



*GAYLORD HOSPITAL  
AND SOLAR THERMAL*

November 8, 2013

Introduction  
to the  
Simplicity of  
Solar Thermal  
in a  
Healthcare  
setting



# TEAMS CORPORATE STRUCTURE

Legacy Mechanical Group, Inc.



CES, Inc. – Engineering Design Services



# SOLAR THERMAL CONSIDERATIONS

Feasibility

Implementation

Performance Verification



# FEASIBILITY

How much do I need?

Can I fit it on the roof?

What is the payback?

(aka - how much will someone give me)



# IMPLEMENTATION

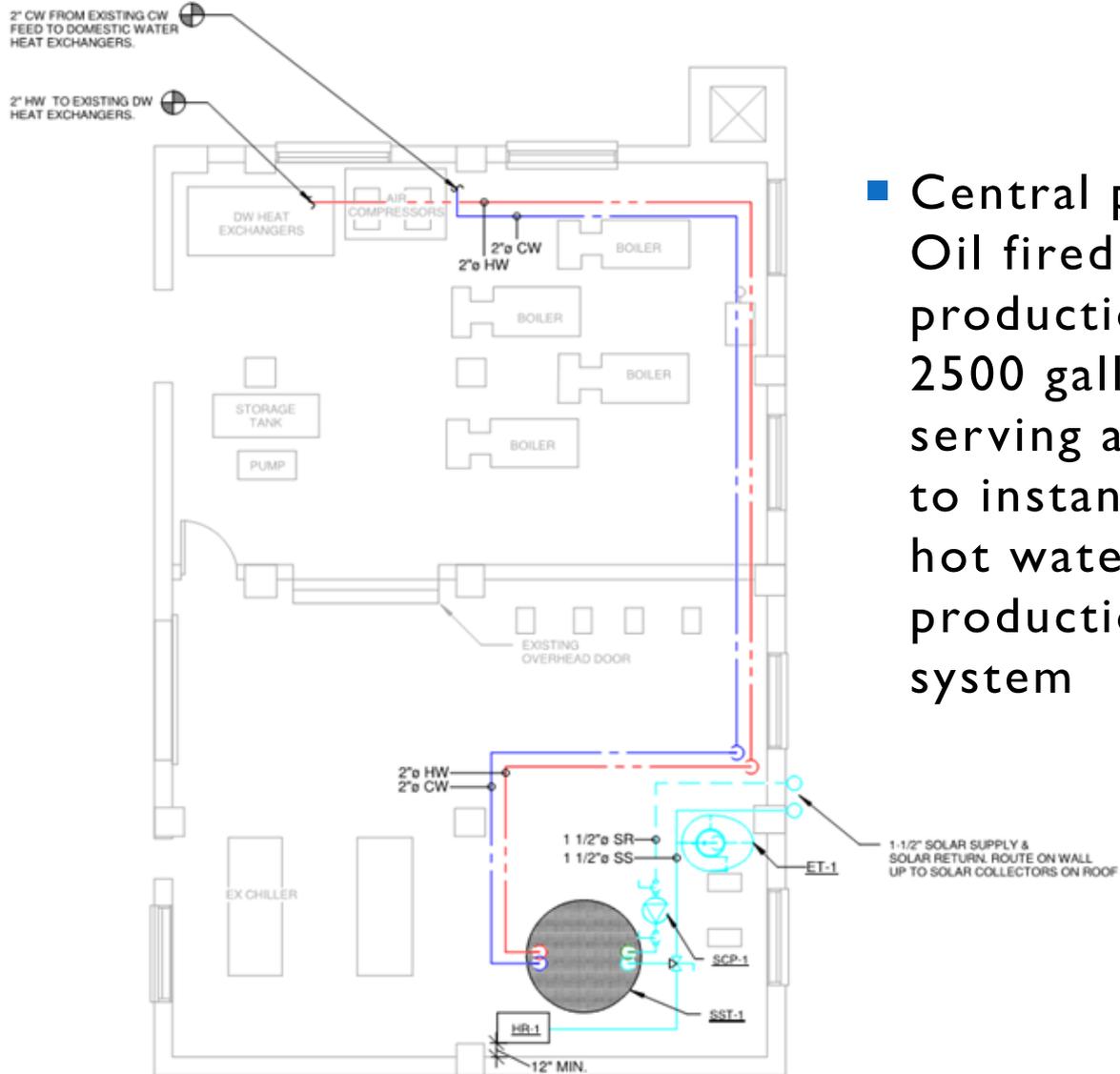
Storage tank volume and physical requirements

