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

A

Permit Number: 99380198161

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 21901 KAAN RD. (no rural route) City HOLLAND NEBR. NE, Zip _____

Legal Description Sec 2 T7N R7E HOLLAND ACRES ADDITION 1 4
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 BRIAN CATLIN Signature _____

Address _____ City/State/Zip _____

☐ Check if owner designed system Home Phone _____ Work Phone _____

C. Contractor

Name CHANDEL HOMES INC. Company Name _____

Address P.O. B 67065 City/State/Zip _____

☐ Check if contractor designed system Work Phone 432-3700 Cell 730-4903

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

Designer Name Bill ARNSEN Firm GEO-TECK Work Phone 466-8154

E. This System Will Serve a

☒ Residential Dwelling Number of Bedrooms 3+ POTENTIAL FUTURE 4th IN W.O 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 4-30-99 Date frwd 8/19/99 **ACTION** ☐ Approved ☐ Disapproved Signature _____
2. **Supt. Bldg. Insp. or Village Clerk** Date rec'd 4/19/99 Date frwd 5/19/99 **ACTION** ☒ Approved ☐ Disapproved Signature _____
3. **City or County Engineer** Date rec'd 8-19-99 Date frwd 8-19-99 **ACTION** ☒ Approved ☐ Disapproved Signature _____

9/3/99 Sewer & tank + 1 lateral ok

Installation Final Written Approval

By John Jhen - ENG Designed System

Date 9/8/99

Business Office Use Only

Date Rec'd 4/30/99
Amt Paid #150.00
Rec'd By _____ Cash/Check No. 5554

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:

Sewage Disposal System

Soil Absorption Test Data Report

Annex to Application

PLEASE PRINT OR TYPE

System Location (Indicate correct number and street)

Address 21901 KAAR (no rural route) City Holland Nebr. NE, Zip 68372

Owner BRISH Addresss

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

Date of Tests to Weather: Precipitation Temperature

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)

ATTACHED

SEE

Sum of Percolation Rates:

Average of Rates:

Rate Used for Calculation:

Person Conducting Percolation Tests

Name:

Phone:

Address

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Remarks SEE ENGINEERS PLAN

Signature of Reviewing Official John C Munn Date 4-30-99

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:

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.

Indicate North with Arrow

SEE ENGINEERED DESIGN

ENGINEERED SYSTEM IF NOT APPROVED

LAGOON TO BE INSTALLED

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

A. System Location (Indicate correct number and street)

Address (no rural route) 21901 KAAR RD City HOLLAND NE, Zip 68372

B. Proposed Septic Tank/s

Tank Material: ☐ Concrete ☐ Plastic ☒ Other SEE

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 Chris Eckhardt Pres. Custom Home Tech Date 4/30/99

Installer _____ Date _____

FORM 23-102 10-96

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

D

Permit Number: 993801 98101

Sewage Disposal System

As Built Plans & Specifications

Date 9/8/99

System Location (Indicate correct number and street)

Address 21901 Loer Rd (no rural route) City ~~Ed~~ Holland NE, Zip _____

A. Building Sewer

1. Material: _____
   Diameter: _____ in.
2. Distance above basement floor: _____ in.
   or distance below basement floor: _____ in.
3. Distance between dwelling and septic tank: 69' ft.
4. Number of clean-outs: 1
5. Distances to: well or suction line Village Water ft.
   stream _____ ft.
   pressure line _____ ft.
   property line _____ ft.

B. Septic Tank

1. Material: Concrete
   Number of compartments: 1
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. Outlet: ☒ baffle ☐ tee
7. Depth to top of tank, below unfinished grade: 2' in.
8. Distances to: Well or suction line NA ft.
   Stream NA ft.
   Pressure line See blue print ft.
   Property line See blue print ft.

C. Distribution Box

1. Material: Concrete
   Number available outlets: _____
2. Factory built: ☒ Yes ☐ No
3. Distance from septic tank: 48' ft.

D. Absorption Field

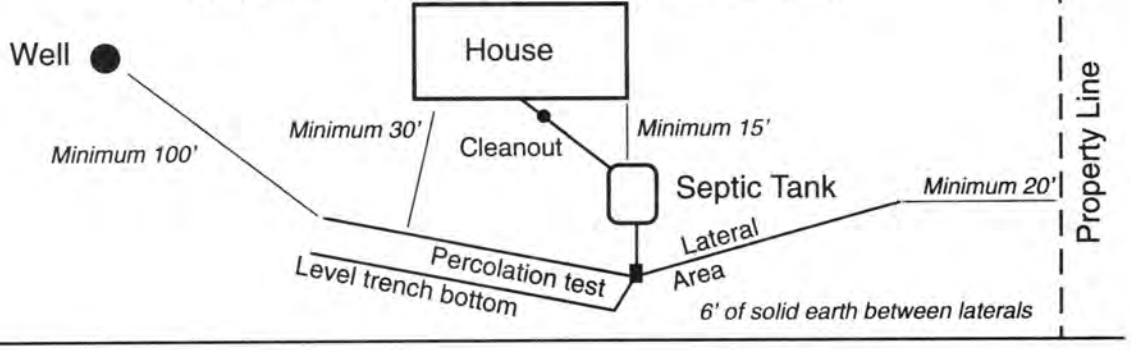
(Provide as-built drawings on back of this form)

