

Holding tank Design

Property Owner: Tim Mcelroy/Ben thompson Date: 2/27/2024

Site Address: 50005 197th ave Mcgregor PID: 29-1-497600

Comments: 1820 2 comp tank 2ft of cover

instructions: = site specific input = adjust if desired = self-calculated (DO NOT ADJUST)

1) 1 bedroom Type II Residential System

2) 180 GPD design flow

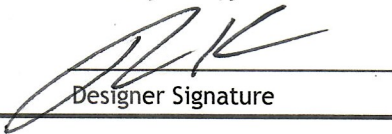
No Lift station to holding tank (lift basket < 100 gal treat as sewer line, > 100 gal treat as tank)

3) 1820 Gallon Holding tank (minimum) at 12.00 gpi

4) 114 inches from bottom of tank to "Hi Level" float (75% full when alarm activates)

5) 455 gallons reserve capacity (after High Level Alarm is activated)

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


Designer Signature

218 SEPTIC
Company 218-851-2013

LC197
License#

2/27/2024
Date

BEN THOMPSON
612-236-5781

ENARC -
BTHOMPSON@ACTIONOVERHEAD.COM

5 HAMROCK TWP

TWP - 49

RMA - 23

SE - 9

INSPECTOR CHECK LIST - Holding Tank

50005 197th ave Mcgregor

- WELL setbacks: 20'-50' to sewer line req's MDH pressure test form (5 psi for 15 min)
50' to everything
- PROPERTY LINES setback: 10' to everything
- Road setback: platted : 10' prop line. Metes & bounds : out of road easement, or outer ditch
- LAKE / BLUFF setback: 20' for bluff. Lakes: GD __, RD __, NE __. Protected wetland __.
- Building setbacks: 10' for everything.
- WATER LINE under pressure 10' to tank & sewer line. (else sewer line > 12" below)

- Sewer line & tank connection (no hard 90's, long sweep 90 or 2- 45's, slope minimum 1" in 8' = 1%)
(no depth req's, clean out every 100', Sch 40 pipe)
- No Lift station to Holding tank (lift basket < 100 gallons treat as sewer line, >100 gal treat as tank)
- Holding tank and risers (water tight risers, insulated, proper depth, existing verified by pumping)
mfg _____ 1820 gallons
- Riser within 12" of grade, 6"+ access pipe to grade.
- High Level Alarm (set at 75% capacity) (electrical or mechanical) 114 inches from bottom of tank

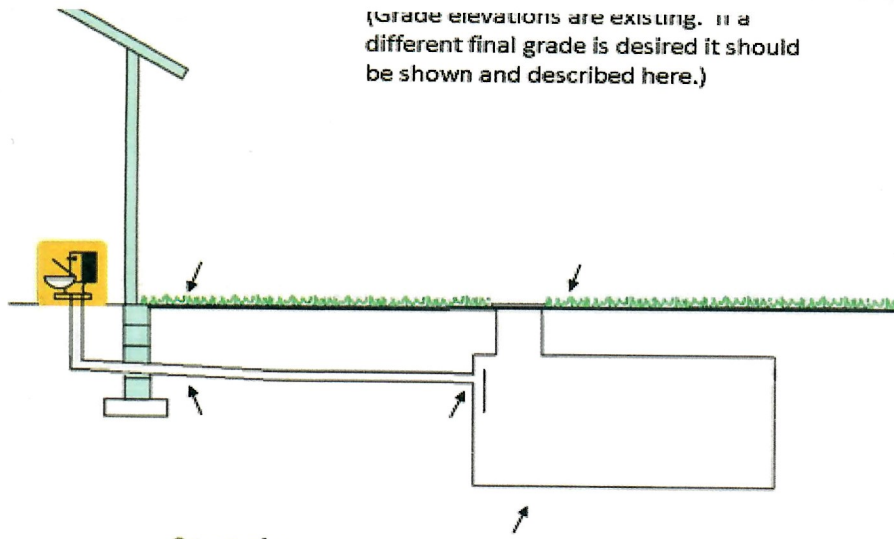
- Water tight testing form
- Re-use existing tank certification
- Abandon existing system if necessary
- monitoring plan and type _____
- well abandonment form if necessary

System Elevations

_____ benchmark Ground LEVEL

If grade elevations are existing. If a

(Grade elevations are existing. If a different final grade is desired it should be shown and described here.)



