

# 2011 Onsite Septic System



RECEIVED  
MAY 16 2011

Becker County Planning & \_\_\_\_\_  
915 Lake Ave, Detroit Lakes, MN 56501  
Phone (218)-846-7314; Fax (218)-846-7266

### 1: PROPERTY DATA (as it appears on the tax statement, purchase agreement or deed)

Parcel Number(s) of property where the system will be installed: 10 0370 000

Is this a split of an existing property? Yes No (If yes and a parcel number has not yet been assigned, indicate the main parcel number from which the new parcel was split.) Section 23 Township 129 Range 40W Township Name Erie

Legal Description Pt SW 1/4 SE 1/4 Bcg 1499.1 ft W of SE Cor

Is the property located within 1000 feet of a lake, 300 feet of a river or 50 ft of a wetland? Yes  No   
If so, which one: lake river wetland (circle correct water body) Lake/River Name \_\_\_\_\_

Project Address: 33707 St Hwy 34

### 2: PROPERTY OWNER INFORMATION (as it appears on the tax statement, purchase agreement or deed)

Owner's First Name Kurt Owner's Last Name Holland

Owner's Mailing Address: 33707 St Hwy 34 Detroit Lakes

### 3: DESIGNER/INSTALLER INFORMATION

Designer's Company Name Stenger Exc. Designer's Name Tim

License # L553 Address 35295 St. Hwy 34 D.L. Phone Number 847-2912

Installer's Company Name Same Installer's Name \_\_\_\_\_

License # \_\_\_\_\_ Address \_\_\_\_\_ Phone Number \_\_\_\_\_

### 4: SYSTEM DESIGN INFORMATION U of M worksheets and site plan must accompany this form. Worksheets may be found at: <http://septic.umn.edu/>.

Size of All Tanks to be installed 1500 gal Septic Tank \_\_\_\_\_ gal Tank with \_\_\_\_\_ gal Lift Station (2 compartment tank)  
625 gal Lift Station (separate tank) \_\_\_\_\_ gal Holding Tank \_\_\_\_\_ Existing tank to be used  
\_\_\_\_\_ gal Holding Tank with Privy \_\_\_\_\_ pit privy

Total Number of tanks to be installed in this system Two (This # will be reported to MPCA at end of year.)

If using chamber, Brand & Model of Chamber \_\_\_\_\_ # of chambers to be installed \_\_\_\_\_

	TANK	SETBACKS DRAINFIELD	This work will:
Distance to Well	<u>80'</u>	<u>100' +</u>	_____ install a system on a vacant lot (never had structures on the property) (new)
Distance to Building	<u>50'</u>	<u>200'</u>	_____ install a system on a lot where the structure has been removed and being rebuilt (replacement)
Distance to Property Line	<u>10' +</u>	<u>3'</u>	_____ install an additional system on the property (new)
Distance to OHW of Lake	<u>NA</u>	<u>NA</u>	<input checked="" type="checkbox"/> replace/repair existing system (failing)
Distance to Pressure Line	<u>60'</u>	<u>200'</u>	_____ enlarge existing system (undersized)
Distance to Wetland/Protected Water	<u>NA</u>	<u>NA</u>	

