LINCOLN COUNTY
DEPARTMENT OF ENVIRONMENTAL HEALTH
WASTEWATER TREATMENT AND DISPOSAL SYSTEM PERMIT

Issue Date: 11/05/2010 Expiration Date: 11/06/2011

Property Owner: Family Solutions Network, Inc. c/o: John Baisden, Jr.

Address: [redacted]

Telephone: (Home) [redacted] (Work) [redacted]

Installer: Scott A. Curry, PE #3790 – TLC Engineering License No. N/A

____ New Installation __XX__ Existing System

_____ Repair _____ Replacement _____ Extension __XX__ Other

Describe: Revising existing Wastewater Treatment System with installation of Eliminite Level II system, per Engineered Plan of TLC Engineering approved by DEQ-PWS per E.Q. #09-1157, for Turning Winds Alternative School in Troy (South Fork Yaak), Montana.

Parcel Description:

Legal: S18 T35 R31 -- HES 347

Address or Location: 31733 South Fork Road

Approved Design Criteria For the Turning Winds Alternative School Wastewater Treatment System.

Maximum Flows: 1000 GPD All system components per DEQ-PWS approved plans & specifications.

SYSTEM MUST INCLUDE INSTALLATION OF EFFLUENT FILTER(S) AT SEPTIC TANK OUTLET(S) !!

Special Instructions: ***INSTALL ELIMINITE LEVEL II TREATMENT SYSTEM AND MODIFY EXISTING SYSTEM COMPONENTS ACCORDING TO DEQ-PWS APPROVED ENGINEERED PLAN, CIRCULAR DEQ 4, AND LINCOLN COUNTY WASTEWATER REGULATION. ANY DEVIATIONS FROM APPROVED ENGINEERED PLAN MUST BE AUTHORIZED BY DEQ-PWS AND THE DEPARTMENT.*** **INSTALLING ENGINEER MUST SIGN-OFF ON THE CLOSURE STATEMENT AND SUBMIT AS-BUILT DRAWINGS ON COMPLETION.**

Issued By: *Kendra J. Lind, R.S.*

Closure Statement:

I, _____, have inspected this system and confirm that it is in compliance with the DEQ-PWS approved engineered plans per EQ #09-1157, the conditions of this permit, and the Lincoln County Wastewater Treatment and Disposal Regulation.

Signed: _____ *Date:*

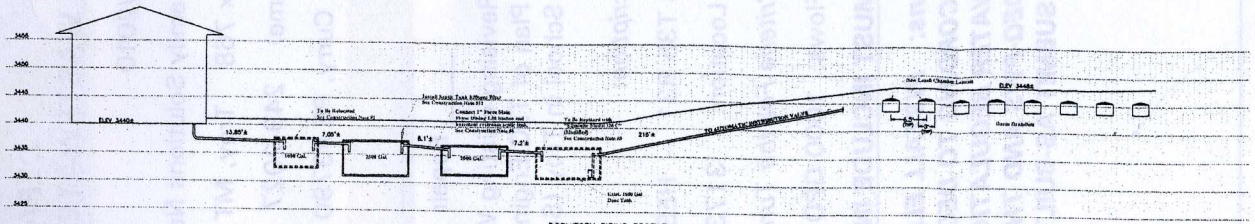
Scott A. Curry, PE #3790

NOTICE: The Department must be notified at least 48 hours prior to backfilling the system. Any system not inspected by the Department or its designated representative prior to closure is an illegal installation in violation of Lincoln County Health Board Regulation No. 3. Illegal installations may result in fines and/or requirements to remove or reconstruct the system.