1. Type: ☐ Half rounds ☒ Perforated pipe
   Diameter of half round: _____
   or perforated pipe: _____
   Material: ☐ fiberglass ☒ plastic ☐ concrete
   ☐ other _____
2. Lateral lines: Number 4
   Length of each line: 100' ft. _____ ft.
   _____ ft. _____ ft., _____ ft.
3. Trench dimensions: Width 8'6" ft.
   Slope None in/100 ft.
   Average depth 3'6" in
4. Filter material: pea/road gravel
   see blue print Depth of material 3' in.
5. Distances to: Well or suction line NA ft.
   Stream NA ft.
   Pressure line [illegible] ft.
   Property line 20+ ft.

Indicate North with Arrow

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

Individual Sewage System Design (Example)



STATE OF NEBRASKA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Michael J. Linder
Director
Suite 400, The Atrium
1200 'N' Street
P.O. Box 98922
Lincoln, Nebraska 68509-8922
Phone (402) 471-2186
FAX (402) 471-2909

Mike Johanns
Governor

Construction Permit # 99S028

Brian Catlin
1910 'A' St., Apt. 1
Lincoln, NE 68502

RE: On-site Wastewater Treatment System - Evapotranspiration/Infiltration
21901 Kaar Rd.
Sec. 2, T7N, R7E
Lot 4, Block 1, Holland Acres
Holland, Lancaster County

Dear Mr. Catlin:

Documents describing the above-referenced project have been approved and stamped accordingly. Pursuant to Neb. Rev. Stat. Sec. §81-1506(2)(Reissue 1987), a permit for construction is hereby granted. This permit shall also serve as the operating permit for the facility once construction is complete.

Compliance with minimum sanitary engineering design criteria was the only consideration in the review of this project and items such as quality of material, structural soundness, electrical and mechanical design features were not considered unless specifically noted in the review comments. However, this approval does not in any way release the owner from the responsibility of providing an operable facility.

Construction shall be as described in the approved documents. If, for any reason, major changes are necessary, written approval must be obtained from this Department before proceeding.

One set of documents is being made a part of this Department's records, and the remaining documents are being returned to you.

Please complete and return the enclosed card as soon as the information is available. If you have any questions please contact Steven M. Goans, P.E. at (402) 471-2580.

Pursuant to a Delegation Memorandum dated January 12, 1999, and signed by the Director, the undersigned hereby executes this document on behalf of the Director.

Signed the 17TH day of August, 1999.

