Lincoln-Lancaster County Health Department

ENVIRONMENTAL HEALTH DIVISION

3140 N STREET · LINCOLN, NE 68510-1514 (402) 441-8000

Permit

SEWAGE INSTALLATION
SEPTIC SYSTEM
VARIANCE REQUEST

Establishment

ROBERT E CALDWELL
T9N R7E SEC 33 QTR NW
NEALAC BLK 2 LOT 4
10300 RICKY RD

Permittee

ROBERT E CALDWELL
21301 S 120 ST
HICKMAN NE 68372

Permit # 02380251601

Issued 08/12/02
Expires 02/12/03
Revenue Code 3157

FEES: $200.00
$100.00

TOTAL: $300.00

Bruce D. Dart

Bruce D. Dart, Health Director

• POST IN A PROMINENT PLACE • NOT TRANSFERABLE

002783

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

A

Permit Number: 0238 02516

Sewage Disposal System

Request for Site Clearance and Permit

Include Form B, Form C and Applicable Fees with this Application.

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

The undersigned hereby requests site clearance and permit to construct a Sewage Disposal System in conformance with appropriate resolution or ordinance, as described herein:

PLEASE PRINT OR TYPE

A. System Location (Indicate correct number and street)

Address 10300 Ricky Road (no rural route) City Lincoln NE, Zip

Legal Description NW (1/4) 1/4 33 (Section) T9N (Township) R7E (Range) Healrene Acres (Subdivision) Addition 2 (Block) 4 (Lot)

Geographical Location (if known): Longitude Latitude

☐ Check if system mail address is not the same as the owner's address

B. ~~Owner~~ / Contract Purchaser

Name Robert Caldwell Signature Robert E. Caldwell

Address 21301 S. 120th City/State/Zip Hickman, NE 68372

☐ Check if owner designed system Home Phone 788-2253 Work Phone 323-8450

C. Contractor

Name Southwick Sewer Company Name Brad Southwick - Southwick Sewer

Address Hickman City/State/Zip

☐ Check if contractor designed system Work Phone 792-2462

D. Engineer/Installer ☑ Check and complete if engineer designed system

Designer Name Stephen H. Nickel Firm Nickel Engineering, Inc. Work Phone (402) 423-0559

E. This System Will Serve a

☒ Residential Dwelling Number of Bedrooms 3 Is there a Whirlpool Bathtub (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 ☒ Municipal Code 24.38 ☐ County Resolution No. 2832

1. **Health Department** Date rec'd 8/12/02 Date frwd 8/12/02 ACTION ☒ Approved ☐ Disapproved Signature Jerrold C. Hood
2. **Supt. Bldg. Insp. or Village Clerk** Date rec'd 8-12-02 Date frwd 8-12-02 ACTION ☒ Approved ☐ Disapproved Signature
3. **City or County Engineer** Date rec'd 8/12/02 Date frwd 8/12/02 ACTION ☒ Approved ☐ Disapproved Signature Chase Baker

3/11/03 Need drawing for Dr. Hood
4/15/03 Tank + sewer only J.C.H.

Installation Final Written Approval

By Jerrold C. Hood R.E.H.D.

Date APRIL 7, 2003

Business Office Use Only
Date Rec'd 8/12/02
Amt Paid 300.00
Rec'd By Cu Cash/Check No. 1466

FORM 23-100 10-96 White - Health Dept. Yellow - Engineer Pink - Bldg. Inspector

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

B

Permit Number: 02380256

Sewage Disposal System

Soil Absorption Test Data Report
Annex to Application

PLEASE PRINT OR TYPE

System Location (Indicate correct number and street)

Address 10300 Ricky Road (no rural route) City Lincoln NE, Zip

Owner Robert Caldwell Addresss 21301 S. 120th, Hickman, NE, 68372

Soil Type (SCS): Silty Clay Loam (Wymore WtC2) Percolation Rate: 40.2 min./inch

Date of Tests 4/29/02 5/16/02 to 4/30/02 5/17/02 Weather: Precipitation 0 Temperature 75°F

