

**Date:**

## Leachate Pumping System Application

**Client:**

**Project:**

**Plant:**

**Location:**

### DESIGN CONDITIONS

Power Supply: Voltage \_\_\_\_ 1Ø \_\_\_\_ 3Ø \_\_\_\_

**PUMPS:**

Submersible Pumps: Horizontal or Vertical

Pump 1

Pump 2

Pump 3

Flow Rate:

Head (TDH):

**FLOW METER:**

Required: Y or N

Preferred Make/Model:

Temp Rate Requirement:

Horizontal or Vertical Mount:

Voltage of Flow Meter:

**BREAK OUT BOXES:**

Breakout (Junction) Box Needed:

	Pump 1	Pump 2	Pump 3
Level:	Y or N	Y or N	Y or N
Flow:	Y or N	Y or N	Y or N
Power:	Y or N	Y or N	Y or N
Desicant Required:	Y or N	Y or N	Y or N

Location in relation to top of riser and Control panel location

**SIDE SLOPE RISER:**

Slope: \_\_\_\_ :1

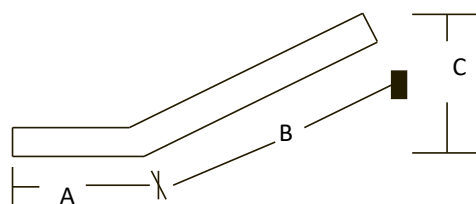
Length of Riser Pipe (A + B): \_\_\_\_ feet

Vertical Distance = Sump to Top of Riser Pipe (C): \_\_\_\_ feet

Riser Pipe ID: \_\_\_\_ inches SDR \_\_\_\_

Distance From Top of Riser Pipe to Controller: \_\_\_\_ feet

Gravel type:



**VERTICAL RISER:**

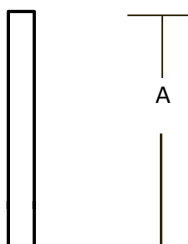
Vertical Distance = Sump to Top of Riser Pipe (A): \_\_\_\_ feet

Riser Pipe ID: \_\_\_\_ inches SDR \_\_\_\_

Distance From Top of Riser Pipe to Controller: \_\_\_\_ feet

Guide Rail Required?

Concrete or HDPE Manhole?



**CONTROLLER:**

Existing control system or new?

Relay Logic, Programmable Logic Controllers (PLCs) or computer based controller?

Pump Control: Simple or Duplex  
 Digital Display required? Y or N  
 Enclosure Type (circle one): NEMA 3R, 4 4X-SS, 12 NEMA 7, & 7/4 explosion-proof  
 Duplex GFCI Outlet: Y or N  
 Storage Tank Full Shutdown Circuit: Y or N  
 Elapsed Time Meters: Y or N  
 Run Cycle Counters: Y or N  
 Top Mounted Alarm Light: Y or N  
 Flow Sensor: Y or N  
 Telemetry Options (circle one): RS 232 RS422 RS485 direct phone connection cellular phone FM radio  
 Modbus Mapping Required?: Y or N  
 Enclosure Heater? Y or N

**SHUT DOWN CONTROLS:**

Low Low Level: Generator Failure:  
 High Level: Generator Fuel Level:  
 Level Switch Failure:

**SHUT DOWN ALARMS:** Audible: Visual: Auto dialer:

**GENERATOR:**

Power by Generator: Y or N  
 Generator Required: Y or N Supplied by Whom:  
 Power to be used for pumps alone or will it power other equipment (describe):

Power Output Required (cold weather start):  
 Gas / Diesel / Natural Gas (circle one): Redundancy required (i.e.: trickle battery): Y or N

Shelter Required?	Y or N	Provided by Whom?	
Insulated	Y or N	Heater	Y or N Gas/electric (circle one)
Exhaust fan	Y or N	Windows	Y or N
Doors	Y or N	Gas Monitoring	Y or N
Lights	Y or N		

**Other performance or operation requirements, if any:**