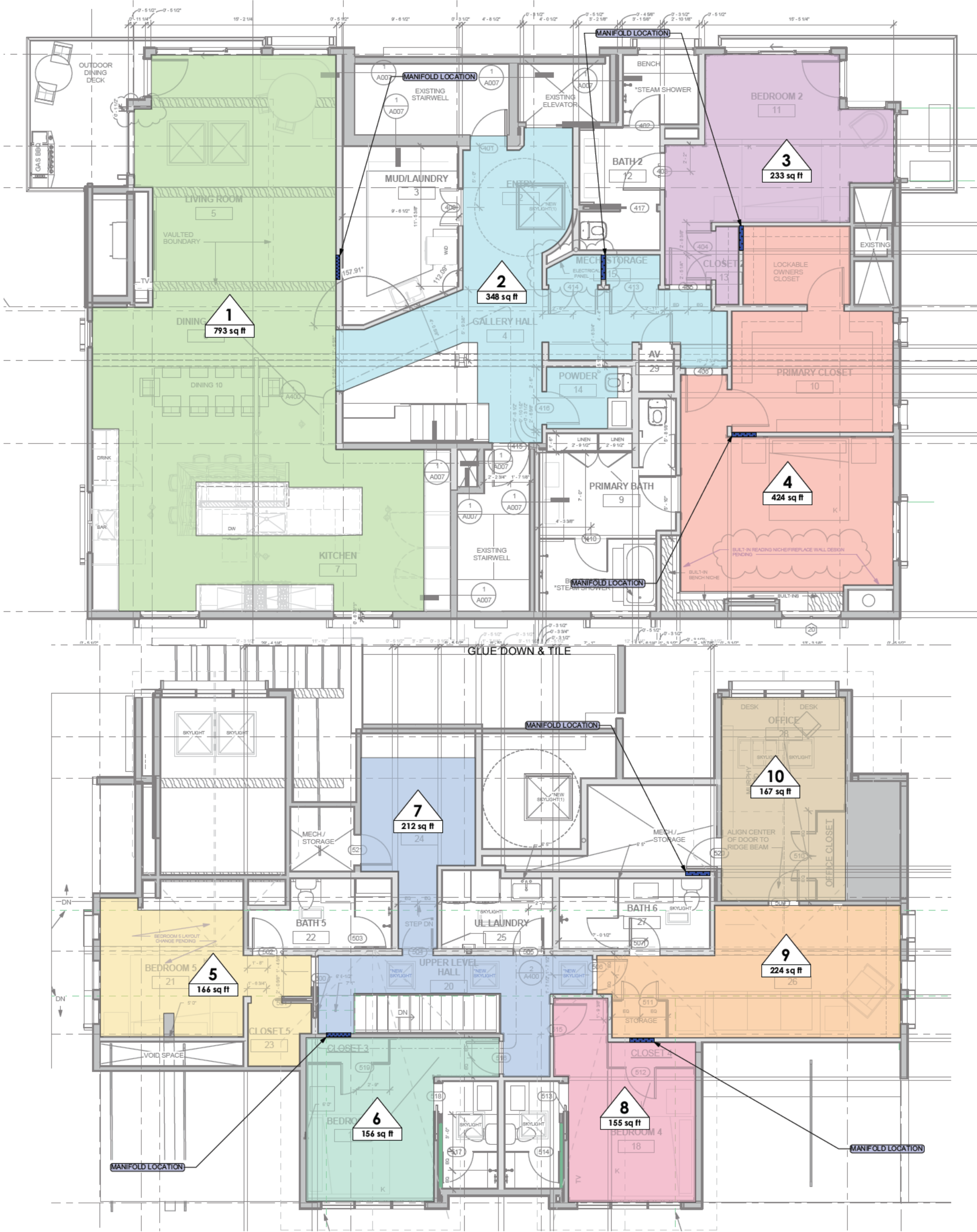


ZONE

- 1
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- 9
- 10

ZONING SCHEDULE

ZONE	SQ. FT
1	793
2	348
3	233
4	424
5	166
6	156
7	212
8	155
9	224
10	167
TOTAL	2877



1 ZONING
Scale: 1/8" = 1'-0"

NOTE: SHADED AREAS TO BE COVERED WITH THERMALBOARD PANELS, AREAS NOT SHADED WILL NEED TO BE INFILLED WITH TYP. SHEET GOODS



