Lincoln-Lancaster County Health Department

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

Permit

SEWAGE INSTALLATION
SEPTIC SYSTEM

Permit # 99380212201

Issued 12/02/99
Expires 06/02/00
Revenue Code 3157

FEES: $150.00

Establishment

G M B RENTALS INC
T11N R6E SEC 6 QTR SW
IRREGULAR TRACT LOT 63IT
5580 W MILL RD-RAYMOND

TOTAL: $150.00

Permitee

G M B RENTALS INC
12500 W AGNEW RD
VALPARAISO NE 68065

Leon F. Vinci, MPH, Health Director

• POST IN A PROMINENT PLACE • NOT TRANSFERABLE

011221

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

A

Permit Number: 99380212

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 5580 W. MILL RD. (no rural route) City RAYMOND NE, Zip 68428

Legal Description SW (1/4) 1/4 6 (Section) 11N (Township) 6E (Range) _____ (Subdivision) _____ (Addition) _____ (Block) 63 I.T. (Lot)

Geographical Location (if known): Longitude _____ Latitude _____

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

B. Owner

Name GMB RENTALS, INC Signature Eugene R Benes

Address 12500 W. AGNEW, RD. City/State/Zip WAHOO NE. 68066

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

C. Contractor

Name STEVE MACHACEK Company Name M&W CONST.

Address P.O. BOX 91 City/State/Zip WESTON, NE 68070

☒ Check if contractor designed system Work Phone 402 642-5788

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

Designer Name _____ Firm _____ Work Phone _____

E. This System Will Serve a

☐ Residential Dwelling Number of Bedrooms _____ Is there a Whirlpool Bathtub YES NO

☒ Commercial Establishment/Other Facility Specify DAYCARE WORK SHOP

Design flow in gallons per day 420 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 12/2/99 Date frwd 12/2/99	ACTION ☒ Approved ☐ Disapproved Signature Jerrold C. Hood	
2. Supt. Bldg. Insp. or Village Clerk	Date rec'd 11-30 99 Date frwd 11-30 99	ACTION ☒ Approved ☐ Disapproved Signature Sandy Sevi, Clerk	
3. City or County Engineer	Date rec'd 12-2-99 Date frwd 12-2-99	ACTION ☒ Approved ☐ Disapproved Signature [signature]	

12-3-99. rm

Installation Final Written Approval

By Ron Maguire

Date 12-7-99

Business Office Use Only

Date Rec'd 12/07/99

Amt Paid 150 ck

Rec'd By _____ ~~Cash~~/Check No. 5079

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: 9938021 22

Sewage Disposal System

Soil Absorption Test Data Report

Annex to Application

PLEASE PRINT OR TYPE

System Location (Indicate correct number and street)

Address 5580 W. MILL RD. (no rural route) City RAYMOND NE, Zip 68428

Owner GMB RENTALS, INC Addresss 12500 W. AGNEW RD. VALPARAISO, NE. 68065

Soil Type (SCS): SILT CLAY Percolation Rate: 11.08 min./inch

Date of Tests 11/18/99 to 11/19/99 Weather: Precipitation 0 Temperature 65°

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	30	11/18	10:00	11/18	5:30	11/19	9:55	12	11/19	10:55	60	4½	13.3
2	30	11/18	10:00	11/18	5:30	11/19	9:57	12	11/19	10:57	60	6¾	9.9
3	30	11/18	10:00	11/18	5:30	11/19	10:00	12	11/19	11:00	60	5½	10.9
4	30	11/18	10:00	11/18	5:30	11/19	10:02	12	11/19	11:02	60	6	10
5	30	11/18	10:00	11/18	5:30	11/19	10:04	12	11/19	11:04	60	5	12
6	30	11/18	10:00	11/18	5:30	11/19	10:07	12	11/19	11:07	60	5¼	10.4

Sum of Percolation Rates: 66.5

Average of Rates: 11.08

Rate Used for Calculation:

Person Conducting Percolation Tests

Name: STEVE MACHACEK DBA M&W CONST

Phone: 402-642-5788

Address P.O. BOX 91

WESTON, NE. 68070

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Remarks

Signature of Reviewing Official Date

FORM 23-101 10-96

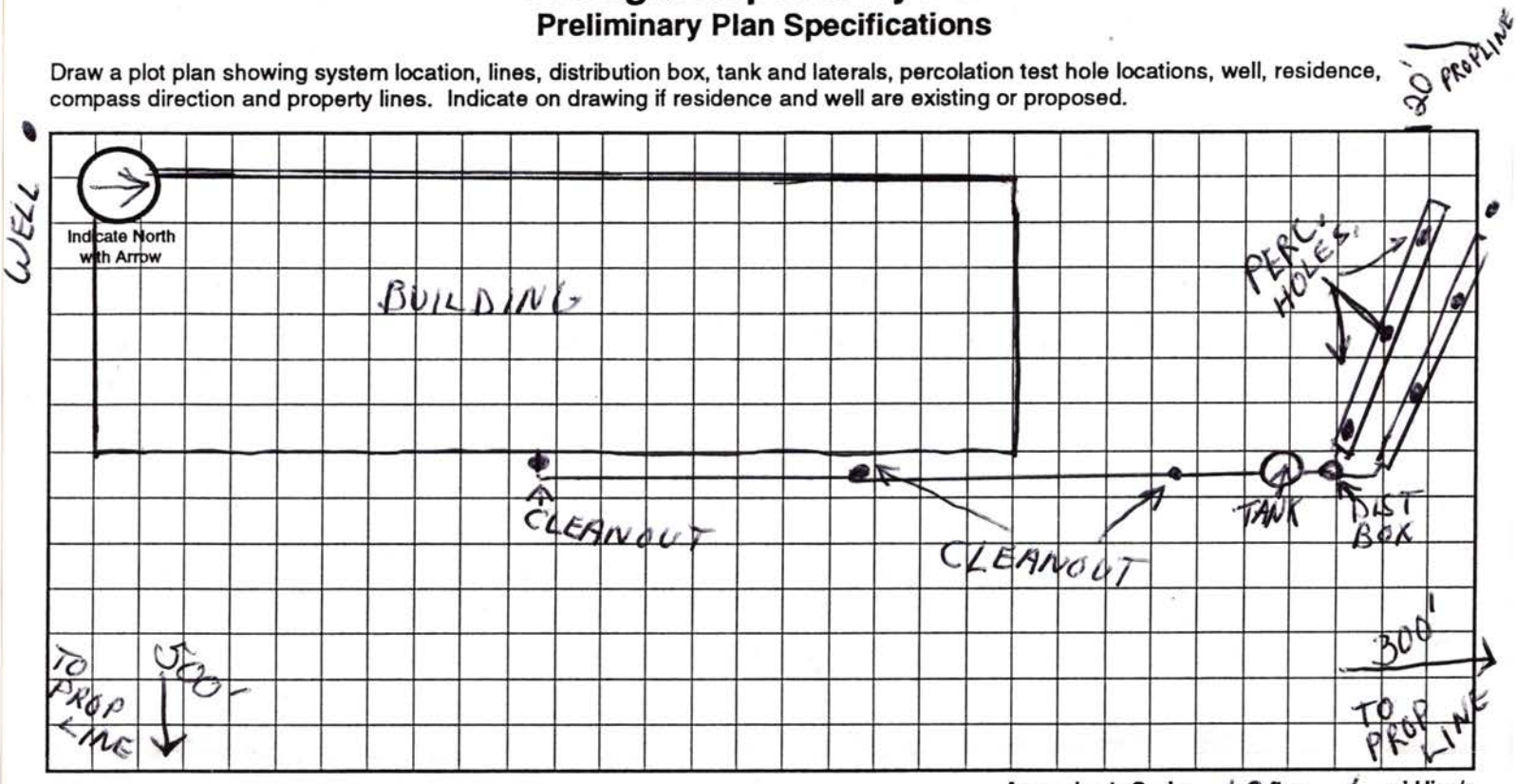
Lincoln-Lancaster County Health Department
Environmental Health Division
3140 "N" Street • Lincoln, NE 68510-1514
Phone: 402-441-8022

C

Permit Number: 9938021/22

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: 10 ft. = 1 grid line/s

A. System Location (Indicate correct number and street)

Address (no rural route) 5580 W. MILL. RD City RAYMOND NE, Zip 68428

B. Proposed Septic Tank/s

Tank Material: ☒ Concrete ☐ Plastic ☐ Other _____

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

Percolation Rate 11.08 (min. per inch) Soil Type: SILT CLAY Land Slope: _____ %

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

Total Square Feet of Field Required: 550 sq. ft.