Percolation Test Data Table

A.	B.	C. D. E. F. Pre-Saturation Period				G. H. I. J. K. Percolation Readings					L. M. N. 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	48/40.8	4/29	3:40 P	4/29	7:40 P	4/30	9:52	35.76	10:02	37.68	10	1.92	5.21
2	48/43.2	5/16	2:36 P	5/16	6:36 P	5/17	1:20 P	30.36	1:50	31.08	30	0.72	41.7
3	48/44.4	"	2:38	"	6:38	"	1:24	33.96	1:54	34.56	30	0.60	50.0
4	48/45.6	"	2:41	"	6:41	"	1:28	36.60	1:58	37.20	30	0.60	50.0
5	46.8/42	"	2:45	"	6:45	"	1:31	33.12	2:01	33.66	30	0.54	55.6
6	48/43.2	"	2:47	"	6:47	"	1:32	31.80	2:03	32.58	31	0.78	38.5

Person Conducting Percolation Tests

Name: Stephen H. Nickel, Nickel Eng., Inc.
Phone: (402) 423-0559
Address 7941 Portsche Lane
Lincoln, NE 68516

Sum of Percolation Rates: 241.0
Average of Rates: 40.2
Rate Used for Calculation: .0249 50 MIN/IN

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Remarks

Signature of Reviewing Official Date

FORM 23-101 10-96

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

B

Permit Number: 0238 02514

Sewage Disposal System

Soil Absorption Test Data Report
Annex to Application

PLEASE PRINT OR TYPE

System Location (Indicate correct number and street)

Address 10300 Ricky Road (no rural route) City Lincoln NE, Zip

Owner Robert Caldwell Addresss 21301 S. 120th, Hickman, NE, 68372

Soil Type (SCS): Silty Clay Loam (Wymore WTC2) Percolation Rate: 18.2 min./inch

Date of Tests 7/9/02 to 7/10/02 Weather: Precipitation 1" Temperature 85°

Percolation Test Data Table

A.	B.	C. D. E. F. Pre-Saturation Period				G. H. I. J. K. Percolation Readings					L. M. N. 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)
7	50.4/44.4	7/9	10:43 A	7/9	2:45 P	7/10	2:32 P	36.00	2:42 P	37.68	10	1.68	5.95
8	50.4/44.4	"	10:48	"	2:48	"	2:35	36.00	2:45	36.96	10	0.96	10.4
9	48/42	"	10:50	"	2:50	"	2:38	33.96	2:48	35.04	10	1.08	9.26
10	51.4/44.4	"	10:55	"	2:55	"	4:55	35.64	5:25	37.44	30	1.80	16.7
11	49.2/42	"	10:56	"	2:56	"	5:04	35.88	5:34	36.60	30	0.72	41.7
12	48/42	"	10:57	"	2:57	"	5:02	32.76	5:32	33.96	30	1.20	25.0
	hole/top gravel												

Sum of Percolation Rates: 109.0
Average of Rates: 18.2
Rate Used for Calculation: .0551 41.7

Person Conducting Percolation Tests

Name: Stephen H. Nickel, Nickel Engr, Inc.
Phone: (402) 423-0559
Address 7941 Portsche Lane
Lincoln, NE 68516