Sincerely,

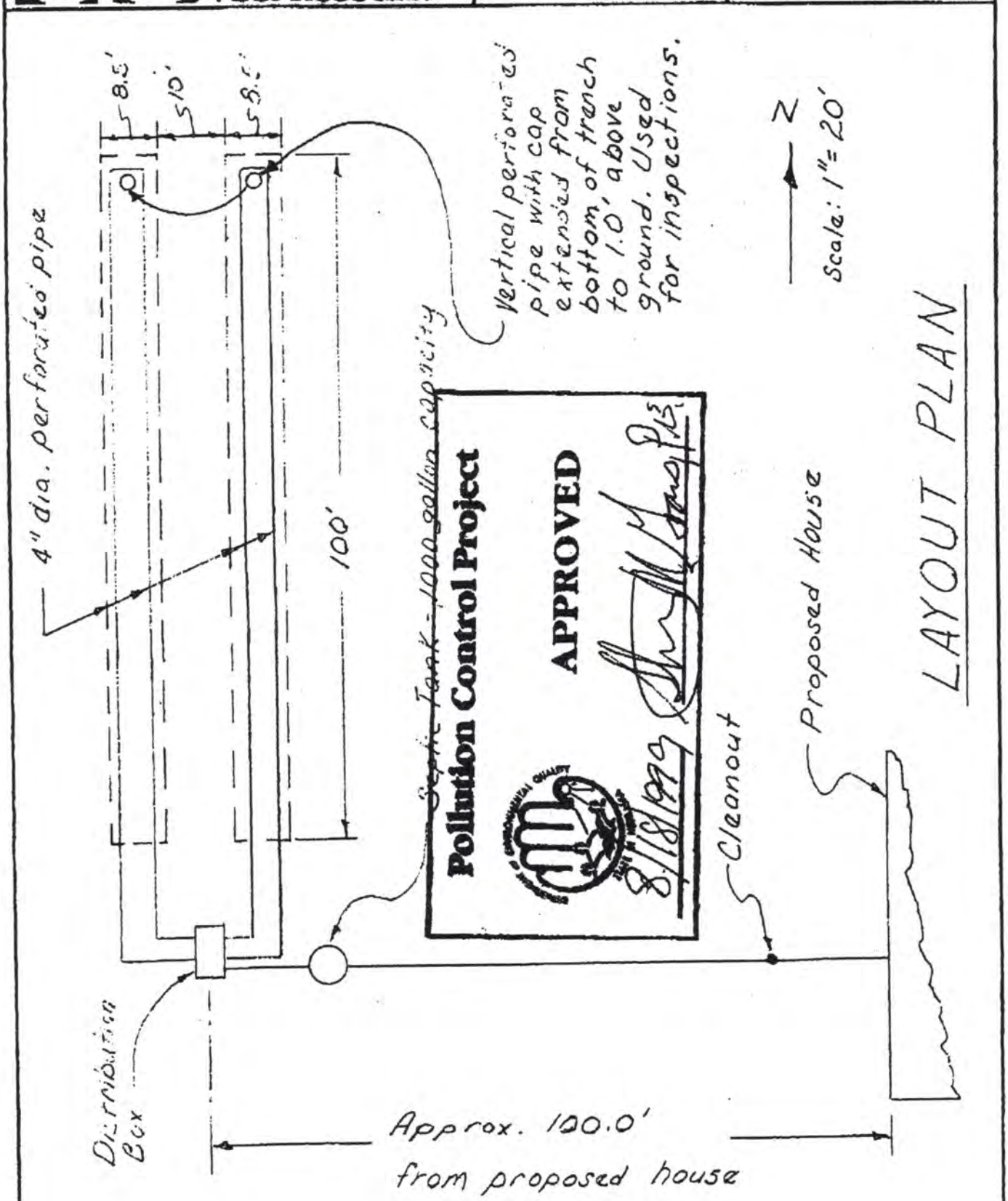
Patrick W. Rice

Patrick W. Rice
Assistant Director

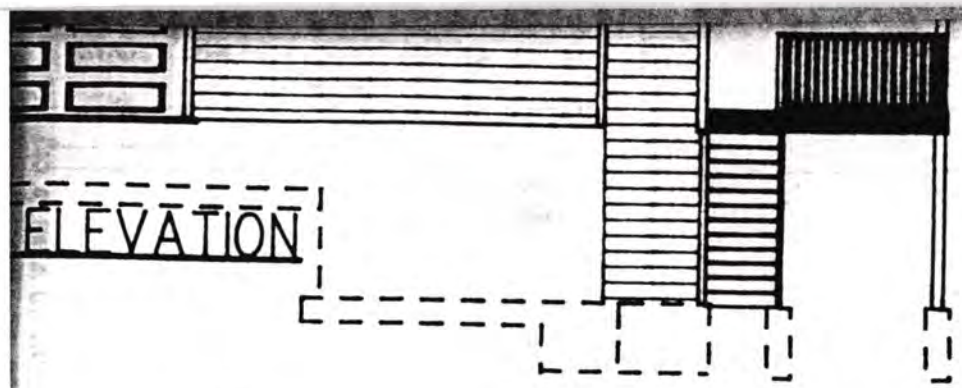
PWR/smg
cc:William Arneson, P.E.; GSI
John Minor, LLCHD
Chris Grabenstein, Chandel Homes

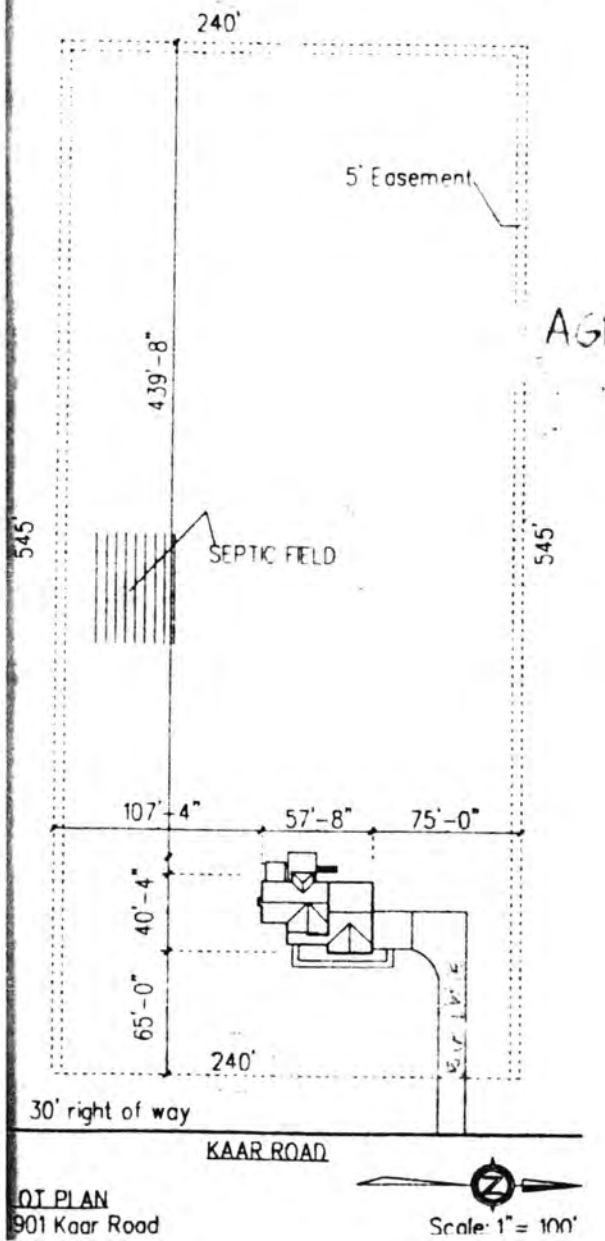
Geotechnical Services Inc.

