# FIELD EVALUATION SHEET

PRELIMINARY EVALUATION DATE 8-1-22, FIELD EVALUATION DATE 10-12-22
PROPERTY OWNER: Scott and Amy Kirkhoff PHONE
ADDRESS: TBD 450th Ave CITY,STATE,ZIP: Aitkin, MN, 56431
LEGAL DESCRIPTION: PT OF LOT2 IN DOC 448506
PIN# 11-0-070103 SEC 32 T 45 R 27 TWP NAME Hazelton Twp
FIRE# LAKE/RIVER Round Lake LAKE CLASS GD OHWL FT.

## DESCRIPTION OF SOIL TREATMENT AREAS

| | AREA #1 | AREA #2 |
|---|---|---|
| DISTURBED AREAS | YES ~~✓~~ NO ✓ | YES NO ✓ |
| COMPACTED AREAS | YES NO ✓ | YES NO ✓ |
| FLOODING | YES NO ✓ | YES NO ✓ |
| RUN ON POTENTIAL | YES NO ✓ | YES NO ✓ |
| SLOPE % | 1% | 1% |
| DIRECTION OF SLOPE | SE | SE |
| LANDSCAPE POSITION | flat | flat |
| VEGETATION TYPES | ash trees, aspen, white pine | ash, aspen, |

REFERENCE BM ELEV. 100 FT
REFERENCE BM DESCRIPTION
Edge of road at approach

DEPTH TO STANDING WATER OR MOTTLED SOIL: BORING# 1 6", 1A 6", 2 6", 2A 8"

BOTTOM ELEVATION--FIRST TRENCH OR BOTTOM OF ROCK BED: #1 101 FT., #2 101 FT.

SOIL SIZING FACTOR: SITE # 1 1.27, SITE #2 1.27

CONSTRUCTION RELATED ISSUES:

LIC# 747 SITE EVALUATOR SIGNATURE: Cody Schrupp

SITE EVALUATOR NAME: Cody Schrupp TELEPHONE# 218-820-9864

LUG REVIEW DATE

Comments:

SOIL BORING LOGS ON REVERSE SIDE

Form des 2/20/98

# SOILS CHARTS FOR BOTH PROPOSED AND ALTERNATE SITES

## 1 (PROPOSED) SOILS DATA

| DEPTH (INCHES) | TEXTURE | MUNSELL COLOR |
|---|---|---|
| 0-4 | Ls | 10YR 3/2 |
| 4-6" | Ls | 10YR 4/3 |
| mottles directly below topsoil | | |

## 2 (PROPOSED) SOILS DATA

| DEPTH (INCHES) | TEXTURE | MUNSELL COLOR |
|---|---|---|
| 0-6 | Ls | 10YR 3/2 |
| 6+ | Ls | 10YR 4/3 |
| mottles directly below topsoil | | |

## 1 (ALTERNATE) SOILS DATA

| DEPTH (INCHES) | TEXTURE | MUNSELL COLOR |
|---|---|---|
| 0-6" | Ls | 10YR 3/2 |
| 6+ | Ls | 10YR 4/3 |
| mottles directly below topsoil | | |

## 2 (ALTERNATE) SOILS DATA

| DEPTH (INCHES) | TEXTURE | MUNSELL COLOR |
|---|---|---|
| 0-8 | Ls | 10YR 3/2 |
| 8+ | Ls | 10YR 4/3 |
| mottles directly below topsoil | | |

ADDITIONAL SOIL BORINGS MAY BE REQUIRED

# MOUND DESIGN WORK SHEET (For Flows up to 1200 gpd)

## A. Average Design FLOW

Estimated 450 gpd *(see figure A-1)*
or measured _____ x 1.5 (safety *factor*) =_____ gpd

| A-1: Estimated Sewage Flows in Gallons per Day | | | | |
|---|---|---|---|---|
| number of bedrooms | Class I | Class II | Class III | Class IV |
| 2 | 300 | 225 | 180 | 60% |
| 3 | 450 | 300 | 218 | of the |
| 4 | 600 | 375 | 256 | values |
| 5 | 750 | 450 | 294 | in the |
| 6 | 900 | 525 | 332 | Class I, |
| 7 | 1050 | 600 | 370 | II, or III |
| 8 | 1200 | 675 | 408 | columns. |

## B. SEPTIC TANK Capacity

1500 gallons *(see figure C-1)*

| C-1: Septic Tank Capacities (in gallons) | | | |
|---|---|---|---|
| Number of Bedrooms | Minimum Liquid Capacity | Liquid capacity with garbage disposal | Liquid capacity with disposal & lift inside |
| 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 |

## C. SOILS *(refer to site evaluation)*

1. Depth to restricting layer = 0 feet
2. Depth of percolation tests = _____ feet
3. Texture loamy sand
   Percolation rate _____ mpi
4. Soil loading rate 1.27 gpd/sqft *(see figure D-33)*
5. Percent land slope 1 %