Type of Lateral: ☐ Half-Moon ☐ Perforated Pipe ☒ Other Lateral Material: INFILTRATOR 24

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

Total Length of Laterals 110 ft. Number of Trenches 2 Trench Width 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 Steve Machacek STEVE MACHACEK (M&W CONST) Date 11/19/99

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: 993802/22

Sewage Disposal System

As Built Plans & Specifications

Date 12/2/99

System Location (Indicate correct number and street)

Address 5580 W. MILL RD. (no rural route) City RAYMOND NE. NE, Zip 68428

A. Building Sewer

1. Material: PLASTIC SCH40.
   Diameter: 4" in.
2. Distance above basement floor: _____ in.
   or distance below basement floor: 40" in.
3. Distance between dwelling and septic tank: 48.5 ft.
4. Number of clean-outs: 3
5. Distances to: well or suction line 270 ft.
   stream NA ft.
   pressure line 200 ft.
   property line 104 ft.

B. Septic Tank

1. Material: CONCRETE
   Number of compartments: 1
2. Capacity: 1,600 gal.
3. Factory built: ☒ Yes ☐ No
4. Manholes: Over inlet, diameter 8 in.
   Over outlet, diameter 8 in.
   Riser: ☒ above ☐ below grade 1" in.
5. Inlet: ☒ baffle ☐ tee
6. Outlet: ☒ baffle ☐ tee
7. Depth to top of tank, below unfinished grade: 24" in.
8. Distances to: Well or suction line 270 ft.
   Stream NA ft.
   Pressure line 200' ft.
   Property line 104' ft.

C. Distribution Box

1. Material: CONCRETE
   Number available outlets: 5
2. Factory built: ☒ Yes ☐ No
3. Distance from septic tank: 11' ft.

D. Absorption Field

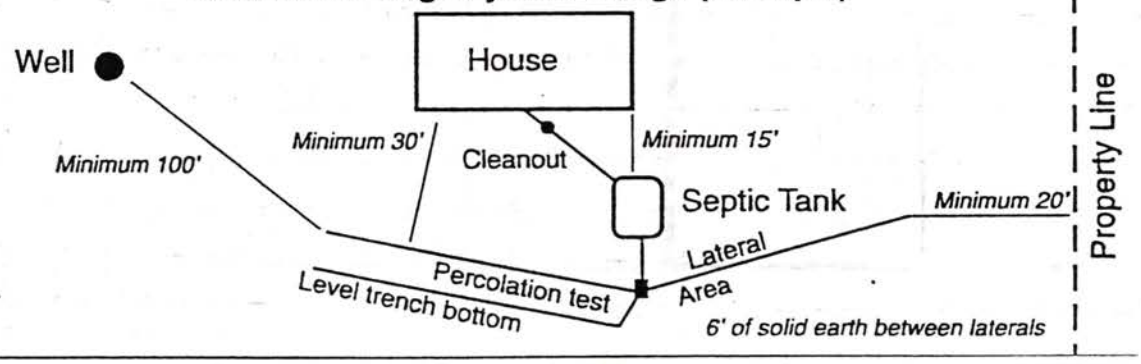
(Provide as-built drawings on back of this form)

1. Type: ☐ Half rounds ☐ Perforated pipe
   Diameter of half round: _____
   or perforated pipe: _____
   Material: ☐ fiberglass ☒ plastic ☐ concrete
   ☒ other INFILTRATOR 24
2. Lateral lines: Number 2
   Length of each line: 76' ft. 76' ft.
   _____ ft. _____ ft., _____ ft.
3. Trench dimensions: Width 5 ft.
   Slope 1 in/100 ft.
   Average depth 40 in
4. Filter material: GRAVEL
   Depth of material 22 in.
5. Distances to: Well or suction line 300' ft.
   Stream NA ft.
   Pressure line 200' ft.
   Property line 54' ft.

