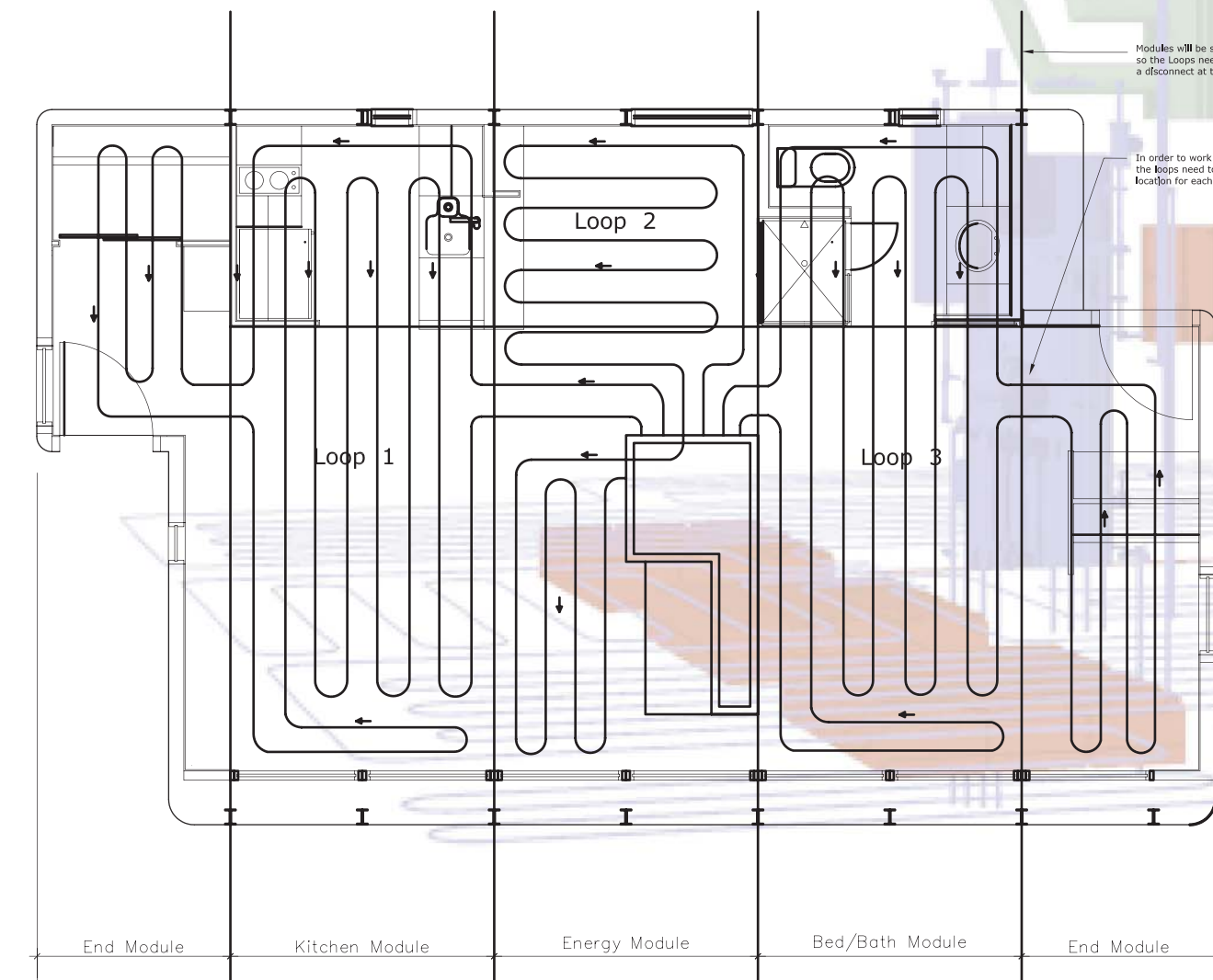


M202 Equipment Schedule

Sched.	Unit	Manufacturer	Model	Notes:
(A)	Solar Collectors	Viessman	Vitosol 300/100	---
(B)	Storage Tanks	Viessman	Vitocell-B 100	---
(C)	Boiler	Electro	EMB-4	17,070 BTU/hr; 120V 42A
(D)	Circulation Pump	Grundfos	Series UP 15-42F	Brute II15F 115V15A
(E)	3-way Diverting Valve	Honeywell	T100R1004	w/ Temp Contoller; V135 A
(F)	Air Eliminator	Splrovent	VJR-100 TM	---
(G)	Pressure Release Valve	Watts	174A	3/4" F x 3/4" F 30 psie
(H)	Expansion Tank	Waterguard	ETC-2X	---
(J)	Reducing Valve	ITT Jabsco	FB-38 FF	w/ quikc fill
(K)	Radiant Heat Manifold	Wiresbo	A2620300	3-loop S&R with Flow/Temperature Meters

Notes

- The 3-way Diverting Valves should be provided so that when the radiant floors are off, the water cycles strait thru the boiler.
- The boiler and circulation pump 'D', are the main energy pulls of the house. We need compete control of these items.
- See --- for thermostat placement and details.
See --- for Radiant Floor Zone Diagrams.
See --- for House Plumbing.
See --- for Riser Diagram.
- Solar Thermal Collectors can be placed close to a 45 degree angle.
- House is 800 Sq.Ft.



