

**Aitkin County Environmental Services**

**Application for an  
Operating Permit for Wastewater Treatment And Dispersal**

**Permittee:** Gary Clark                      **Parcel Number:** 07-1-154500

**Address:** 31212 407th PL.  
~~Yvon Nathan St.~~  
Aitkin, MN 56431

**Legal Description:** Lot 7 Blk 1 Diamond Head Acres

**Telephone #** 612-834-1139 - C

**GIS Location** \_\_\_\_\_

**A. Description of Wastewater Treatment and Dispersal System:**

Sewage flows by gravity from the home to a 1500 gallon combination septic tank. This will be installed "backwards" to receive effluent in the 500 gallon end. From the 1000 gallon side, effluent will be time dosed at 450 gallons per day into a 500 gallon per day Multi-Flo Aerobic Treatment Plant. The Multi-Flo will gravity feed a 625 gallon pump tank. From that pump tank, effluent will dose into pressurized gravelless trenches.

Number of Bedrooms = 3

Flow = 450 gallons per day

Hydraulic Loading Rate = 1.27 gpd/sqft

Organic Loading Rate = .00003 BOD/sqft

Estimated Cost of:

System Construction = \$13,500

Operation = \$10 per month

Monitoring & Servicing: first two years No Charge, after two years  
\$150/yr

Testing = \$80 first year, then \$40/yr 2 years

Anticipated System Life = 25 - 40 years

**B. Performance Standard Requirements:**

During the period beginning on the date of the Operating Permit and lasting until the Permit's expiration date, the Permittee is authorized to discharge from the wastewater treatment unit to subsurface dispersal. No surface discharge is permitted. The following parameters must be monitored and the results must be found within the compliance limits.

<b>Parameter</b>	<b>Compliance Limit</b>	<b>Sample Location</b>	<b>Sample Frequency</b>	<b>Sample Type</b>	<b>Reporting Frequency</b>
Fecal Coliform	<1000 cfu/100ml	ATU / Pump Tank	Semi-annual 1st year		Annual
Flow	450 GPD	pump control	Monthly if in use	Record on log sheet	Annual

**C. Maintenance Requirements:**

<b>Parameter</b>	<b>Location</b>	<b>Frequency</b>
Daily Flow	pump control	Monthly if in use (record on log sheet)
Sludge and scum level	Septic Tank	Annually
Pump, Alarms, Floats, etc.	Tanks	Annually
Multi-Flo	Multi-Flo	Semi-annually
Surfacing effluent, landscaping etc.	Total system	Annually

**D. Monitoring and Reporting Requirements:**

Monitoring results obtained during each calendar year shall be submitted no later than December 31st of that year to:

Aitkin County Environmental Services  
209 - 2nd Street NW  
Aitkin, MN 56341

The monitoring reports shall be signed by the Permittee. Copies are to be retained by the Permittee.

The Permittee shall notify Aitkin County Environmental Services within thirty (30) days when monitoring results do not meet the monitoring plan requirements of this permit.

Monitoring plans may be modified as necessary and reapproved by Aitkin County Environmental Services.

Sampling and laboratory testing procedures shall be performed in accordance with Standard Methods and the testing shall be performed by a Minnesota Department of Health approved laboratory. All sampling and testing costs shall be the responsibility of the Permittee.

Monitoring will be done by:

Septic Check, Inc, 6549 Keystone Road, Milaca, MN 56353 320-983-2447  
Lic #2624

**E. Mitigation Plan:**

If surfacing occurs: verify cause and make any necessary repairs or reduce water use.

Waste strength: if fecals exceed limit - reduce influent strength, increase retention time.  
If fecals continue to exceed limit add disinfection.

If flow exceeds limit: reduce flow

A replacement septic system could be constructed.

**I hereby certify with my signature as the designer, that all data for the operating application is true and correct to the best of my knowledge.**