Connection to various system types

Minimize down time



# CENTRAL PLANT CONNECTION



- Central plant – Oil fired Steam production – 2500 gallon serving as preheat to instantaneous hot water production system







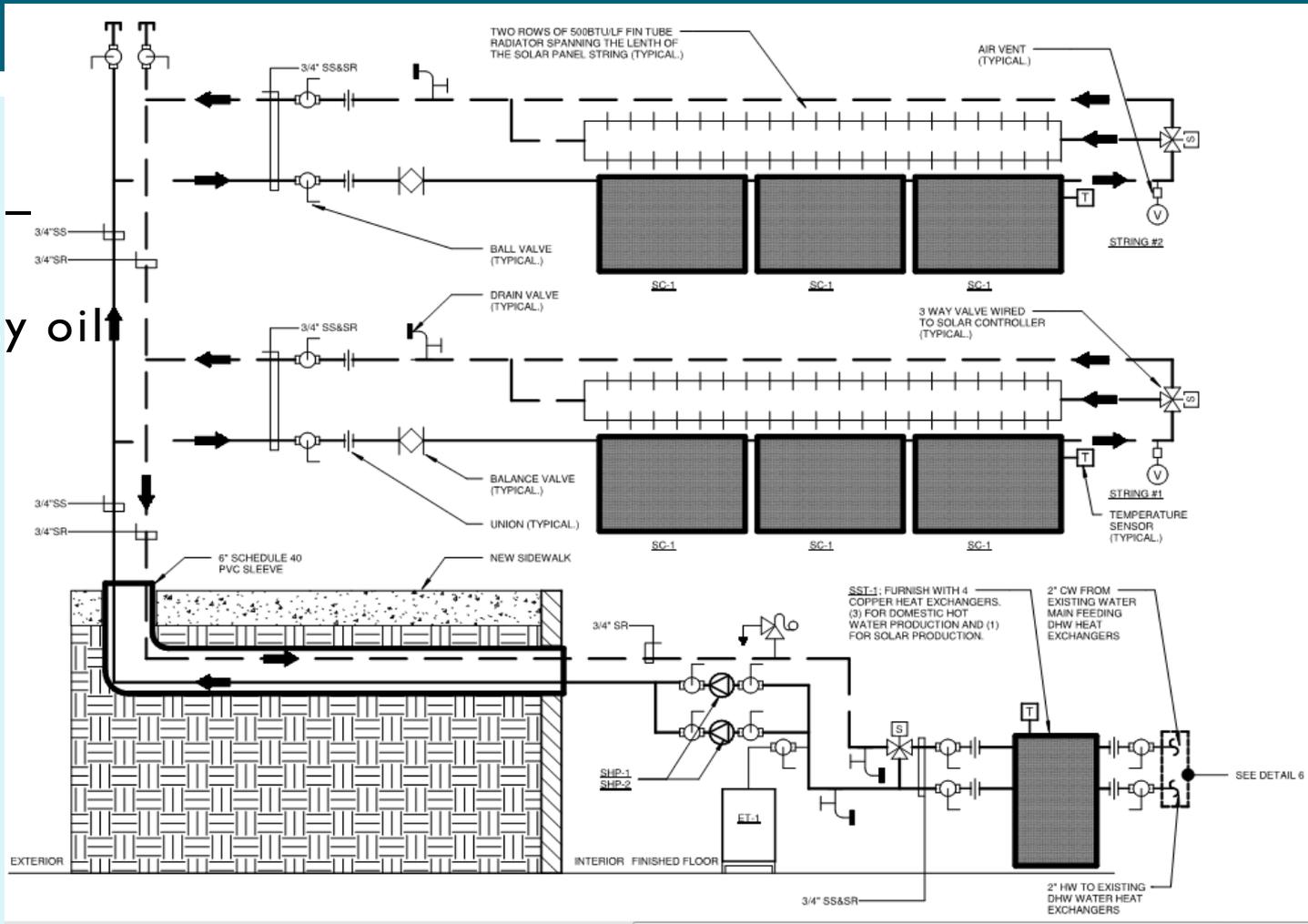






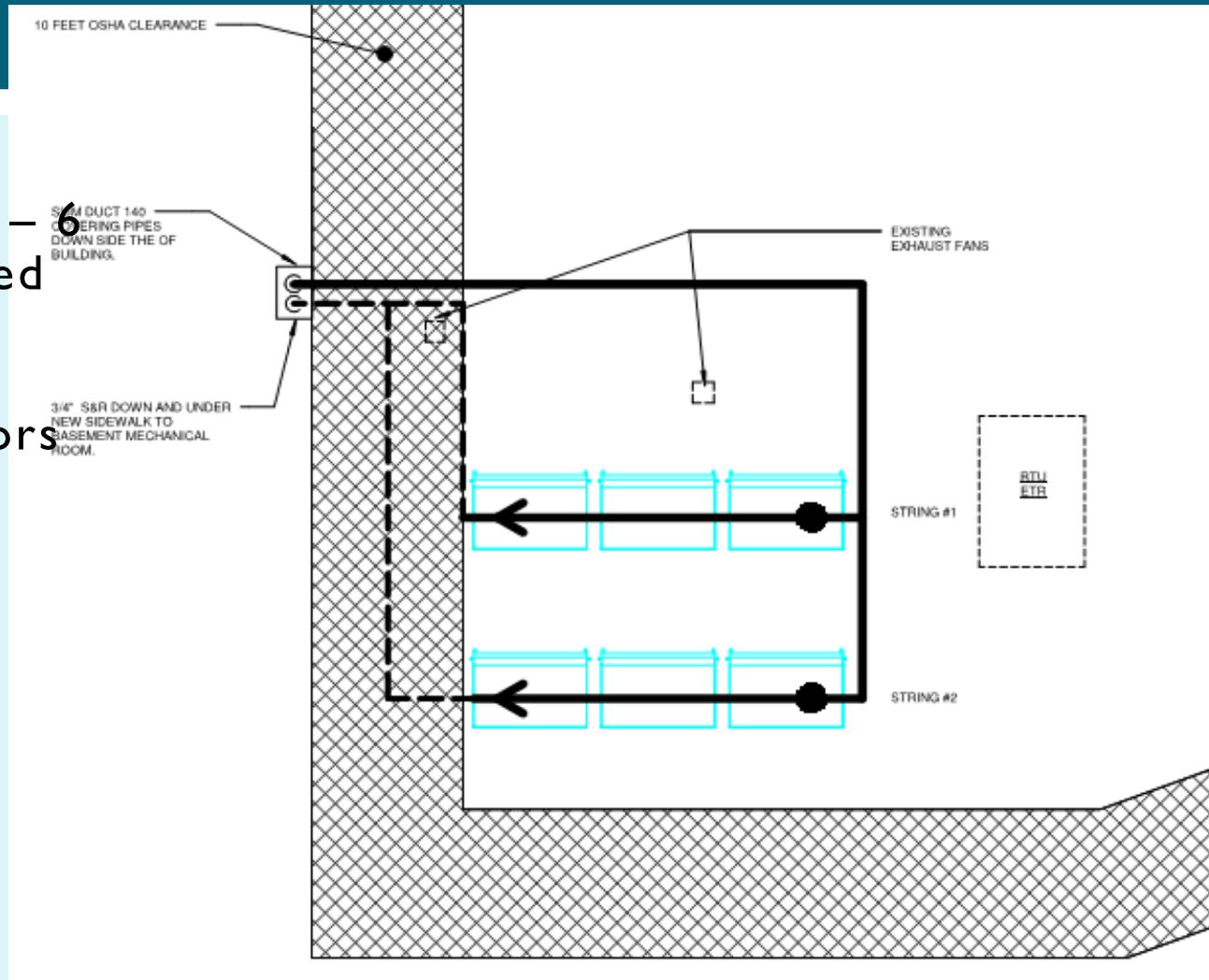
# MILNE PAVILION CONNECTION

- Milne pavilion — High Efficiency oil fired



# MILNE PAVILION CONNECTION

- Milne pavilion – 6 Evacuated SolarUs Solar Collectors







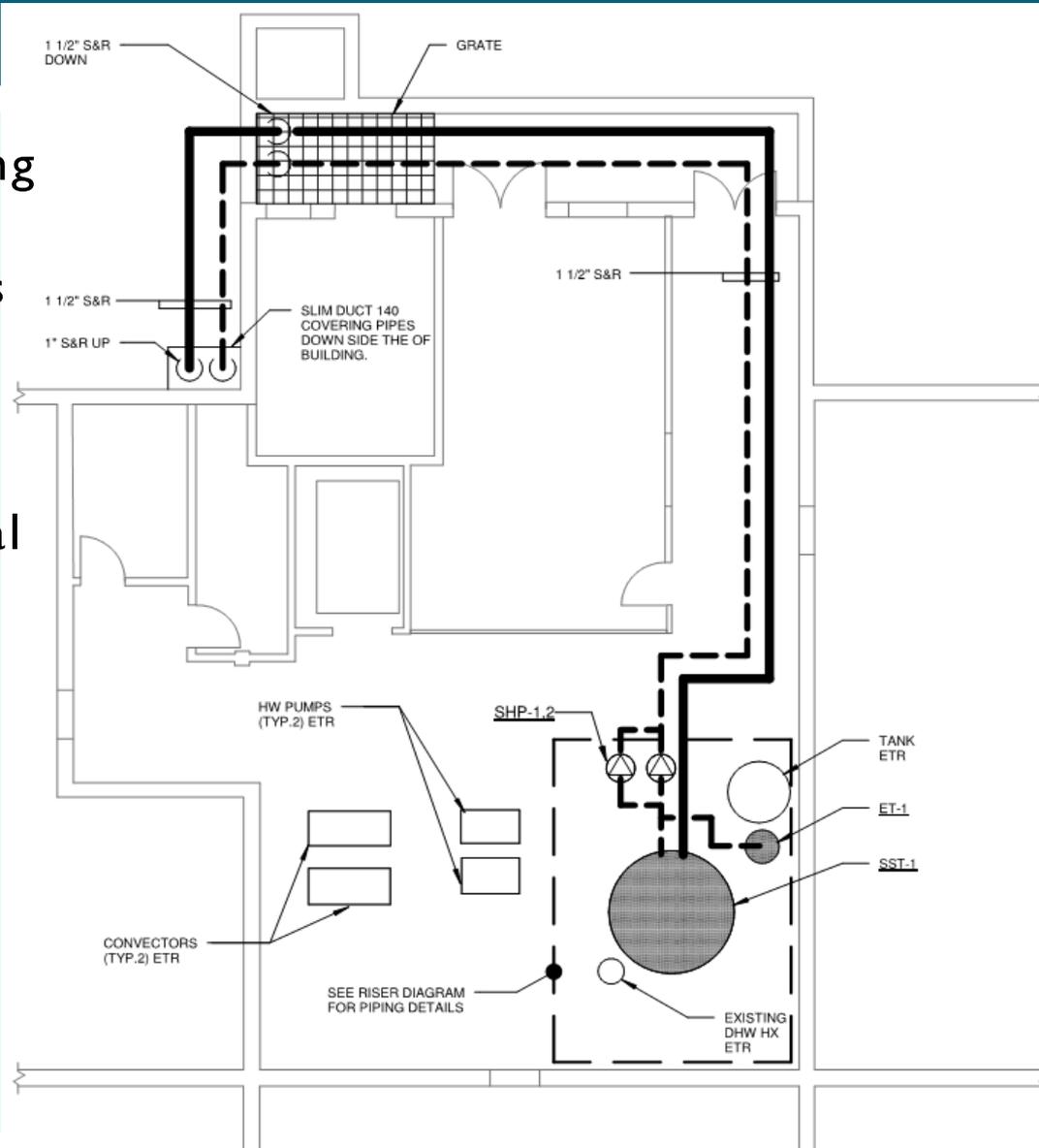