LOOP

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- 15
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- 24
- 25
- 26
- 27
- 28



MANIFOLD SCHEDULE			
LABEL	ITEM	LOCATION	LOOPS SERVICED
A	7 LOOP MANIFOLD	DINING ROOM	1,2,3,4,5,6,7
B	3 LOOP MANIFOLD	ENTRY STORAGE	8,9,10,
C	2 LOOP MANIFOLD	CLOSET 2	11,12
D	4 LOOP MANIFOLD	PRIMARY CLOSET	13,14,15,16
E	6 LOOP MANIFOLD	CLOSET 3	12,18,19,20,21,22
F	4 LOOP MANIFOLD	CLOSET4	23,24,25,26
G	2 LOOP MANIFOLD	MECH/STORAGE	27,28

1 OVERALL DESIGN
Scale: 1/8" = 1'-0"



LOOP

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1 OVERALL FLOW DESIGN
Scale: 1/8" = 1'-0"

- ROUTED THRU BOARD CHANNEL
- CUSTOM ROUTED
- ROUTED BELOW SUBFLOOR

PEX SCHEDULE

Loop	Feet of PEX In Board	Approx Leader Length	Est. Total Feet of PEX FT
1	157	8	165 FT
2	157	8	165 FT
3	159	6	165 FT
4	162	4	166 FT
5	162	3	165 FT
6	159	5	164 FT
7	160	5	165 FT
8	163	4	167 FT
9	162	6	168 FT
10	161	4	165 FT
11	159	3	162 FT
12	166	5	171 FT
13	150	3	153 FT
14	151	3	154 FT
15	148	3	151 FT
16	148	3	151 FT
17	120	7	127 FT
18	113	9	122 FT
19	110	7	117 FT
20	111	2	113 FT
21	158	5	163 FT
22	139	3	142 FT
23	114	3	117 FT
24	114	3	117 FT
25	163	2	165 FT
26	162	2	164 FT
27	117	8	125 FT
28	118	7	125 FT
APPROX TOTAL			4194 FT

A WBI PRODUCT

THERMALBOARD

Overall Flow Diagrams

v. 4

DMB

Sheet 3

5/5/25

PEX SCHEDULE			
Loop	Feet of PEX In Board	Approx Leader Length	Est. Total Feet of PEX FT
1	157	8	165 FT
2	157	8	165 FT
3	159	6	165 FT
4	162	4	166 FT
5	162	3	165 FT
6	159	5	164 FT
7	160	5	165 FT
8	163	4	167 FT
9	162	6	168 FT
10	161	4	165 FT
11	159	3	162 FT
12	166	5	171 FT
13	150	3	153 FT
14	151	3	154 FT
15	148	3	151 FT
16	148	3	151 FT
17	120	7	127 FT
18	113	9	122 FT
19	110	7	117 FT
20	111	2	113 FT
21	158	5	163 FT
22	139	3	142 FT
23	114	3	117 FT
24	114	3	117 FT
25	163	2	165 FT
26	162	2	164 FT
27	117	8	125 FT
28	118	7	125 FT
APPROX TOTAL			4194 FT