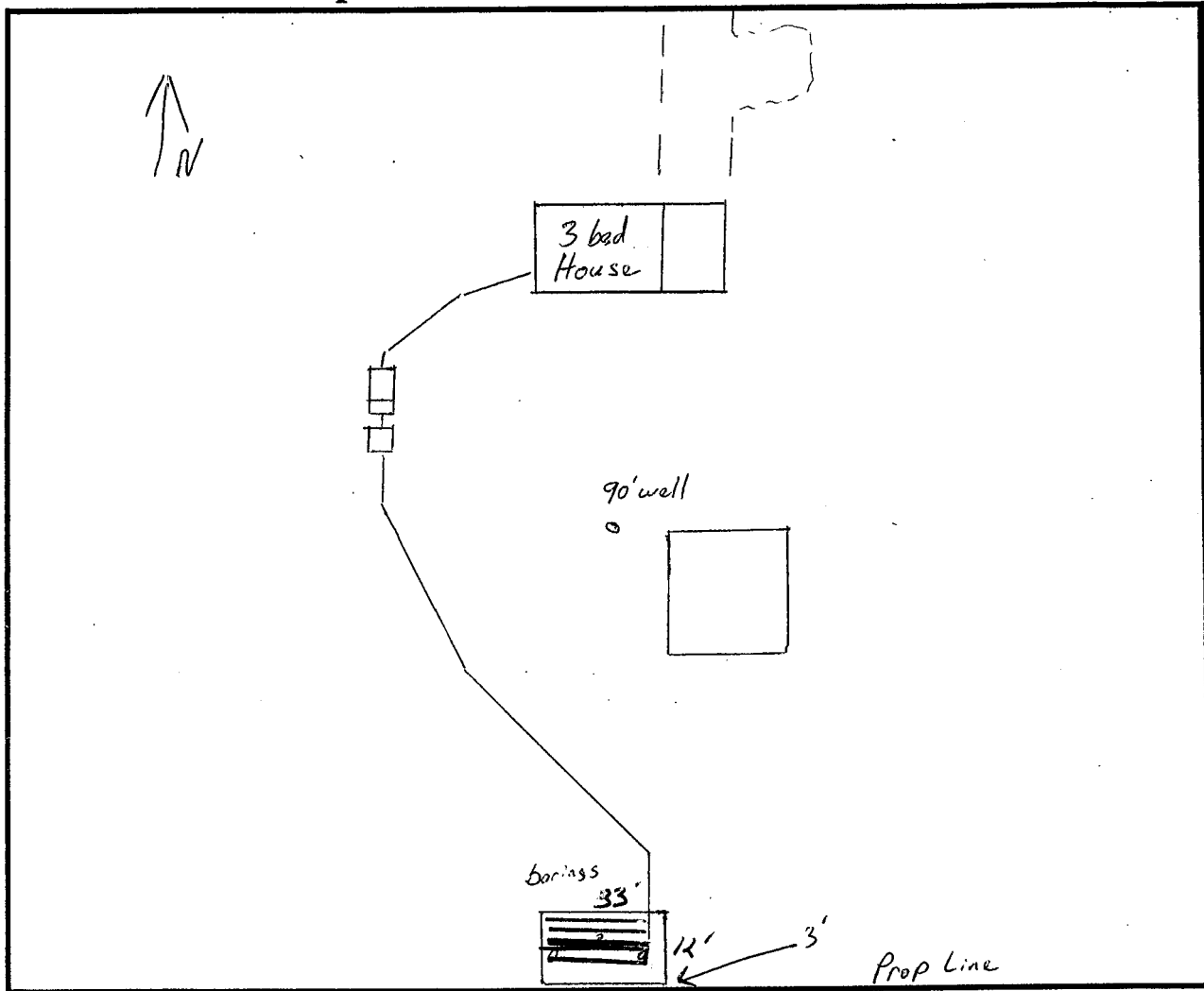
### 5: DESIGNER'S CERTIFIED STATEMENT

I, Tim Stenger certify that I have completed the preceding design work in accordance with all applicable requirements (including, but not limited to Minnesota Chapter 7080 and the Becker County Individual Sewage Treatment System Ordinance).

Tim Stenger  
Signature of Designer

May 14 2011  
Date

# Site Evaluation Map



List any construction issues: \_\_\_\_\_  
 \_\_\_\_\_

## Mapping Checklist

Map scale: 1" = 50'      \_\_\_ indicate north      \_\_\_ show slope      \_\_\_ % direction      \_\_\_

### Locate

- \_\_\_ lot dimensions/property lines
- \_\_\_ dwellings and other improvements
- \_\_\_ existing and/or proposed system(s)
- \_\_\_ replacement area
- \_\_\_ unsuitable area(s)
- \_\_\_ public water supply wells
- \_\_\_ pumping access
- \_\_\_ inner wellhead zone

### Easements

- \_\_\_ phone
  - \_\_\_ electric
  - \_\_\_ gas
- ### Elevations
- \_\_\_ borings
  - \_\_\_ benchmark
  - \_\_\_ perc tests
  - \_\_\_ horiz&vert reference pts

### Setbacks

- \_\_\_ building
- \_\_\_ all water wells within 100ft
- \_\_\_ pressure pipe
- \_\_\_ water suction pipe
- \_\_\_ streams, lakes, rivers.
- \_\_\_ floodway and fringe

I hereby certify this work has been completed in accordance with all applicable ordinances, rules and laws.

Tim Stinger (signature)

May 14 (date)

LS53 (license #)      847-2912 (phone number)

Application Approved by: Hebe Mottz Date: 5-17-11  
Amount Paid 100<sup>00</sup> Receipt Number 253360 Permit Number \_\_\_\_\_

NOTES: \_\_\_\_\_  
477486  
Mailed c of c to homeowner. 6/1/11

INSPECTION REPORT

Home Information

Does the structure contain any of the following elements?

Garbage disposer  Yes  No Dishwasher  Yes  No  
Grinder pump  Yes  No Lift pump in basement  Yes  No  
Effluent screen installed?  Yes  No Effluent screen manufacturer \_\_\_\_\_  
Alarm required?  Yes  No Alarm Type \_\_\_\_\_ Alarm manufacturer \_\_\_\_\_  
Lift pump in system?  Yes  No Pump manufacturer \_\_\_\_\_  
Number of bedrooms \_\_\_\_\_

Component Information

Tank size 1500 2/c +625-1.75 Tank manufacturer Brown & Wilbert  
Drainfield size \_\_\_\_\_  
Drainfield medium \_\_\_\_\_ Medium manufacturer \_\_\_\_\_  
Drainfield medium size/depth \_\_\_\_\_

Soil Verification

Vertical separation verified for Boring #1 on \_\_\_\_\_ Depth \_\_\_\_\_  
Vertical separation verified for Boring #2 on \_\_\_\_\_ Depth \_\_\_\_\_  
Vertical separation verified for Boring #3 on \_\_\_\_\_ Depth \_\_\_\_\_

Setback Verification

	TANK	DRAINFIELD
Distance to Well	<u>+50'</u>	<u>+50'</u>
Distance to Building	<u>+10'</u>	<u>+50'</u>
Distance to Property Line	<u>+10'</u>	<u>&gt;10'</u>
Distance to OHW of Lake	<u>-</u>	<u>-</u>
Distance to Pressure Line	<u>+50'</u>	<u>+100'</u>
Distance to Wetland/Protected Water	<u>-</u>	<u>-</u>

*papers attached*

Date System Installed 5/20/11 Installer Tim Stenger Etc Inspector Laura Hall

CERTIFICATE OF COMPLIANCE

( ) Certificate Is Hereby Denied  
 Certificate is Hereby Granted Based upon the Application, addendum from, plans, specifications and all other supporting data.  
With property maintenance, this system can be expected to function satisfactory, however, this is not a guarantee.

Signature Laura Hall Title Ets inspector Date 5/20/11

(Certificate of Compliance is not valid unless signed by a Registered Qualified Employee)

# PROPERTY LINE AGREEMENT

I, Gerald F. Zirbel "Fritz",

owner of the property described as:

33663 Poplar LN DL.

Parcel Number: 10.0425.003 give

owner of the property described as:

Carl Holland

Parcel Number: 10 0370 000

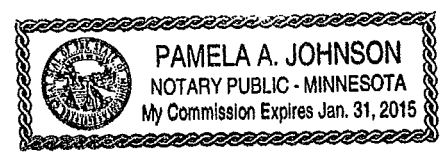
permission to have their sewer system closer than the required 10 feet to the lot line.