Project Proposed Cabin House	
Location 21901 Kaar Rd.	Date June 7, 1999
Calc by Wm. Arneson, P.E.	Page 2 of 4

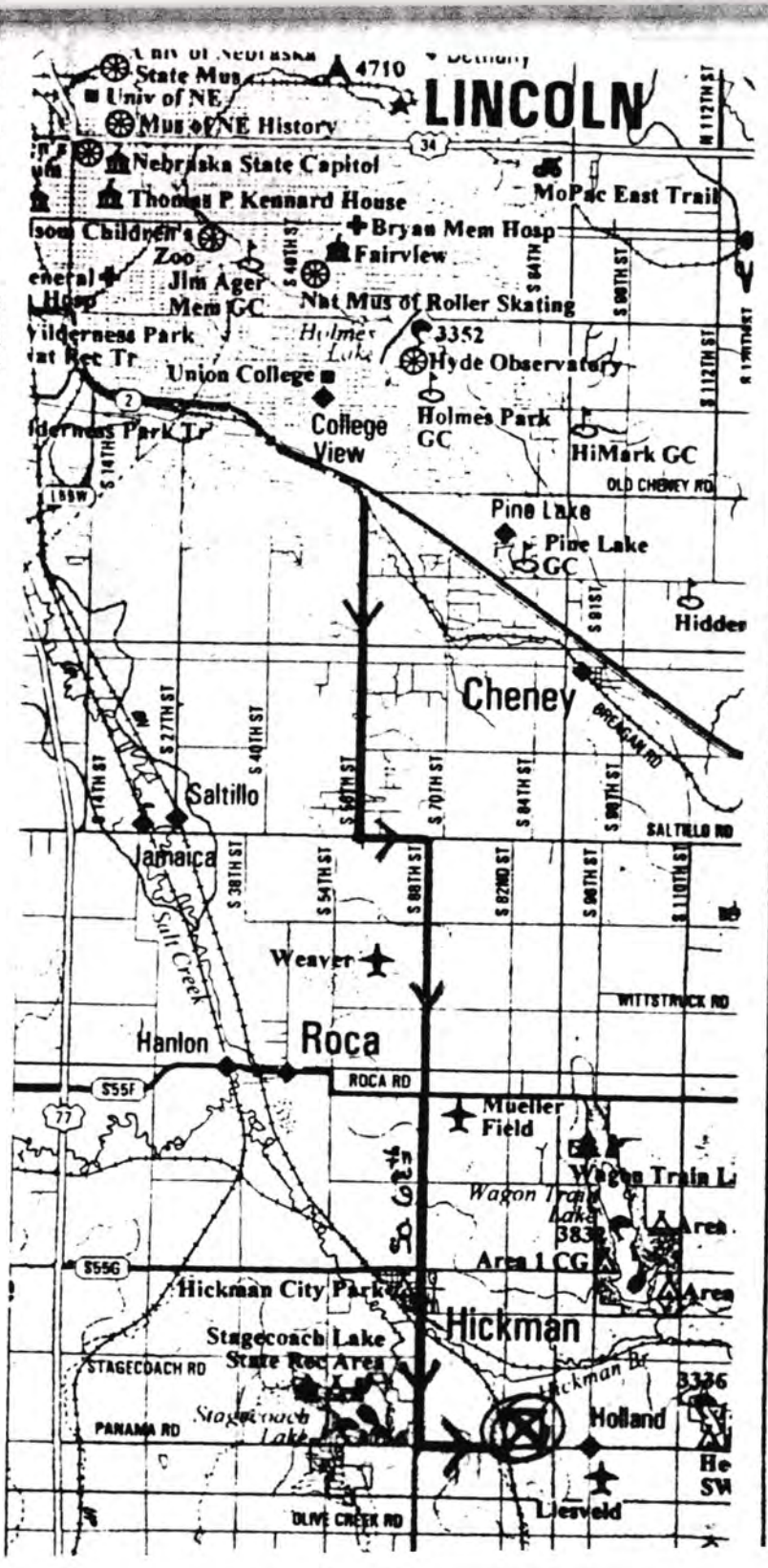


Form 201 1/93





3 ACRES



CHANDELL HOMES, IN

atlin Res. 21901 Kaar Road

Geotechnical Services Inc.

Project Proposed Cabin House		
Location 21901 Kaar Rd	Date June 7, 1999	
Calc by Wm. Arneson, P.E.	Page 2 of 4	

LAYOUT PLAN

Form 201 1/93

Geotechnical Services Inc.