LOOP

1

21

2

22

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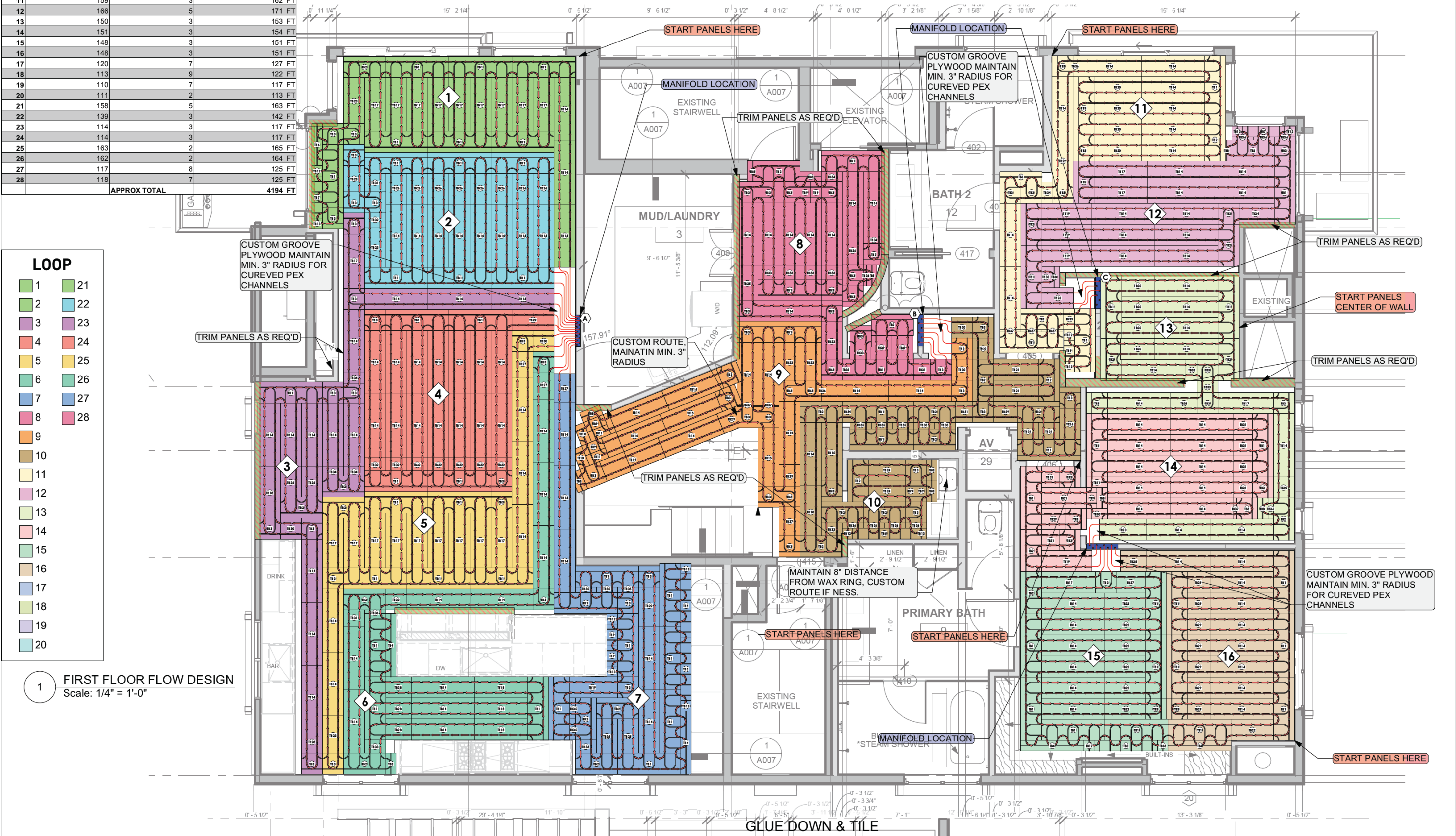
17