License #2624

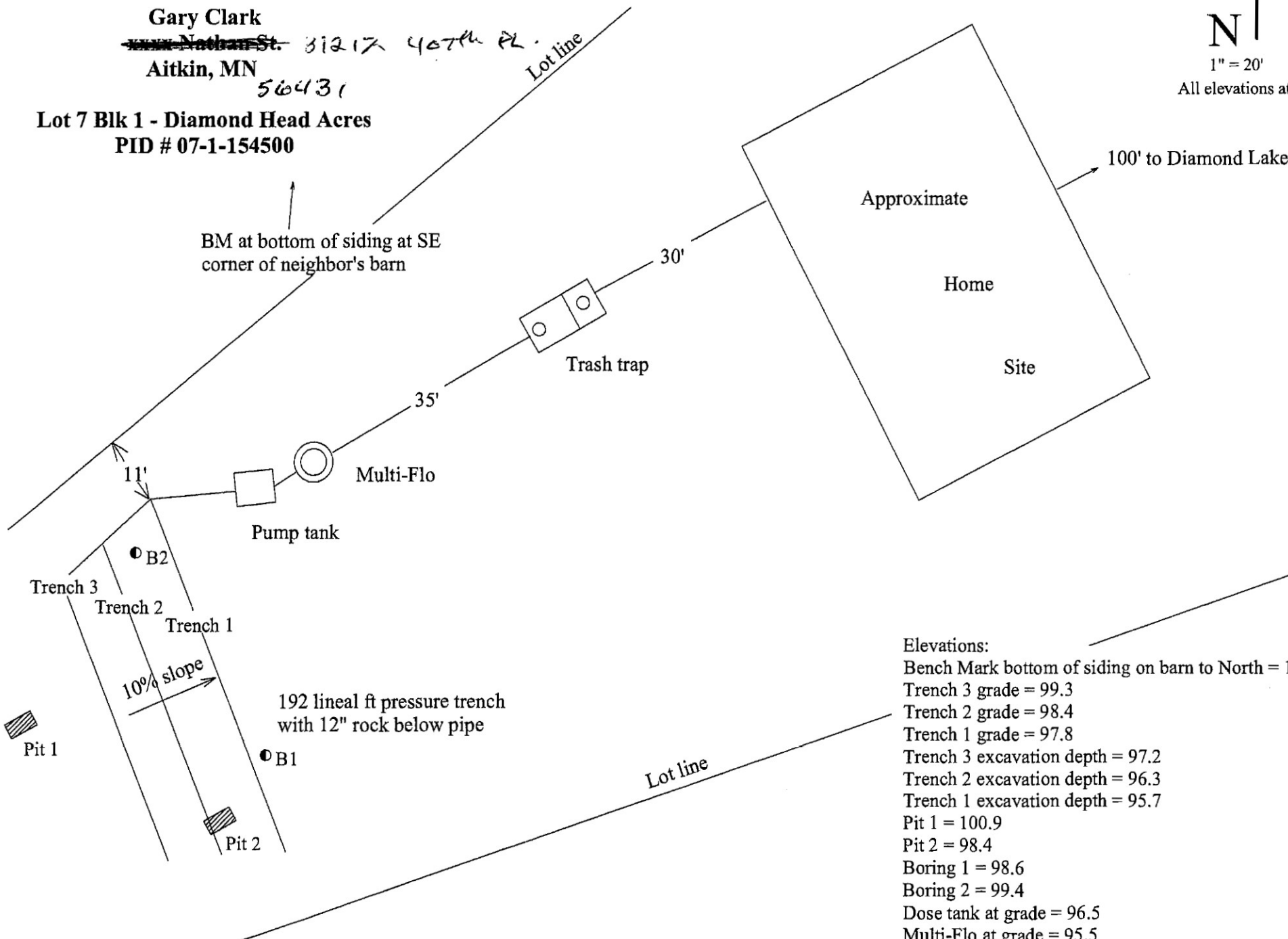
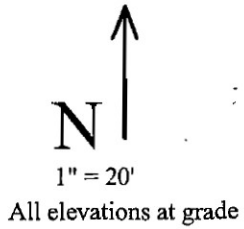
7-28-06

Eric Larson 6549 Keystone Rd, Milaca, MN 56353 320-983-2447

### System Layout

Gary Clark  
~~31217 407th Pl.~~  
 Aitkin, MN 56431

Lot 7 Blk 1 - Diamond Head Acres  
 PID # 07-1-154500



- Elevations:
- Bench Mark bottom of siding on barn to North = 100.0'
  - Trench 3 grade = 99.3
  - Trench 2 grade = 98.4
  - Trench 1 grade = 97.8
  - Trench 3 excavation depth = 97.2
  - Trench 2 excavation depth = 96.3
  - Trench 1 excavation depth = 95.7
  - Pit 1 = 100.9
  - Pit 2 = 98.4
  - Boring 1 = 98.6
  - Boring 2 = 99.4
  - Dose tank at grade = 96.5
  - Multi-Flo at grade = 95.5
  - Trash trap at grade = 93.0
  - Lake level est. (5-19-06) = 88.5