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Remarks

Signature of Reviewing Official Date

FORM 23-101 10-96

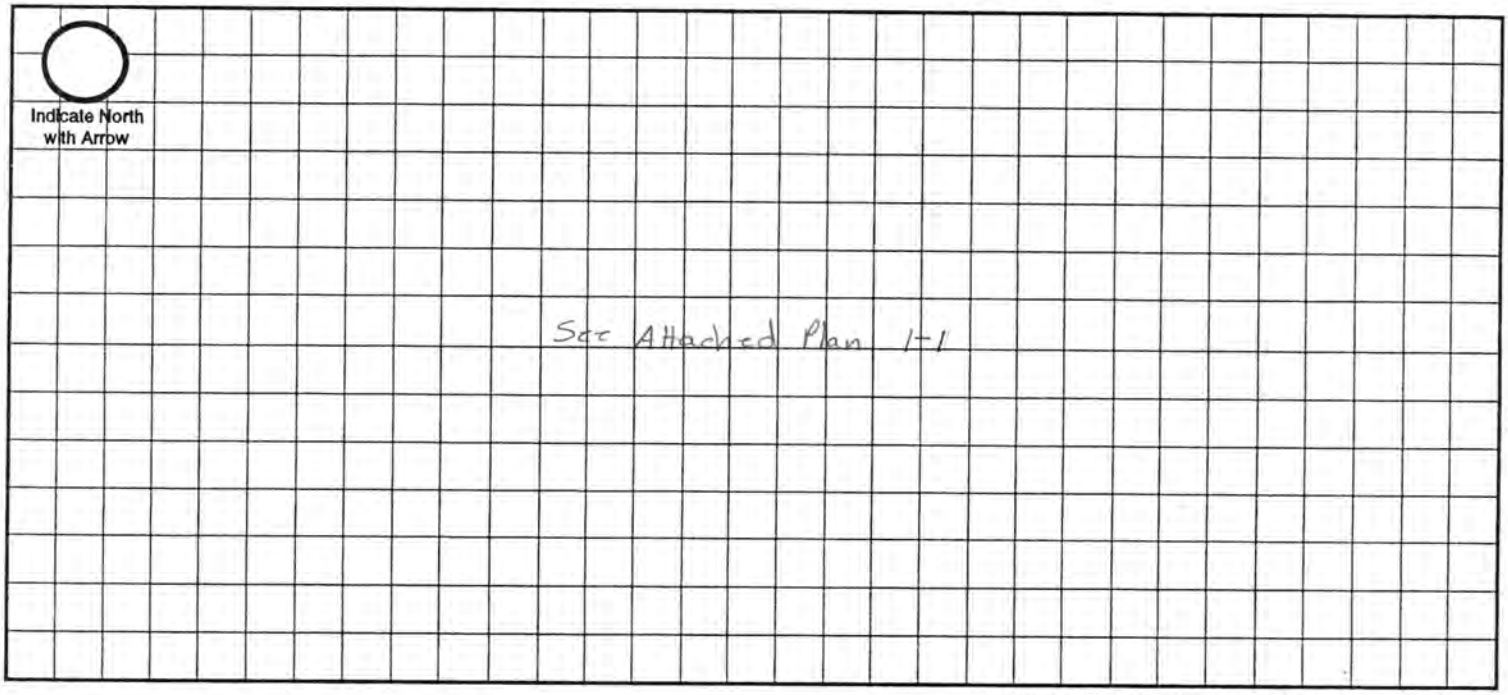
Lincoln-Lancaster County Health Department
Environmental Health Division
3140 "N" Street • Lincoln, NE 68510-1514
Phone: 402-441-8022

C

Permit Number: 02380256

Sewage Disposal System
Preliminary Plan Specifications

Draw a plot plan showing system location, lines, distribution box, tank and laterals, percolation test hole locations, well, residence, compass direction and property lines. Indicate on drawing if residence and well are existing or proposed.



Approximate Scale: _____ ft. = _____ grid line/s

A. System Location (Indicate correct number and street)

Address (no rural route) 10300 Kicky Road City Lincoln NE, Zip _____

B. Proposed Septic Tank/s

Tank Material: ☒ Concrete ☐ Plastic ☐ Other _____

C. Proposed Absorption System (See Form B for Percolation Information)

Percolation Rate Design for 60 (min. per inch) Soil Type: Silty Clay Loam (Wymore) Land Slope: _____ %

Type of Absorption System: ☒ Trench ☐ Bed ☐ Other _____

Total Square Feet of Field Required: 1050 sq. ft.

Type of Lateral: ☒ Half-Moon ☐ Perforated Pipe ☐ Other Lateral Material: _____

Capacity of Septic Tank 1500 gals Number of Absorption Beds: — Number of Distribution Laterals per Bed —