Signed: Gerald F. Zirbel "Fritz"

Dated: 5-16-2011

Subscribed and sworn to before me this 16<sup>th</sup> day of May, 2011.

Paula Ah  
Notary





Property Owner(s) 1 Curt Holland Phone Number \_\_\_\_\_

Address \_\_\_\_\_

P.I.D. \_\_\_\_\_ Section \_\_\_\_\_ Township \_\_\_\_\_ N \_\_\_\_\_ Range \_\_\_\_\_ W

Date \_\_\_\_\_ Time \_\_\_\_\_ Weather conditions \_\_\_\_\_

**Location Information** (check all that apply)  
 shoreland  dwelling  replacement system  
 protection area  other establishment  new home construction

**Homeowner Information**

No. of bedrooms (if applicable) 3 bedrooms (includes possible additions)  
 No. of residents in home \_\_\_\_\_ adults \_\_\_\_\_ children  
 Estimated flow 450 gpd  
 Well casing depth 90 feet Discharge location if checked \_\_\_\_\_  
 Water using devices (check)  
 Garbage disposal  Water softener \_\_\_\_\_  
 Dishwasher  Sump pump \_\_\_\_\_  
 Large bathtub  High eff. furnace \_\_\_\_\_  
 Laundry/large tub on 2nd floor  Jucuzzi/hottub \_\_\_\_\_  
 Water use concerns (check)  
 Toilet/faucet leaks  Max load laundry/day  Long term prescription medications  
 Home business  Lint screen  Antibact. soap  Frequent parties or out of town guests

**Soil Data**

Soil texture classification: \_\_\_\_\_  
 Unnatural soil (check)  Yes  No  
 Type of observation (check)  Probe  Pit  Boring  
 Parent material (check)  Till  Outwash  Loess  Bedrock  Alluvium  
 Vegetation type (check)  Wet  Dry  Unknown  
 Slope form (check)  Summit  Shoulder  Back  Foot  Toe  
 Drainage (check)  Good  Fair  Poor  Ponding  Flooding  
 Located in floodplain (check)  Yes  No

**Site Summary Data**

Standing water: 10 inches  
 Bedrock: 10 inches  
 Saturated soil: 10 inches  
 Maximum depth of system: 36 inches  
 Max elevation at system bottom: \_\_\_\_\_ feet  
 Soil sizing factor (SSF): .83 gpd/ft<sup>2</sup>  
 Linear loading rate (LLR): \_\_\_\_\_ gpd/ft  
 Was a perc test done?  Yes  No \_\_\_\_\_ mpi

Soil Survey Data	Soil #1	Soil #2
Map unit sym & name		
Landscape position		
Flooding		
Slope		
Watertable depth		
Bedrock depth		
Possible system depth		
Texture at depth		
Permeability (P)		
Perc(MPI) = 60 / P		
NRCS onsite suitability		

**Soil Boring Data**

Boring #	Elevation	Location	Soil Horizons	Depth (inches)	Texture	Color	Structure	Consistence
1			0-4		top soil			
			4-20		sandy loam	10yR 6/4	wel	
			20-72		sand	10yR 7/6		

Boring #	Elevation	Location	Soil Horizons	Depth (inches)	Texture	Color	Structure	Consistence
2			0-4		top soil			
			4-14		sandy loam	10yR 5/6		
			14-24		++ sand	7/6		
			24-72		sand	6/6		

# University of Minnesota Trench and Bed Worksheet

All boxed rectangles must be entered, the rest will be calculated.

## 1. Flow

A. Estimated Flow  gpd (Fig. A-1)



**A-1 Estimated Sewage Flows In GPD**

Number of Bedrooms	Class			
	I	II	III	IV
2	300	225	180	60% of the values in the Class I, II or III columns
3	450	300	213	
4	600	375	256	
5	750	450	299	
6	900	525	332	
7	1050	600	370	
8	1200	675	408	

**Pump Tank Minimum Sizing**  
500 gallons or 100% of Average Design Flow (A-1) or dual alternating pump system

## 2. Minimum Septic Tank Capacity

B. Septic tank capacity (Fig C-1)  gallons      Number of tanks/compartments

C. Effluent filter (yes/no)

**C-1 Minimum Septic Tank Capacity In Gallons**

Number of Bedrooms	Minimum Capacity	Capacity with GD*	Capacity with GD and pump in basement **
2 or less	750	1125	1500
3 or 4	1000	1500	2000
5 or 6	1500	2250	3000
7, 8, or 9	2000	3000	4000

\* GD = garbage disposal, Must have multiple tanks or compartments

\*\* Must have multiple tanks, compartments or effluent screen

## 3. Pump Tank Specifications

D. Pump tank needed (yes/no)       Minimum size if needed  gallons

## 4. SOILS (Site evaluation data)

E. Depth to restricting layer =  ft

F. Maximum depth of system Item E - 3 ft =  $\frac{72''}{0} - 3 = \frac{36''}{0}$  ft

G. Texture       Percolation Rate  mpi  
if available

H. SSF  ft<sup>2</sup>/gpd (see figure D-15)

I. % Slope  %

**D-15 Soil Characteristics & SSF**

Perc Rate mpi	Soil Texture	Soil Sizing Factors ft <sup>2</sup> /gpd
< 0.1 *	Coarse sand	0.83
0.1 - 5	Medium sand loamy sand	0.83
0.1 - 5**	Fine sand	1.67
6 - 15	Sandy loam	1.27
16 - 30	Loam	1.67
31 - 45	Silt loam - silty	2.00
46 - 60	Clay loam, sandy clay or silty clay	2.20
61 - 120	Clay, sandy or silty clay	4.20
>120****		

\* No trench >25% of total system  
\*\* Soil with >50% fine sand particles  
\*\*\* A mound must be used  
\*\*\*\* An other or performance system