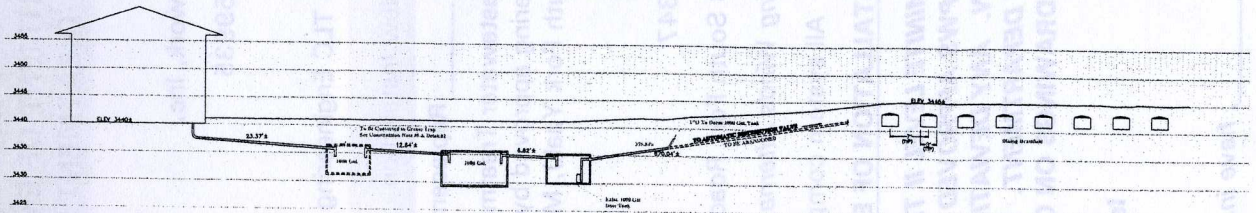
406-293-7781

DISCLAIMER

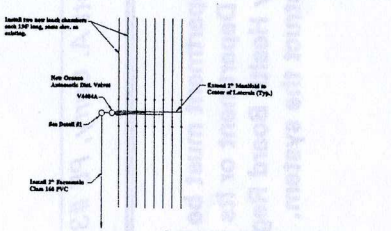
This permit is not a guarantee by the Department that the system will function properly for a prescribed period of time.



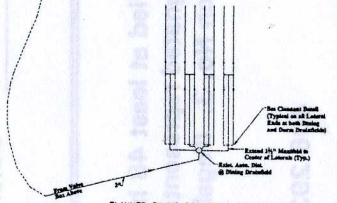
DORMITORY PIPING PROFILE
1"=10'



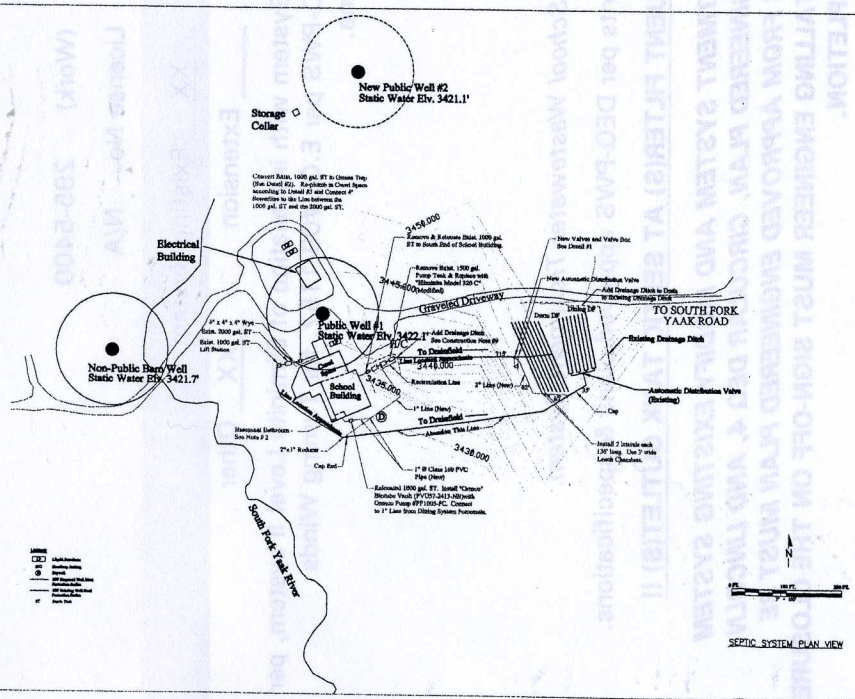
DINING HALL PIPING PROFILE
1"=10'



PLANNED DORM DRAINFIELD (NO SCALE)
REPLUMB AS SHOWN



PLANNED DINING DRAINFIELD (NO SCALE)
REPLUMB AS SHOWN



CONSTRUCTION & INSTALLATION REQUIREMENTS

1. **Remove the 1000 gal. septic tank serving the Dorm System. Re-connect the piping directly to the 2500 gal. septic tank. Provide uniform slope on the installed sewer lines. Re-install this septic tank to serve the bathroom in the basement of the School Building.**