Total Length of Laterals 440 ft. Number of Trenches 6 Trench Width _____

D. 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 ☐	☐

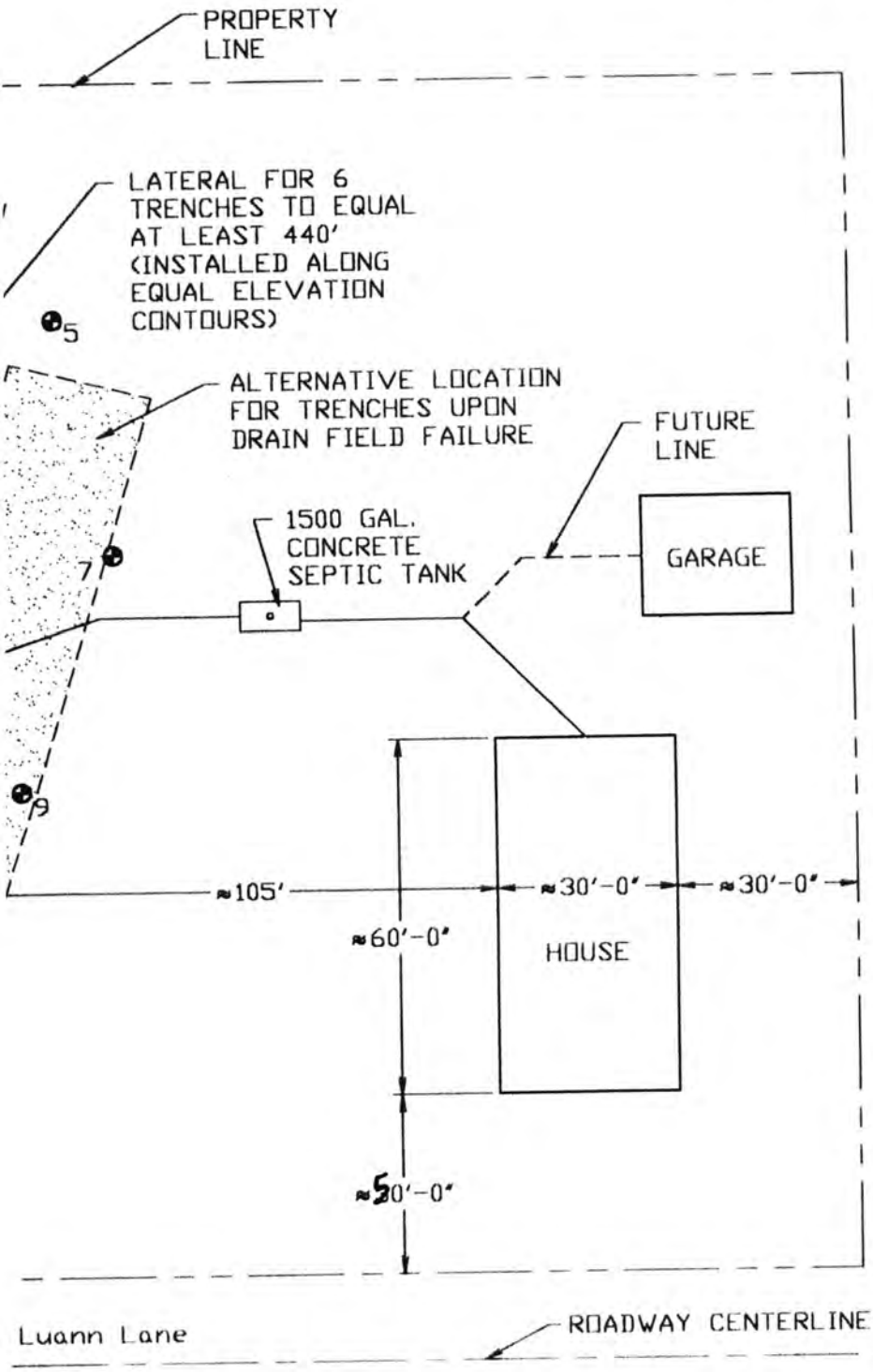
E. Required Signatures

Home Building Contractor _____ Date _____

Installer _____ Date _____

NOTE:

SEPTIC TANK & LINE LOCATION
TO BE DETERMINED BY CONTRACTOR





N

SCALE: 1"=30'

CALDWELL RESIDENCE @ 10300 RICKY ROAD
(SEPTIC TANK & SOIL ABSORPTION SYSTEM)

NICKEL ENGINEERING INCORPORATED
7941 Portsche Lane
Lincoln, NE 68516
Ph. 402-423-0559

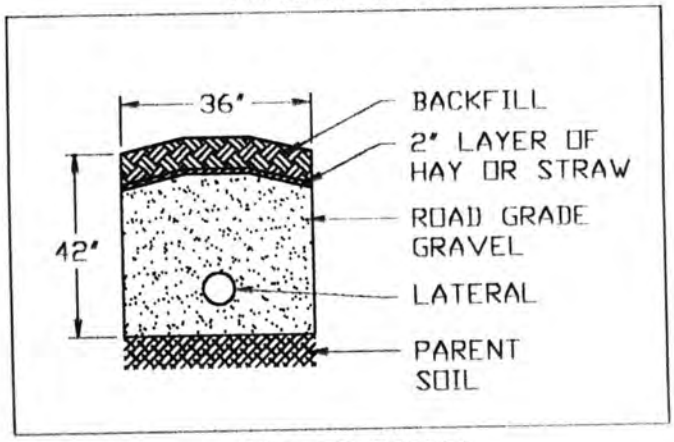
DATE 8/9/02
FILE NO. WIE-02
DESIGNED SN,JB
SHEET NO. 1-1

NOTE:

THE RESPONSIBILITY RESTS ON THE CONTRACTOR TO CONFORM TO ALL LOCAL AND STATE BUILDING CODES.

