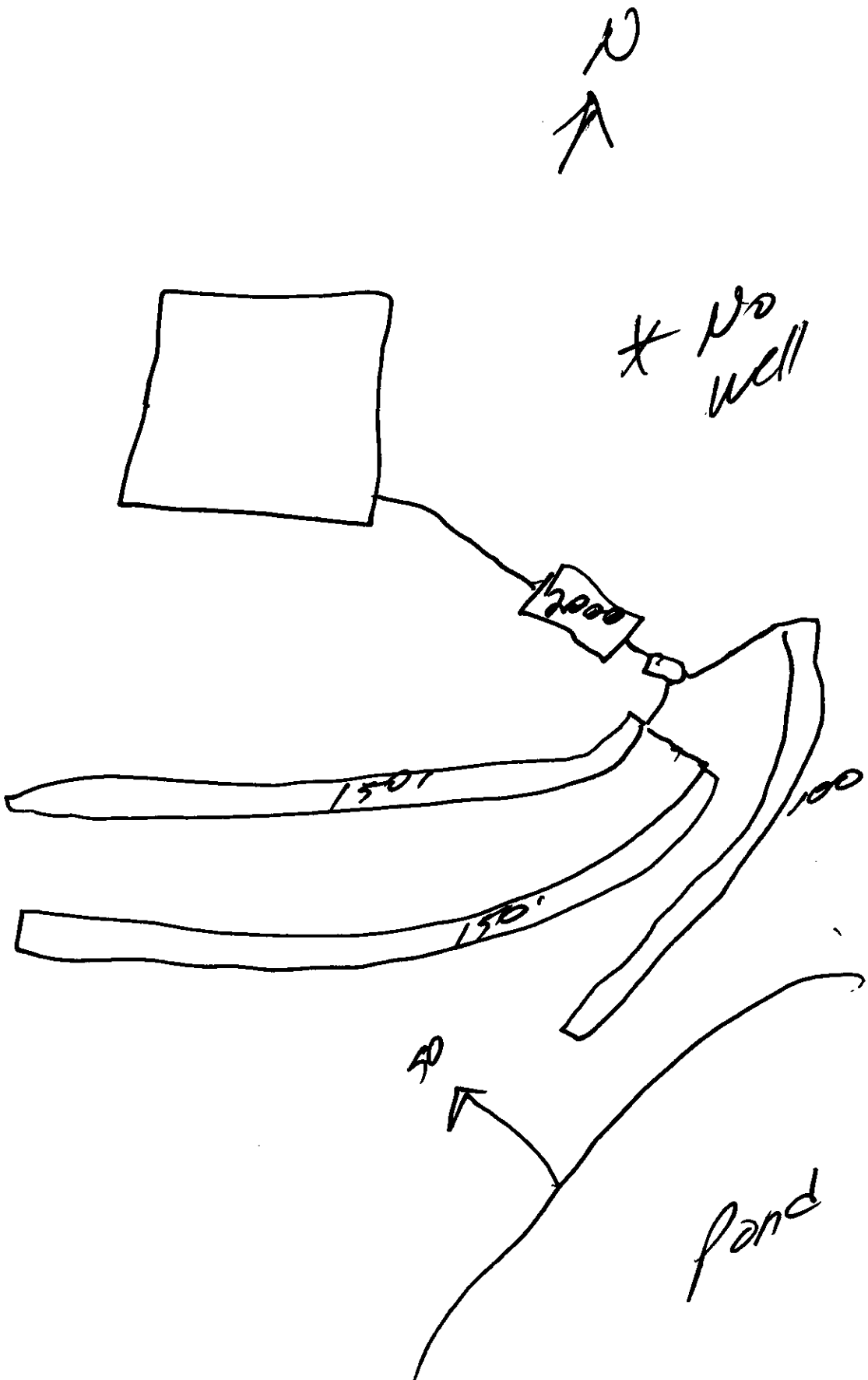
Follow-Up _____ Date _____

Installation Final Written Approval

By _____

Date 6/13/16

Field Note Drawing (See Reverse Side):


N
* No well
house
150'
150'
100'
40
pond

Nate C. Hartman

From: Sarah Patras <villageofroca@gmail.com>
Sent: Wednesday, September 16, 2015 9:58 AM
To: Nate C. Hartman
Subject: Re: Lutz Application
Attachments: SKM_C335015091608570O.pdf

Hi Nate,

Attached are the signed applications for the Peterson and Lutz properties. If you need anything else please let me know.

Thanks,
Sarah

On Fri, Sep 11, 2015 at 9:29 AM, Nate C. Hartman <nhartman@lincoln.ne.gov> wrote:

Sounds good Sarah. Thanks!

Nate Hartman REHS, QCIS, QPSWPPP

Senior Environmental Health Specialist

Water Quality Section

Lincoln-Lancaster County Health Department

(402) 441-8643 Fax (402) 441-3890

From: Sarah Patras [mailto:villageofroca@gmail.com]
Sent: Friday, September 11, 2015 8:16 AM
To: Nate C. Hartman
Subject: Re: Lutz Application

Hi Nate,

This one is also on our agenda for Monday. I will email this and the Peterson application back to you on Tuesday.

Thanks,

Sarah

On Thu, Sep 10, 2015 at 4:07 PM, Nate C. Hartman <nhartman@lincoln.ne.gov> wrote:

Sarah:

Attached is the application for Robert Lutz. Let me know if you have any questions.

Thanks!

Nate Hartman REHS, QCIS, QPSWPPP

Senior Environmental Health Specialist

Water Quality Section

Lincoln-Lancaster County Health Department

(402) 441-8643 Fax (402) 441-3890

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Sarah Patras

Village Clerk/Treasurer

Village of Roca

Equal Opportunity Provider and Employer

website: https://sites.google.com/site/villageofroca/
Daytime: 402-450-7214

402-421-9577

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Sarah Patras
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