## D. ROCK LAYER DIMENSIONS

1. Multiply average design flow (A) by 0.83 to obtain required rock layer area.
   450 gpd x 0.83 sqft/gpd – 373.5 sqft
2. Determine rock laver width = 0.83 sqft/gpd x linear Loading Rate (LLR)
   0.83 sqft/gpd x 12 gpd/sqft = 10 ft
3. Length of rock layer = area ÷ width =
   373.5 sqft (D1) ÷ 10 ft (D2) = 38 ft

| Mound LLR | |
|---|---|
| < 120 MPI | ≤12 |
| ≥ 120 MPI | ≤6 |

## E. ROCK VOLUME

1. Multiply rock area (D1) by rock depth of 1 ft to get cubic feet of rock
   380 sqft x 1 ft = 380 cuft
2. Divide cuft by 27 cuft/cuyd to get cubic yards
   380 cuft ÷ 27 cuyd/cuft = 14.1 cuyd
3. Multiply cubic yards by 1.4 to get weight of rock in tons
   14 cuyd x 1.4 ton/cuyd = 19.6 tons

## F. SEWAGE ABSORPTION WIDTH

Absorption width equals absorption ratio (See Figure D-33) times rock layer width (D2)

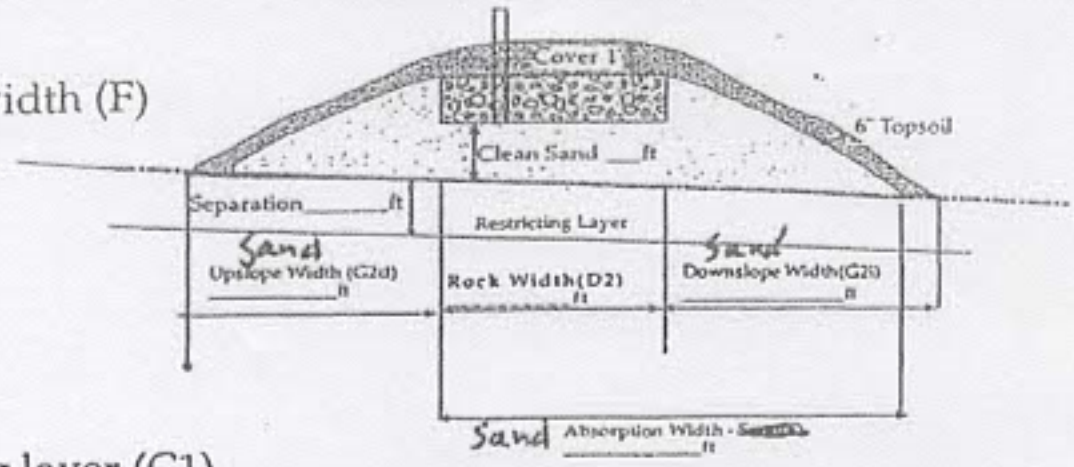
10 x 1.5 ft = 15 ft

| D-33: Absorption Width Sizing Table | | | |
|---|---|---|---|
| Percolation Rate in Minutes per Inch (MPI) | Soil Texture | Loading Rate Gallons per day per square foot | Absorption Ratio |
| Faster than 5 | Course Sand<br>Medium Sand<br>Loamy Sand<br>Fine Sand | 1.20 | 1.00 |
| 6 to 15 | Sandy Loam | 0.72 | 1.50 |
| 16 to 30 | Loam | 0.60 | 2.00 |
| 31 to 45 | Silt Loam<br>Silt | 0.50 | 2.40 |
| 46 to 60 | Sandy Clay Loam<br>Silty Clay Loam<br>Clay Loam | 0.45 | 2.67 |
| 61 to 120 | Silty Clay<br>Sandy Clay<br>Clay | 0.24 | 5.00 |
| Slower than 120* | | | |

*System designed for these soils must be other or performance

## G. MOUND SLOPE WIDTH & LENGTH
(landslope greater than 1%)

Landslope > 1% slope




1. Downslope absorption width = absorption width (F) minus rock layer width (D2)

15 ft - 10 ft = 5 ft

2. Calculate mound size

UPSLOPE

a. Depth of clean sand fill at upslope edge of rock layer = 3 ft minus the distance to restricting layer (C1)

3 ft - 0 ft = 3 ft

b. Mound height at the upslope edge of rock layer = depth of clean sand for separation (G2a) at upslope edge plus depth of rock layer (1 ft) plus depth of cover (1 ft)

3 ft + 1ft + 1ft = 5 ft

c. Upslope berm multiplier based on land slope

2.91 *(see figure D-34)*

d. Upslope width = berm multiplier (G2c) x upslope mound height (G2b):

2.91 x 5 ft = 14.55 ft

DOWNSLOPE

e. Drop in elevation = rock layer width (D2) x percent landslope (C5) ÷ 100

10 ft x 1 % ÷ 100 = .1 ft

f. Downslope mound height = depth of clean sand for slope difference (G2e) at downslope rock edge plus the mound height at the upslope edge of rock layer (G2b)