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

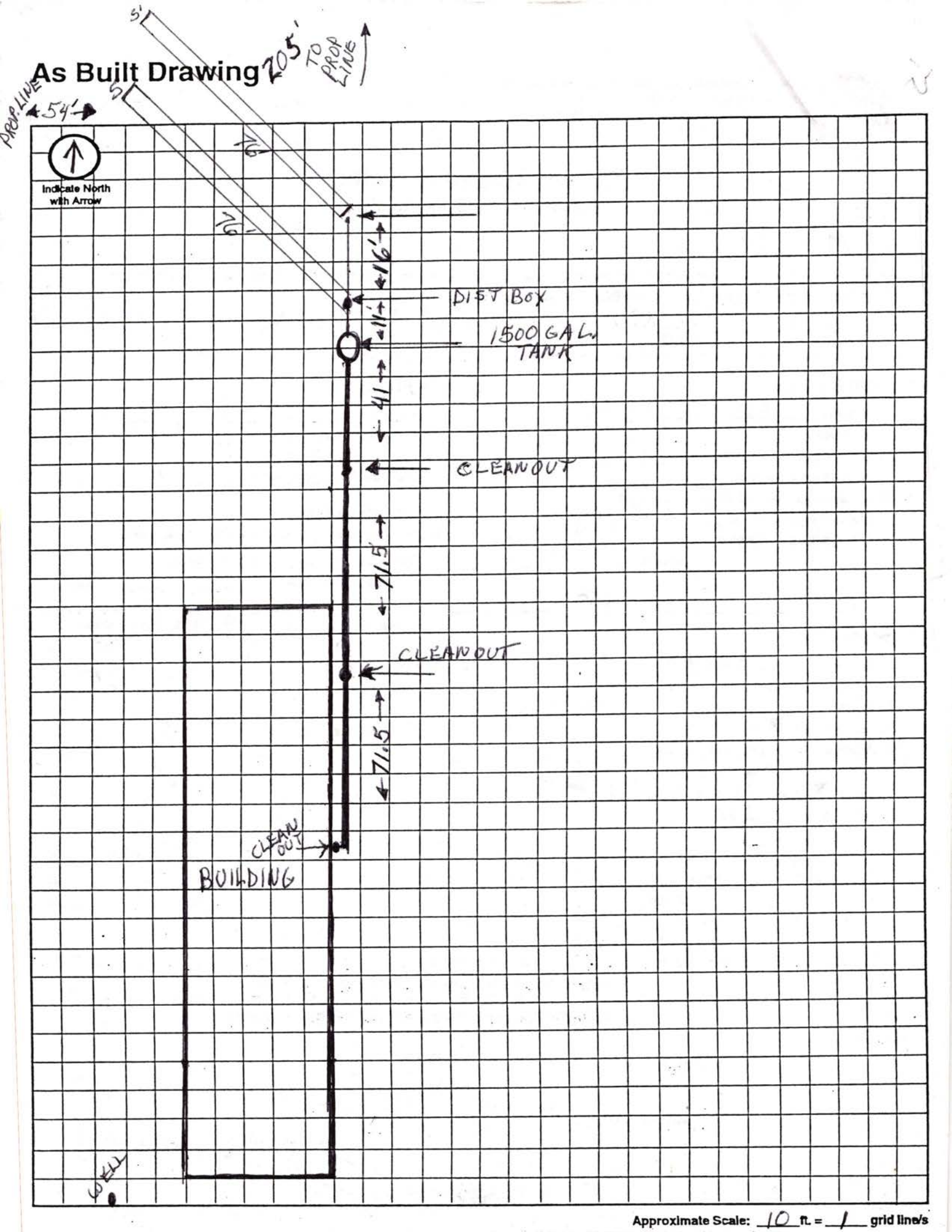
Indicate North with Arrow

Individual Sewage System Design (Example)



FORM 23-103 10-96

As Built Drawing



Approximate Scale: 10 ft. = 1 grid line/s

GEARY
ENGINEERING, INC
4740 A Street, Suite 104
Lincoln, NE 68510
(402) 489-7627

MECHANICAL
ELECTRICAL
FIRE PROTECTION

Put with print or Septic

ADDENDUM NO.

DATE: June 14, 2001

PROJECT: Benes septic system design-GE#11030
Raymond, NE

This addendum is issued to all plan holders of record prior to receipt of proposals. This addendum modifies only those portions of the proposed Contract Documents as described below and all other portions of the proposed Contract Documents remain unchanged and in full effect.