18

19

20

1 FIRST FLOOR FLOW DESIGN
Scale: 1/4" = 1'-0"



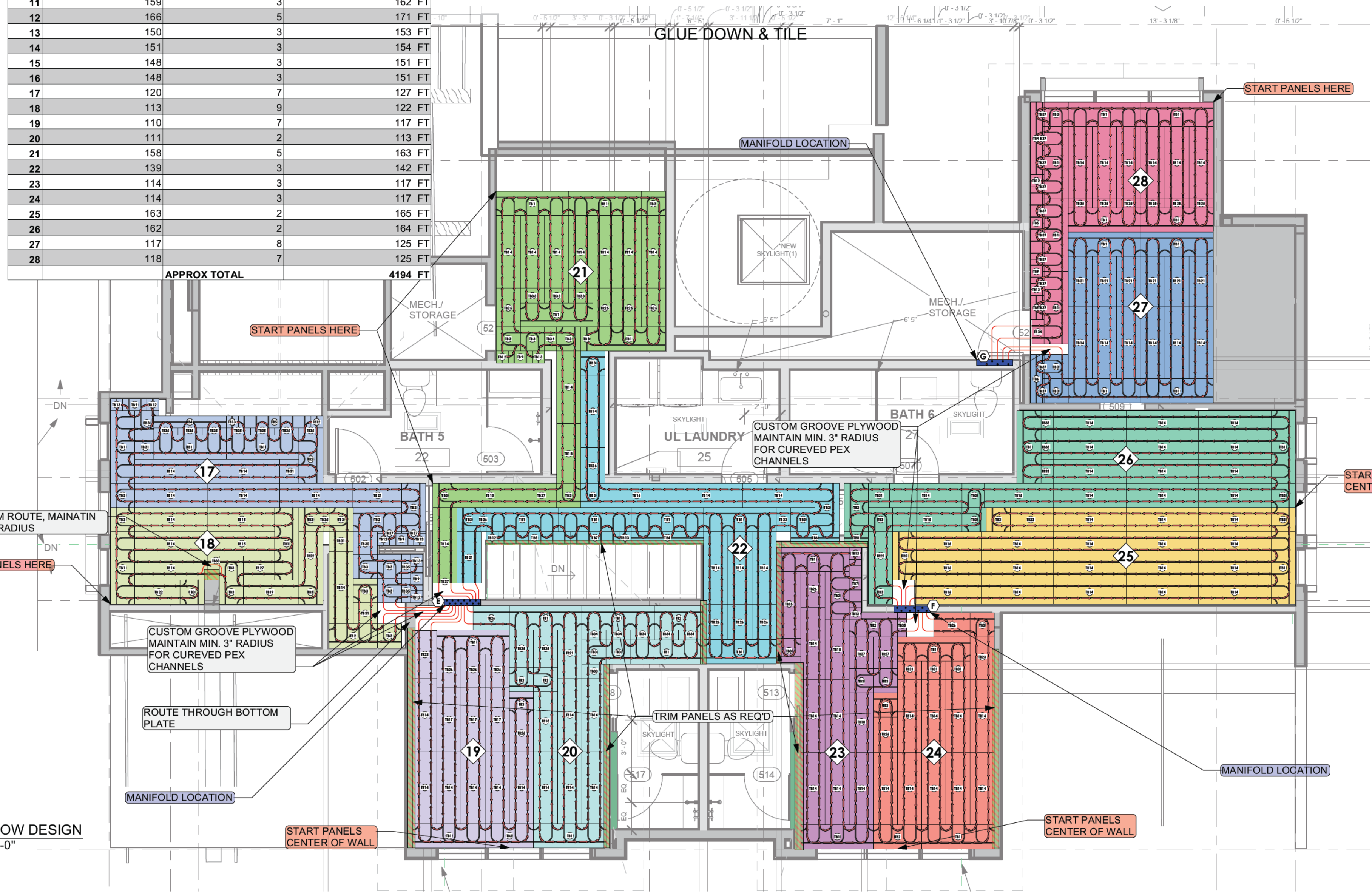
LOOP

- 1
- 2
- 3
- 4
