Lincoln-Lancaster County Health Department

ENVIRONMENTAL PUBLIC HEALTH DIVISION

3140 N STREET · LINCOLN, NE 68510-1514

002764

(402) 441-8000

Permit: SEWAGE INSTALLATION
LAGOON

Permit # 03380265701

Issued 06/16/03
Expires 12/16/03
Revenue Code 3157

Establishment: MARC GROFF
T11N R5E SEC 6
LOT 14IT
NW 140 ST-MALCOLM

FEES: $200.00

TOTAL: $200.00

Permittee: MARC GROFF
5621 NW FAIRWAY DR
LINCOLN NE 68521

Bruce D. Dart

Bruce D. Dart, Health Director

EPH COPY

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

A

Permit Number: 03380265701

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 14000 NW 140 (no rural route) City Malcolm NE, Zip _____

Legal Description 6 11N 5E 14 I.T.
1/4 1/4 Section Township Range Subdivision Addition Block Lot

Geographical Location (if known): Longitude _____ Latitude _____

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

B. Owner

Name Marc Groff Signature Marc Groff

Address 5621 NW. Fairway Dr. City/State/Zip Lincoln, Ne 68521

☐ Check if owner designed system Home Phone 438-6561 Work Phone _____

C. Contractor

Name Brad Southwick Company Name Southwick Sewer + Drain

Address 17201 So 72nd City/State/Zip Hickman, Ne 68372

☐ Check if contractor designed system Work Phone 430-7606

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

Designer Name BRAD SOUTHWICK Firm SOUTHWICK SEWER + DRAIN Work Phone 475-2462

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 6/16/03 Date frwd 6/18/03 ACTION ☒ Approved ☐ Disapproved Signature Jerrold C. Hood
12-5-03 Lic Work LM 12-8-03 mm

2. **Supt. Bldg. Insp. or Village Clerk** Date rec'd 6-18-03 Date frwd 6-18-03 ACTION ☒ Approved ☐ Disapproved Signature _____

3. **City or County Engineer** Date rec'd 06/18/2003 Date frwd _____ ACTION ☒ Approved ☐ Disapproved Signature _____

Installation Final Written Approval

* See form B notes

By Ron Maynard

Date 12-10-03

Business Office Use Only
Date Rec'd 6/16/03
Amt Paid 200.00
Rec'd By CW Cash/Check No. 3631

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

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B

Permit Number: 033802657

Sewage Disposal System
Soil Absorption Test Data Report
Annex to Application

PLEASE PRINT OR TYPE

System Location (Indicate correct number and street)

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

Owner Mark Groff Address 5621 - NW Fairway Dr LINCOLN 68

Soil Type (SCS): WTC / PAC2 Percolation Rate: 60 – 120 m

Date of Tests 5/29 to 5/30 Weather: Precipitation — Temperature 50s

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 (Min/in
1	30	5/29	6:00	5/30	8:00	5/30	9:40	9¼	5/30	10:10	30	¼	12
2			PM		AM		AM	7¼		AM		¼	12
3								7¼				¼	12
4								10⅝				⅝	48
5								7¼				⅜	80
6								6⅜				⅜	80
7								9½				½	60

Sum of Percolation Rates: _____
Average of Rates: _____
Rate Used for Calculation: _____

Person Conducting Percolation Tests

Name: Brad Southwick
Phone: 430-7606
Address 17201 So 72nd st.
Hickman, NE 68372

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Remarks Soils map indicates ~~Steinauer clay loam. However, well drained stone free from~~ Pawnee clay loam
~~rock chemical notes was apparent in the soils~~

Signature of Reviewing Official _____ Date _____

Lincoln-Lancaster County Health Department
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Phone: 402-441-8022

B

Permit Number:

Sewage Disposal System

Soil Absorption Test Data Report

Annex to Application

PLEASE PRINT OR TYPE

System Location (Indicate correct number and street)

Address NW 140 (no rural route) City Malcolm NE, Zip 68402

Owner Mark Grotte Addresss

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

Date of Tests 9/30 to 10/1/03 Weather: Precipitation — Temperature 60s

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	28	9/30	4:30	10/1	8:00	10/1	10:45	21 3/4	10/1	10:55	10	1/2	20
2			PM		AM			19 5/8				7/8	12
3								17 3/4				5/8	16
4								22 3/8				3/8	27
5								13 1/2				1/4	40
6								20 3/8				7/8	12

