

**LEGEND**



NOTES: Possible Drainfield Area

SLOPE ACROSS DRAINFIELD AND 100% REPLACEMENT AREA 1-3%  
 AT THIS TIME THERE ARE NO KNOWN WELLS AND/OR SURFACE WATERS WITHIN 100 FEET OF THE PROPOSED DRAINFIELD/100% REPLACEMENT AREAS.

PRIOR TO CONSTRUCTION OF DRAINFIELD, VERIFY THAT SEPTIC SYSTEM AND ALL COMPONENTS WILL MEET ALL REQUIRED OFFSETS AND NOTIFY ENGINEER OF ANY DISCREPANCIES.  
 OWNER MUST DIVERT ALL STORM RUNOFF AWAY FROM ALL SEWER SYSTEM COMPONENTS TO PREVENT POSSIBLE MALFUNCTION.

ALL SEWER SERVICE LINES SHALL BE SLEEVED OR PROPERLY REDDED FOR PROTECTION AT ALL ROAD/DRIVEWAY CROSSINGS AND PARKING AREAS. INSULATE AS REQUIRED. PRIMARY AND SECONDARY TREATMENT SYSTEM SHOULD BE PROTECTED FROM VEHICULAR TRAFFIC INCLUDING AGRICULTURAL EQUIPMENT AND CONSTRUCTION EQUIPMENT. TO PREVENT INJURY TO LIVESTOCK OR HORSES, OWNER MAY WANT TO CONSIDER FENCING OFF THE PRIMARY AND SECONDARY TREATMENT COMPONENTS OF THIS SYSTEM.

ALL WATER LINES MUST BE AT LEAST 10 FEET FROM SEWER COMPONENTS.

ALL SEWER SERVICE LINES SHALL BE A MINIMUM OF 10 FEET FROM BUILDING.

INSTALLER SHOULD CALL FOR A UTILITY LOCATE 1-800-424-5555

WASTEWATER SYSTEM NOTES FOR THIS PERMIT:

- 1) ALLOWABLE WASTEWATER FLOW IS UP TO 350 GALLONS/DAY
- 2) APPLICATION RATE = 5 GPD/TS SANDY LOAM. 350/5=70sf  
 25=52sf(3/17sf= 3 LATERALS OF 8F
- 3) PRIMARY TREATMENT WILL CONSIST OF MIN EXISTING 1500 GALLON SEPTIC TANK FOR EACH DWELLING WITHIN OF 500 GALLON DOSE TANK IF PRESSURE DOSE
- 4) SECONDARY TREATMENT WILL CONSIST OF A PRESSURE DOSE DRAINFIELD USING GRAVELLESS ABSORPTION TRENCHES. THE PROPOSED SYSTEM WILL HAVE 3 LATERALS 8F IN LENGTH. THE LATERALS WILL USE LOW PROFILE 3F CHAMBER. IF IN LENGTH 22 CHAMBERS/LAT. LATERALS ARE TO BE MIN OF 7 ON CENTER. TRENCH DEPTH TO BE STATED ON PERMIT TO CONSTRUCT. SEE PERMIT FOR ACTUAL ALLOWED DEPTH OF LATERALS. NOTE IF OWNER DECIDES TO PRESSURE DOSE, LATERAL PIPING TO BE 1-1/4" ORRICE SIZE IS 96" AND SPACED EVERY 5'. START FIRST ORRICE 1' IN FROM BALL VALVE POINTED DOWN WITH ORRICE SHIELD. THE REST OF THE ORRICES FACING UP. THEN EVERY 20' NEED DOWNWARD FACING ORRICE W/SHIELD UNTIL END OF LATERAL. LAST ORRICE FACING DOWN 1' FROM END OF LATERAL BALL VALVE.

**Construction Notes:**

Because of site conditions and proposed system type. Good chance of having to dose drainfield or switch it to pressure dose because of the grade concerns. (Pressure Dose)  
 would recommend using or doing the following:  
 using PVC risers and make system watertight and not just soil tight.  
 Possible Drainfield location has been identified, must stay min 25' of proposed test pit locators while staying within the identified area and orientation.  
 using A-Lox/Tough light gaskets for inlet and outlet of proposed lines. Seal existing tank and bed the overdig for the 2" transport lines. If pressure dose, sleeve the 2" dose transport line from tank overdig via 4" sch 40, recommend separating out the floats and putting them on their own area as opposed to adding them to the pump line transport lines should be sleeved under all roadways where necessary and insulated, recommend draining back to dose tank or have transport line below frost line.  
 Biotinler should be cleaned before a year.  
 pumping of the tank should be every 2-3 years depending on usage. (spring or early fall) or 4 insulated lid.  
 If ground water is present, may want to add ballast to the dose tank depending on the site conditions.

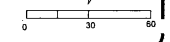
Effluent filter is required to be added to the outlet of the septic tank.  
 Min slope from house to septic tank for transport line is 1/4" per foot

Owner, may want to consider duplex pumping as a back up, and owner may want to consider having a larger than the min septic tank and dose tank in the event the owner ever needs to add/expand the system. Owner is required to protect all septic components ie from vehicle traffic, livestock, animals or anything that would prevent the system from functioning properly. This includes all transport lines, septic tanks, tanks, valve boxes, drainfield. May be best to fence the drainfield area to prevent livestock from damaging system.

If a camper drop ever gets added to the system, would recommend oversized the septic tank by a min of 500 gallons. Would not put the stored water effluent into the septic tank from the RV/Camper, would bring that to an approved location.

Contractor shall notify at utility companies and determine the exact location of all underground utilities before commencing work.

Proposed house location may change but the drainfield location has to remain as located and orientated.



No.	Revision	By	Date

**As-built Permit #**  
 Bozeman, MT 59718

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**PS-1**