Sewer pipe
exiting house
104.3 Grade
106.3 Pipe

Holding Tank
104.3 Grade
106.5 inlet
108.2 Tank bottom

HOLDING TANK PUMPING SERVICE AGREEMENT

Permit # _____

Address

50005 197TH AVE MCGREGOR

THIS AGREEMENT, entered into by and between Aitkin County Registered Septic Tank Pumper, Timber Lakes Septic Service, hereinafter referred to as "Contractor", and _____ hereinafter referred to as "Homeowner".

WHEREAS, Homeowner desires and is required to retain individual sewage treatment system holding tank services to protect the environment and to obtain a certificate of compliance from Aitkin County; and

WHEREAS, the Contractor desires to provide sewage treatment system pumping services to Homeowner as necessary and in accordance with the terms and conditions outlined herein.

NOW THEREFORE, in consideration of the mutual promises contained herein, Parties do hereby agree as follows:

1. **TERM.** The term of this Agreement shall be from _____ to final installation of an Aitkin County approved sewage treatment system or connection to a Municipal Sewage Treatment System, unless earlier terminated as provided herein. The parties understand and agree that this Agreement is intended to arrange for the provision of pumping services so that Homeowner may occupy the home pursuant to a certificate of compliance to be issued by the Aitkin County Environmental Services Department upon execution of this Agreement. Homeowner further agrees that at the earliest possible date, Homeowner shall have a permanent sewage treatment system installed in accordance with the Aitkin County Subsurface Sewage Treatment System Ordinance and as approved by the Aitkin County Environmental Services Department or connect to a Municipal Sewage Treatment System. Upon approval by the County of Aitkin of the individual sewage treatment system or connection to a municipal sewer, or approval by Aitkin County Environmental Services of an amended or different contract, this Agreement shall terminate.

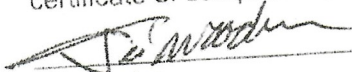
2. **FREQUENCY OF PUMPING.** Homeowner agrees that he/she shall not allow the holding tank to overflow or discharge in any manner. Contractor and Homeowner agree that the holding tank shall be pumped in accordance with the following:

- Tank size (gal.) _____ / (number of household occupants multiplied by 75 gallons per day) = frequency of pumping; or
- Within 24 hours of indication by tank alarm of lack of capacity (applicable only if system has a functional alarm);
- Whichever is greater

Contractor agrees to provide pumping services according to the regular pumping schedule or as needed to prevent discharge. Homeowner shall compensate Contractor as agreed by the parties for pumping services rendered.

3. **INSPECTION.** Holding tanks will be inspected by a licensed pumper at the time of servicing for leaks below the operating depth and whether tank tops, riser joints, and connections leak through visual evidence of major defects.

4. **REPORTING.** Grievances of Homeowner or Contractor shall be reported to the Aitkin County Environmental Services Department by Homeowner or Contractor. Homeowner and Contractor understand that failure to have holding tank pumped as herein specified or the discharge of any contents from the holding tank, regardless of fault, may result in the suspension, cancellation or revocation of the certificate of compliance, and the homeowner may be required to vacate the premises.