ESTIMATE OF DAILY HOT WATER USAGE FOR COMPETITION:

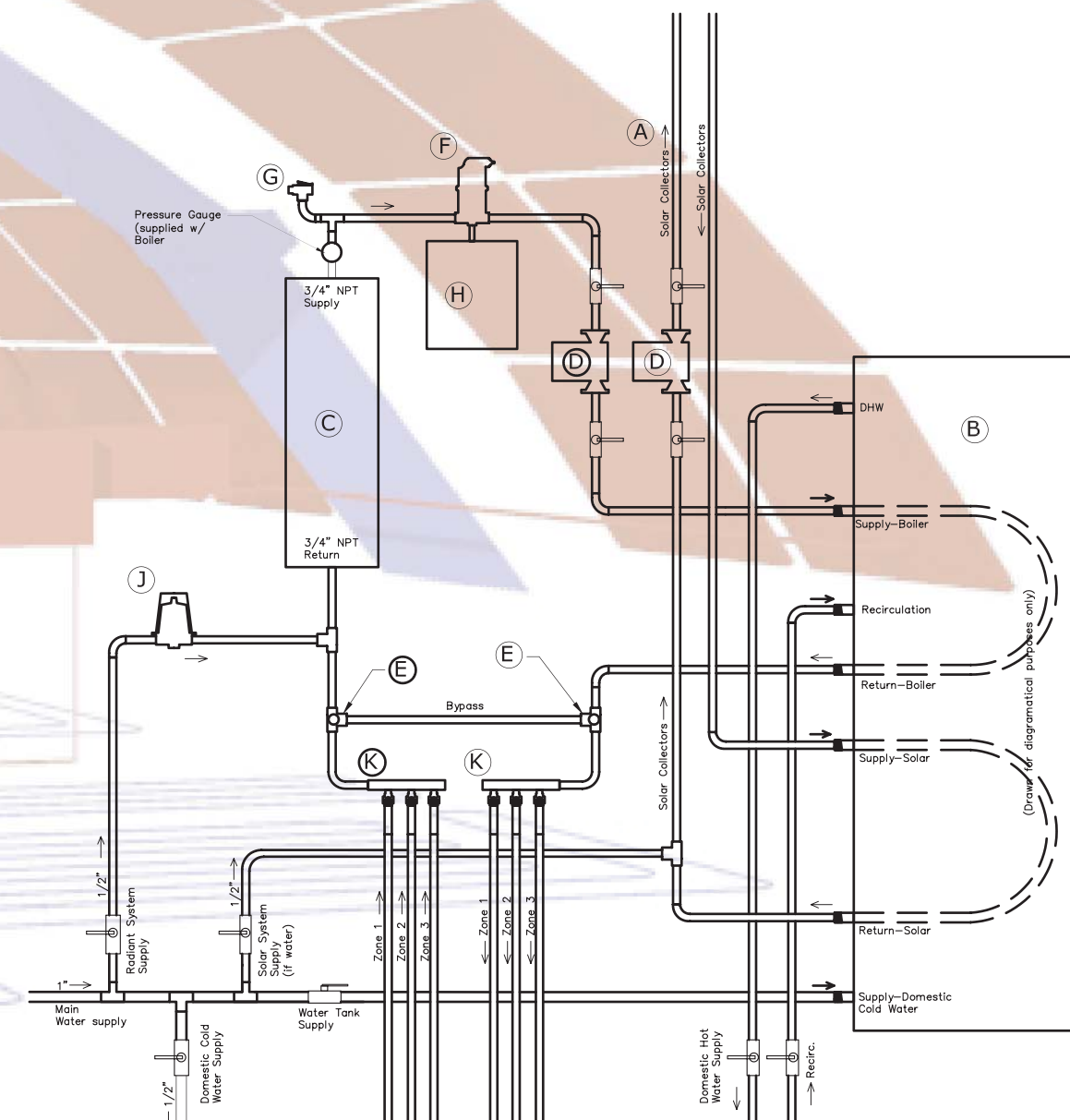
Shower, 15 gallons, 2 showers per day	30 gallons total
Food preparation and clean-up, 5 gallons, 1 times per day	5 gallons total
Personal (hand-washing, etc.), 2 gallons, 6 times per day	12 gallons total
Fisher and Paykel dishwasher, 5 gallons per cycle, 1 cycle per day	5 gallons total
Clothes washer, 20 gallons per cycle, 1 cycle per day	20 gallons total

	77 gallons total

WATER USE SCHEDULE:

7 am	1 shower, 2 personal	15 + 2 (2) =	19 gal
1 pm	1 clothes washing cycle		20 gal
6 pm	2 personal, 1 dishwashing cycle, 1 food prep	2 (2) + 5 + 5 =	14 gal
10 pm	1 shower, 2 personal	15 + 2 (2) =	9 gal

Total amount of water used per day during week of competition: 72 gal.



Mi * So

University of Michigan
Solar House Project

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Solar Decathlon 2005
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Washington D.C. 20001

Design Drawings +
Submittals
June 15, 2004

Design Drawings +
Submittals Revision
October 1, 2004

Construction Drawings
50% Completion
November 1, 2004

Construction Drawings
100% Completion
