

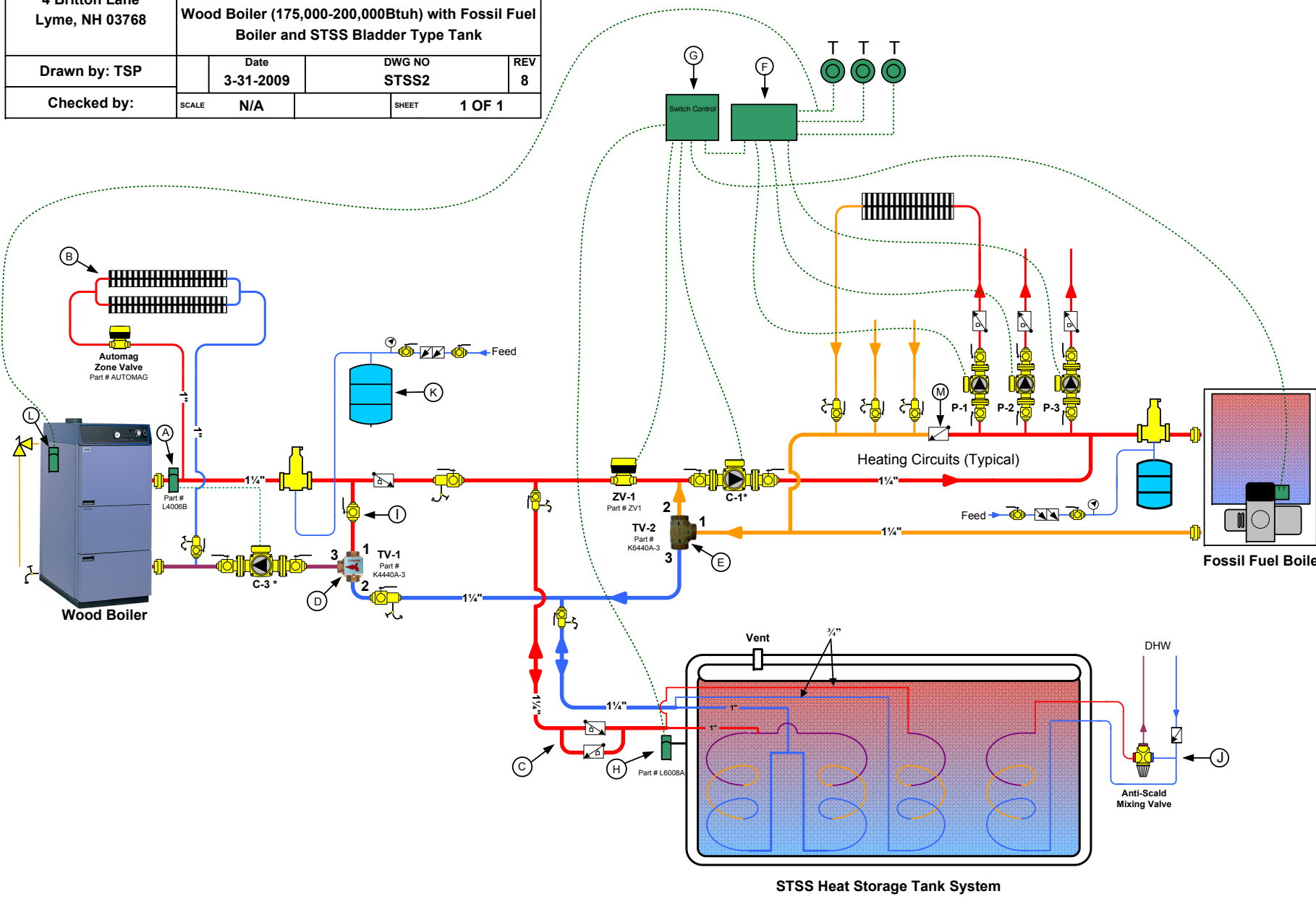
<b>BioHeatUSA</b> 4 Britton Lane Lyme, NH 03768	<b>BioHeatUSA Piping Layout Concept Diagram</b>		
	<b>Wood Boiler (175,000-200,000Btuh) with Fossil Fuel Boiler and STSS Bladder Type Tank</b>		
<b>Drawn by: TSP</b>	<b>Date</b> 3-31-2009	<b>DWG NO</b> STSS2	<b>REV</b> 8
<b>Checked by:</b>	<b>SCALE</b> N/A	<b>SHEET</b> 1 OF 1	

### Symbol Key

	Circulator w/ Isolation Flanges		Central Air Separator
	Ball Valve		Zone Valve
	Purging Valve		Pressure Reducing Valve
	Swing Check Valve		Pressure Relief Valve
	Weighted Check Valve		Union
	Backflow Preventer		Drain Valve
	Thermostat		

- ### NOTES:
- (A) Aquastat-Honeywell L4006B BioHeat part #L4006B- **Used Only for the Solo Plus Boiler with the Analog Controller.**
  - (B) Emergency Gravity Flow Overheat Loop-Needs to be 10% of Wood Boiler Output. The Automag Zone Valve must be Mounted Horizontally.
  - (C) Weighted Check Valves Used as Heat Traps
  - (D) Termovar Mixing Valve
  - (E) Termovar Diverter Valve-Termovar Kit-Part #K6440AF
  - (F) Circulator Switch Relay-Typical Controller
  - (G) BioHeatUSA Switch Control-Part # BLTCONTROL
  - (H) Backup Boiler Control-Honeywell Aquastat L4008A or Equivalent
  - (I) Balancing Valve Required. (Start with Valve Closed halfway, i.e., at 45 degrees)
  - (J) Anti-Scald Valve needs to be installed below tank's water line or swing check installed on cold water line to prevent hot water from entering cold water
  - (K) Amtrol 60 or Equivalent Expansion Tank is Suitable for most Solo Plus Installations up to 86 gallons  
Honeywell L4008B Overheat Aquastat Set to 200°F.
  - (L) Connected to the Largest Heating Circuit.-**Used with the Solo Plus W/Analog Controller, Froling FHG, and Solo Innova.**
  - (M) Check Valve Should be a Swing Check and not a Weighted Check Valve to Prevent Ghost Flow to Heating Circuits.

**\*Circulator Notes:**  
 C-3 and C-1 Circulator Sizing:  
 (Multi-Speed Circulator Recommended)  
 2-120' coils-Taco 007 or Equivalent.  
 2-180' coils-Taco 010 or Equivalent.  
 3-180' coils-Taco 010 or Equivalent.



This is only a **concept** drawing. Final design, installation and code compliance details are the responsibility of the designer/installer of the system.