Person Conducting Percolation Tests

Name: Brad Southwick

Phone: 430-7606

Address 17201 So 72nd st. Hickman, Ne

Sum of Percolation Rates: 127

Average of Rates: 22

Rate Used for Calculation: 40

> 20 min

DO NOT WRITE BELOW THIS LINE

[* Rather fast perc rate for this soil]

Reviewing Action

* Remarks Soils map indicates Steinauer clay loam. However, well developed structure from root channel pores was apparent in this soil (Alfalfa was growing in this area). A 2nd test presoak in Shanneberg silty clay loam of 6½ hrs continuous presoak did not slow original perc rate significantly. Appears to be a rather permanent structure development in soil

Signature of Reviewing Official Ben Mayhew Date 12-8-03

FORM 23-101 10-96

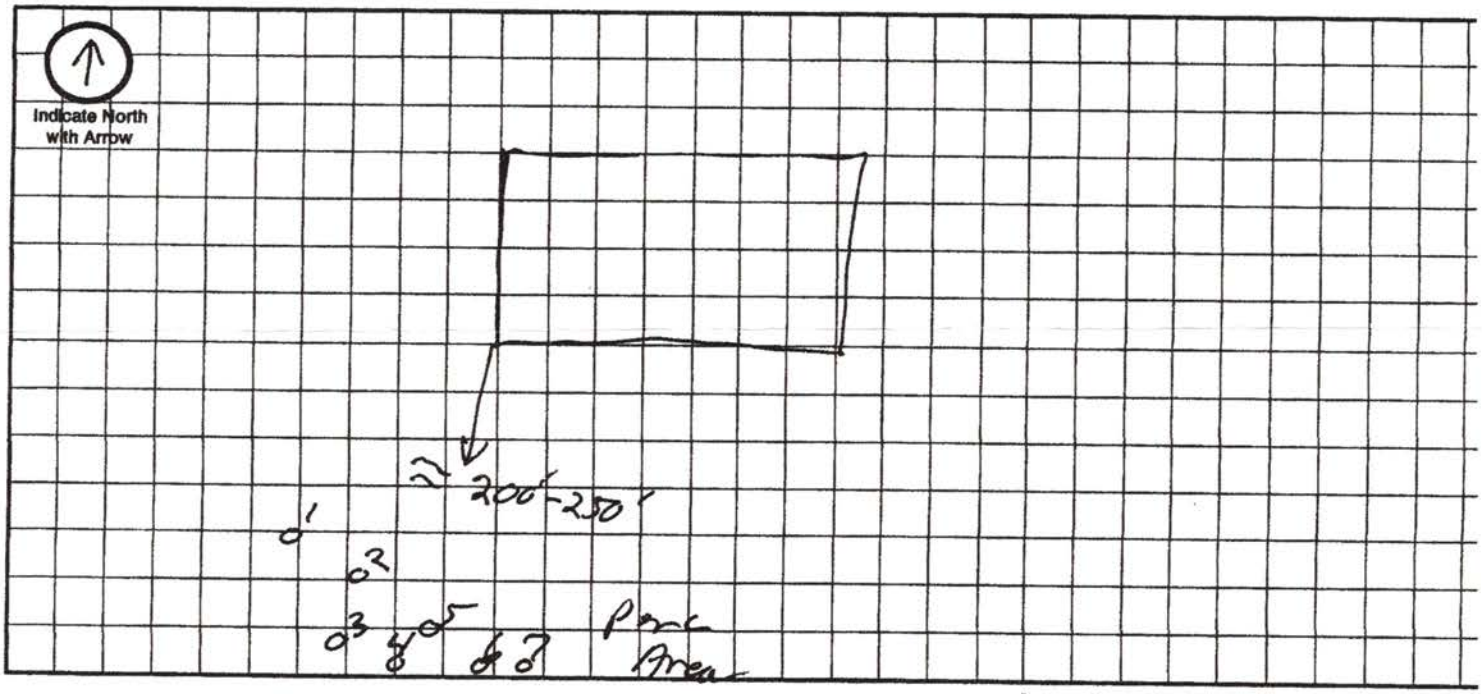
Lincoln-Lancaster County Health Department
Environmental Health Division
3140 "N" Street • Lincoln, NE 68510-1514
Phone: 402-441-8022