June 7, 1999

Chandel Homes, Inc.
4529 Birch Creek Dr.
Lincoln, NE 68516

Attn: Chris Grabenstein FAX: 1-402-430-4900

RE: PROPOSED CATLIN HOUSE SEPTIC SYSTEM, HOLLAND, NE; GSI # 9902098

Dear Mr. Grabenstein:

The following is our design for the proposed septic system. We used a daily flow for the 3 bedroom house of 400 gallons per day. Because of the relatively slow percolation rates of the soils we used the Lancaster County "Experimental Sewage Disposal System Method" which used the Seepage – Evaportranspiration Bed System. We placed the two trenches along the north half of the site because of the better percolation rates were located there. The gravel called for should be ¼ to 3/8 inch size "pea" gravel, the sand should be "masonary" sand and the geofabric can be either Contech C200 woven or C-31NW nonwoven materials or equal. If you have any questions, please contact our office.

Respectfully,
Geotechnical Services, Inc.

Wm. C. Arneson

Wm. C. Arneson, P.E.
Division Manager

FILE: C:/MSOFFICE/Winword/Letters27

4817 NORTH 66TH STREET
LINCOLN, NEBRASKA 68504-1720
(402) 466-8154 FAX (402) 466-8195

OMAHA • LINCOLN • GRAND ISLAND
DES MOINES • CEDAR RAPIDS • QUAD CITIES
KANSAS CITY • WICHITA • SALINA • DENVER

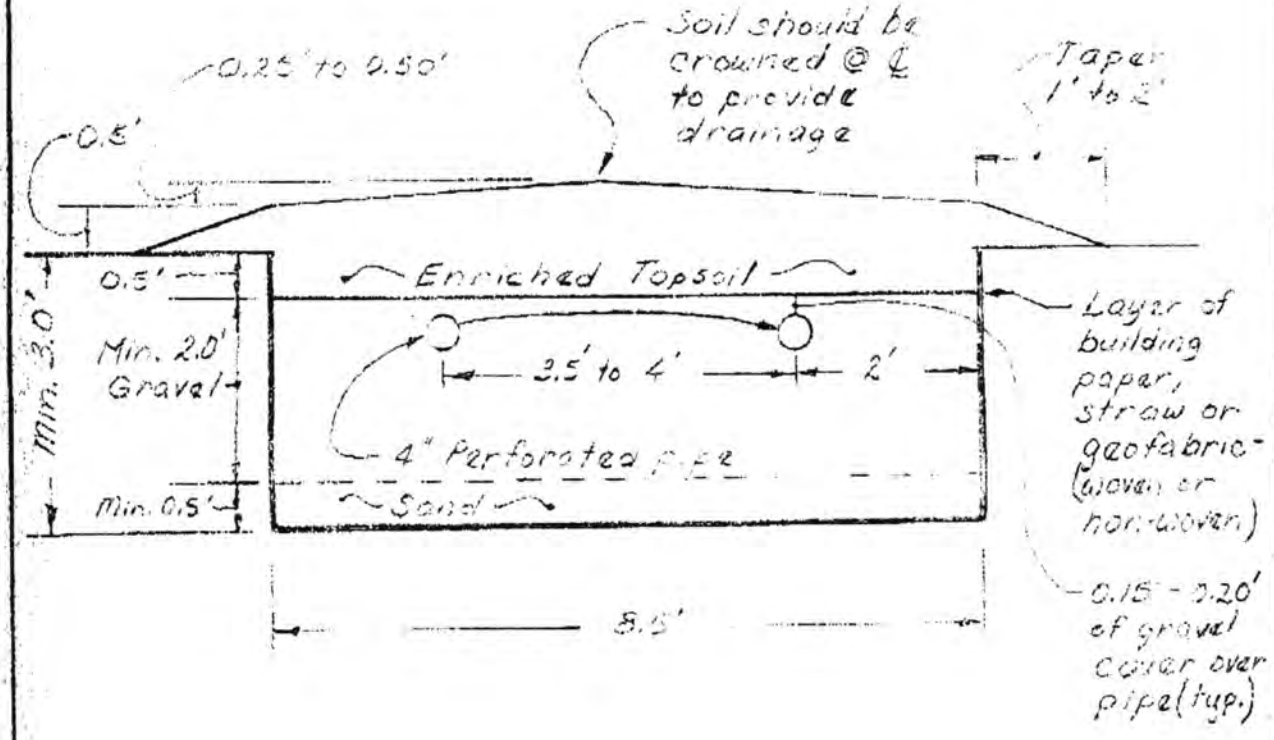
GEOTECHNICAL, MATERIALS & ENGINEERING ENVIRONMENTAL CONSULTANTS

GS Geotechnical Services Inc.

Project Proposed Catlin House	
Location 21901 Kaar Rd	Date June 7, 1999
Calc by Wm. Arasin, P.E.	Page 1 of 3

SEEPAGE - EVAPOTRANSPIRATION BED FOR A BEDROOM HOME

(Lancaster Co. Experimental Sewage Disp. Sys.)