Contractor

Date 2 27 28

Homeowner

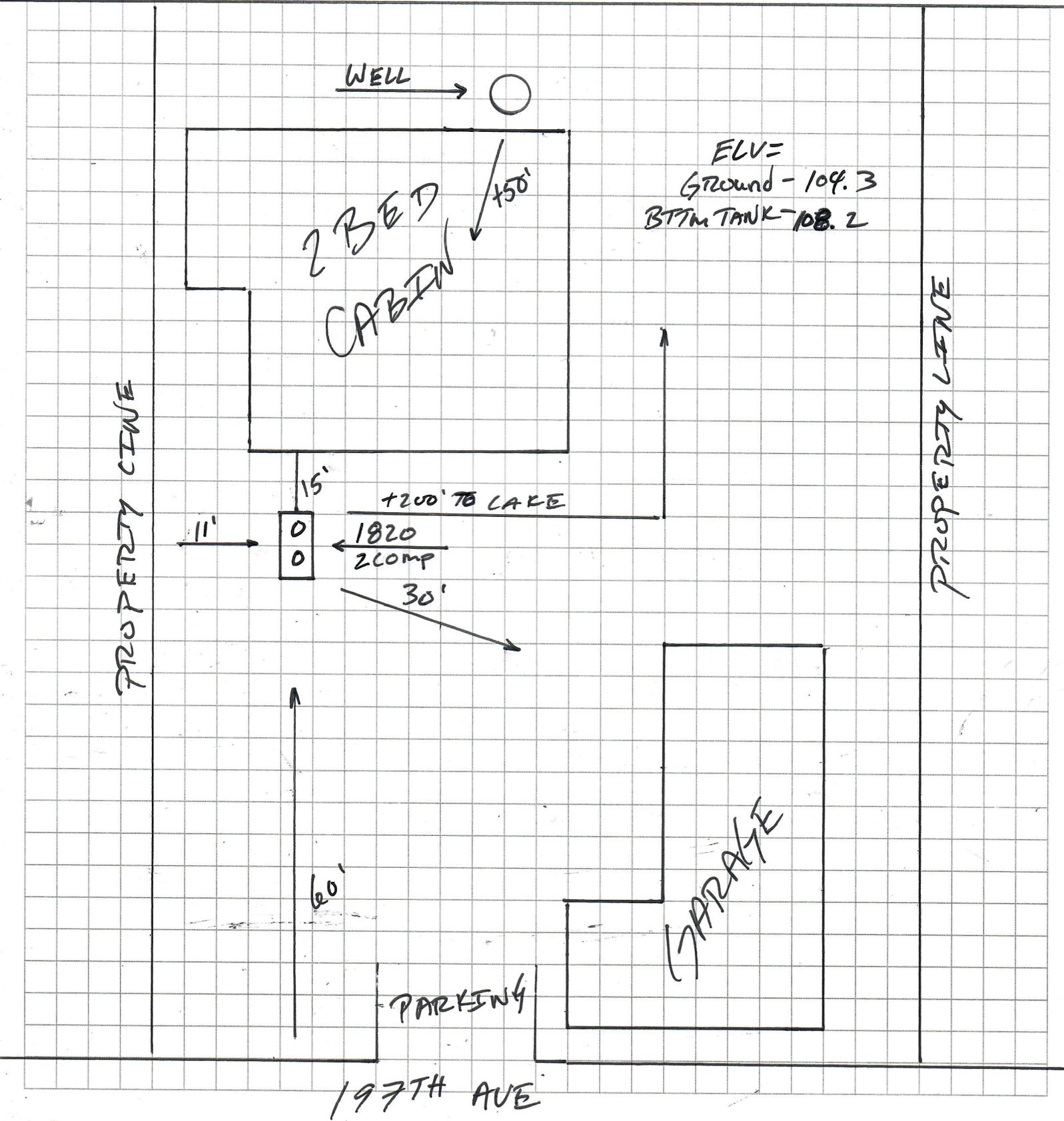
Date _____



PARCEL #	29-1-497600
DATE	2/27/24

LICENSE -L4197

LAKE



Aitkin County, Minnesota

454E—Mahtomedi loamy coarse sand, 12 to 25 percent slopes

Map Unit Setting

National map unit symbol: gjgy
Elevation: 980 to 1,640 feet
Mean annual precipitation: 25 to 30 inches
Mean annual air temperature: 39 to 45 degrees F
Frost-free period: 120 to 140 days
Farmland classification: Not prime farmland

Map Unit Composition

Mahtomedi and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mahtomedi

Setting

Landform: Outwash plains
Landform position (two-dimensional): Shoulder, backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy and gravelly outwash