.1 ft + 5 ft = 5.1 ft

g. Downslope berm multiplier based on percent land slc

3.09 *(see figure D-34)*

h. Downslope width = downslope multiplier (G2g) times downslope mound height (G2f)

3.09 x 5.1 ft = 15.8 ft

i. Select the greater of G1 and G2h as the downslope width: 15.8 ft

j. Total mound width is the sum of upslope width (G2d) width plus rock layer width (D2) plus downslope width (G2i)

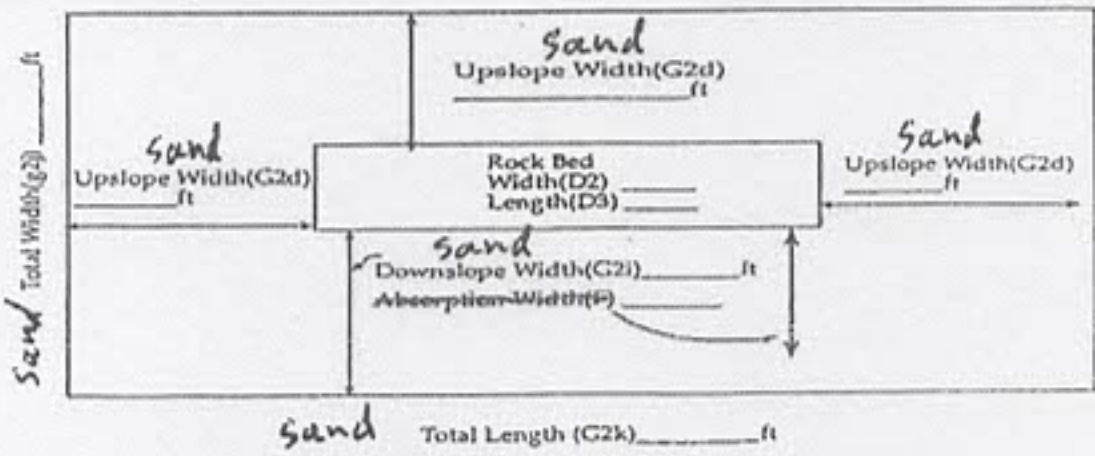
14.55 ft + 10 ft + 15.8 ft = 40.35 ft

k. Total mound length is the sum of upslope width (G2d) plus rock laver length (D3) plus upslope width (G2d)

14.55 ft + 38 ft + 14.55 ft = 67.1 feet

D-34: SLOPE MULTIPLIER TABLE

| Land Slope, in % | UPSLOPE multipliers for various slope ratios | | | | | | DOWNSLOPE multipliers for various slope ratios | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3:1 | 4:1 | 5:1 | 6:1 | 7:1 | 8:1 | 3:1 | 4:1 | 5:1 | 6:1 | 7:1 |
| 0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 |
| 1 | 2.91 | 3.85 | 4.76 | 5.66 | 6.54 | 7.41 | 3.09 | 4.17 | 5.26 | 6.38 | 7.53 |
| 2 | 2.83 | 3.70 | 4.54 | 5.36 | 6.14 | 6.90 | 3.19 | 4.35 | 5.56 | 6.82 | 8.14 |
| 3 | 2.75 | 3.57 | 4.35 | 5.08 | 5.79 | 6.45 | 3.30 | 4.54 | 5.88 | 7.32 | 8.86 |
| 4 | 2.68 | 3.45 | 4.17 | 4.84 | 5.46 | 6.06 | 3.41 | 4.76 | 6.25 | 7.89 | 9.72 |
| 5 | 2.61 | 3.33 | 4.00 | 4.62 | 5.19 | 5.71 | 3.53 | 5.00 | 6.67 | 8.57 | 10.77 |
| 6 | 2.54 | 3.23 | 3.85 | 4.41 | 4.93 | 5.41 | 3.66 | 5.26 | 7.14 | 9.38 | 12.07 |
| 7 | 2.48 | 3.12 | 3.70 | 4.23 | 4.70 | 5.13 | 3.80 | 5.56 | 7.69 | 10.34 | 13.73 |
| 8 | 2.42 | 3.03 | 3.57 | 4.05 | 4.49 | 4.88 | 3.95 | 5.88 | 8.33 | 11.54 | 15.91 |
| 9 | 2.36 | 2.94 | 3.45 | 3.90 | 4.30 | 4.65 | 4.11 | 6.25 | 9.09 | 13.04 | 18.92 |
| 10 | 2.31 | 2.86 | 3.33 | 3.75 | 4.12 | 4.44 | 4.29 | 6.67 | 10.00 | 15.00 | 23.33 |
| 11 | 2.26 | 2.78 | 3.23 | 3.61 | 3.95 | 4.26 | 4.48 | 7.14 | 11.11 | 17.65 | 30.43 |
| 12 | 2.21 | 2.70 | 3.12 | 3.49 | 3.80 | 4.08 | 4.69 | 7.69 | 12.50 | 21.43 | 43.75 |