TRENCH SECTION

Scale: 1" = 2.0'

Form 201 1/83

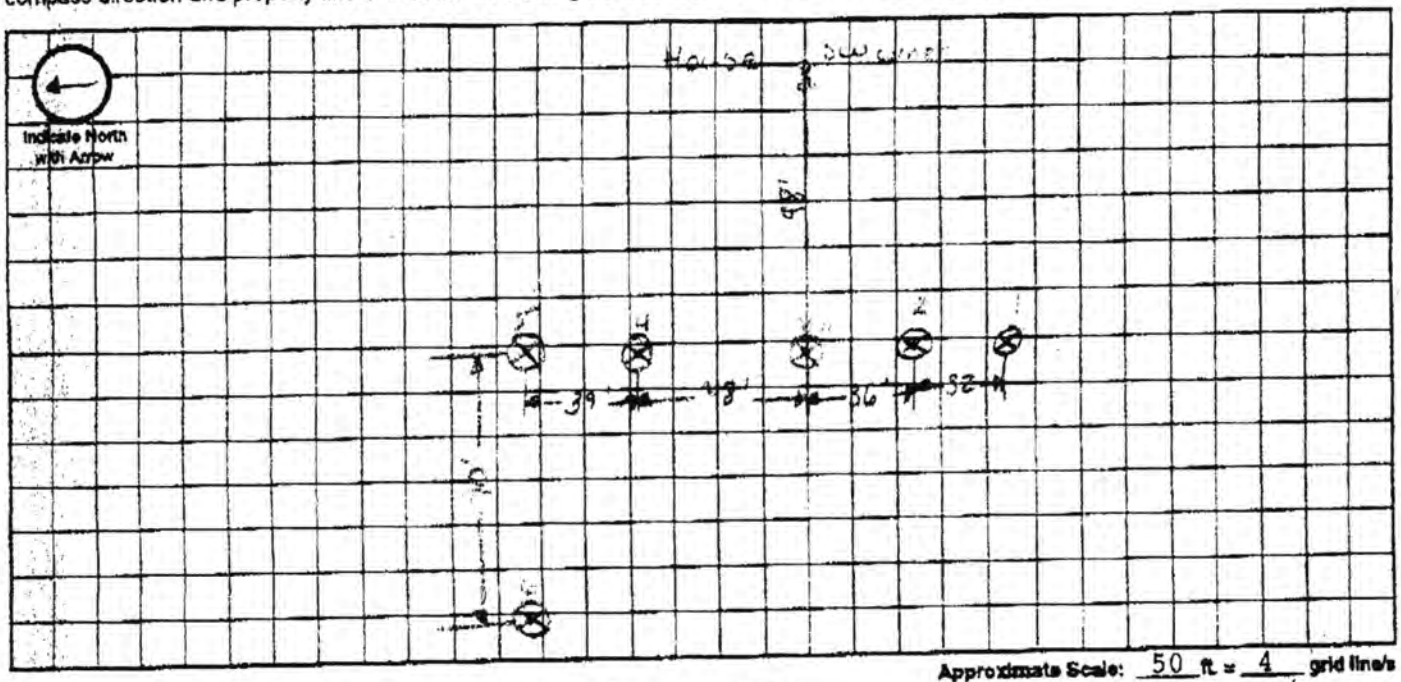
C

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

Permit Number:

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: 50 ft = 4 grid lines

A. System Location (Indicate correct number and street)

Address (no rural route) 21901 Kaar Rd. City Holland NE, Zip

B. Proposed Septic Tank/s

Tank Material: ☐ Concrete ☐ Plastic ☐ Other

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

Percolation Rate 60-120 (min. per inch) Soil Type: Silty Clay Land Slope: 2 %

Type of Absorption System: ☐ Trench ☐ Bed ☒ Other Seepage-Evapotranspiration Bed

Total Square Feet of Field Required: 1,680 sq. ft. Proposed Area = 8.5' X 100' = 1,700 sq. ft.

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

Capacity of Septic Tank 1,000 gals Number of Absorption Beds: 2 Number of Distribution Laterals per Bed 2

Total Length of Laterals 100 ft. Number of Trenches Trench Width 8.5'