# MILNE MECHANICAL ROOM



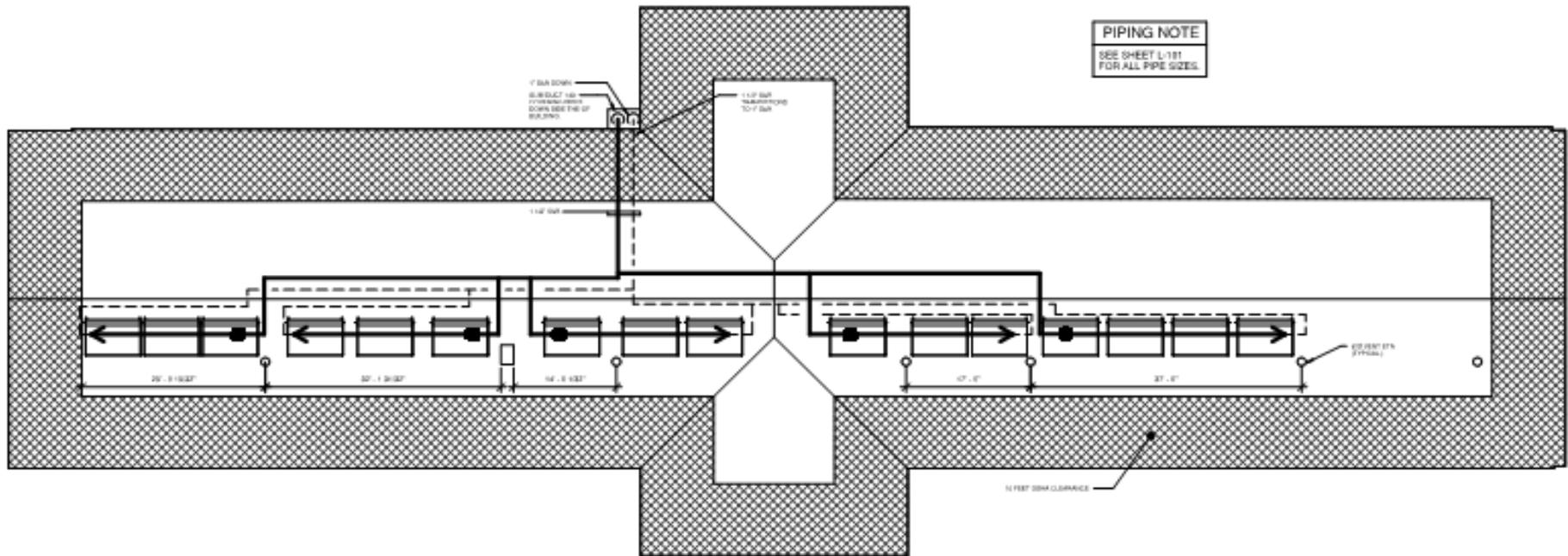
# LYMAN BUILDING CONNECTION

- Lyman Building – instantaneous hot water steam generators - served central plant