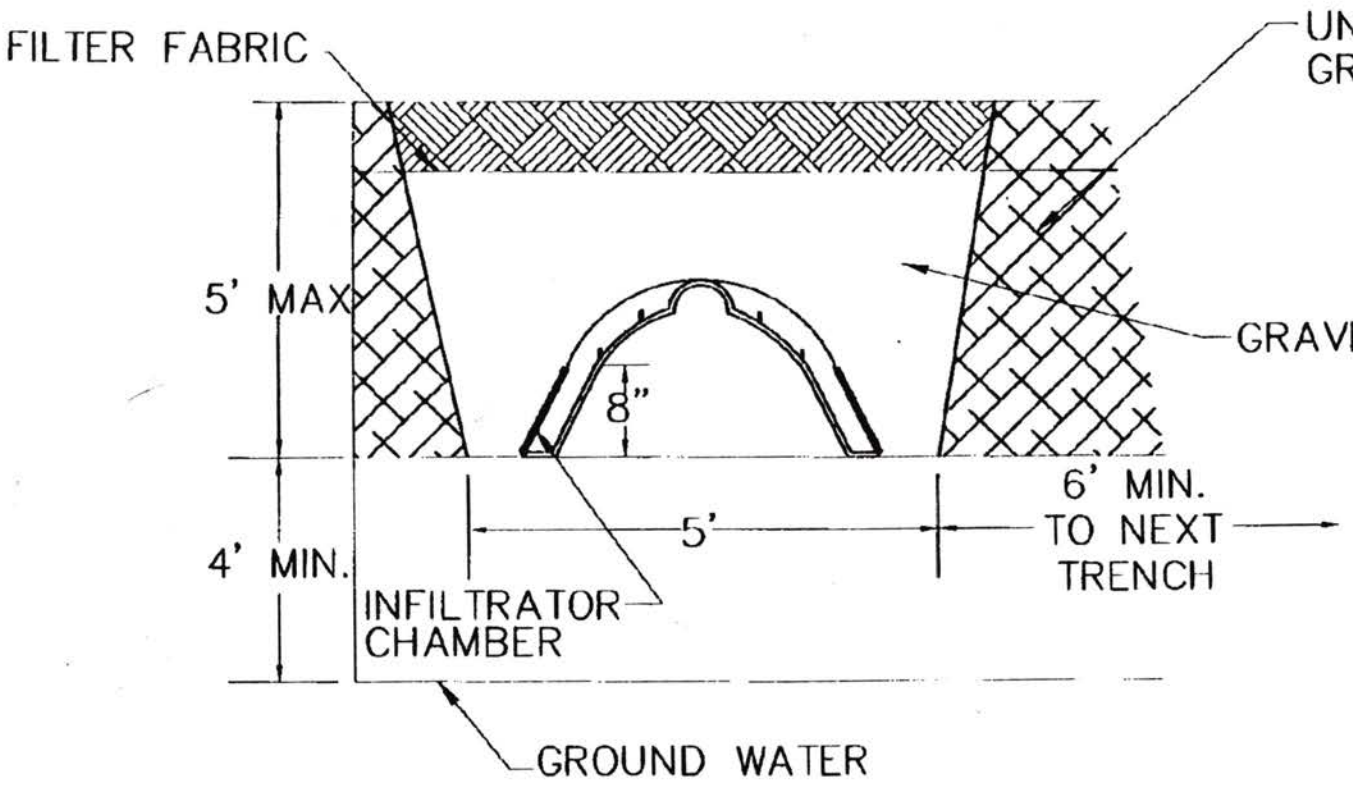
ADDENDUM ITEMS.

PLUMBING

1. The original half moon with concrete block design for the Benes septic system will not be used. The new septic system shall be the infiltrator chamber system. The design of this new system is basically the same, we will still use 5 foot trenches and it will be backfilled with gravel. See attached detail.

ATTACHMENTS: Sheet S-1B

END OF ADDENDUM



GENE BENES 783-3203.

