

Enviro-Septic® Wastewater Treatment System DESIGN CRITERIA WORKSHEET

Manufactured by Presby Environmental, Inc. (800) 473-5298
 Distributed in Indiana exclusively by Environmental Septic Solutions, Inc. (812) 457-3144

DESIGNED BY:		INSTALLED BY:	
Name:		Name:	
Company:		Company:	
Address:		Address:	
Telephone:		Telephone:	
PEI Cert. #:		PEI Cert. #:	
SYSTEM OWNER(S):		SITE IDENTIFICATION:	
Name:		Address:	
Address:		Town:	
		Map/Lot:	
		Permit #:	
Telephone:		County:	

Note: Presby Environmental, Inc. and Environmental Septic Solutions, Inc. strongly recommend the completion of these worksheets for all system designs to assure proper design criteria are utilized. Completed documentation to be retained by Designer, with copies provided to the installer, system owner and the local health officer.

Instructions to Designer: Complete all white sections by filling in blanks or circling

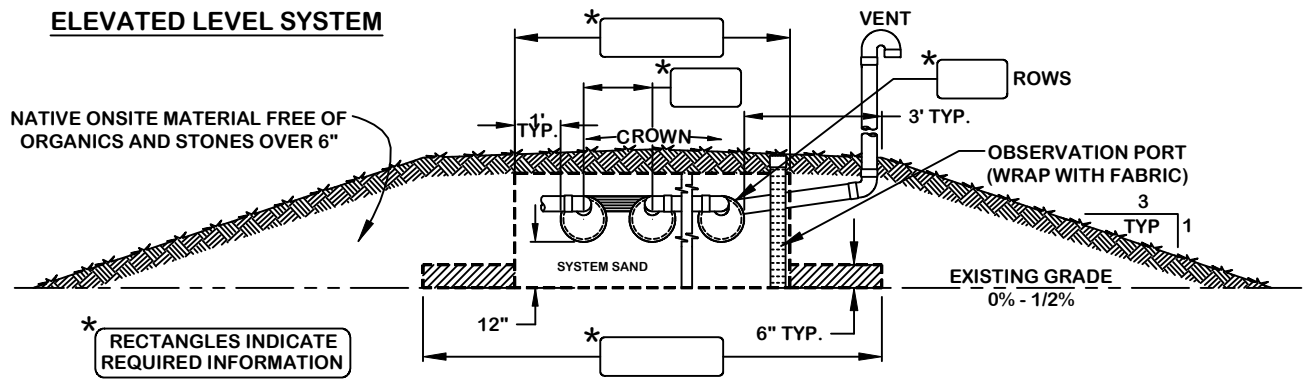
Indiana Soil Loading Rate (IN-SLR GPD/sf) circle one	0.25	0.30	0.50	0.60	0.75	1.20	<i>Attach Site/Soil Evaluation Report. Refer to Table B in manual.</i>
Presby Soil Loading Rate (PR-SLR GPD/sf) circle one	0.37	0.45	0.75	0.90	1.12	1.20	
Number of Bedrooms (determines system size)	Sizing charts assume 150 gallons per day per bedroom # of bedrooms x 150 gallons per day = Daily Design Flow (Add 1 bedroom for each jetted tub 125 gal.+ capacity)						Daily Design Flow
	Bedrooms x 150 =						GPD
Required Minimum Separation Distance to SHWT or Limiting Layer (Circle 24 inches or 30 inches)	24 INCHES (Design Flow < 450 GPD per Bed)			30 INCHES (Design Flow ≥ 450 GPD per Bed)			<i>Measured from the sand bed bottom/soil interface. It is acceptable to divide flows greater than or equal to 450 GPD into multiple beds in order to use 24" separation distance.</i>
Vertical Orientation of System (circle one)	SUBSURFACE (Infiltrative surface 4" or more below orig. grade)			ELEVATED (infiltrative surface < 4" below original grade)			<i>It is <u>always</u> preferable to raise the bed when a SHWT is encountered; however, a perimeter drain may still be required.</i>
Type of System (circle one)	GRAVITY FED			FLOOD DOSED			<i>Flood dose frequency: minimum=design flow ÷ 6 Maximum design flow ÷ 8 (per day)</i>
Configuration (circle one)	BASIC SERIAL (0.25 – 1.20 PLR GPD/sf)			COMBINATION (0.25 – 1.20 PLR GPD/sf)		NON-CONVENTIONAL (0.60 PLR GPD/sf or faster)	
Site Slope / System Slope	LEVEL (0-1/2%)		SLOPING _____ %			<i>6% max. slope for elevated systems 15% max. slope for subsurface systems</i>	
Depth to Limiting Layer	_____ inches			Depth to SHWT =		_____ inches	
Perimeter Drain included? <i>(Req'd. if SHWT is less than 24 in. from infiltrative surface)</i>	YES NO (circle one)			Minimum Drain Depth =		_____ inches	