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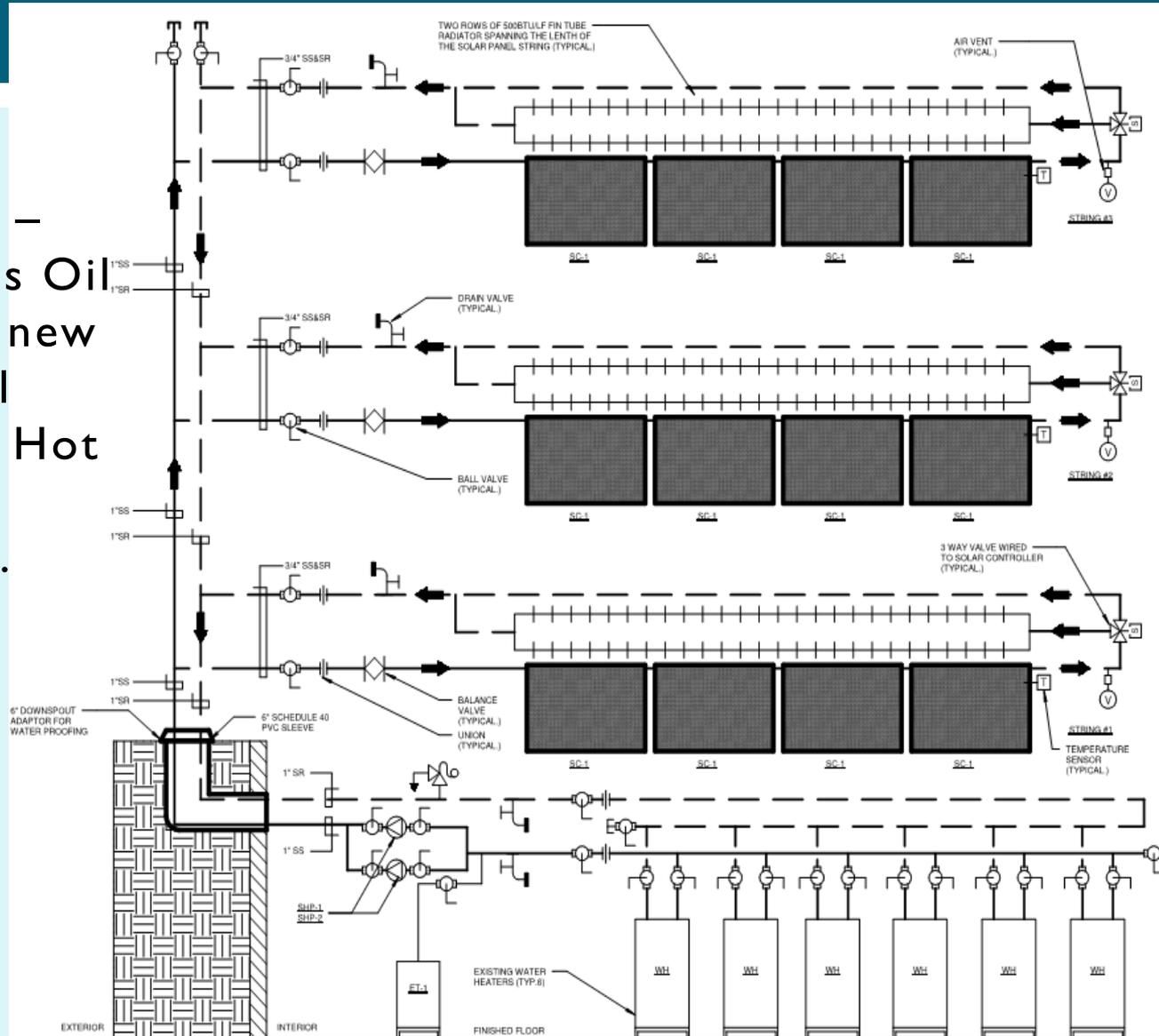