ABSORPTION PIPE DETAIL

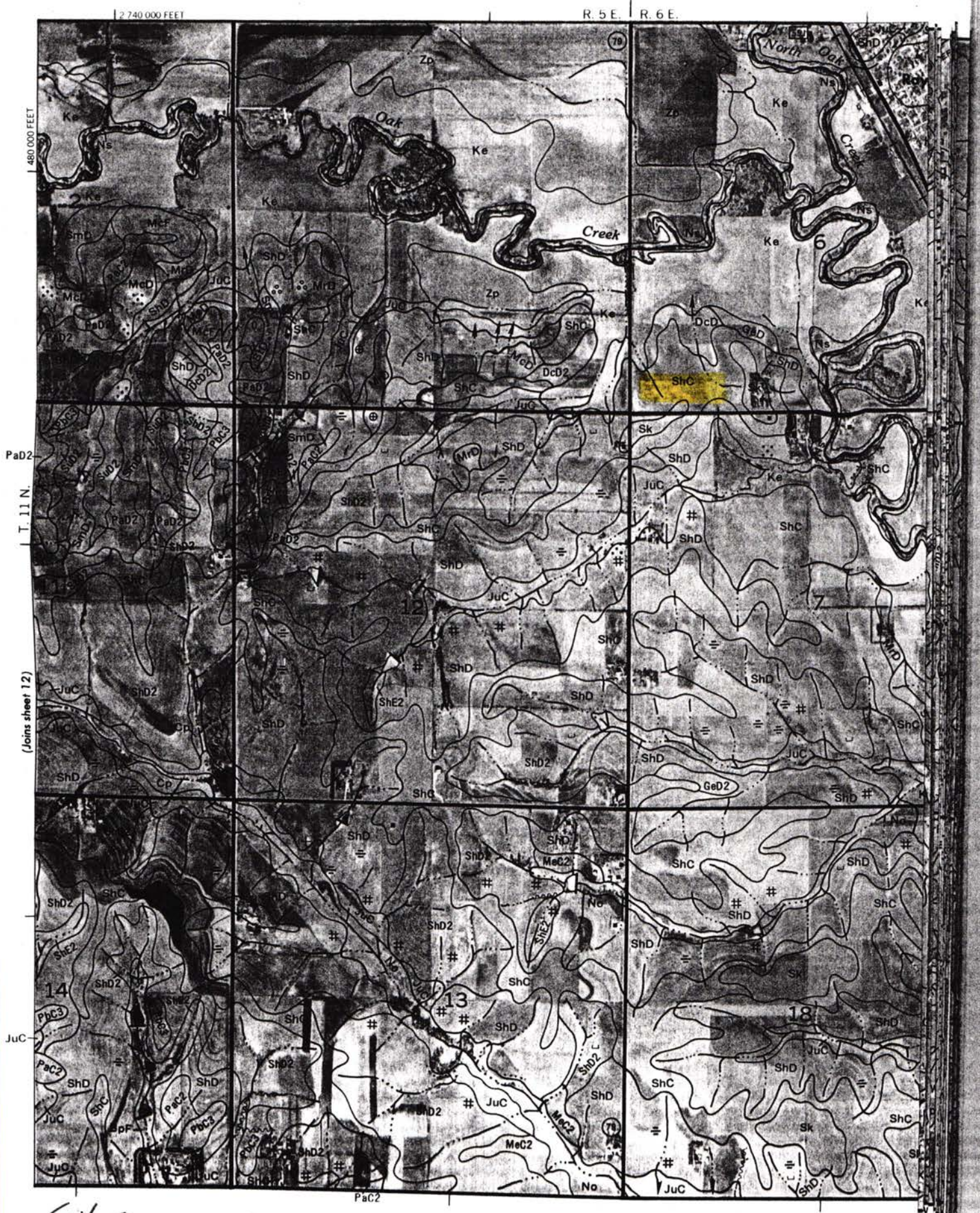
NOT TO SCALE

REGISTERED PROFESSIONAL ENGINEER
RONALD W. GEARY
E-5715
6/14/01
STATE OF NEBRASKA

BENES SEPTIC SYSTEM RAYMOND, NE	GEARY ENGINEERING, INC. 4740 'A' STREET SUITE 104 Lincoln, Nebraska 68510 Tel. (402)489-7627 Fax (402)489-7650
REVISED ABSORBTION FIELD SECTION	
SHEET: S-1B	
DATE: JUNE 14, 2001	
DRAWN BY: BJK	