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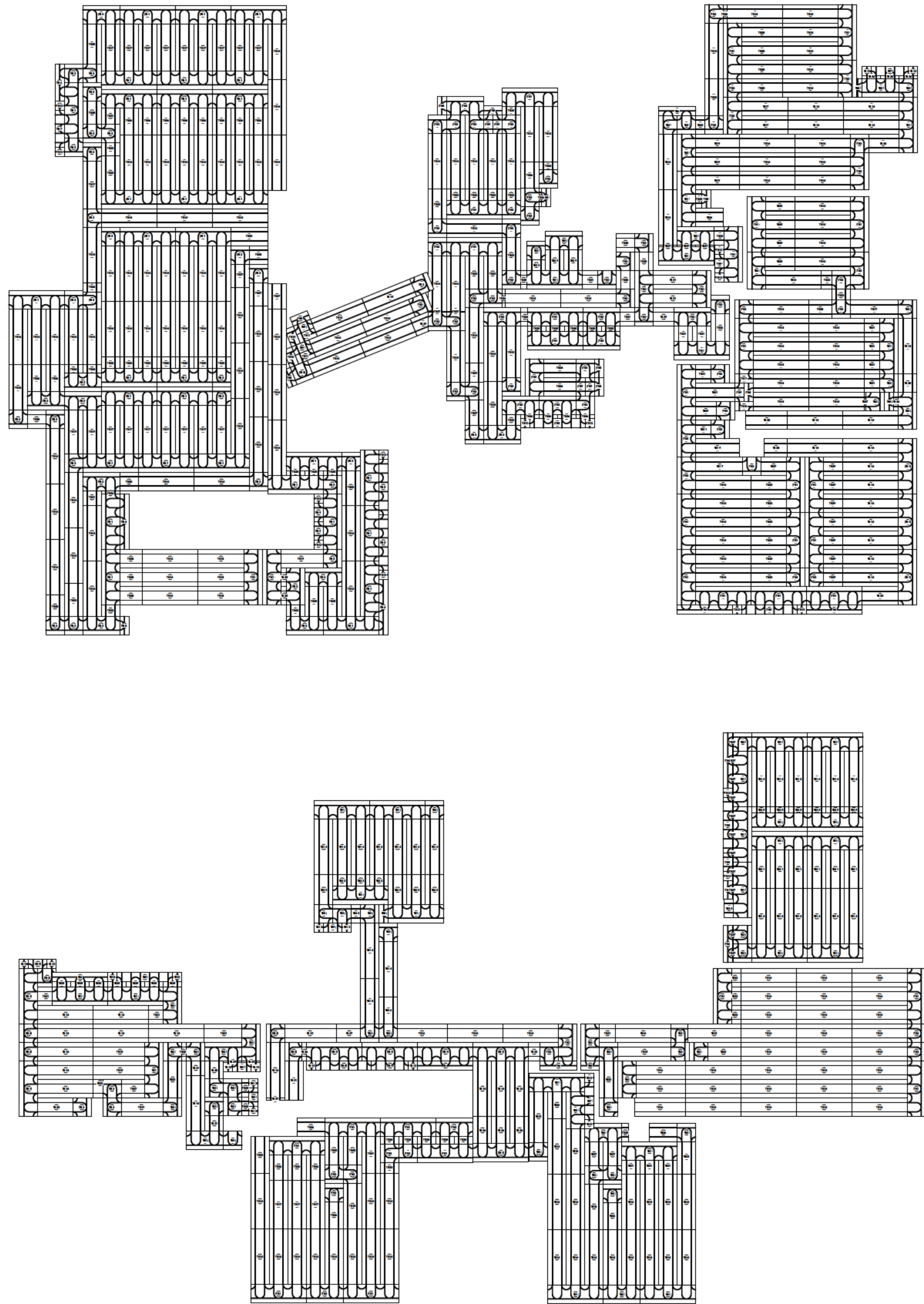
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PEX SCHEDULE

