



Advanced Hydronic Design Part 1

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# **Welcome to WMS**

## **Advanced Design Considerations**

### **Part 1**

#### **What will be covered**

**US Boiler Sales**

**How to pick the correct boiler for the job?**

**Lowering system Temperatures for Return on Investment**

**Sizing the System Piping**

**Piping Options**

**Piping and controlling Radiant Heating for comfort.**

## Picking The Right Boiler

There are so many options in today's market?

How do you pick the right boiler?

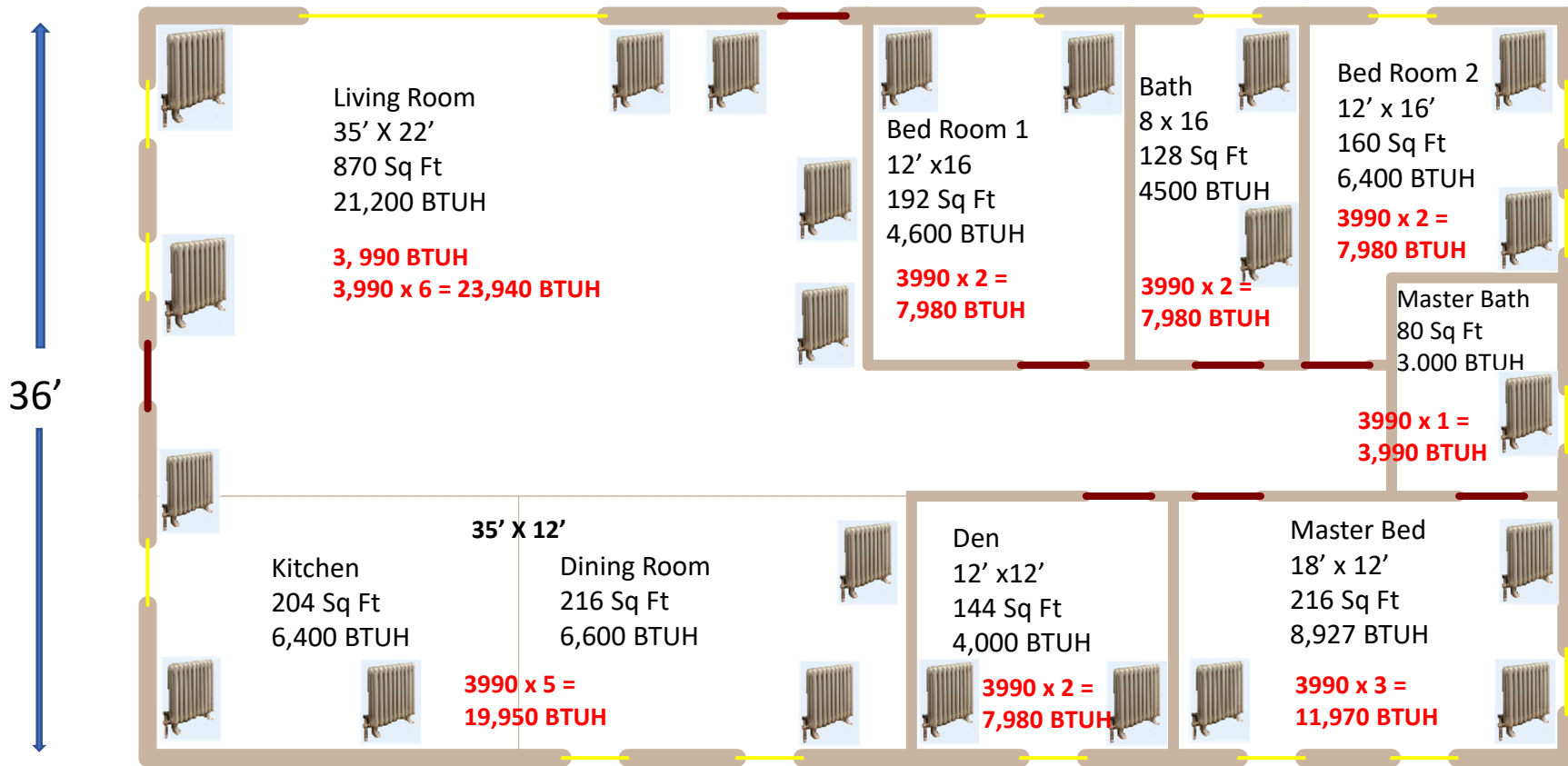
Why is it the best for the existing application?

Which one is going to give my customer the best service?

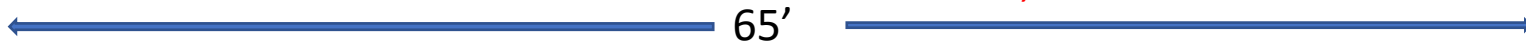
Which option will give them the best return on investment?



**Connected Load**  
**Typical Ranch Style Home**



Total Connected Load = 23 X 3,990 = 91,770 BTUH  
**Total Load 65,627 BTUH**



## What is Next?

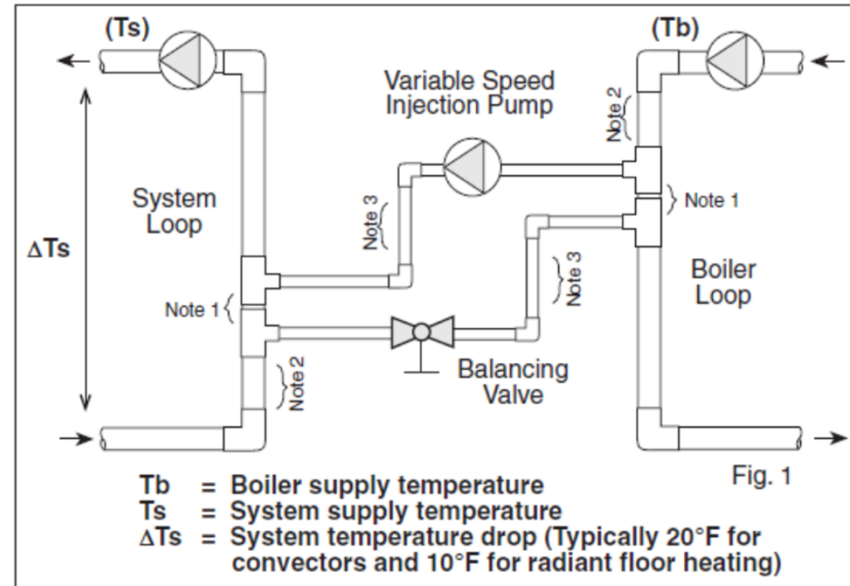
Is the customer happy with the existing heat?

If they are a target for Condensing Equipment this is a great application

It is also a great application for a Non-Condensing boiler with outdoor reset.

Let's look at some options.





## INJECTION GPM & PIPE SIZE SHEET

	RADIANT LOOP BTUH	120,000				GPM	PIPE SIZE
<b>TB</b>	SYSTEM LOOP TEMPERATURE	180				0-2	"1/2"
<b>TS</b>	RADIANT LOOP DESIGN TEMP	145				2.1-4.9	"3/4"
<b>ΔTs</b>	RADIANT LOOP DESIGN ΔT	30				5.0-10	"1"
						10.1-18	"1 1/4"
						18.1-28	"1 1/2"
	INJECTION GPM	3.7					
	INJECTION PIPE SIZE						