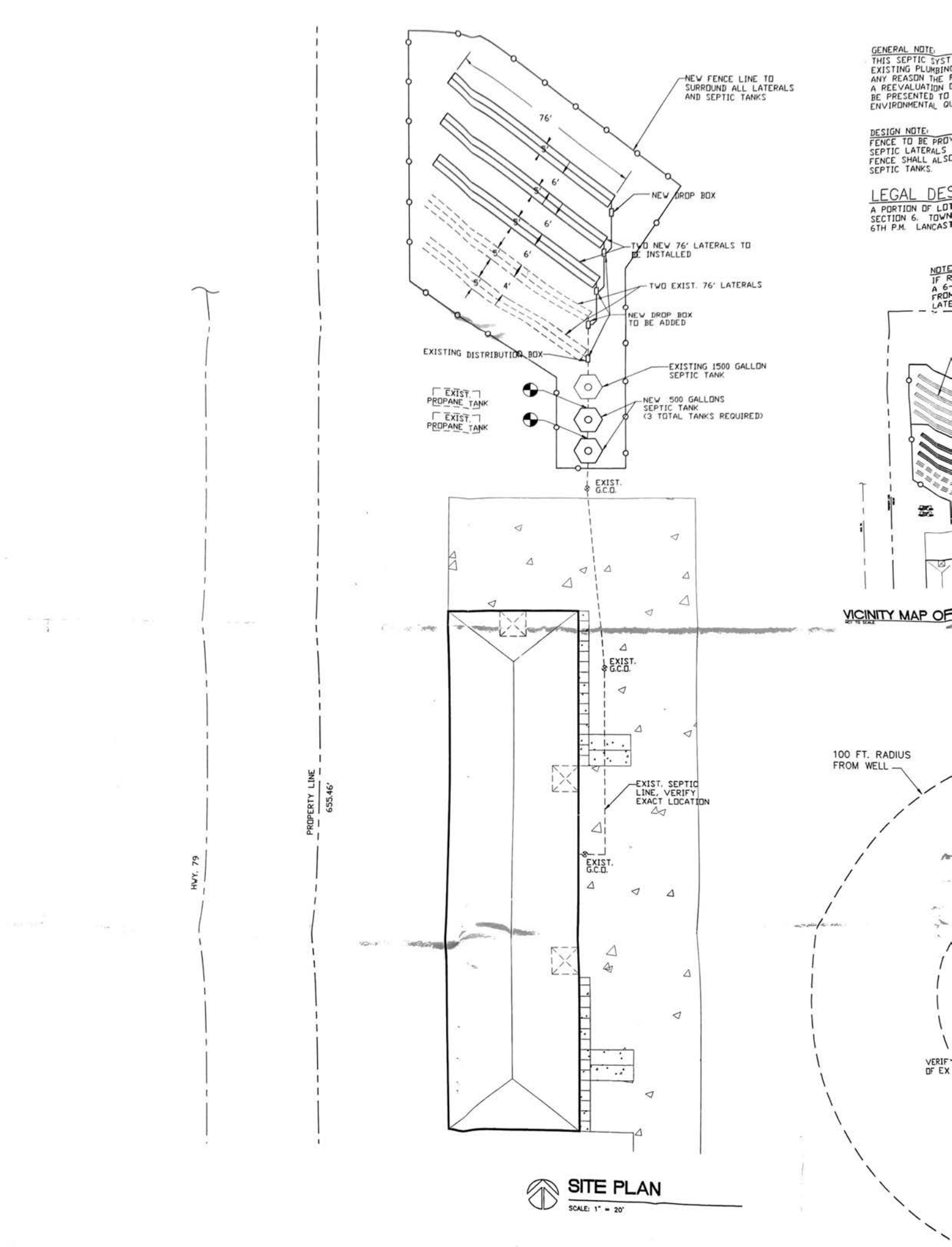
1 02:49P SSH Architecture

LANCASTER COUNTY, NEBRASKA



Soil Survey USDA

Soil Conservation Service



GENERAL NOTE:
THIS SEPTIC SYST
EXISTING PLUMBIN
ANY REASON THE
A REEVALUATION
BE PRESENTED TO
ENVIRONMENTAL QU

DESIGN NOTE:
FENCE TO BE PROV
SEPTIC LATERALS
FENCE SHALL ALSO
SEPTIC TANKS.

LEGAL DES
A PORTION OF LOT
SECTION 6, TOWN
6TH P.M. LANCAST

NOTE
IF R
A 6-
FROM
LATE

VICINITY MAP OF

VERIF
OF EX

GENERAL NOTE:
THIS SEPTIC SYSTEM IS DESIGNED FOR THE EXISTING PLUMBING FIXTURE COUNT. IF FOR ANY REASON THE FIXTURE COUNT SHOULD CHANGE A REEVALUATION OF THE SYSTEM MUST BE PRESENTED TO THE DEPARTMENT OF ENVIRONMENTAL QUALITY.

DESIGN NOTE:
FENCE TO BE PROVIDED AROUND ALL EXIST. SEPTIC LATERALS AS WELL AS NEW ONES FENCE SHALL ALSO ENCLOSE THE THREE SEPTIC TANKS.

LEGAL DESCRIPTION PARENT PARCEL

A PORTION OF LOT 63 I.T. IN THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 11 NORTH, RANGE 6 EAST OF THE 6TH P.M. LANCASTER COUNTY, NEBRASKA

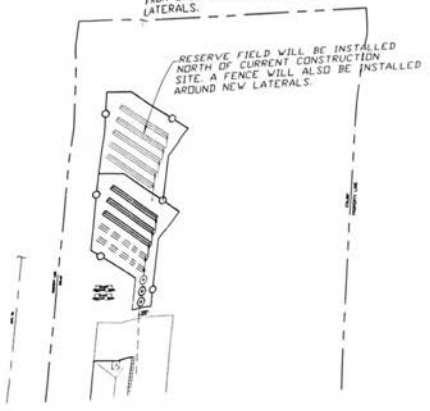
LEGEND

- Existing Property Corner
- Guard Post
- Section Corner
- Set Corner
- Sanitary Manhole
- Vent Pipe
- Water Well
- Property Line
- Existing Sewer Line