C

Permit Number: 033802657

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 lir

A. System Location (Indicate correct number and street)

Address (no rural route) _____ City _____ NE, Zip _____

B. Proposed Septic Tank/s

Tank Material: ☐ Concrete ☐ Plastic ☐ Other _____

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

Percolation Rate _____ (min. per inch) Soil Type: _____ Land Slope: _____

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

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

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

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

Total Length of Laterals _____ ft. Number of Trenches _____ 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 _____

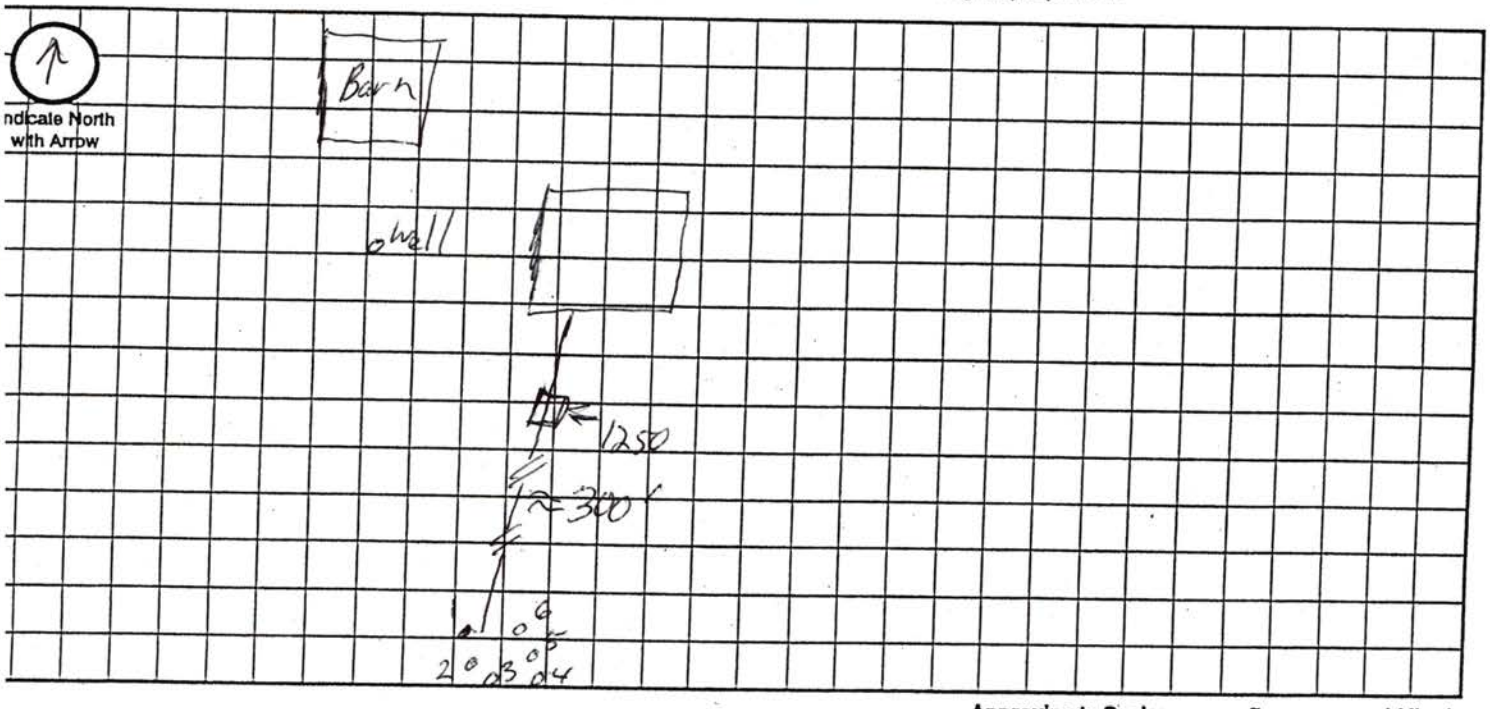
Lincoln-Lancaster County Health Department
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Phone: 402-441-8022