THE CONTRACTOR SHALL NOTIFY THE SOILS ENGINEER WHEN CONSTRUCTION OF THE DRAIN FIELD BEGINS TO ALLOW THE ENGINEER TO VERIFY PROPER DEPTHS AND CONSTRUCTION OF THE DRAIN FIELD.

TYPICAL TRENCH



(NOT TO SCALE)

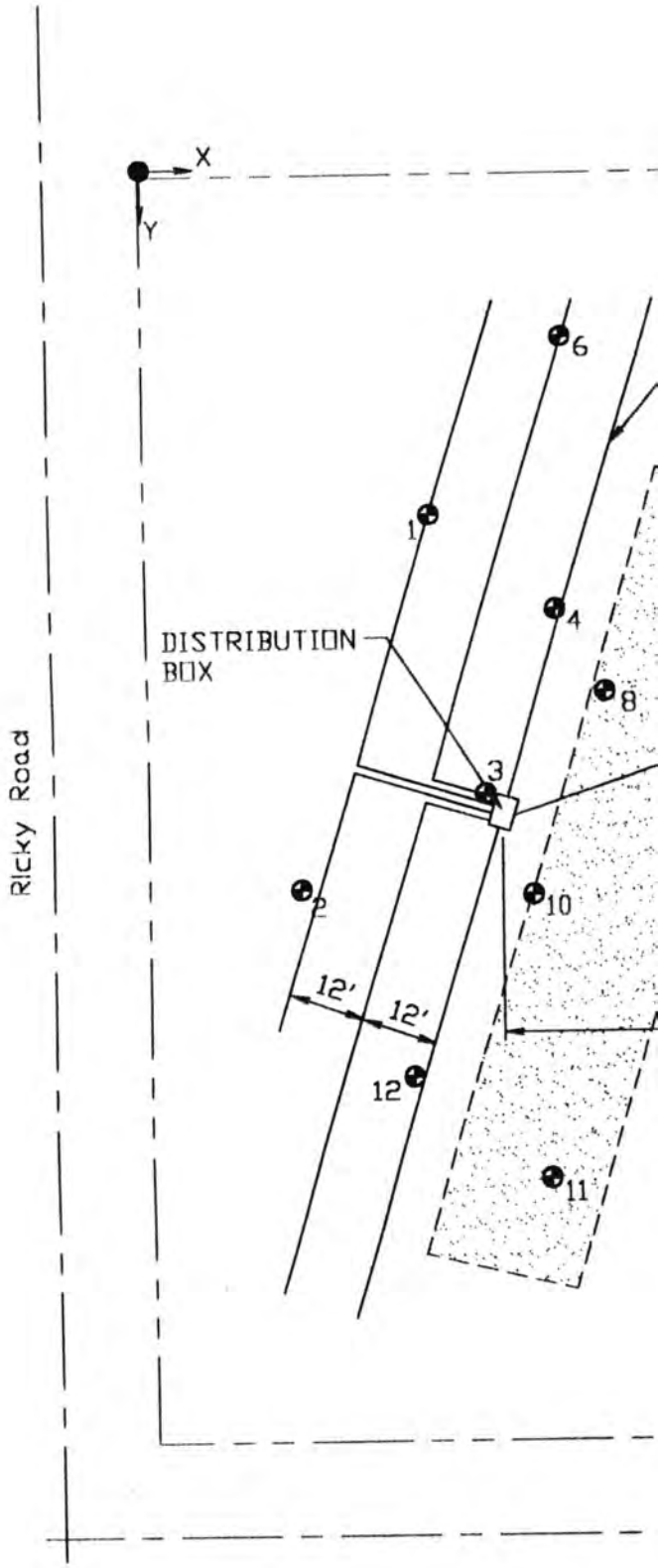
TEST HOLE LOCATION

1-4"	7-4"
X=44'-6"	X=96'-9"
Y=26'-10"	Y=79'-9"
2-6"	8-4"
X=23'-6"	X=71'-6"
Y=113'-10"	Y=83'-6"
3-6"	9-4"
X=52'-6"	X=80'-11"
Y=99'-0"	Y=119'-2"
4-6"	10-4"
X=64'-0"	X=59'-10"
Y=70'-6"	Y=114'-11"
5-6"	11-4"
X=87'-6"	X=62'-1"
Y=40'-10"	Y=159'-6"
6-6"	12-4"
X=65'-6"	X=40'-10"
Y=26'-10"	Y=143'-7"

NOTE: 1-4" INDICATES HOLE NUMBER 1 WITH A 4" DIAMETER.