5. System Type

<input checked="" type="checkbox"/>	Pressure Bed (<6% slope)
<input type="checkbox"/>	Gravity Bed (<6% slope)
<input type="checkbox"/>	Trenches

Distribution Media Type

<input checked="" type="checkbox"/>	Rock
<input type="checkbox"/>	Chamber
<input type="checkbox"/>	Gravelless
<input type="checkbox"/>	Other: _____

Method of Distribution

<input checked="" type="checkbox"/>	Pressure
<input type="checkbox"/>	Drop Boxes
<input type="checkbox"/>	Dist. Box (<3% slope)
<input type="checkbox"/>	Other: _____

6. TRENCH OR BED BOTTOM AREA

J. For trenches with 6 inches of wide wall beneath the pipe or 10" diameter gravelless pipe:

$$A \times H = \underline{0} \text{ gpd} \times \underline{0} \text{ ft/gpd} = \underline{NA} \text{ ft}^2$$

K. For trenches with 12 inches of sidewall:

$$A \times H \times 0.8 = \underline{0} \text{ gpd} \times \underline{0} \text{ ft/gpd} \times 0.8 = \underline{NA} \text{ ft}^2$$

L. For trenches with 18 inches of sidewall:

$$A \times H \times 0.66 = \underline{0} \text{ gpd} \times \underline{0} \text{ ft/gpd} \times 0.66 = \underline{NA} \text{ ft}^2$$

M. For trenches with 24 inches of sidewall:

$$A \times H \times 0.6 = \underline{0} \text{ gpd} \times \underline{0} \text{ ft/gpd} \times 0.6 = \underline{NA} \text{ ft}^2$$

N. For gravity beds with 6 or 12 inches of rock below the pipe;

$$1.5 \times A \times H = 1.5 \times \underline{0} \text{ gpd} \times \underline{0} \text{ ft/gpd} = \underline{0.0} \text{ ft}^2$$

O. For pressure beds with 6 or 12 inches of rock below the pipe;

$$A \times H = \underline{0} \text{ gpd} \times \underline{0} \text{ ft/gpd} = \underline{NA} \text{ ft}^2 \quad 375 \text{ sq ft}$$

7. Trench and Bed Dimensions

P. Select required square feet of bottom area required based on depth of rock/gravelless pipe or height of chamber slats

ft<sup>2</sup>

(must use 6" of rock square footage for beds)

Q. Select width of trench or bed  ft

(use 3' for gravelless pipe, width of chamber or width of excavation for rock in trenches & beds can not be wider the 25')

R. For trenches or pressure beds the lineal feet required = required square footage / width of bottom of trench or bed

$$\underline{0.0} \text{ ft}^2 / \underline{0.0} \text{ ft} = \underline{NA} \text{ lineal feet}$$

S. For gravity beds the lineal feet required = required square footage / width of bed

$$\underline{0.0} \text{ ft}^2 / \underline{0.0} \text{ ft} = \underline{\hspace{2cm}} \text{ lineal feet}$$

8. Rock Sizing and Volume

T. Depth of media below pipe  ft

Cubic feet of rock needed = Rock depth below distribution pipe plus 0.5 foot times bottom area:

(Rock depth + 0.5 foot) x Area (J, K, L, M)

$$(\underline{0.0} \text{ ft} + 0.5 \text{ ft}) \times \underline{0.0} \text{ ft}^2 = \underline{NA} \text{ ft}^3$$

Volume in cubic yards = volume in cubic feet divided by 27

$$\underline{NA} / 27 = \underline{NA} \text{ yd}^3$$

Weight of rock in tons = cubic yards times 1.4

$$\underline{NA} \times 1.4 = \underline{NA} \text{ tons}$$

Add in 10% extra for constructability = 1.1 X  =  tons

9. Layout

Select an appropriate scale; one inch =  ft

Show pertinent property boundaries, rights-of-way, easements.

Show location of house, garage, driveway, and all other improvements, existing or proposed.

Show location and layout of sewage treatment system, well and dimensions of all elevations

I hereby certify that I have completed this work in accordance with all applicable ordinances, rules and laws.

\_\_\_\_\_ (signature) \_\_\_\_\_ (license #) \_\_\_\_\_ (date)

Local Unit of Government Approval

\_\_\_\_\_ (signature) \_\_\_\_\_ (registration #) \_\_\_\_\_ (date)

# PUMP SELECTION PROCEDURE

## A. Determine pump capacity:

### gravity distribution

1. Minimum required discharge is 10 gpm
2. Maximum suggested discharge is 45 gpm

### pressure distribution

see pressure design worksheet

Selected pump capacity: 22.4 gpm

Perforation Discharges in gpm				
head (feet)	perforation diameter (inches)			
	1/8*	3/16	7/32	1/4
1.0 <sup>a</sup>	0.18	0.42	0.56	0.74
2.0 <sup>b</sup>	0.26	0.59	0.80	1.04
5.0	0.41	0.94	1.26	1.65

Use 1.0 foot for single-family homes.  
 Use 2.0 feet for anything else  
 \* Potential for plugging

## B. Determine head requirements:

1. Elevation difference between pump and point of discharge.

14 feet

2. Special head requirement:

If pumping to a pressure distribution system, five feet for pressure required at manifold. If gravity system, zero. 5 feet

3. Friction loss

a. Enter friction loss table with gpm and pipe diameter. Read friction loss in feet per 100 feet from table.

F.L. = 210 ft./100 ft of pipe

b. Determine total pipe length from pump to discharge point. Estimate by adding 25 percent to pipe length for fitting loss. Equivalent pipe length times 1.25 = total pipe length

210 x 1.25 = 265 feet

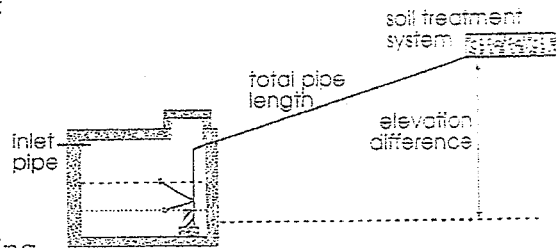
c. Calculate total friction loss by multiplying friction loss in ft./100 ft by equivalent pipe length.