Typical profile

A - 0 to 1 inches: loamy coarse sand
E - 1 to 14 inches: loamy coarse sand
Bw - 14 to 25 inches: gravelly sand
C - 25 to 60 inches: gravelly sand

Properties and qualities

Slope: 12 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Ecological site: F090AY019WI - Dry Sandy Uplands

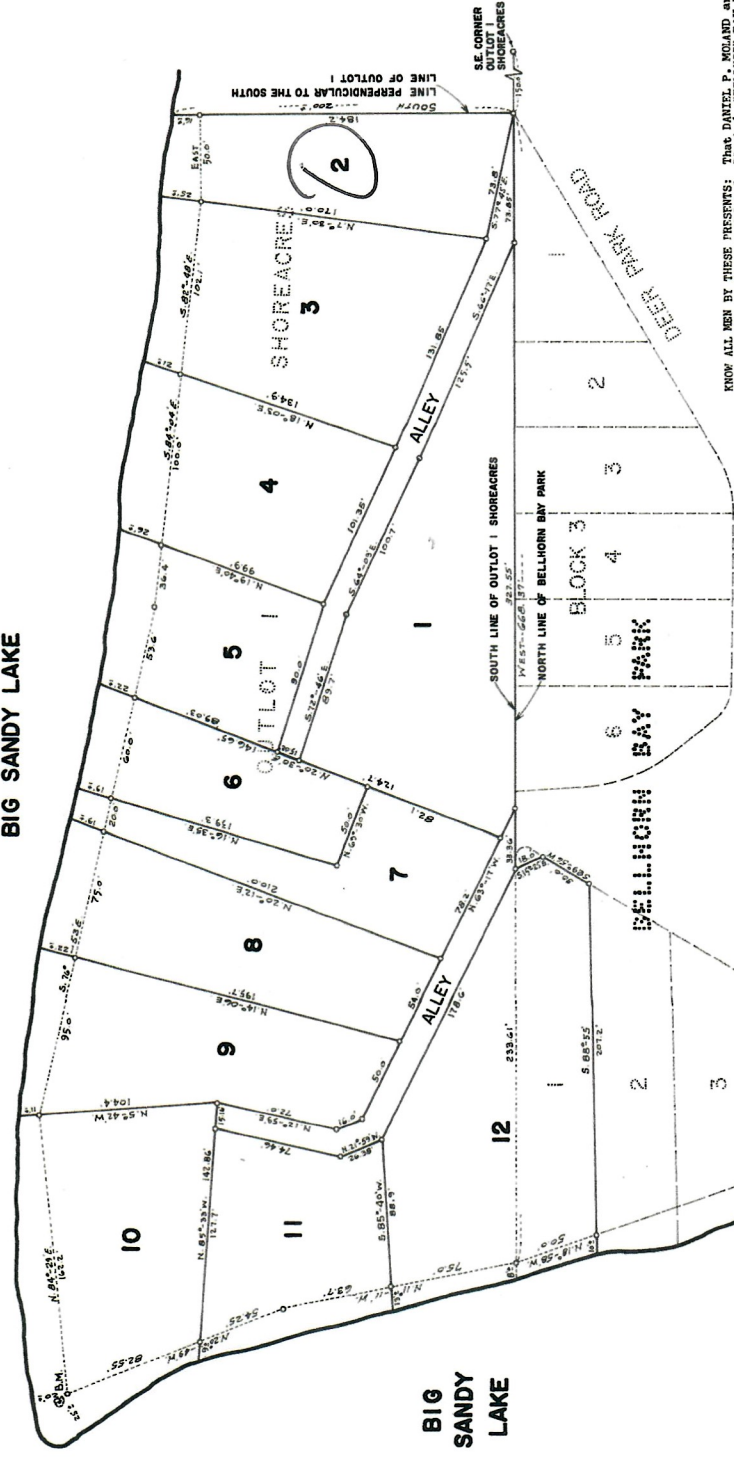
TOWER PINES

AITKIN COUNTY, MINNESOTA

SCALE 1" = 40'
BEARINGS ASSUMED
+ DENOTES IRON

W. L. VOIGT, SURVEYOR
AITKIN, MINNESOTA

BIG SANDY LAKE



BIG SANDY LAKE

I, W. L. Voigt, do hereby certify that I have surveyed and platted the property described on this plat and that the same is correct in all particulars shown in feet and decimals of a foot, that the outside boundary lines are correctly designated and that there are no wet lands, easements, public highways or roads laid out or travelled except as shown.