Loop	Feet of PEX In Board	Approx Leader Length	Est. Total Feet of PEX FT
1	157	8	165 FT
2	157	8	165 FT
3	159	6	165 FT
4	162	4	166 FT
5	162	3	165 FT
6	159	5	164 FT
7	160	5	165 FT
8	163	4	167 FT
9	162	6	168 FT
10	161	4	165 FT
11	159	3	162 FT
12	166	5	171 FT
13	150	3	153 FT
14	151	3	154 FT
15	148	3	151 FT
16	148	3	151 FT
17	120	7	127 FT
18	113	9	122 FT
19	110	7	117 FT
20	111	2	113 FT
21	158	5	163 FT
22	139	3	142 FT
23	114	3	117 FT
24	114	3	117 FT
25	163	2	165 FT
26	162	2	164 FT
27	117	8	125 FT
28	118	7	125 FT
APPROX TOTAL			4194 FT



1 SECOND FLOW DESIGN
Scale: 1/4" = 1'-0"



1 OVERALL PARTS
Scale: 1/8" = 1'-0"



THERMALBOARD PANEL SCHEDULE					
QTY	SORT	ITEM	PART #	SQ FT PER BOARD	TOTAL
102	1	48" Supercombo	TB1	5.333	543.966
44	2	32" Supercombo	TB2	3.556	156.464
119	3	16" Supercombo	TB3	1.778	211.582
7	4	48" Supercombo Top	TB4	2.667	18.669
7	5	48" Supercombo Bottom	TB5	2.667	18.669
4	6	2/3 Supercombo Top	TB6	1.778	7.112
4	7	2/3 Supercombo Bottom	TB7	1.778	7.112
15	8	1/6 Supercombo Top Half	TB8	0.889	13.335
15	9	1/6 Supercombo Bottom	TB9	0.889	13.335
3	10	1/6 Supercombo Left	TB10	0.889	2.667
3	11	1/6 Supercombo Right	TB11	0.889	2.667
15	12	1/12 Supercombo Left	TB12	0.444	6.66
15	13	1/12 Supercombo Right	TB13	0.444	6.66
218	14	48" Straight	TB14	5.33	1161.94
10	15	46" Straight	TB15	5.111	51.11
4	16	44" Straight	TB16	4.889	19.556
24	17	42" Straight	TB17	4.667	112.008
9	18	40" Straight	TB18	4.444	39.996
8	19	38" Straight	TB19	4.22	33.76
6	20	36" Straight	TB20	4	24
12	21	34" Straight	TB21	3.778	45.336
14	22	32" Straight	TB22	3.556	49.784
7	23	30" Straight	TB23	3.33	23.31
3	24	28" Straight	TB24	3.11	9.33
13	25	26" Straight	TB25	2.889	37.557
25	26	24" Straight	TB26	2.667	66.675
9	27	22" Straight	TB27	2.44	21.96
7	28	20" Straight	TB28	2.222	15.554
13	29	18" Straight	TB29	2	26
8	30	16" Straight	TB30	1.778	14.224
20	31	14" Straight	TB31	1.556	31.12
8	32	12" Straight	TB32	1.333	10.664
20	33	10" Straight	TB33	1.111	22.22
14	34	8" Straight	TB34	0.889	12.446
29	35	6" Straight	TB35	0.667	19.343
13	36	4" Straight	TB36	0.444	5.772
20	37	2" Straight	TB37	0.222	4.44
COMBOS			STRAIGHTS		
Sub Total SqFt	1008.898		Sub Total SqFt	1858.105	
Sub Total Boards	189.18		Sub Total Boards	348.416	
Round Up Boards	190		Round Up Boards	349	
5%	9.5		5%	17.45	
Boards to be Shipped	200		Boards to be Shipped	367	