**Final Dimensions:**
40.35 x 67.1

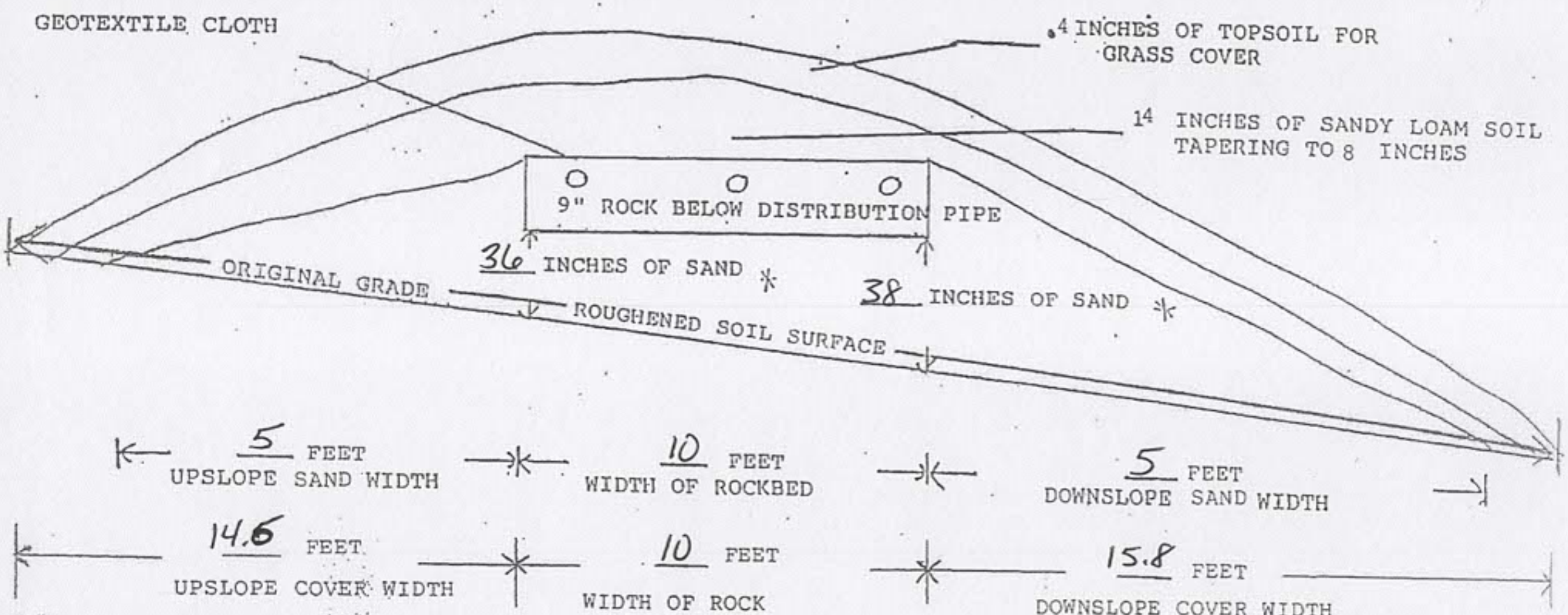
I hereby certify that I have completed this work in accordance with applicable ordinances, rules and laws.

Cody Schopp (signature) 747 (license #) 10-12-22 (date)

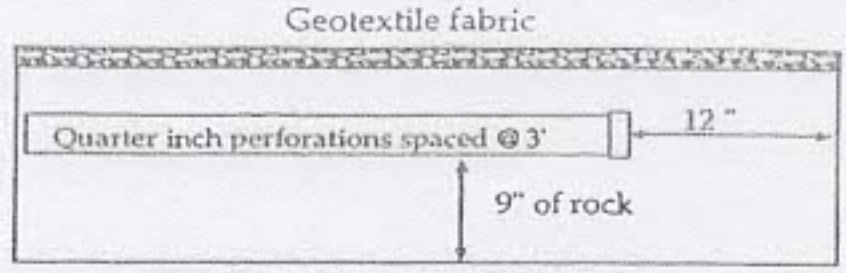
MOUND CROSS-SECTION

1% PERCENT SLOPE OF ORIGINAL SOIL

10 FT. x 38 FT. SIZE OF ROCKBED 40.35 FT. x 67.1 FT. SIZE OF SANDBASE



# PRESSURE DISTRIBUTION SYSTEM




Perf Sizing 3/16" - 1/4"
Perf Spacing 1.5'- 5'

1. Select number of perforated laterals 3

2. Select perforation spacing = 3 ft

3. Since perforations should not be placed closer than 1 foot to the edge of the rock layer (see diagram), subtract 2 feet from the rock layer length.