Presby Design Criteria Worksheet, page 2

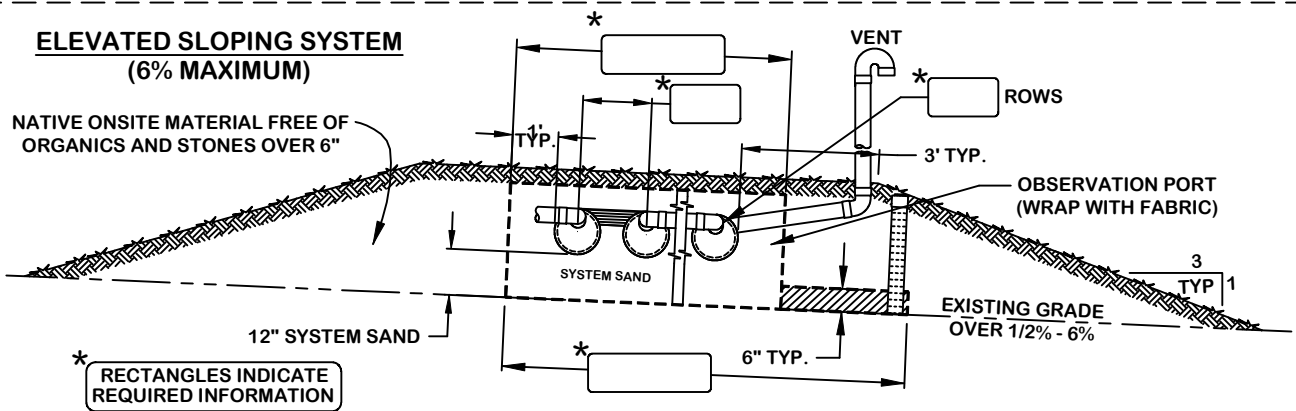
System Sand Bed Area = (from Table B)	_____ sq ft min.	System Sand Bed Length (SSBL) = (from Table C)	_____ ft min.
Row (line) Length min. =	_____ ft (SSBL -2 ft)	Bed Bottom at highest elevation of original grade	_____ inches below grade
High Vent from d-box?	YES NO (circle one)	<i>Flood dosed: High vent off d-box is required.</i> <i>Gravity: House (roof) vent is the high vent; no vent off d-box.</i> Low vent required for ALL systems. <i>Note: 10 ft. min. differential between. High and Low vent inlets.</i>	
Distribution Box included?	YES NO (circle one)	<i>D-box to be installed on stable, compacted base. Insulate d-box in pumped systems to prevent freezing. Flow equalizers required. If dividing flow to multiple sections or beds.</i>	
Minimum Presby pipe required	_____ FT OF PRESBY PIPE REQUIRED (From Table A)		Amount of pipe required is based on the # of bedrooms and the Presby pipe selected (AES, ES or SS)
Row (Line) Length used = (Maximum row length is 100 ft)	_____ FT ROW (LINE) LENGTH (minimum row length = minimum System Sand bed – 2 ft)		Ideal system shape is as long & narrow as the site will allow.
Total Number of Rows used	_____ FT PIPE REQ'D. ÷ ROW LGTH _____ = _____ MIN. NUMBER OF ROWS (Round UP if result is not a whole number)		All systems/beds require a minimum of 2 rows (lines). Easiest to work with 10 ft. increments.
Determine System Sand bed length (SSBL) used	_____ FT MIN. + 2 FT. = _____ FT SYSTEM SAND ROW LENGTH BED LENGTH		Bed length is always 2 ft more than minimum row (line) length.
Determine System Sand bed width minimum	_____ SSBA ÷ _____ FT SSBL used = _____ FT SYSTEM SAND BED WIDTH (SSBW)		System Sand always extends 1 ft horizontally beyond pipe ends.
Center- to-Center Row Spacing	SPACING IS FIXED AT 1.5 FT (level fields: center rows in middle of sand bed area) (sloping fields: group rows at high side of sand bed)		Distance from the center of one row to the center of the adjacent row.
Determine if Multiple Beds are required (Note: each bed must receive an equal amount of effluent.)	YES NO (circle one) If "Yes": _____ # of Beds Required		Multiple beds can be used to accommodate site constraints. Bed loading limit is 750 GPD; divide daily design flow by 750 to determine number of beds. It is acceptable to divide flows greater than 450 GPD into multiple beds in order to use 24 inches required separation distance rather than 30 inches.
If Multiple Beds are required, determine layout	END-TO-END SIDE-TO-SIDE (circle one) <i>Note: End-to-End configurations are preferred</i>		<i>End-to-End beds separated by a min. of 4ft. undisturbed soil.</i> <i>Side-to-Side beds separated by a minimum of 20 ft.</i>
Determine depth of System Sand required below pipes	12 INCHES 6 INCHES (if elevated) (circle one) (if subsurface)		Elevated systems require an additional 6 in. of System Sand below the pipes.
PROPOSED SYSTEM SUMMARY OF DESIGN CRITERIA :			
DESIGN CRITERIA:	REQUIRED MINIMUM	ACTUAL PROVIDED IN DESIGN	
Total Presby Pipe (ft.)	_____ FT	_____ FT	
Row (Line) Lengths	_____ FT	_____ FT	
Numbers of Rows (Lines)	_____	_____	
Center-to-Center Spacing	_____ FT	_____ FT	
Number of Beds	_____	_____	