W. L. Voigt
Surveyor
Minnesota Registration No. 5522

State of Minnesota s.s.
County of Aitkin
On this 5th day of August, A.D. 1969, personally appeared before me, Wm. L. Voigt, to whom said instrument was presented for recording, and acknowledged that he executed the foregoing certificate as his own free act and deed.

Wm. L. Voigt
Notary Public
By Commission Expires 1/18/70

This is to certify that the adjoining plat has been accepted and approved by the Board of County Commissioners at a regular meeting held this 5th day of August, A.D. 1969.

TAXES PAID AND
TRANSFER ENTRIES
Robert J. ...
Auditor

KNOW ALL MEN BY THESE PRESENTS: That DANIEL P. MOLAND and ROSEMARIE MOLAND, his wife, owners and proprietors of Lot 1, Block 6, BELLHORN BAY PARK and that part of Outlot No. 1 "SHOREAGES" lying westerly of a line described as commencing at the intersection of the North line of Outlot 1 to said South line of Outlot 1 to the shoreline of Big Sandy Lake and there terminating, have caused the same to be surveyed and platted as TOWER PINES, and do hereby certify that the same is correct in all particulars shown in feet and decimals of a foot, and that there are no wet lands, easements, public highways or roads laid out or travelled except as shown. Excepting and subject to any flowage rights of the United States Government as appear of record.

In witness whereof, said DANIEL P. MOLAND and ROSEMARIE MOLAND, his wife, have hereunto set their hands and seals this 5th day of August, A.D. 1969.

Daniel P. Moland
Daniel P. Moland
Rosemarie Moland
Rosemarie Moland

In presence of:
Wm. L. Voigt
as to
Wm. L. Voigt

State of Minnesota s.s.
County of Aitkin
On this 5th day of August, A.D. 1969, before me, a Notary Public, within and for said County and State, personally appearing in and who executed the foregoing instrument, and they acknowledged that they executed the same as their own free act and deed.