# LYMAN BUILDING CONNECTION



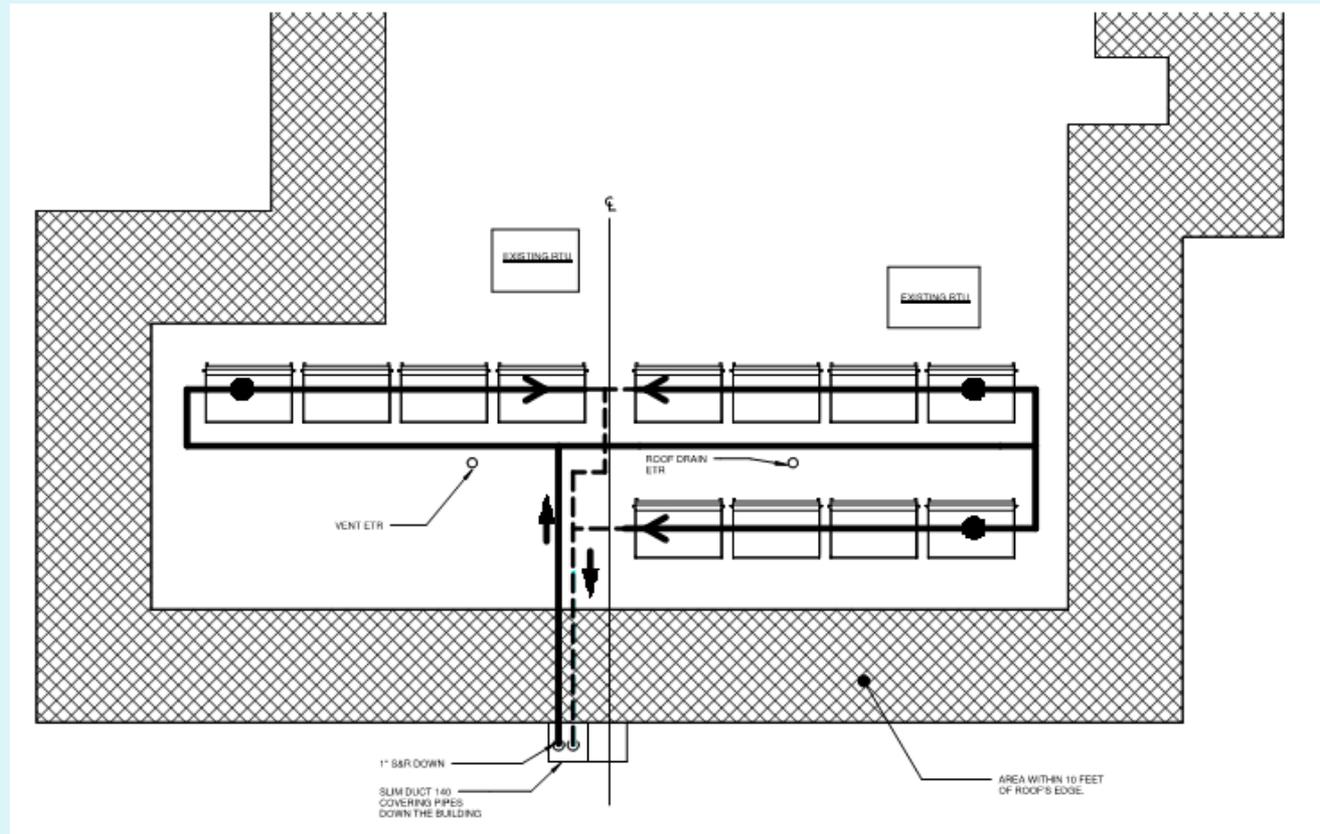
# JACKSON BUILDING CONNECTION

- Jackson Building – Burderus Oil fired to new dual coil Indirect Hot Water Heaters.



# JACKSON BUILDING CONNECTION

- Jackson Building – 12 SolarUS Evacuated Solar Collectors



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- Jackson Building – 12 SolarUS Evacuated Solar Collectors



# JACKSON BUILDING CONNECTION

- Jackson Building – I  
SolarUS  
Evacuated  
Solar  
Collectors



# PERFORMANCE VERIFICATION

- Hospital's Oil Consumption – before
- after



# LESSONS LEARNED

- Lessons Learned –
- Weather – predict it better
- Existing roof structural unknowns