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 ☐	☐

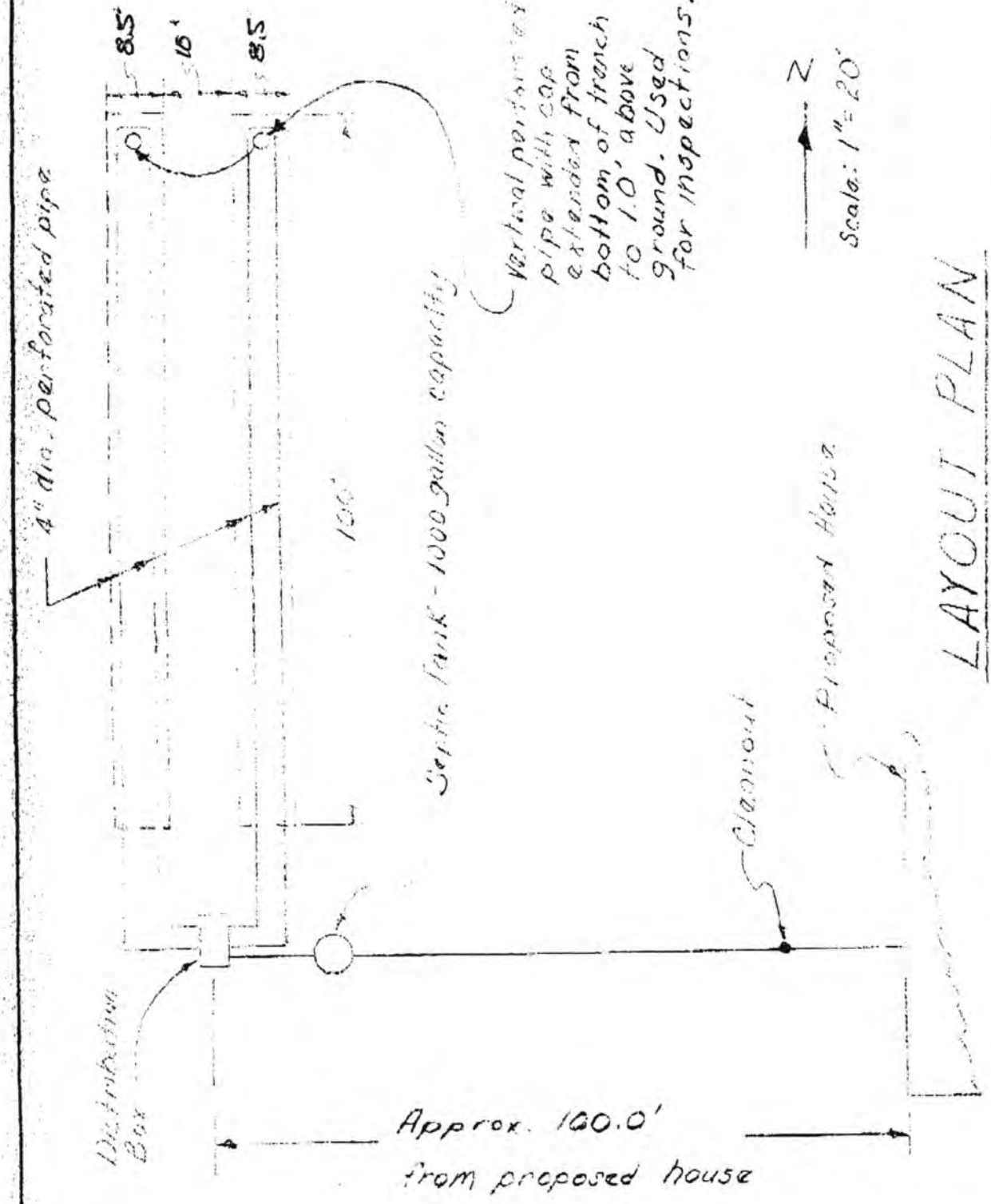
E. Required Signatures

Home Building Contractor Date

Installer Date

Geotechnical Services Inc.

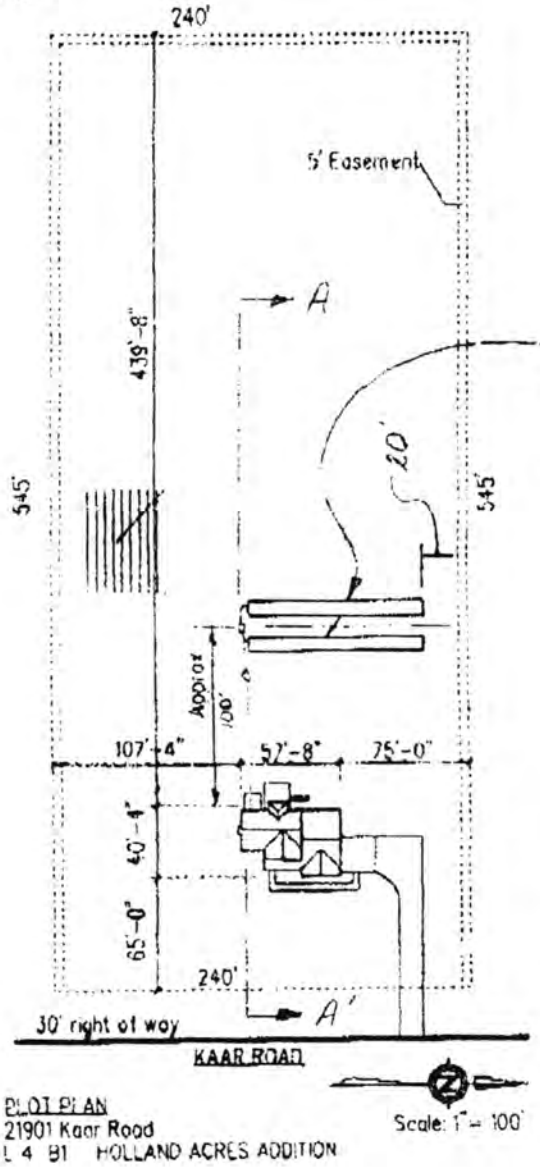
Project Proposed [illegible] House	
Location 21901 Kaar Rd	Date June 9, 99
Calc by [illegible]	Page 2 of 3



Form 801 1/89

Chandel Homes, Inc.