Total friction loss = 265 x 1.11 / 100 = 29.4 feet

4. Total head required is the sum of elevation difference, special head requirements, and total friction loss.

14 = 5 + 29.4 (1) (2) (3c)

Total head: 22 feet



flow rate gpm	Friction Loss in Plastic Pipe Per 100 feet		
	nominal pipe diameter		
	1.5"	2"	3"
20	2.47	0.73	0.11
25	3.73	1.11	0.16
30	5.23	1.55	0.23
35	6.96	2.06	0.30
40	8.91	2.64	0.39
45	11.07	3.28	0.48
50	13.46	3.99	0.55
55		4.76	0.70
60		5.60	0.82
65		6.48	0.95
70		7.44	1.09

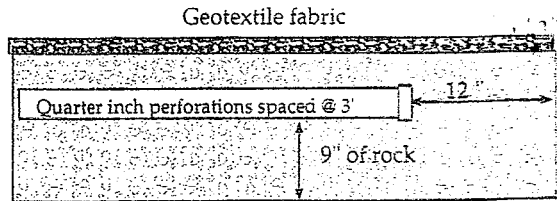
## C. Pump selection

*EPO511*

1. A pump must be selected to deliver at least 22.4 gpm (Step A) with at least 22 feet of total head (Step B).

# PRESSURE DISTRIBUTION SYSTEM

- Select number of perforated laterals 4
- Select perforation spacing = 3 feet.
- Since perforations should not be placed closer than 1 ft. to the edge of the rock layer (see diagram), subtract 2 ft. from the rock layer length.



Perf Sizing 7/32" - 1/4"  
Perf Spacing 1.5' - 5'

$$\text{Rock layer length} - 2 \text{ ft.} = \underline{28} \text{ feet.}$$

- Determine the number of spaces between perforations. Divide the length above by perforation spacing and round down to nearest whole number.

$$\text{Length perf. spacing} = \frac{28}{(3)} \text{ ft.} + \frac{3}{(2)} \text{ ft.} = \underline{9} \text{ spaces}$$

- Number of perforations is equal to one plus the number of perforation spaces .

$$\underline{9} \text{ spaces} + 1 = \underline{10} \text{ perforations/lateral}$$

- Multiply perforations per lateral by number of laterals to get total number of perforations.

$$\frac{4}{\text{laterals}} \times \frac{10}{\text{perfs/lateral}} = \underline{40} \text{ perforations.}$$

Calculate the square footage per perforation (6-10 sqft/perf)  
System area: 400 x \_\_\_\_\_ = \_\_\_\_\_

$$\frac{400}{\text{area}} \div \frac{40}{\text{perforations}} = \underline{10} \text{ sqft/perf}$$

- Determine required flow rate by multiplying number of perforations by flow per perforation

$$\frac{40}{\text{perfs}} \times \frac{.56}{\text{gpm/perf}} = \underline{22.4} \text{ gpm}$$

- If laterals are connected to header pipe as shown on upper example, to select minimum required lateral diameter; enter table with perforation spacing and number of perforations per lateral. Select minimum diameter for perforated lateral = \_\_\_\_\_ inches.

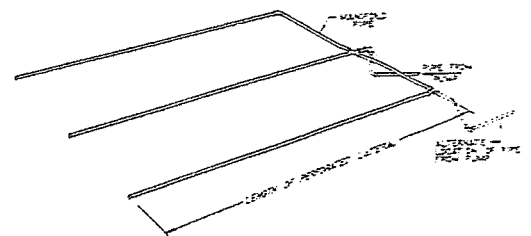
- If perforated lateral system is attached to manifold pipe near the center, lower diagram, perforated lateral length and number of perforations per lateral will be approximately one half of that in step 8. Using these values, select minimum diameter for perforated lateral = \_\_\_\_\_ inches.

Perforation Discharges in gpm				
head (feet)	perforation diameter (inches)			
	1/8"	3/16	7/32	1/4
1.0 <sup>a</sup>	0.18	0.42	0.56	0.74
2.0 <sup>b</sup>	0.26	0.59	0.80	1.04
5.0	0.41	0.94	1.26	1.65

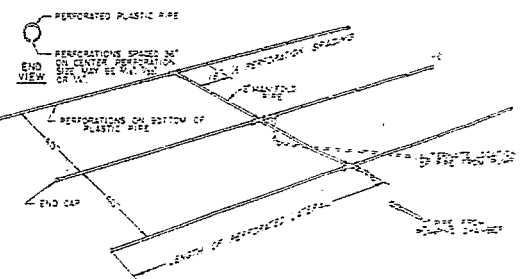
Use 1.0 foot for single-family homes.  
 Use 2.0 feet for anything else.  
 \* Potential for plugging

Maximum number of quarter inch perforations per lateral to guarantee < 10% discharge variation			
Perforation Spacing (feet)	1 1/4	1 1/2	2
2.5	14	18	28
3.0	13	17	26
3.3	12	16	25
4.0	11	15	23
5.0	10	14	22

MANIFOLD LOCATED AT END OF PRESSURE DISTRIBUTION SYSTEM



LAYOUT OF PERFORATED PIPE LATERALS FOR PRESSURE DISTRIBUTION IN MANOLD



*W. S. 77*

**CERTIFICATE OF COMPLIANCE**  
**SEWAGE SYSTEM**

This certificate has been issued this 12 day of October, 1987

to certify compliance with regulations of Zoning Ordinance, Becker County, Minnesota.  
North 01°33 West.