C

Permit Number:

Sewage Disposal System
Preliminary Plan Specifications

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



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

. System Location (Indicate correct number and street)

ldress (no rural route) NW 140 City Malcolm NE, Zip 68402

. Proposed Septic Tank/s

nk Material: ☐ Concrete ☒ Plastic ☐ Other _____

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

rcolation Rate 40 (min. per inch) Soil Type: _____ Land Slope: _____ %

pe of Absorption System: ☐ Trench ☐ Bed ☐ Other _____

al Square Feet of Field Required: 825 sq. ft.

pe of Lateral: ☐ Half-Moon ☐ Perforated Pipe ☒ Other Lateral Material: Infiltrator

pacity of Septic Tank 1250 gals Number of Absorption Beds: _____ Number of Distribution Laterals per Bed _____

al Length of Laterals 210 ft. Number of Trenches 3 Trench Width 4'

Setbacks Check the Boxes Below if the Required Setback has been Satisfied

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

Required Signatures

ie Building Contractor _____ Date _____

ıller Brad Bartling Date 11-15-03

23-102 10-96

Lincoln-Lancaster County Health Department
Environmental Health Division
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D

Permit Number:

Sewage Disposal System

As Built Plans & Specifications

Date 12-8-03

System Location (Indicate correct number and street)

Address 14100 NW 140 (no rural route) City Malcolm NE, Zip 68402

A. Building Sewer

1. Material: PVC Sch 40
   Diameter: 4 in.
2. Distance above basement floor: _____ in.
   or distance below basement floor: 11 in.
3. Distance between dwelling and septic tank: 65 ft.
4. Number of clean-outs: 1
5. Distances to: well or suction line > 50 ft.
   stream NA ft.
   pressure line NA ft.
   property line > 15 ft.

B. Septic Tank

1. Material: Plastic - Snyder
   Number of compartments: 1
2. Capacity: 1250 gal.
3. Factory built: ☒ Yes ☐ No
4. Manholes: Over inlet, diameter 18 in.
   Over outlet, diameter 18 in.
   Riser: ☐ above ☐ below grade _____ in.
5. Inlet: ☐ baffle ☒ tee
6. Outlet: ☐ baffle ☒ tee
7. Depth to top of tank, below unfinished grade: 10 in.
8. Distances to: Well or suction line > 50 ft.
   Stream NA ft.
   Pressure line NA ft.
   Property line > 15 ft.

C. Distribution Box

1. Material: PVC
   Number available outlets: 5
2. Factory built: ☒ Yes ☐ No
3. Distance from septic tank: 352 ft.

D. Absorption Field

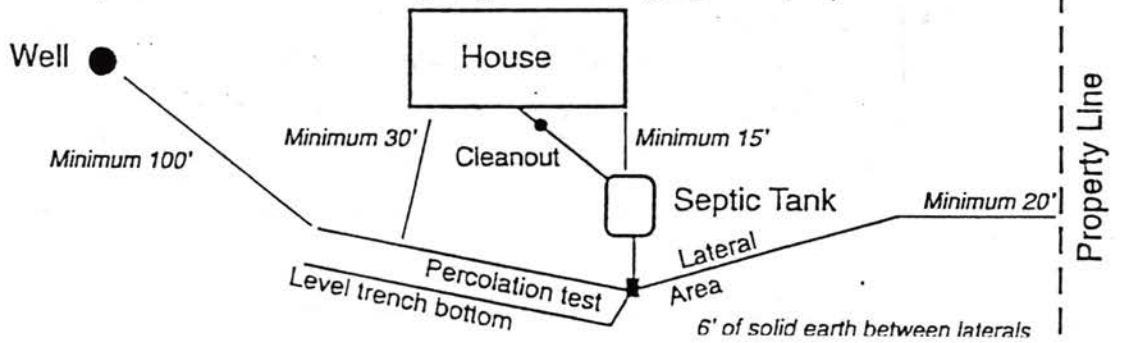
(Provide as-built drawings on back of this form)