CHOOSE CROSS-SECTION THAT APPLIES AND PROVIDE REQUIRED INFORMATION

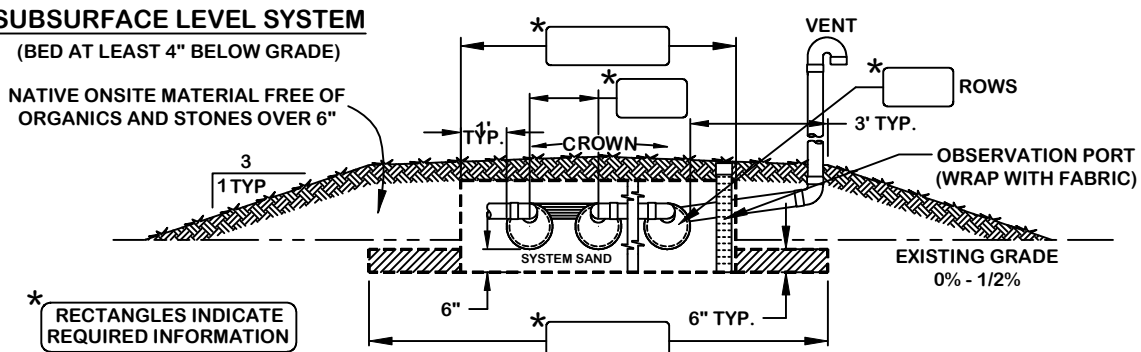
ELEVATED LEVEL SYSTEM



ELEVATED SLOPING SYSTEM (6% MAXIMUM)



SUBSURFACE LEVEL SYSTEM (BED AT LEAST 4" BELOW GRADE)



SUBSURFACE SLOPING SYSTEM (15% MAXIMUM) (BED AT LEAST 4" BELOW GRADE)