#34: thence South 81°00 West, along said highway centerline, 249.65 ft: (cont  
Lake No.          Sec. 23 Twp. 139 Range 40 Twp. Name Erée  
DRAINFIELD

CAPACITY	1000 gls	1000 SF
DISTANCE FROM NEAREST WELL	65 F	85 F
DISTANCE FROM LAKE OR STREAM	N/A	N/A
DISTANCE FROM OCCUPIED BUILDING	48 F	68 F
DISTANCE FROM PROPERTY LINE	+10 F	+10 F
DISTANCE FROM BOTTOM TO WATER TABLE	KURT HOLLAND	+ 4 F

Owner: Name KURT HOLLAND

Address c/o FIRST NATIONAL BANK  
717 Washington Avenue  
Detroit Lakes MN 56501 Zip No.         

Permit No. SP 16283-29  
2 tank system, up on hill

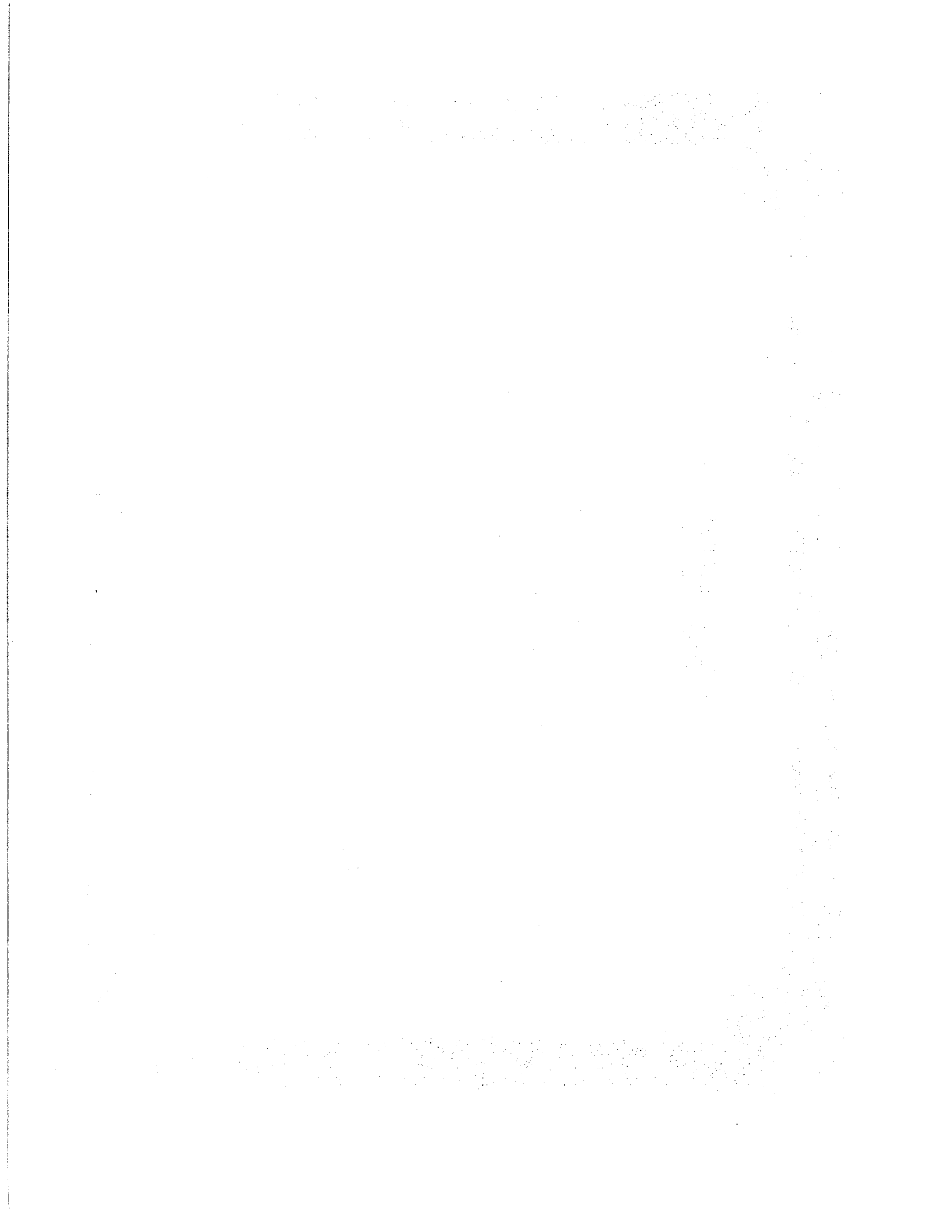
Signed by:  *Floyd Arenly*  
Zoning Administrator

thence south 01°55 east, 494.92 ft to the south line of said  
section 23: thence south 88±12 East along said south line 244.57

to place of beginning

bottom)

*Floyd Arenly*



APPLICATION FOR BUILDING OR SEWAGE PERMIT AND CERTIFICATE OF OCCUPANCY

LEGAL DESCRIPTION AND LOCATION							
LOCATION	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>23</u>	<u>139</u>	<u>40</u>	<u>Eric</u>
	Lake No.	Lake Name	Lake Classif.	Sec.	TWP	Range	TWP Name

IDENTIFICATION: Please Print All Information

Owner	Last Name	First	Initial	Mailing Address— No. Street, City and State	Zip No.	Tel. No.	
	<u>Holland, Kurt D.</u>						
Contractor	Name	<u>First National Bank</u>					
	<u>717 Washington Ave. Detroit Lakes, MN</u>				<u>56501</u>		

TYPE OF IMPROVEMENT:	RESIDENTIAL PROPOSED USE:	NON-RESIDENTIAL PROPOSED USE:
<input type="checkbox"/> New Building <input type="checkbox"/> Alteration Other <u>Inspection</u>	<input type="checkbox"/> One Family Dwelling <input type="checkbox"/> Multiple Dwelling _____ Units	Specify: _____ Size: _____