   38 (Rock layer length) - 2 ft = 36 ft

4. Determine the number of spaces between perforations. Divide the length (3) by perforation spacing (2) and round down to nearest whole number.

   Perforation spacing = 36 ft ÷ 3 ft = 13 spaces

5. Number of perforations is equal to one plus the number of perforation spaces(4). *Check figure E-4 to assure the number of perforations per lateral guarantees <10% discharge variation.*

   13 spaces + 1 = 14 perforations/lateral

6. A. Total number of perforations = perforations per lateral (5) times number of laterals (1)

   14 perfs/lat x 3 lat = 42 perforations

   B. Calculate the square footage per perforation.
   Should be 6-10 sqft/perf. *Does not apply to at-grades.*
   Rock bed area = rock width (ft) x rock length (ft)
   10 ft x 38 ft = 380 sqft
   Square foot per perforation = Rock bed area ÷ number of perfs (6)
   380 sqft ÷ 42 perfs = 9 sqft/perf

7. Determine required flow rate by multiplying the total number of perforations (6A) by flow per perforation *(see figure E-6)*

   42 perfs x .74 gpm/perfs = 31.1 gpm

8. If laterals are connected to header pipe as shown on upper example, to select minimum required lateral diameter; enter figure E-4 with perforation spacing (2) and number of perforations per lateral (5) Select minimum diameter for perforated lateral = 1.5 inches.

9. If perforated lateral system is attached to manifold pipe near the center, lower diagram, perforated lateral length (3) and number of perforations per lateral (5) will be approximately one half of that in step 8. Using these values, select minimum diameter for perforated lateral = _____ inches.

**E-4: Maximum allowable number of 1/4-inch perforations per lateral to guarantee <10% discharge variation**

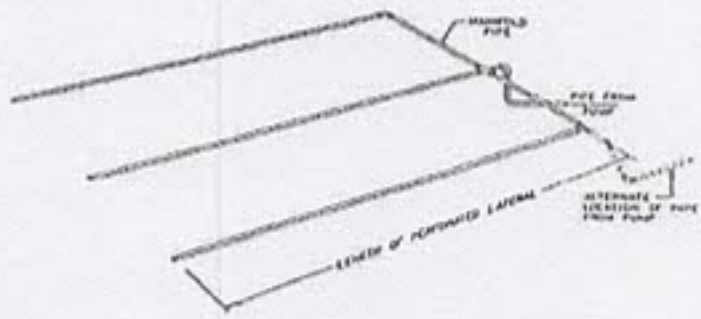
| perforation spacing (feet) | 1 inch | 1.25 inch | 1.5 inch | 2.0 inch |
|---|---|---|---|---|
| 2.5 | 8 | 14 | 18 | 28 |
| 3.0 | 8 | 13 | 17 | 26 |
| 3.3 | 7 | 12 | 16 | 25 |
| 4.0 | 7 | 11 | 15 | 23 |
| 5.0 | 6 | 10 | 14 | 22 |

**E-6: Perforation Discharge in gpm**

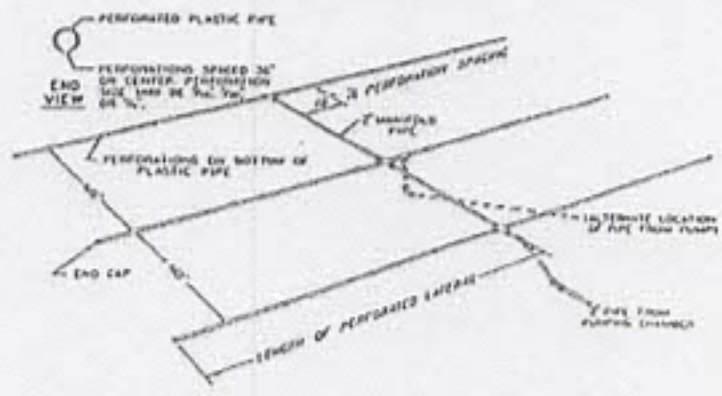
| head (feet) | perforation diameter (inches) | | | |
|---|---|---|---|---|
| | 1/8 | 3/16 | 7/32 | 1/4 |
| 1.0[a] | 0.18 | 0.42 | 0.56 | 0.74 |
| 2.0[b] | 0.26 | 0.59 | 0.80 | 1.04 |
| 5.0 | 0.41 | 0.94 | 1.26 | 1.65 |

[a] Use 1.0 foot for single-family homes.
[b] Use 2.0 feet for anything else.

MANIFOLD LOCATED AT END OF PRESSURE DISTRIBUTION SYSTEM



LAYOUT OF PERFORATED PIPE LATERALS FOR PRESSURE DISTRIBUTION IN MOUND




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

Cody Schyp (signature) 747 (license #) 10-12-22 (date)

# PUMP SELECTION PROCEDURE

## 1. Determine pump capacity:

### A. Gravity distribution

1. Minimum required discharge is 10 gpm
2. Maximum suggested discharge is 45 gpm. For other establishments at least 10% greater than the water supply rate, but no faster than the rate at which effluent will flow out of the distribution device.