DESIGN CRITERIA - PER NDEQ TITLE 124

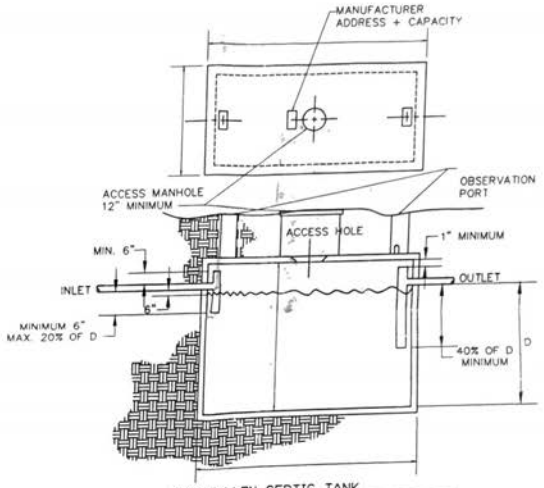
ESTIMATED DAILY WATER FLOW:
1500 GALLONS
SEPTIC TANK (CHAPTER 10.002)
1125 + (1500 X 0.75) = 2250 GALLONS
ABSORBTION AREA
PERCOLATION RATE: 11 MIN/IN
AREA = FLOW RATE/(5/SQRT. PERC. RATE)
= 1500/5/SQRT. 11
= 995 SQ.FT.
ACTUAL DESIGN (1243.75 SQ. FT.)
NUMBER OF TRENCHES = 5
LENGTH OF TRENCHES = 76'
WIDTH OF TRENCHES = 60"
DISTANCE BETWEEN TRENCHES = 9 FEET
TRENCH MATERIAL = HALFMOON/GRAVEL SYSTEM
GROUND WATER
STATIC WATER LEVEL: 41'

NOTE:
IF RESERVE FIELD IS INSTALLED A 6-FOOT DISTANCE MUST BE KEPT FROM EXISTING LATERALS TO NEW LATERALS.

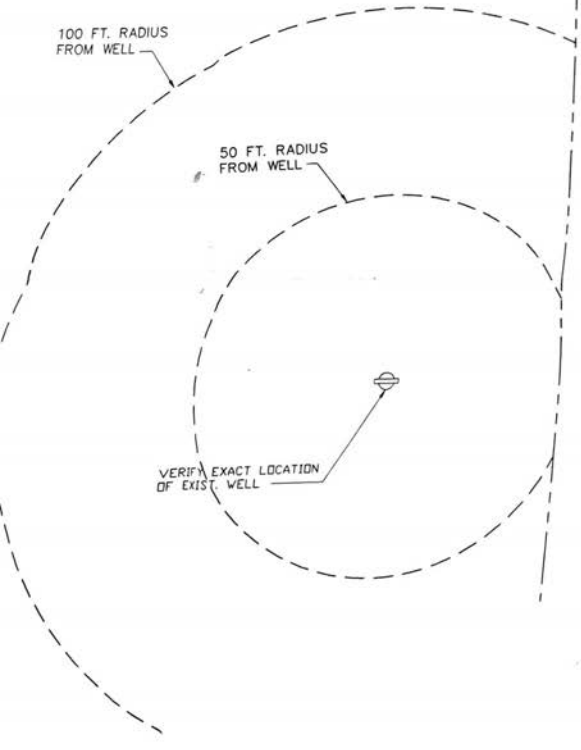


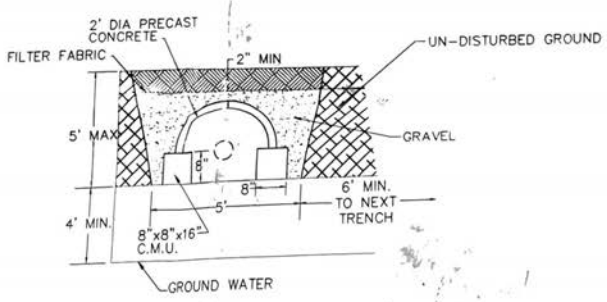
VICINITY MAP OF RESERVE FIELD
NOT TO SCALE

656.06'
PROPERTY LINE



SEPTIC TANK DETAIL
NOT TO SCALE





ABSORPTION PIPE DETAIL
NOT TO SCALE

REGISTERED PROFESSIONAL ENGINEER
RONALD W. GEARY
E-5715
6/12/01
STATE OF NEBRASKA

GEARY ENGINEERING, INC.
4740 'A' STREET SUITE 104
Lincoln, Nebraska 68510
Tel (402)489-7627
Fax (402)489-7630

revisions

BENES SEPTIC SYSTEM
5580 WEST MILL ROAD
RAYMOND NEBRASKA

SEPTIC SYSTEM

date 6-13-01
designed BJK
checked
drawn GEARY
job 11030

SHEET S-1