THERMALBOARD TYPICAL INSTALLATION DETAILS OVER WOOD SUBFLOOR

CARPET OVER THERMALBOARD RADIANT FLOOR HEATING

FLOATING ENGINEERED HARDWOOD OVER THERMALBOARD RADIANT FLOOR HEATING

LAMINATE FLOORING OVER THERMALBOARD RADIANT FLOOR HEATING

NAIL DOWN HARDWOOD OVER THERMALBOARD RADIANT FLOOR HEATING

VINYL OVER THERMALBOARD RADIANT FLOOR HEATING

TILE OVER THERMALBOARD RADIANT FLOOR HEATING

NOTE: TYPICAL INSTALLATION DETAILS ARE SHOWN. EXACT DETAILS MAY DIFFER BASED ON ARCHITECTURAL DESIGN. SOME FLOOR COVERINGS MAY NOT BE APPLICABLE TO THIS DESIGN AND OTHERS MY BE POSSIBLE. BE SURE TO READ AND INSTALL ACCORDING TO THE MOST RECENT THERMALBOARD DESIGN AND INSTALLATION MANUAL AS IT MAY CONTAIN ADDITIONAL DETAILS AND GUIDELINES. DETAILS FOR SPECIAL CIRCUMSTANCES SUCH AS INSTALLING OVER CONCRETE OR RADIANT WALL HEATING MAY BE DOWNLOADED FROM THE THERMALBOARD WEBSITE: www.thermalboardradiantfloorheating.com

- THERMALBOARD INSTALLATION GENERAL INSTRUCTIONS:**
 - The installer shall refer to the manufactures guidelines for installation methods of various floor coverings.
 - Custom grooves shall be routed as indicated on plans using a router jig and shall be made using a 1/2" core box router bit.
 - When applicable installation contractor shall coordinate with the plumbing contractor so as to have all plumbing stubbed out 12" above sub-floor prior to installation.
 - Remove all burrs left by custom routing and on angle holes. Holes for routing tubing below sub-floor shall be drilled using a 11/16" bit at the correct location and in the appropriate direction so that the end of the tube can be passed from the groove to the under floor area in the right direction to lead to the appropriate manifold location or the boiler panel.
 - All grooves shall be inspected and cleaned of any debris prior to tubing installation. Tubing shall be and remain pressurized immediately following installation of the the panels for the duration of all construction.
 - Tubing for the Thermalboard system shall be 3/8" PEX with oxygen diffusion barrier meeting CSA B137i5 certification and listed by ICBO, to ASTM F-876-93 and F-877-93

2) ALTERNATE MANIFOLD INSTALLATION
SCALE: NONE

1) MANIFOLD INSTALLATION - MULTI ZONE MANIFOLD
SCALE: NONE

NOTE: This Thermalboard Radiant layout drawing is conceptual and diagrammatic and does not constitute a complete hydronic plan. While the board shown in this plan may be installed with labor that can carefully follow the plan, it should be coordinated with the trained and qualified plumbing or heating technician who shall install and make operational the required components of the complete hydronic heating system. The trained and qualified plumbing or heating technician shall supply and install all materials needed to complete this hydronic system. Technician also to provide any incidental work not shown or specified, which can be reasonably inferred as belonging to the work necessary to provide the complete system.

The boards shown in this plan are comprised of whole boards or boards to be cut in the field to fit what is shown in the plan

LOOPS	"A"
1	14"
2	16"
3	18"
4	20"
5	22"
6	24"
7	26"
8	28"
9	30"
10	32"

ATTACHMENT OF THERMALBOARD TO WOOD SUBFLOOR:

- Consult and verify the fit and appropriateness of layout design before securing boards to subfloor.
- Each Thermalboard shall be glued on the downward side to a wooden subfloor using construction adhesive type glue with a minimum 1/8" bead in the gluing pattern shown.
- Each Ecowarm Board shall be attached to a wood subfloor at a minimum of 11x points as shown. They may be attached with screws at each point or cross stapled using a sheathing stapler with 2 staples at opposing 45° angles to each other at each location. Boards measure 16" by 48" with tubing on center. Request separate details when using over cement.