### B. Pressure distribution

*See pressure distribution work sheet*

**From A or B Selected pump capacity:** 31.1 gpm

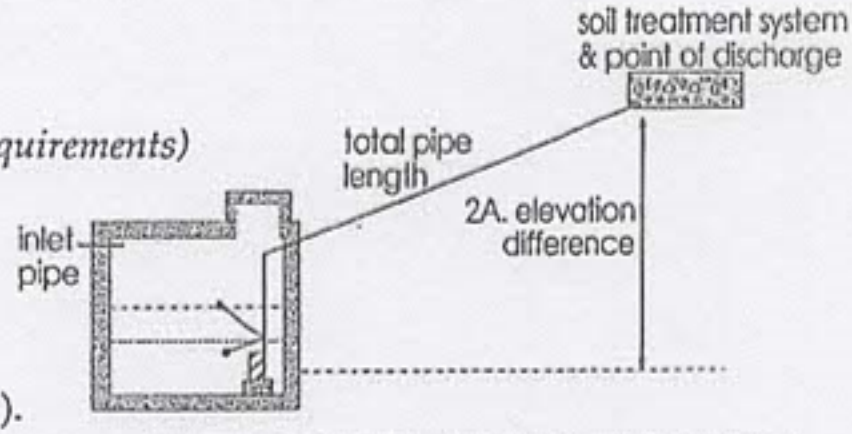
## 2. Determine pump head requirements:

A. Elevation difference between pump and point of discharge?

10 feet

B. Special head requirement? *(See Figure at right - Special Head Requirements)*

5 feet




| Special Head Requirements | |
|---|---|
| Gravity Distribution | 0 ft |
| Pressure Distribution | 5 ft |

C. Calculate Friction loss

1. Select pipe diameter 2 in
2. Enter *Figure E-9* with gpm (1A or B) and pipe diameter (C1).

   Read friction loss in feet per 100 feet from Figure E-9

   Friction Loss = 2.06 ft/100ft of pipe
3. Determine total pipe length from pump discharge to soil treatment discharge point. Estimate by adding 25 percent to pipe length for fitting loss. Total pipe length times 1.25 = equivalent pipe length

   40 feet x 1.25 = 50 feet
4. Calculate total friction loss by multiplying friction loss (C2) in ft/100 ft by the equivalent pipe length (C3) and divide by 100.

   = 2.06 ft/100ft x 50 ÷100 = 1.03 ft

D. Total head required is the sum of elevation difference (A), special head requirements (B), and total friction loss (C4)

10 ft + 5 ft+ 1.03 ft =

**Total head:** 16.03 feet

| E-9: Friction Loss in Plastic Pipe Per 100 feet | | | |
|---|---|---|---|
| | nominal pipe diameter | | |
| flow rate gpm | 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 | 0.58 |
| 55 | | 4.76 | 0.70 |
| 60 | | 5.60 | 0.82 |
| 65 | | 6.48 | 0.95 |
| 70 | | 7.44 | 1.09 |

## 3. Pump selection

A pump must be selected to deliver at least 31.1 gpm (1A or B) with at least 16.03 feet of total head (2D)

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

Cody Schupp (signature) 747 (license #) 10-12-22 (date)

CLIENT: Scott + Amy Kirkhoff

# SKETCH SHEET

DATE: 10-12-22

MAP DRAWN TO SCALE [redacted] WITH A NORTH ARROW

See Sketch
on Survey Drawing

## CHECK OFF LIST--HAVE ALL OF THE FOLLOWING BEEN DRAWN ON THE MAP??

SHOW EXISTING OR PROPOSED

- [x] WATER WELLS WITHIN 100 FT OF TREATMENT AREAS
- [x] PRESSURE WATER LINES WITHIN 10 FT OF TREATMENT AREAS
- [x] STRUCTURES
- [x] LOT IMPROVEMENTS
- [x] ALL SOIL TREATMENT AREAS
- [x] ALL ISTS COMPONENTS
- [x] HORIZONTAL AND VERTICALREFERENCE
- [x] POINT OF SOIL BORINGS
- [ ] DIRECTION OF SLOPE
- [x] LOT EASEMENTS
- [ ] ALL LOT DIMENSIONS
- [x] DISTURBED/ COMPACTED AREAS
- [x] SITE PROTECTION–LATHE AND RIBBON EVERY 15 FT
- [x] ACCESS ROUTE FOR TANK MAINTENANCE

REQUIRED SETBACKS

- [x] STRUCTURES
- [x] PROPERTY LINES
- [x] OHWL

COMMENTS:

## INDICATE ELEVATIONS

| | |
|---|---|
| BENCHMARK | 100 |
| ELEVATION OF SEWER LINE @ HOUSE | 99 |
| ELEVATION @ TANK INLET | 97 |
| ELEVATION @ BOTTOM OF ROCK LAYER | 101 |
| ELEVATION @ BOTTOM OF BORING OR RESTRICTIVE LAYER | 98 |
| ELEVATION OF PUMP | 92 |
| ELEVATION OF DISTRIBUTION DEVICE | 102 |