Wm. L. Voigt
Notary Public
My Commission Expires 1/18/70

165784
STATE OF MINNESOTA SS
COUNTY OF AITKIN

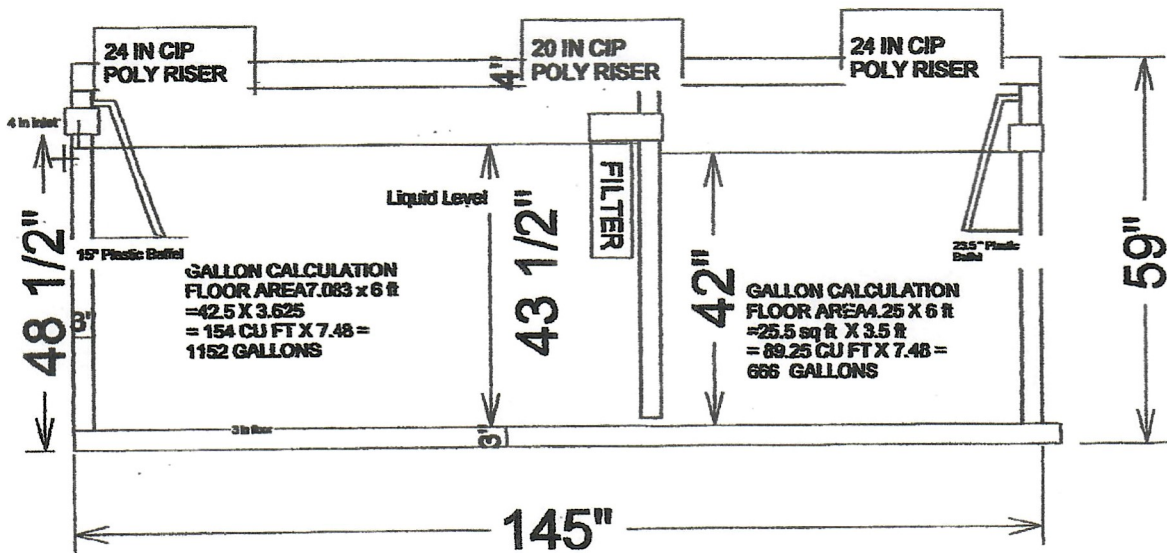
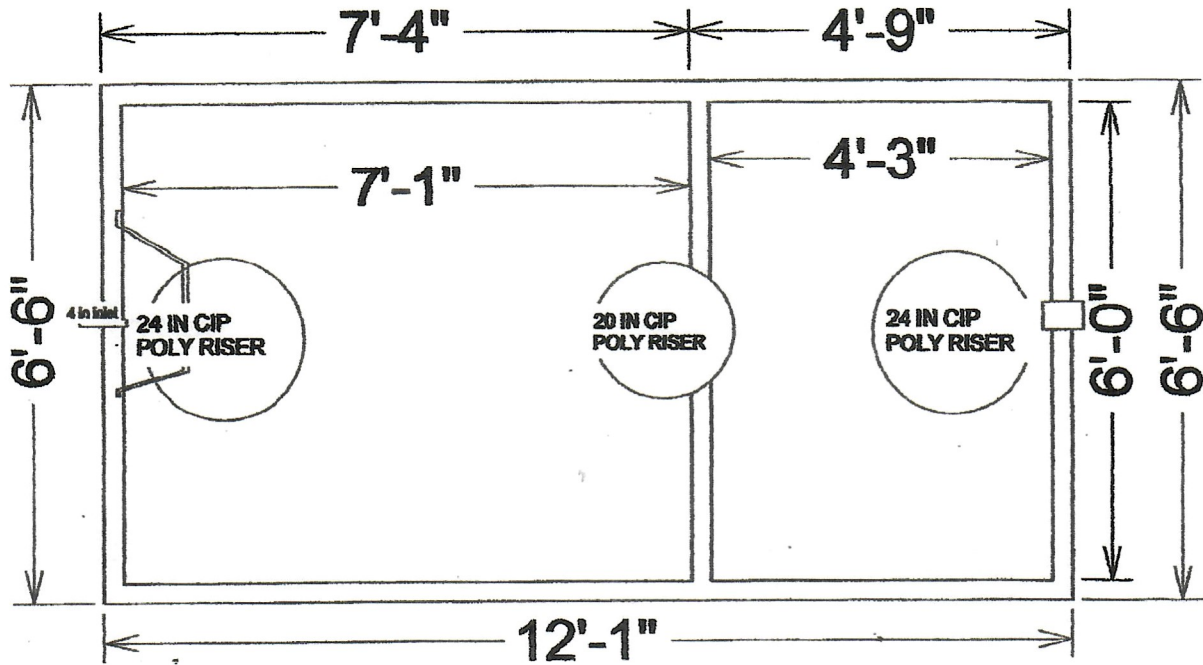
Block 1950 information from Federal Dam on Lake
Water Elevation Aug. 1969 1218.15
Water Elevation in Section 1218.0
Highest Water Elevation 1226.2
Bench Mark Elevation- 1223.4, M.S.L.
20d spike in West side of 12th Norway St. Lot 10

IN WITNESS WHEREOF I HAVE HEREON SET MY HAND AND SEAL OF OFFICE ON AUGUST 5, 1969.
Wm. L. Voigt
Notary Public

1820 Gallon 2 Compartment Septic Tank

Weight: 13,780 Lbs

TOP VIEW



666 gal. / 42" = 15.85 GPI

SIDE VIEW

Drawings Owned BY Jacobson Precast, Inc.
36641 HWY 169, Aitkin, Mn 56431