ESTIMATED COST OF IMPROVEMENT \$	Construction Starting Date:	
PRINCIPAL TYPE OF FRAME:	TYPE OF SEWAGE DISPOSAL:	DIMENSIONS:
<input type="checkbox"/> Masonry <input type="checkbox"/> Wood Frame <input type="checkbox"/> Structural Steel <input type="checkbox"/> Other — Specify _____	<input type="checkbox"/> Public <input type="checkbox"/> Individual Septic Tank, etc. WATER SUPPLY: <input type="checkbox"/> Public <input type="checkbox"/> Individual Well MECHANICAL EQUIPMENT : Elevator: <input type="checkbox"/> Yes <input type="checkbox"/> No Air Conditioning: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Central <input type="checkbox"/> Unit	Basement: <input type="checkbox"/> Yes <input type="checkbox"/> No Stories above basement: _____ Sq. feet (outside dimension) _____ Bedrooms _____ Baths _____ HEATING: <input type="checkbox"/> Electric <input type="checkbox"/> Gas <input type="checkbox"/> Oil <input type="checkbox"/> Coal <input type="checkbox"/> None Other: _____
Type of Roof:		

SEWAGE DISPOSAL SYSTEM DATA:	SEPTIC TANK	SEEPAGE PIT	DRAIN FIELD
Capacity	Gls.	Sq. Ft.	Sq. Ft.
Distance from nearest well	Ft.	Ft.	Ft.
Distance from lake or stream	Ft.	Ft.	Ft.
Distance from occupied building	Ft.	Ft.	Ft.
Distance from property line	Ft.	Ft.	Ft.
Distance from bottom to Water Table	Ft.	Ft.	Ft.

All distances are shortest distance between nearest points

CHARACTERISTICS:

Lot Area is \_\_\_\_\_ square feet. Water frontage is \_\_\_\_\_ feet.

Building set back from high water mark is \_\_\_\_\_ feet. (Building Line)

Land height above high water mark at building line is \_\_\_\_\_ feet

Building set back from State highway is \_\_\_\_\_ feet — from road or street is \_\_\_\_\_ feet.

Side yard is \_\_\_\_\_ and \_\_\_\_\_ feet. Rear yard is \_\_\_\_\_ feet.

Building will be located \_\_\_\_\_ feet from septic tank (Sewage System Permit must be obtained before installation).

Building will be located \_\_\_\_\_ feet from soil absorption system (Cesspool, Drainfield, etc.).



Agreement: I hereby certify that the information contained herein is correct and agree to do the proposed work in accordance with the description above set forth and according to the provisions of the ordinances of Becker County, Minnesota. I further agree that any plans and specifications submitted herewith shall become a part of this permit application. I also understand that this permit is valid for a period of six (6) months. Applicant further agrees that no part of the sewage system shall be covered until it has been inspected and accepted. It shall be the responsibility of the applicant for the permit to notify the County Zoning Administrator, 48 hours before the job is ready for inspection.

Dated 10-5-87

Ordered by 1st National Bank  
Signature of Owner

When signed and approved by the Zoning Administration this becomes your permit. Permission is hereby granted to the above named applicant to perform the work described in the above statement and/or as shown on the sketch. This permit is granted upon the express condition that the person to whom it is granted, and his agent, employees and workmen shall conform in all respects to the ordinances of Becker County, Minnesota. This permit may be revoked at any time upon violation of said ordinances.

Dated 10-5-87

Blond Avenly  
Becker County Zoning Administrator

MUST BE POSTED AT THE BUILDING SITE

Permit Fee \$ \_\_\_\_\_ State Surcharge \$ \_\_\_\_\_ Cormorant Surcharge \$ \_\_\_\_\_

Comments: \_\_\_\_\_

931

mail to:

**INSPECTOR'S CHECK LIST**  
*Make all measurements and computations*

	ACTUAL IS ↓	MINIMUM Shall Be ↓	Sq. Ft.
Building Set Back from High Water Mark	Ft.	Ft.	
Building Set Back from State Highway	Ft.	Ft.	
Side Yard	& Ft.	& Ft.	
Rear Yard	Ft.	Ft.	
Elevation at Building Line above High Water Mark	Ft.	Ft.	

**SEWAGE DISPOSAL SYSTEM STATISTICS**

CATEGORY	SEPTIC TANK		SEEPAGE PIT		DRAIN FIELD	
	Actual	Should be	Actual	Should be	Actual	Should be
Capacity	Gls.	Gls.	SF	SF	SF	SF
Distance from Nearest Well	F	F	F	75	F	50
Distance from Lake or Stream	F	F	F	F	F	F
Distance from Occupied Building	F	10	F	20	F	20
Distance from Property Line	F	10	F	10	F	10
Distance from Bottom to Water Table	---	F	---	F	F	4

Inspector's Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**INTERPRETATION  
OF ABBREVIATIONS**

Gls — Gallons  
 SF — Square Feet  
 F — Linear Feet

Inspection  
 Dated \_\_\_\_\_ 19\_\_\_\_

\_\_\_\_\_  
 Inspector's Signature

\_\_\_\_\_  
 Title

\_\_\_\_\_  
 Agency

**INSPECTOR'S CHECK LIST**  
*Make all measurements and computations*

	ACTUAL IS ↓	MINIMUM Shall Be ↓	Sq. Ft.
Building Set Back from High Water Mark	Ft.		Ft.
Building Set Back from State Highway	Ft.		Ft.
Side Yard	_____ & _____ Ft.	_____ & _____ Ft.	
Rear Yard	Ft.		Ft.
Elevation at Building Line above High Water Mark	Ft.		Ft.