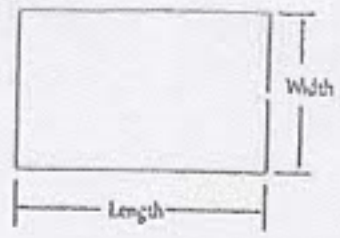
DESIGNER SIGNATURE Cody Schupp

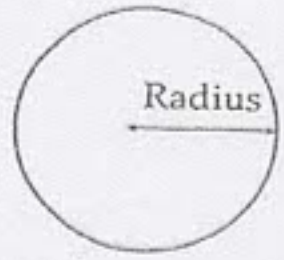
LICENSE# 747

DATE 10-12-22


450 TH AVE
BM
TRACT
LOT
COVT
Alt .A2
Site
.A1
10
.P2
38
P1
40+
500 gal lift
1500 gal 2 comp
Proposed
Deep
Well
LAKE

# DOSING CHAMBER SIZING




1. Determine area
   A. Rectangle area = L x W
   4 x 7 = 28 square feet
   B. Circle area = π (3.14) x radius in feet x radius in feet
   3.14 x _____ ft x _____ ft = _____ sqft
   C. Get area from manufacturer _____ sqft

2. Calculate gallons per inch
   There are 7.5 gallons per cubic foot of volume, therefore multiply the area (1A, B or C) times the conversion factor and divide by 12 inches per foot to calculate gallon per inch.
   Area x 7.5 ÷ 12 = _____ sqft x 7.5 ÷ 12 in/ft = 11.9 gallon per inch manufacturer provided

3. Calculate total tank volume
   A. Depth from bottom of inlet pipe to tank bottom 45 in
   B. Total tank volume = depth from bottom of inlet pipe to tank bottom (3A) x gal/in (2)
   = 45 in x 11.9 gal/in = 535.5 gal

*Legal Tank:*
*500 gallons or*
*100% the Daily flow*
*or*
*Alternating Pumps*

4. Calculate gallons to cover pump (with 2-3 inches of water covering pump)
   (Pump and block height (inch) + 2 inch) x gallon/inch
   (18 in +2 in) x 11.9 gal/in = 238 gallon

5. Calculate total pumpout volume
   A. Select pump size for 4-5 does per day. Gallon per dose = gpd (see *figure A-1)*
   / doses per day = 450 gpd ÷ 4 doses/day = 112.5 gallons
   B. Calculate drainback
      1. Determine total pipe length, 40 feet
      2. Determine liquid volume of pipe, .17 gal per ft (*see figure E-20)*
      3. Drainback quantity = 40 ft (5B1) x .17 gal per ft (5B2) = 6.8 gal
   C. Total pump out volume = dose volume (5A) + drainback (5B3)
   112.5 gal + 6.8 gal = 119.3 Total gallon

| A-1: Estimated Sewage Flows in Gallons per Day | | | | |
|---|---|---|---|---|
| number of bedrooms | Class I | Class II | Class III | Class IV |
| 2 | 300 | 225 | 180 | 60% |
| 3 | 450 | 300 | 218 | of the |
| 4 | 600 | 375 | 256 | values |
| 5 | 750 | 450 | 294 | in the |
| 6 | 900 | 525 | 332 | Class I, |
| 7 | 1050 | 600 | 370 | II, or III |
| 8 | 1200 | 675 | 408 | columns. |

6. Float separation distance (using total pumpout volume)
   Total pumpout volume (5C) ÷ gal/inch (2)
   119.3 gal ÷ 11.9 gal/in = 10 inch

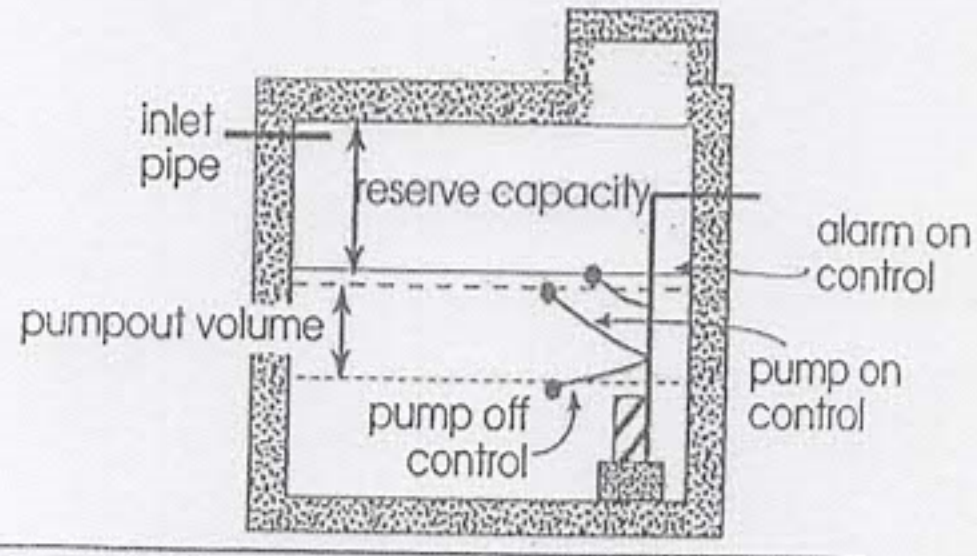
7. Calculate volume for alarm (typically 2 to 3 inches)
   Alarm depth (inch) x gallon/inch (2) = 3 in x 11.9 gal/in) = 35.7 gal