2. **Basement Bathroom**
   a. **Remove the double sink and the wall to enable removal of the existing sewage pump and pump sump. Re-plumb all sewerlines (2 sinks, tub, west and 2 water closets) together in place of the sump and extend to the exterior and to the re-located 1000 gal. septic tank. Install a cleanout on this line where they all come together under the sinks. Maintain venting system.**
   b. **Demolish a section of sidewalk to install the sewerline to the septic tank. Knock a hole in the foundation wall to install the sewerline and replace the sidewalk when finished.**
   c. **Re-install the two sinks and wall that were removed in 2a. and repair the floor.**
   d. **Furnish and install an Cromco Biotube Vault (PVU57-3413-NB) (includes effluent filter) and Cromco Pump (#PF1005-FC) on the outlet of the septic tank and connect the discharge line to the 1" dia. line from the Dining system (See #6).**

3. **At the Dorm System, remove the 1500 gal. pump tank and replace this tank with the "Eliminite 320C". Install the recirculation line to the head end of the 2000 gal. tank in the vicinity of the connection made in #2 above.**

4. **Dorm Drainfield**
   a. **Install two new drainfield laterals each 156 feet long as shown. Use 3' wide leaching chambers with cleanouts on the ends. Use 1 ½" distribution pipe with ½" holes spaced 5' apart (same as existing).**
   b. **Install an "Cromco V4404A" automatic distribution valve as shown to direct flow at the Dorm Drainfield. Re-plumb the drainfield laterals as shown so each sector will consist of 4 laterals, each 68' long. Excavate the ends of all laterals and install cleanouts to the ground surface as shown in Detail #5.**
   c. **Install a 24" dia. concrete valve box with lid to house two ball valves. One ball valve will direct flow to the Dorm Drainfield the other will direct flow to the Dining Drainfield.**

5. **Dining System**
   a. **Re-plumb the 4" dia. sewerline in the crawl space as shown in Detail #3 and install new sewerline to the existing 2000 gal. septic tank. Install a cleanout at the foundation wall on this line.**
   b. **Convert the existing 1000 gal. septic tank to a grease trap as shown in Detail #2.**

6. **Abandon a portion of the 2" dia. force main from the Dining Drainfield and cap the ends that are disconnected. Connect and install a 1" dia. plastic pipe line from the 2" dia. force main to the 4" dia. line between the 2500 gal. septic tank and the 2000 gal. septic tank that serves the Dorm System. The 1" dia. line will provide added friction loss to this line that will reduce the flow into the 2000 gal. septic tank. Use a 2" x 1" reducing bushing at the 2" connection and a 4" wye reduced to 1" at the septic tank connection.**

7. **Install 2" force main from the valve box in 4c. to the Dining Drainfield automatic distribution valve (existing).**

8. **Dining Drainfield - Locate the existing automatic distribution valve, excavate and re-plumb the laterals as shown. Instead of the connection at the ends of the laterals it will be necessary to connect to the center of the drainfield laterals. Excavate the center of the drainfield leaching chambers and connect the manifolds into the center of each lateral as shown. The result will be that effluent will be directed to the center of each sector (4 in total with each sector containing 4 laterals, each 50 feet long). Excavate the ends of all laterals and install cleanouts to the ground surface as shown in Detail #5.**

9. **Excavate a surface water by-pass ditch above and around the tanks at the Dorm septic tanks location as shown. Remove the retaining wall structure at this location and extend all manhole extensions to 6 inches above finished grade. Mound around all extensions to repel surface water. All connections between tanks and extensions and between extensions shall be watertight. A watertight and/or overlapping lid shall be installed on each manhole extension.**

10. **Dining septic tank, grease trap and lift station - Install manhole extensions on these tanks the same as in #9 above.**

11. **Excavate a surface water by-pass ditch above both drainfields and tie it into the existing ditch east of the Dining Drainfield, as shown, to exclude surface water from flowing over the drainfields.**

12. **Install a septic tank effluent filter on the outlet of the Dorm 2500 gal. septic tank.**

SEAL

REVISIONS

DRAWN BY:
AGT Drafting
CHECKED BY:

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EMail: tlcengineering@hotmail.com

PROJECT:
SEWER SYSTEM MODIFICATIONS
TURNING WINDS
YAAK, MONTANA

SCALE (ESS PLAN)
N/A
DATE
07-20-2009
JOB
07-28

SHEET
1
OF 2