1. Type: ☒ Half rounds ☐ Perforated pipe
   Diameter of half round: _____
   or perforated pipe: _____
   Material: ☐ fiberglass ☒ plastic ☐ concrete
   ☐ other ADS - Biodiffuser
2. Lateral lines: Number 3
   Length of each line: 68½ ft. 75 ft.
   68½ ft. _____ ft., _____ ft.
3. Trench dimensions: Width 3 ft.
   Slope 2± in/100 ft.
   Average depth 38 in
4. Filter material: Gravelless
   Depth of material _____ in.
5. Distances to: Well or suction line > 100 ft.
   Stream NA ft.
   Pressure line NA ft.
   Property line NA ft.
   >20'

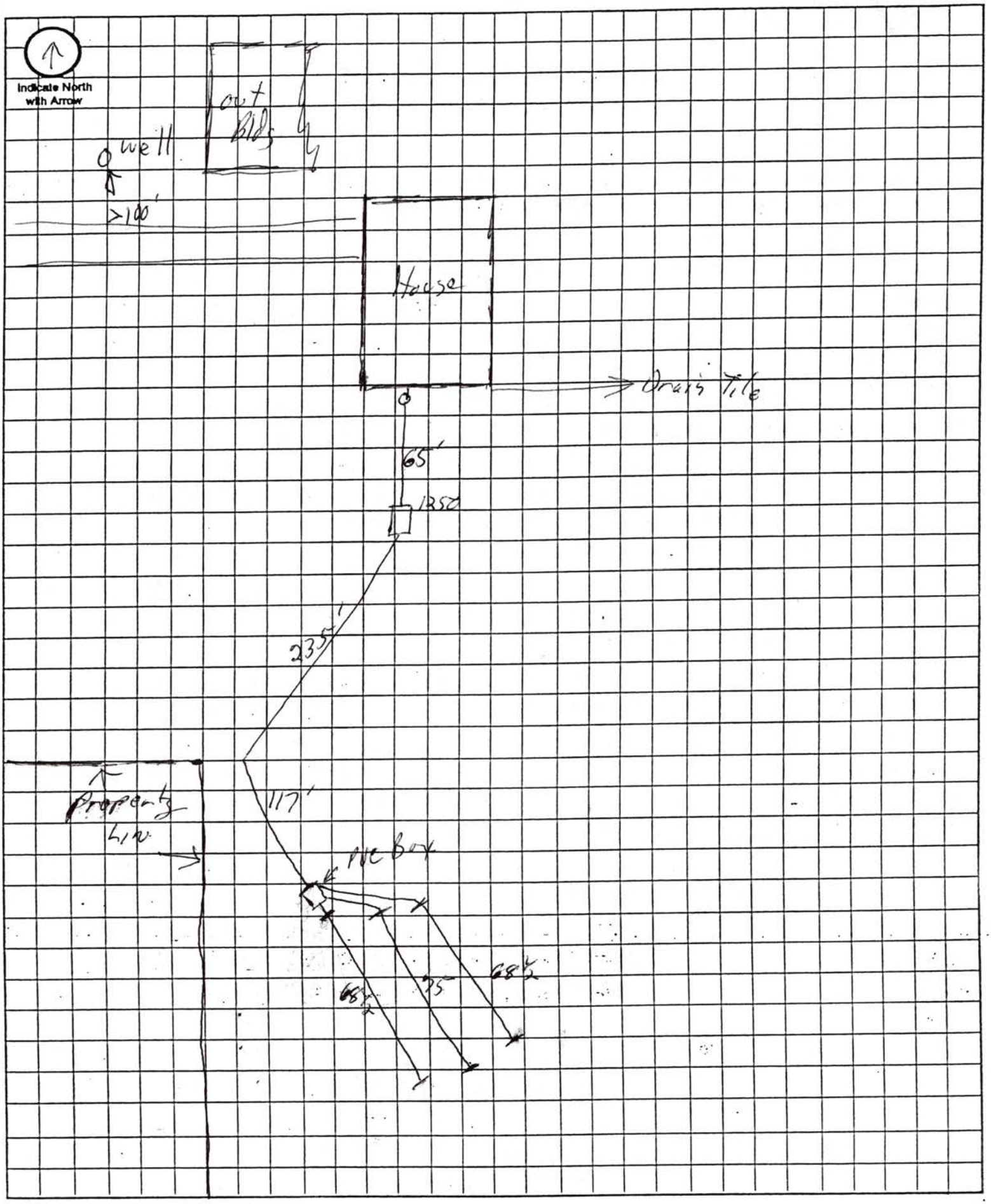
Indicate North with Arrow

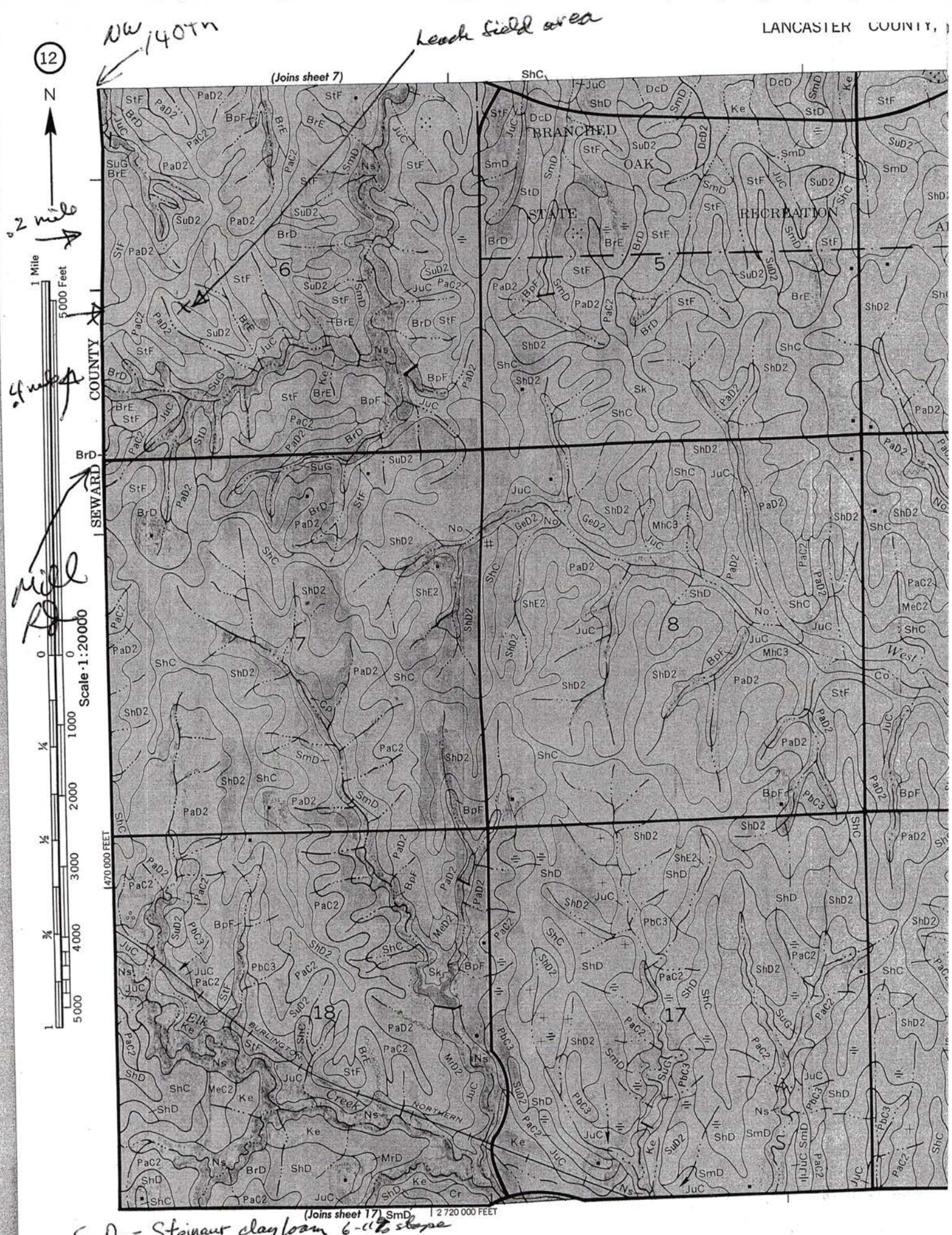
Complete "As Built" drawing on back of this form.

Individual Sewage System Design (Example)



As Built Drawing





SuD2 - Steinauer clay loam 6-11% slope