8. Calculate total gallon = gallons over pump (4) + gallons pumpout (5C) + gallons alarm (7)
   238 gal + 119.3 gal + 35.7 gal = 393 gallons

| E-20: Volume of Liquid in Pipe | |
|---|---|
| Pipe Diameter inches | Gallons per foot |
| 1 | 0.045 |
| 1.25 | 0.078 |
| 1.5 | 0.11 |
| 2 | 0.17 |
| 2.5 | 0.25 |
| 3 | 0.38 |
| 4 | 0.66 |

9. Total Tank Depth = total gallon (8) ÷ gallon/inch (2)
   393 gal ÷ 11.9 gal/in = 33 in

**Recommended:**
Calculate reserve capacity (75% the daily flow)
Daily flow x .75 = 450 x .75 = 337.5 gallons




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

Cody Schrupp (signature) 747 (license #) 10-12-22 (date)

# Subsurface Sewage Treatment System Management Plan

Property Owner: Scott + Amy Kirkhoff Phone: _____ Date: 10-12-22

Mailing Address: _____ City: _____ Zip: _____

Site Address: TBD 450th Ave. City: Aitkin Zip: 56431

This management plan will identify the operation and maintenance activities necessary to ensure long-term performance of your septic system. Some of these activities must be performed by you, the homeowner. Other tasks must be performed by a licensed septic service provider.

System Designer: check every _____ months.
Local Government: check every _____ months.
State Requirement: check every 36 months.

**My System needs to be checked every 36 months.**

**Homeowner Management Tasks**

*Leaks* – Check (look, listen) for leaks in toilets and dripping faucets. Repair leaks promptly.
*Surfacing sewage* – Regularly check for wet or spongy soil around your soil treatment area.
*Effluent filter – Inspect and clean twice a year or more.*
*Alarms* – Alarm signals when there is a problem. Contact a service provider any time an alarm signals.
*Event counter or water meter* – Record your water use.
-recommend meter readings be conducted (*circle one:* DAILY WEEKLY MONTHLY)

**Professional Management Tasks**

- ☐ Check to make sure tank is not leaking
- ☐ Check and clean the in-tank effluent filter
- ☐ Check the sludge/scum layer levels in all septic tanks
- ☐ Recommend if tank should be pumped
- ☐ Check inlet and outlet baffles
- ☐ Check the drainfield effluent levels in the rock layer
- ☐ Check the pump and alarm system functions
- ☐ Check wiring for corrosion and function
- ☐ Check dissolved oxygen and effluent temperature in tank
- ☐ Provide homeowner with list of results and any action to be taken
- ☐ Flush and clean laterals if cleanouts exist

"I understand it is my responsibility to properly operate and maintain the sewage treatment system on this property, utilizing the Management Plan. If requirements in the Management Plan are not met, I will promptly notify the permitting authority and take necessary corrective actions. If I have a new system, I agree to adequately protect the reserve area for future use as a soil treatment system."

Property Owner Signature: _____ Date: _____

Designer Signature: Cody S RP Date: 10-12-22

**See Reverse Side for Management Log**

# Maintenance Log

| Activity | Date Accomplished | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ***Check frequently:*** | | | | | | | | | | |
| Leaks: check for plumbing leaks | | | | | | | | | | |
| Soil treatment area check for surfacing | | | | | | | | | | |
| Lint filter: check, clean if needed | | | | | | | | | | |
| Effluent screen: if owner-maintained | | | | | | | | | | |
| Water usage rate (monitor frequency _____) | | | | | | | | | | |
| ***Check annually:*** | | | | | | | | | | |
| Caps: inspect, replace if needed | | | | | | | | | | |
| Sludge & Scum/Pump | | | | | | | | | | |
| Inlet & Outlet baffles | | | | | | | | | | |
| Drainfield effluent leaks | | | | | | | | | | |
| Pump, alarm, wiring | | | | | | | | | | |
| Flush & clean laterals if cleanouts exists | | | | | | | | | | |
| Other:_____ | | | | | | | | | | |
| Other:_____ | | | | | | | | | | |

Notes:_____

_____

_____

_____

Mitigation/corrective action plan:_____

_____

_____

_____

_____