● POWER POLE

● 4" or 6" TEST HOLE



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

D

Permit Number:

Sewage Disposal System

As Built Plans & Specifications

Date 2-7-03

System Location (Indicate correct number and street)

Address 6100 LUANN LANE (no rural route) City LINCOLN NE, Zip 68516

A. Building Sewer

1. Material: Sch 40 PVC
   Diameter: 4 in.
2. Distance above basement floor: _____ in.
   or distance below basement floor: 33 in.
3. Distance between dwelling and septic tank: 19 ft.
4. Number of clean-outs: 1
5. Distances to: well or suction line NA ft.
   stream NA ft.
   pressure line > 30 ft.
   property line > 50 ft.

B. Septic Tank

1. Material: Concrete
   Number of compartments: 1
2. Capacity: 1250 gal.
3. Factory built: ☒ Yes ☐ No
4. Manholes: Over inlet, diameter 5X9 in.
   Over outlet, diameter 6X10 in.
   Riser: ☐ above ☒ below grade 6 in.
5. Inlet: ☒ baffle ☐ tee
6. Outlet: ☒ baffle ☐ tee
7. Depth to top of tank, below unfinished grade: 25 in.
8. Distances to: Well or suction line NA ft.
   Stream NA ft.
   Pressure line > 50 ft.
   Property line > 50 ft.

C. Distribution Box

1. Material: PVC
   Number available outlets: 5
2. Factory built: ☒ Yes ☐ No
3. Distance from septic tank: 21 ft.

D. Absorption Field

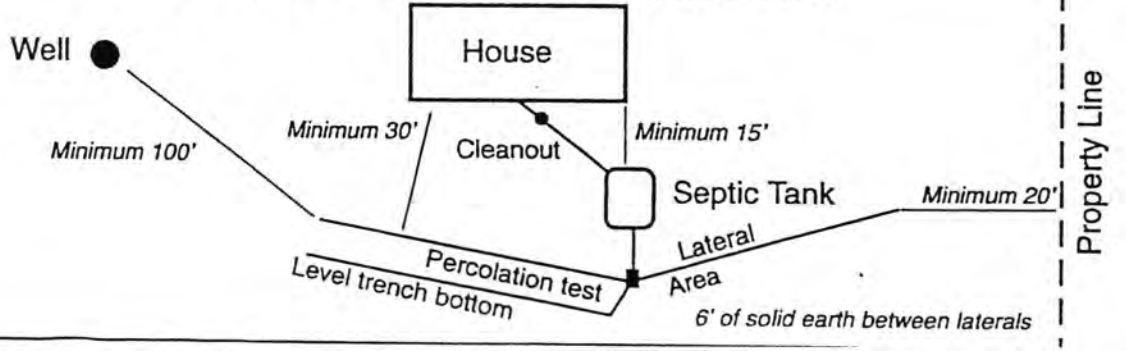
(Provide as-built drawings on back of this form)

1. Type: ☒ Half rounds ☐ Perforated pipe
   Diameter of half round: 14
   or perforated pipe: _____
   Material: ☐ fiberglass ☒ plastic ☐ concrete
   ☐ other Infiltrator
2. Lateral lines: Number 3
   Length of each line: 90 ft. 90 ft.
   90 ft. _____ ft., _____ ft.
3. Trench dimensions: Width 4' ft.
   Slope > 6" in/100 ft.
   Average depth 40 in
4. Filter material: Road Gravel
   Depth of material 16 in.
5. Distances to: Well or suction line NA ft.
   Stream NA ft.
   Pressure line > 30 ft.
   Property line > 20 ft.

Indicate North with Arrow

Complete "As Built" drawing on back of this form.

Individual Sewage System Design (Example)



FORM 23-103 10-96

As Built Drawing

