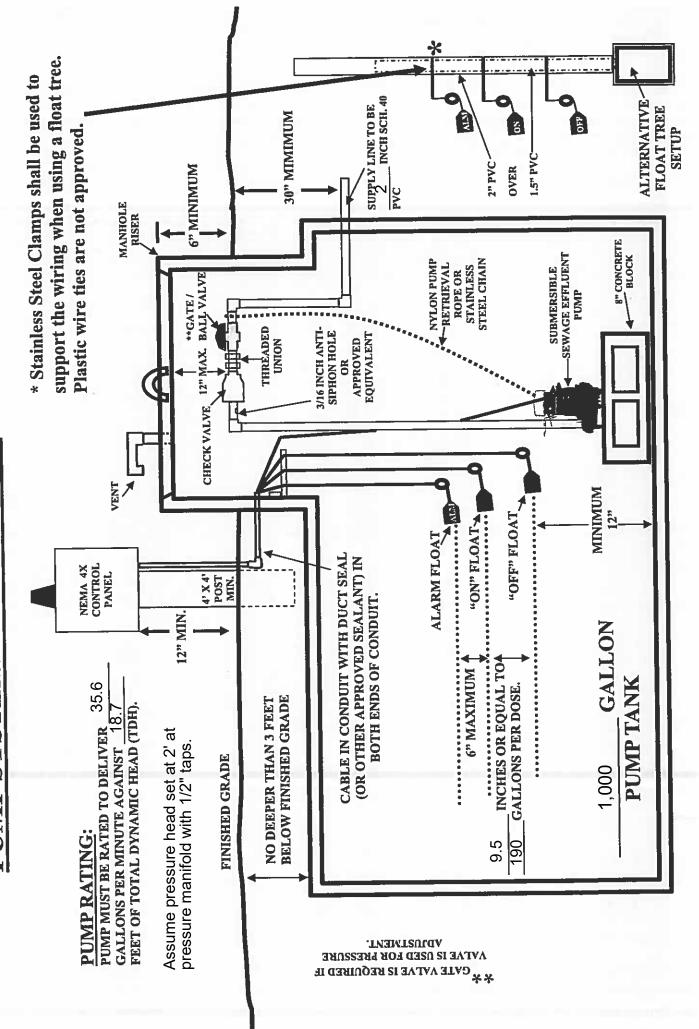
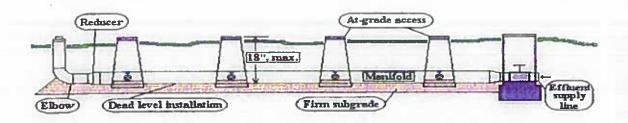
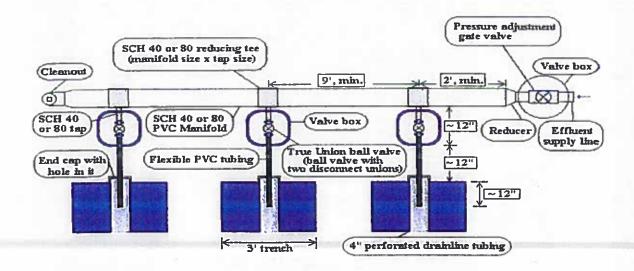
PUMP SYSTEM DETAIL SHEET



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Profile View of Pressure Manifold for Level Site Installation (not to scale)



Plan View of Pressure Manifold for Level Site Installation (not to scale)

Tank Water Tightness Testing Procedures

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I. Leak testing procedures

- The tank shall be set and leveled. The tank hole may be backfilled to a point below the midseam of a
 two-piece tank or to the midpoint of a one-piece tank. If the site conditions do not allow the tank
 hole to be left open or if you choose not to leave the tank hole open, the tank shall be leak tested
 onsite prior to placement in tank hole.
- 2. The manhole riser(s) (if applicable) shall be attached to the tank according to state approved plans.
- 3. The tank shall be filled with water 2" above the seam where the manhole riser is connected to the top of the tank, or to a point level with the top of the tank in both manholes if riser(s) are not required. It is strongly recommended to preform the leak test prior to removing any tank block out (placing any pipes into/out of the tank). If the tank block outs have been removed and pipe has been installed it will be necessary to block or plug the inlet and outlet pipe to prevent flow from these pipes. It may also be necessary to place mastic around the bevel of the inlet manhole and weight the lid down to prevent leakage.
- 4. After filling and allowing for the concrete to absorb water (about 24 hours) add any additional water needed to get water level back to the starting level.
- 5. Contact Applied Resource Management to conduct the test. The test will take a minimum of 24 hours and will not be conducted Friday or the day prior to a Holiday.
- 6. Only after the completion of a satisfactory leak test will the tank be approved for use.

II. Vacuum Testing Procedures (Concrete Tanks Only)'

- The tank shall be set and leveled. The tank hole may be back filled to a point below the midseam of a
 two-piece tank or to midpoint of a one-piece tank. If site conditions do not allow the tank hole to be
 left open or if choose not to leave the tank hole open, the tank shall be leak tested on site prior to
 placement in tank hole.
- 2. The manhole riser(s) (if applicable) shall be attached to the tank according to state approved plans.
- 3. The tank shall be vacuum tested per the following:

Inches of Mercury 5" Duration 2Min.

(≤10% pressure drop /≤ .5 inch loss of mercury shall constitute and acceptable test)

- 4. Applied Resource Management representative shall be present during vacuum testing procedure.
- 5. Only after the completion of a satisfactory vacuum test will the tank be approved for use.

Project Number

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Additional Specifications

- 1. There shall be no splices in any electrical cable within the pump chamber.
- 2. Pump and alarm must be on two separate live electrical circuits which operate independently of each other.
- 3. If the pump manufacturer specifies that the "pump off" level be below the top of the pump, the following manufacturer's specifications and adjust the floats accordingly.
- 4. Check valves shall be mounted horizontally and such that a siphon breaker hole can be drilled on the pump side of the valve.
- Only those tanks specifically approved by the State of North Carolina and appropriately stamped shall be used for pump tanks. Modified septic tanks shall not be approved.
- 6. A complete and approved installation is required for this permit to continue to be valid beyond five years elapsed time from the date of issuance.
- 7. The permit is valid subject to all conditions so noted on this permit, the operations permit, the approved plans and specifications, and any written correspondence that may specify a condition or requirement.
- 8. This permit is valid only for as long as it meets all requirements of the G.S. Chapter 130A Article 11 and related portions of NC Administrative Code.
- 9. No driving or parking shall be allowed over any portions of the system or repair area unless specifically approved elsewhere in this permit.
- 10. System operation, maintenance, and repairs shall be the responsibility of the land owner as named on this permit.
- 11. The pump curve for the effluent pump installed shall be available during system inspection.
- 12. Paperwork confirming that the electrical enclosure used is NEMA 4X rated shall be available during system inspection. (Paperwork used in NEMA 4X rated is clearly marked on the enclosure.)