CATLIN RES.
21901 KAAR Rd
L4 B1 Holland
Acres Add.



Area = 85' 100·2
= 1700 ft²

NOTE: A-A'
Used percolation rates in north portion of lot.

SITE PLAN

Lincoln-Lancaster County Health Department

ENVIRONMENTAL HEALTH DIVISION

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

Permit

SEWAGE INSTALLATION
OTHER SEWAGE DISPOSAL SYSTEM

Permit # 99380198101

Issued 05/04/99
Expires 11/04/99
Revenue Code 3157

Establishment

BRIAN CATLIN
T7N R7E SEC 2
HOLLAND ACRES ADDN
21901 KAAR RD-HOLLAND

FEES: $150.00

Permitee

CHANDEL HOMES INC
P O BOX 67065
LINCOLN NE 68506-7065

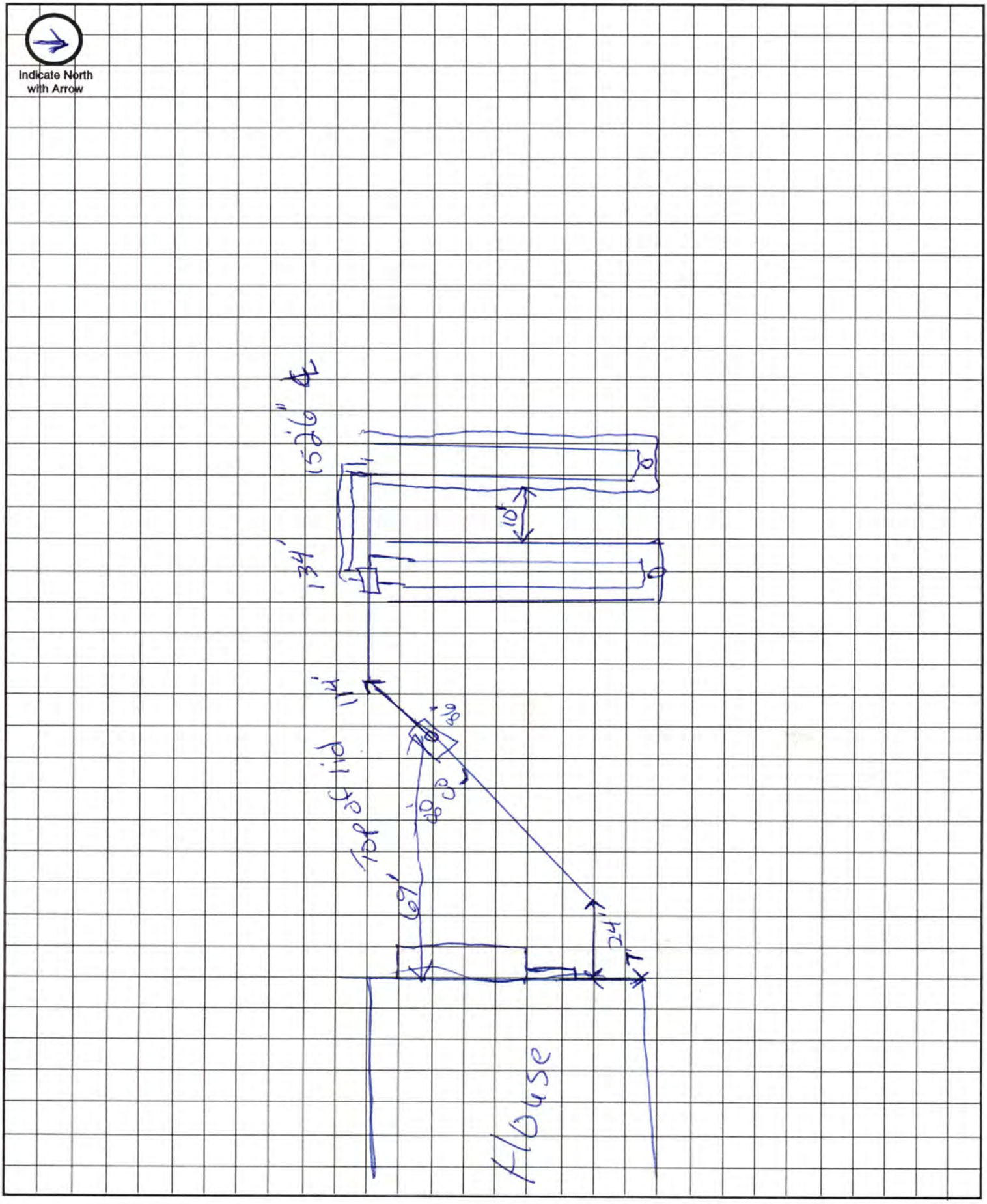
TOTAL: $150.00

Leon F. Vinci, MPH, Health Director

• POST IN A PROMINENT PLACE • NOT TRANSFERABLE

010190

As Built Drawing



Approximate Scale: _____ft. = _____ grid line/s