**SEWAGE DISPOSAL SYSTEM STATISTICS**

CATEGORY	SEPTIC TANK				SEEPAGE PIT				DRAIN FIELD			
	Actual		Should be		Actual		Should be		Actual		Should be	
Capacity	1000	Gls.		Gls.		SF		SF	1000	SF		SF
Distance from Nearest Well	65	F		F		F	75	F	85	F	50	F
Distance from Lake or Stream	N/A	F		F	A	F		F	N/A	F		F
Distance from Occupied Building	48	F	10	F		F	20	F	68	F	20	F
Distance from Property Line	+10	F	10	F		F	10	F	+10	F	10	F
Distance from Bottom to Water Table	--	F	--	F		F	4	F	+4	F	4	F

Inspector's Comments: 2 tank system - up on hill - installed  
in 1992 - self installed

**INTERPRETATION  
OF ABBREVIATIONS**  
 Gl. — Gallons  
 SF — Square Feet  
 F — Linear Feet

Mark Kuehn  
 Inspector's Signature

Inspection Dated 10-8 19 87

\_\_\_\_\_  
 Title  
 \_\_\_\_\_  
 Agency

**LEGAL DESCRIPTION AND LOCATION**  
 2200 W. 11th St. S. 1st Range 44  
 Lake No. 1111 Lake Name LAKE Lake Class. 1 Sec. 1-37 TWP. 44 Range 44 TWP. Name

**IDENTIFICATION: Please Print All Information**

Owner	Last Name	First	Initial	Mailing Address - No. Street, City and State	Zip No.	Tel. No.	
	<u>Holland</u>	<u>Robert</u>	<u>D.</u>	<u>1111 W. 11th St. S. Detroit Lakes, MN</u>	<u>56501</u>	<u>218-847-4427</u>	
Contractor	Name	Address				City	State
	<u>Steve Johnson</u>	<u>718 1/2 W. 11th St. S. Detroit Lakes, MN</u>				<u>56501</u>	<u>218-847-4427</u>

**TYPE OF IMPROVEMENT:**  
 New Building  Alteration  One Family Dwelling  Multiple Dwelling Units of 1  
 Other Remodeling

**RESIDENTIAL PROPOSED USE:**  
 One Family Dwelling  Multiple Dwelling Units of 1

**NON-RESIDENTIAL PROPOSED USE:**  
 Specify REMODELING

**ESTIMATED COST OF IMPROVEMENT \$** 17,000 **Construction Starting Date** 10-5-87

**PRINCIPAL TYPE OF FRAME:**  
 Masonry  Wood Frame  Structural Steel  Other - Specify

**TYPE OF SEWAGE DISPOSAL:**  
 Public  Individual Septic Tank, etc.  Public  Individual Well

**DIMENSIONS:**  
 Basement  Yes  No  
 Stories above basement: 1  
 Sq. feet (outside dimension) 1111  
 Bedrooms 3 Baths 1

**MECHANICAL EQUIPMENT:**  
 Elevator  Yes  No  
 Air Conditioning  Yes  No  
 Central  Unit

**HEATING:**  
 Electric  Gas  Oil  Coal  None  Other

SEWAGE DISPOSAL SYSTEM DATA		SEPTIC TANK	SEEPAGE PIT	DRAIN FIELD
Capacity	<u>28</u> Gls.	<u>100</u> Gls.	<u>100</u> Sq. Ft.	<u>100</u> Sq. Ft.
Distance from nearest well	<u>25</u> Ft.	<u>20</u> Ft.	<u>10</u> Ft.	<u>10</u> Ft.
Distance from lake or stream	<u>1</u> Ft.	<u>10</u> Ft.	<u>10</u> Ft.	<u>10</u> Ft.
Distance from occupied building	<u>10</u> Ft.	<u>10</u> Ft.	<u>10</u> Ft.	<u>10</u> Ft.
Distance from property line	<u>10</u> Ft.	<u>10</u> Ft.	<u>10</u> Ft.	<u>10</u> Ft.
Distance from bottom to Water Table	<u>10</u> Ft.	<u>10</u> Ft.	<u>10</u> Ft.	<u>10</u> Ft.

*All distances are shortest distance between nearest points*

**CHARACTERISTICS:**

Lot Area is 1111 square feet Water frontage is 111 feet  
 Building set back from high water mark is 10 feet (Building Line)  
 Land height above high water mark at building line is 10 feet  
 Building set back from State highway is 10 feet from road or street  
 Side yard is 10 feet and 10 feet Rear yard is 10 feet  
 Building will be located 10 feet from septic tank (Sewage System Permit must be obtained first)  
 Building will be located 10 feet from soil absorption system (Cesspool, Drainfield, etc.)

**APPROVED**  
**OCT 08 1987**  
 S.P.D.

**Agreement:** I hereby certify that the information contained herein is correct and agree to do the proposed work in accordance with the description above set forth and according to the provisions of the ordinances of Becker County, Minnesota. I further agree that any plans and specifications submitted herewith shall become a part of this permit application. I also understand that this permit is valid for a period of six (6) months. Applicant further agrees that no part of the sewage system shall be covered until it has been inspected and accepted. It shall be the responsibility of the applicant for the permit to notify the County Zoning Administrator 48 hours before the job is ready for inspection.

Dated 10-5-87 Signature of Owner [Signature]

When signed and approved by the zoning Administration this becomes your permit. Permission is hereby granted to the above named applicant to perform the work described in the above statement and/or as shown on the sketch. This permit is granted upon the express condition that the person to whom it is granted, and his agent, employees and workmen shall conform in all respects to the ordinances of Becker County, Minnesota. This permit may be revoked at any time upon violation of said ordinances.

**MUST BE POSTED AT THE BUILDING SITE**

Dated 10-5-87 Signature of Zoning Administrator [Signature]  
 Becker County Zoning Administrator  
 Permit Fee \$ 17,000 State Surcharge \$ 0 Cormorant Surcharge \$ 0

Comments: