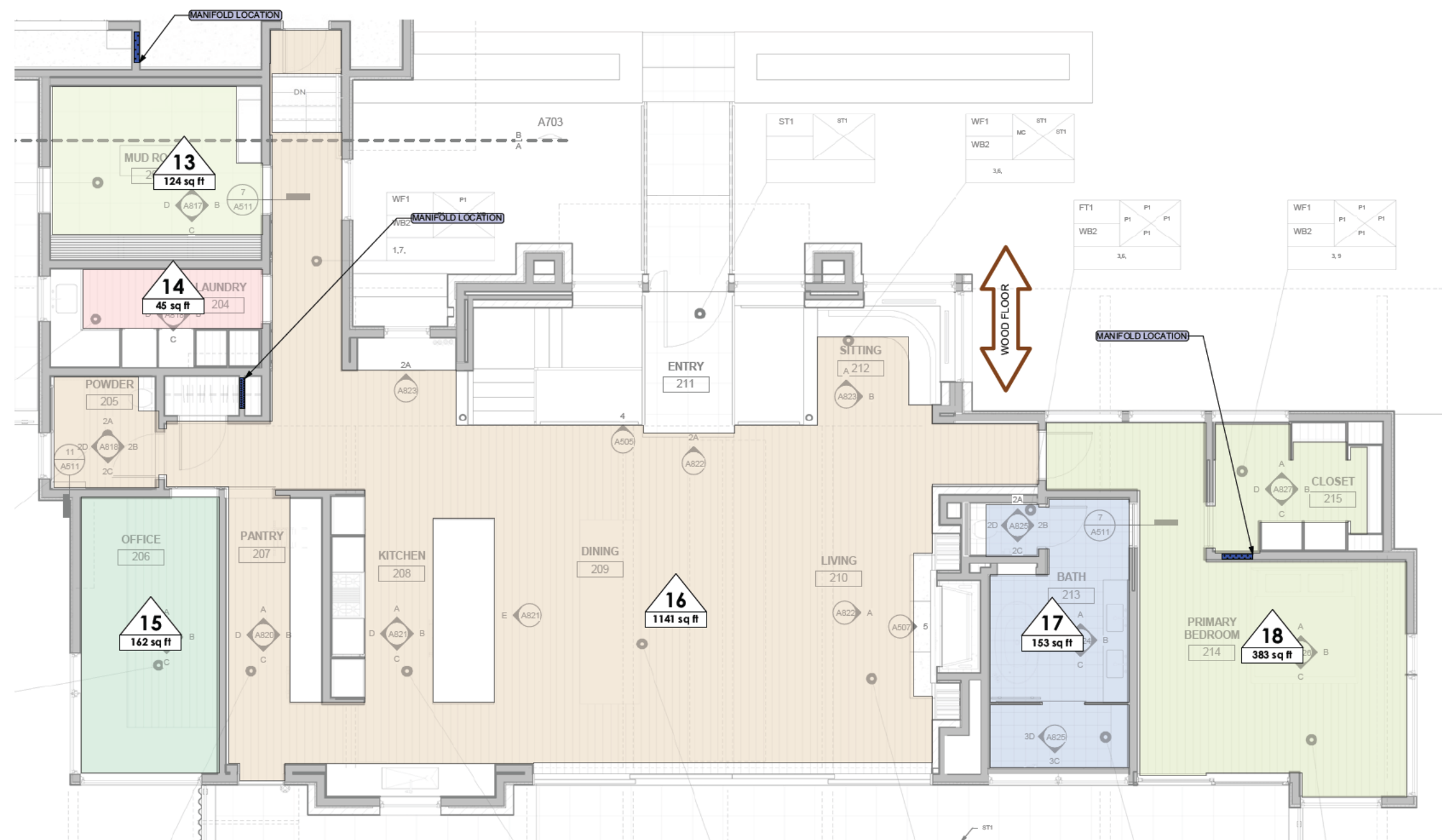
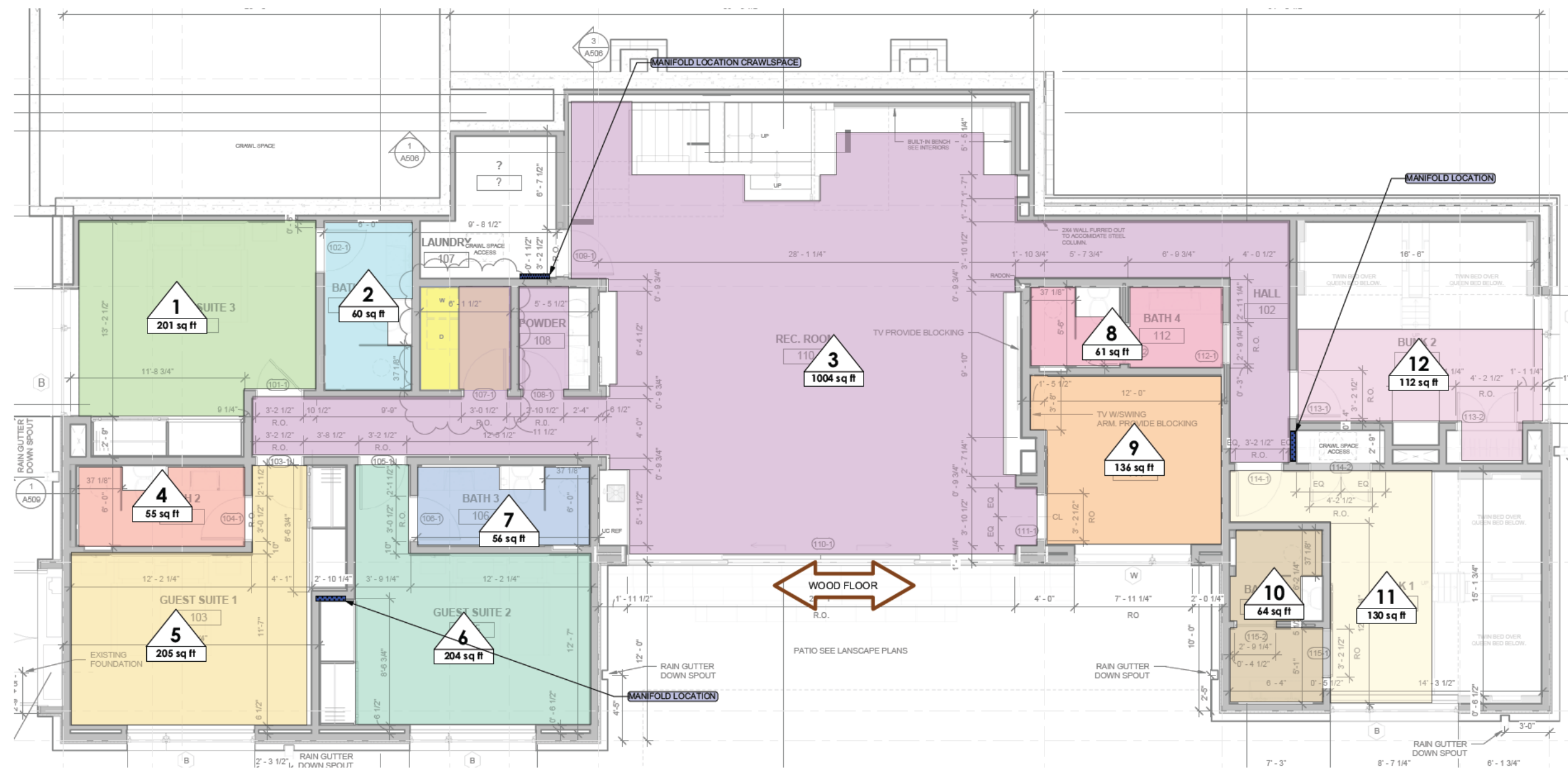


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Scale: 1/8" = 1'-0"

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

A WBI PRODUCT

THERMALBOARD

Zoning

v. 3

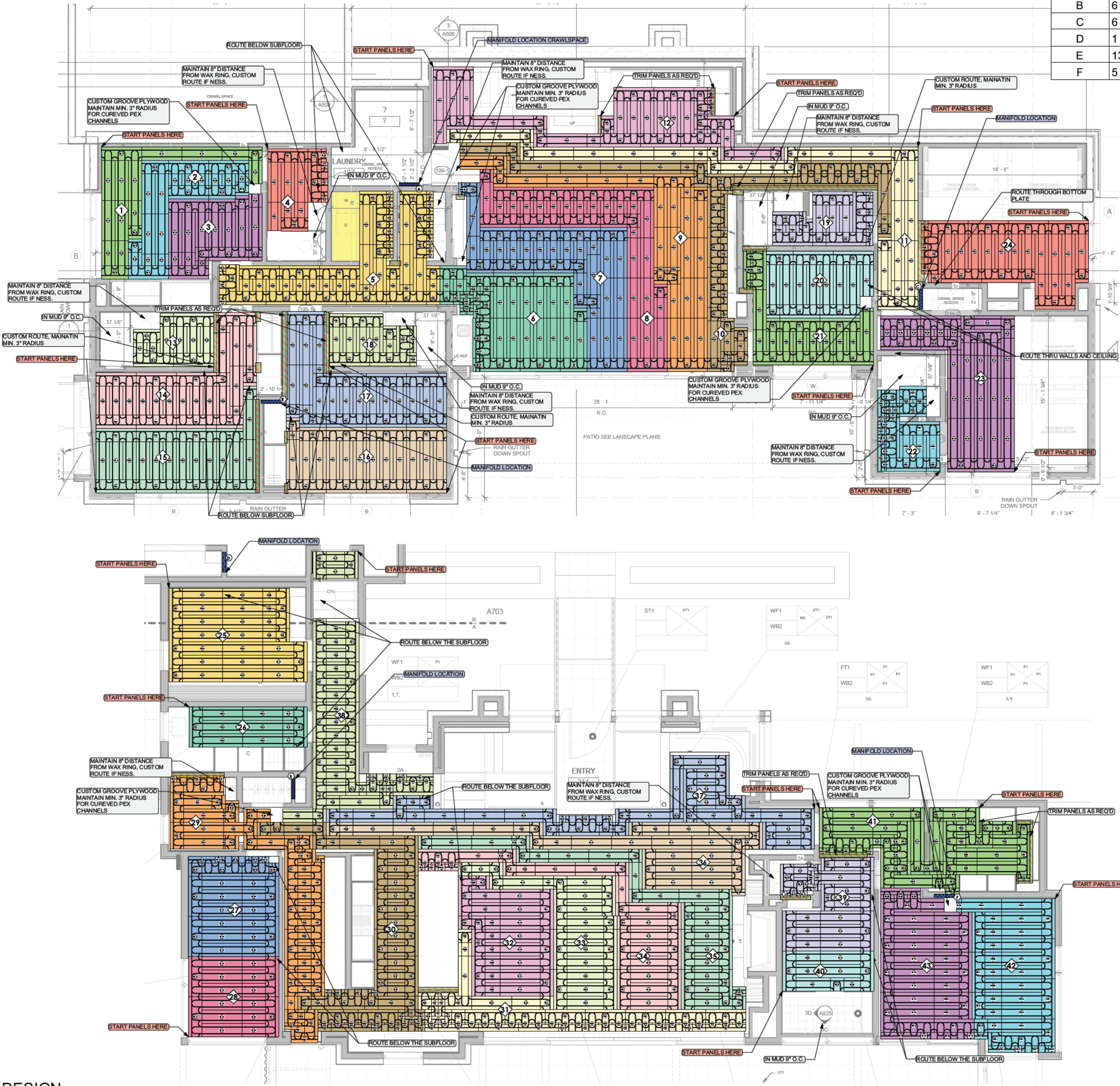
DMB

Sheet 1

5/7/25

LOOP

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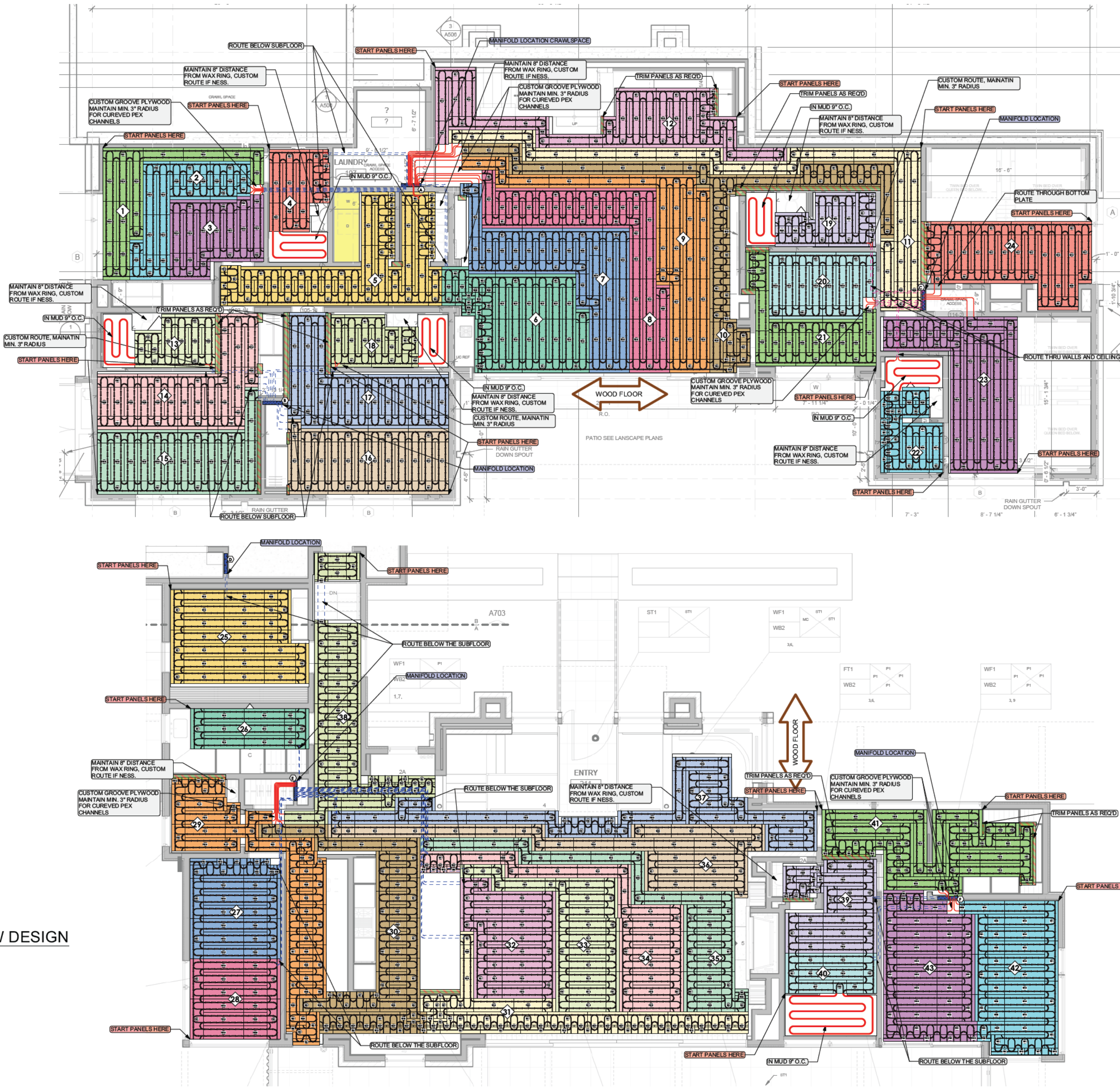
MANIFOLD SCHEDULE			
LABEL	ITEM	LOCATION	LOOPS SERVICED
A	12 LOOP MANIFOLD	MECH 109	1,2,3,4,5,6,7,8,9,10,11,12
B	6 LOOP MANIFOLD	G. SUITE 103	13,14,15,16,17,18
C	6 LOOP MANIFOLD	HALL 102	19,20,21,22,23,24
D	1 LOOP MANIFOLD	MUDROOM 203	25
E	13 LOOP MANIFOLD	HALL	26,27,28,29,30,31,32,33,34,35,36,37,38
F	5 LOOP MANIFOLD	CLOSET 215	39,40,41,42,43

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	97	35	132 FT
2	95	36	131 FT
3	94	36	130 FT
4	83	28	111 FT
5	185	3	188 FT
6	171	27	198 FT
7	177	13	190 FT
8	174	15	189 FT
9	177	13	190 FT
10	176	16	192 FT
11	173	17	190 FT
12	176	14	190 FT
13	74	60	134 FT
14	153	6	159 FT
15	156	3	159 FT
16	151	6	157 FT
17	156	3	159 FT
18	76	60	136 FT
19	81	60	141 FT
20	98	51	149 FT
21	99	51	150 FT
22	84	56	140 FT
23	183	13	196 FT
24	160	5	165 FT
25	174	6	180 FT
26	69	8	77 FT
27	126	18	144 FT
28	104	36	140 FT
29	183	11	194 FT
30	179	12	191 FT
31	130	62	192 FT
32	138	51	189 FT
33	140	49	189 FT
34	150	39	189 FT
35	152	37	189 FT
36	175	14	189 FT
37	177	12	189 FT
38	180	11	191 FT
39	109	13	122 FT
40	104	26	130 FT
41	182	2	184 FT
42	181	3	184 FT
43	182	3	185 FT
APPROX TOTAL			7124 FT

LOOP

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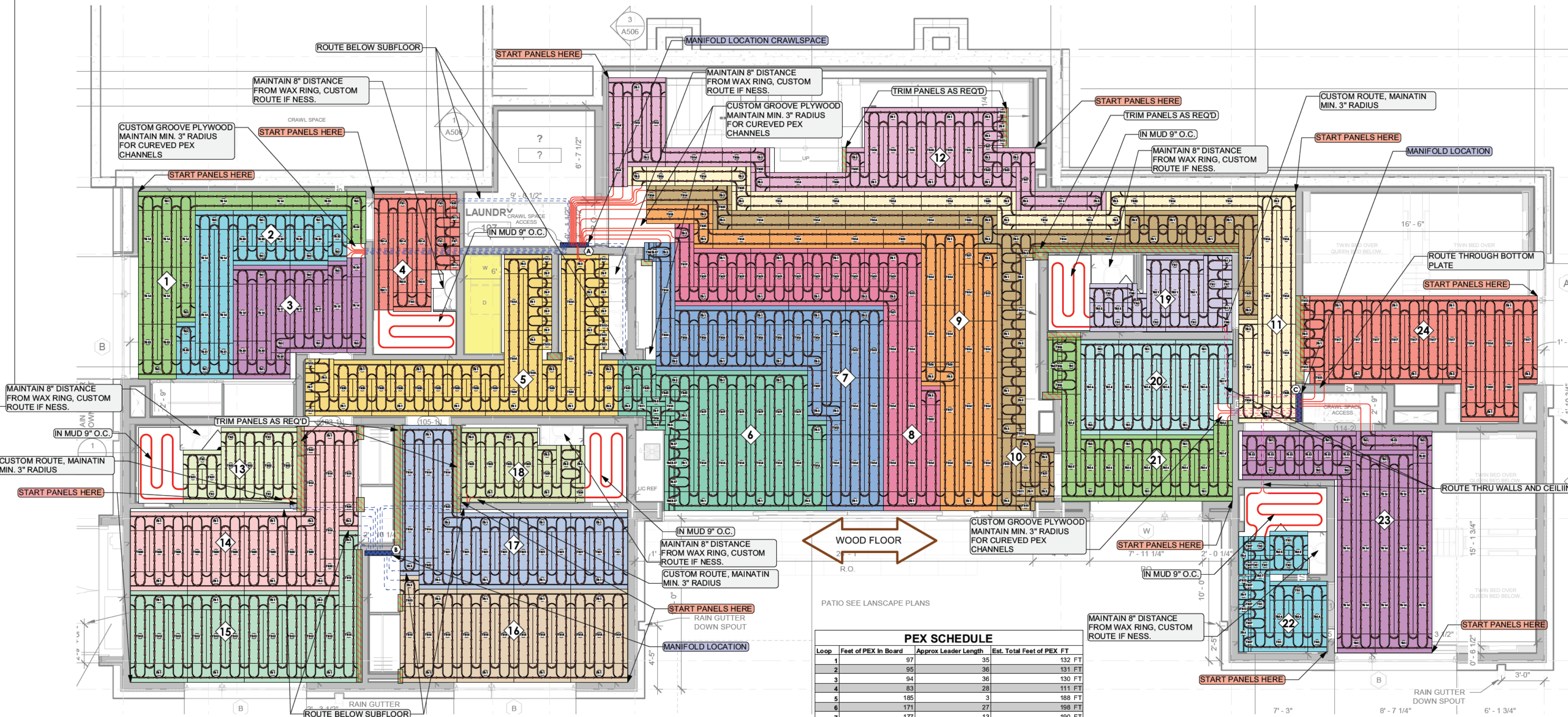
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3 BASEMENT FLOW DESIGN
Scale: 3/16" = 1'-0"

PEX SCHEDULE			
Loop	Feet of PEX in Board	Approx Leader Length	Est. Total Feet of PEX FT
1	97	35	132 FT
2	95	36	131 FT
3	94	36	130 FT
4	83	28	111 FT
5	185	3	188 FT
6	171	27	198 FT
7	177	13	190 FT
8	174	15	189 FT
9	177	13	190 FT
10	176	16	192 FT
11	173	17	190 FT
12	176	14	190 FT
13	74	60	134 FT
14	153	6	159 FT
15	156	3	159 FT
16	151	6	157 FT
17	156	3	159 FT
18	76	60	136 FT
19	81	60	141 FT
20	98	51	149 FT
21	99	51	150 FT
22	84	56	140 FT
23	183	13	196 FT
24	160	5	165 FT
25	174	6	180 FT
26	69	8	77 FT
27	126	18	144 FT
28	104	36	140 FT
29	183	11	194 FT
30	179	12	191 FT
31	130	62	192 FT
32	138	51	189 FT
33	140	49	189 FT
34	150	39	189 FT
35	152	37	189 FT
36	175	14	189 FT
37	177	12	189 FT
38	180	11	191 FT
39	109	13	122 FT
40	104	26	130 FT
41	182	2	184 FT
42	181	3	184 FT
43	182	3	185 FT
APPROX TOTAL			7124 FT

LOOP

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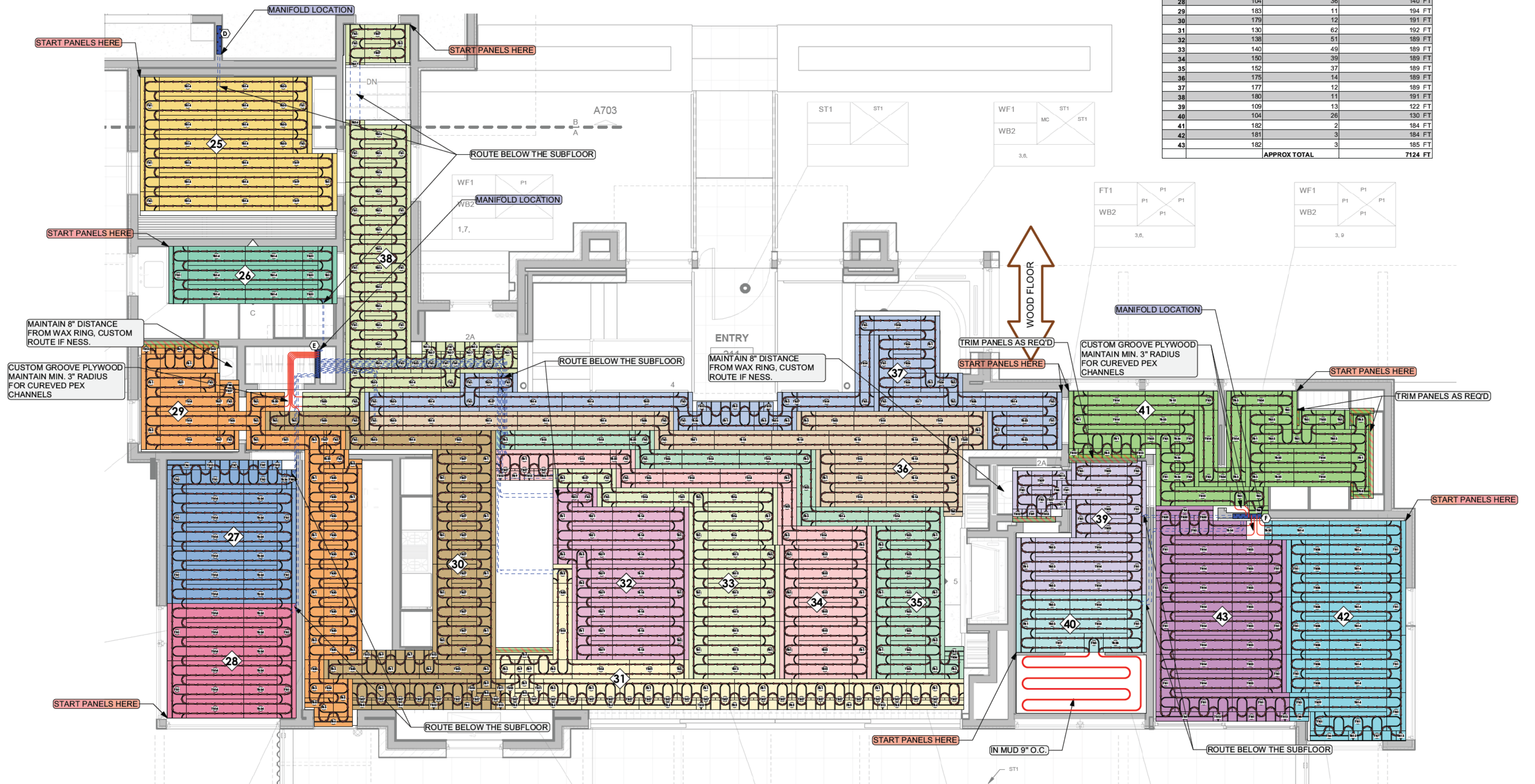
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PEX SCHEDULE

Loop	Feet of PEX In Board	Approx Leader Length	Est. Total Feet of PEX FT
1	97	35	132 FT
2	95	36	131 FT
3	94	36	130 FT
4	83	28	111 FT
5	185	3	188 FT
6	171	27	198 FT
7	177	13	190 FT
8	174	15	189 FT
9	177	13	190 FT
10	176	16	192 FT
11	173	17	190 FT
12	176	14	190 FT
13	74	60	134 FT
14	153	6	159 FT
15	156	3	159 FT
16	151	6	157 FT
17	156	3	159 FT
18	76	60	136 FT
19	81	60	141 FT
20	98	51	149 FT
21	99	51	150 FT
22	84	56	140 FT
23	183	13	196 FT
24	160	5	165 FT
25	174	6	180 FT
26	69	8	77 FT
27	126	18	144 FT
28	104	36	140 FT
29	183	11	194 FT
30	179	12	191 FT
31	130	62	192 FT
32	138	51	189 FT
33	140	49	189 FT
34	150	39	189 FT
35	152	37	189 FT
36	175	14	189 FT
37	177	12	189 FT
38	180	11	191 FT
39	109	13	122 FT
40	104	26	130 FT
41	192	2	194 FT
42	181	3	184 FT
43	182	3	185 FT
APPROX TOTAL			7124 FT



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FIRST FLOOR FLOW DESIGN
Scale: 3/16" = 1'-0"

A WBI PRODUCT

THERMALBOARD

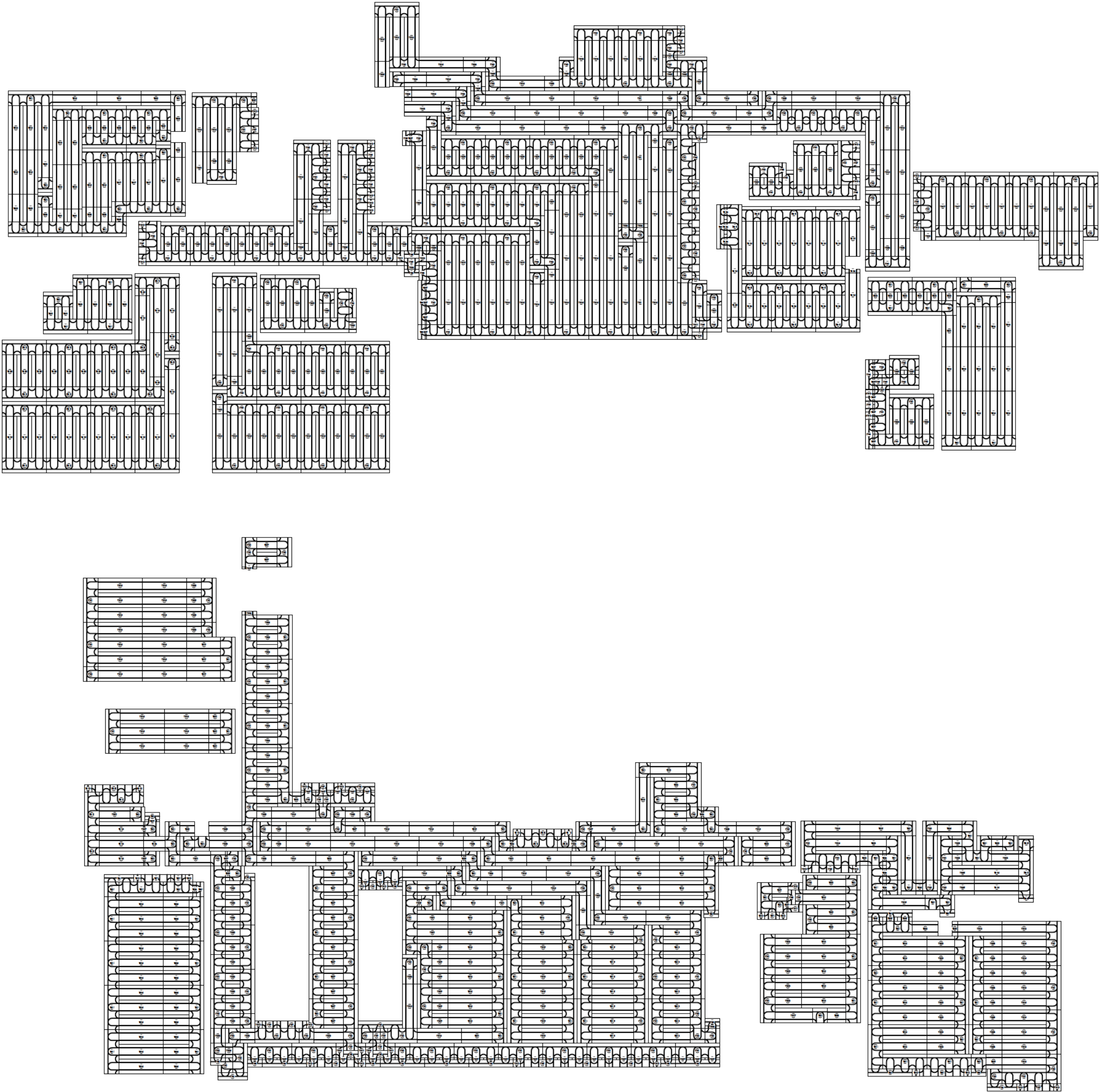
First Floor Flow Diagrams

v. 3

DMB

Sheet 3.2

5/7/25



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

THERMALBOARD PANEL SCHEDULE

QTY	SORT	ITEM	PART #	SQ FT PER BOARD	TOTAL
216		1 48" Supercombo	TB1	5.333	1151.928
57		2 32" Supercombo	TB2	3.556	202.692
164		3 16" Supercombo	TB3	1.778	291.592
11		4 48" Supercombo Top	TB4	2.667	29.337
11		5 48" Supercombo Bottom	TB5	2.667	29.337
7		6 2/3 Supercombo Top	TB6	1.778	12.446
7		7 2/3 Supercombo Bottom	TB7	1.778	12.446
24		8 1/6 Supercombo Top Half	TB8	0.889	21.336
24		9 1/6 Supercombo Bottom	TB9	0.889	21.336
5		10 1/6 Supercombo Left	TB10	0.889	4.445
5		11 1/6 Supercombo Right	TB11	0.889	4.445
22		12 1/12 Supercombo Left	TB12	0.444	9.768
22		13 1/12 Supercombo Right	TB13	0.444	9.768
234		14 48" Straight	TB14	5.33	1247.22
34		15 46" Straight	TB15	5.111	173.774
14		16 44" Straight	TB16	4.889	68.446
14		17 42" Straight	TB17	4.667	65.338
10		18 40" Straight	TB18	4.444	44.44
11		19 38" Straight	TB19	4.22	46.42
12		20 36" Straight	TB20	4	48
21		21 34" Straight	TB21	3.778	79.338
18		22 32" Straight	TB22	3.556	64.008
29		23 30" Straight	TB23	3.33	96.57
22		24 28" Straight	TB24	3.11	68.42
8		25 26" Straight	TB25	2.889	23.112
37		26 24" Straight	TB26	2.667	98.679
16		27 22" Straight	TB27	2.44	39.04
15		28 20" Straight	TB28	2.222	33.33
20		29 18" Straight	TB29	2	40
50		30 16" Straight	TB30	1.778	88.9
11		31 14" Straight	TB31	1.556	17.116
9		32 12" Straight	TB32	1.333	11.997
13		33 10" Straight	TB33	1.111	14.443
9		34 8" Straight	TB34	0.889	8.001
22		35 6" Straight	TB35	0.667	14.674
16		36 4" Straight	TB36	0.444	7.104
60		37 2" Straight	TB37	0.222	13.32

COMBOS	
Sub Total SqFt	1800.876
Sub Total Boards	337.685
Round Up Boards	338
5%	16.9
Boards to be Shipped	355

STRAIGHTS	
Sub Total SqFt	2411.69
Sub Total Boards	452.22
Round Up Boards	453
5%	22.65
Boards to be Shipped	476

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

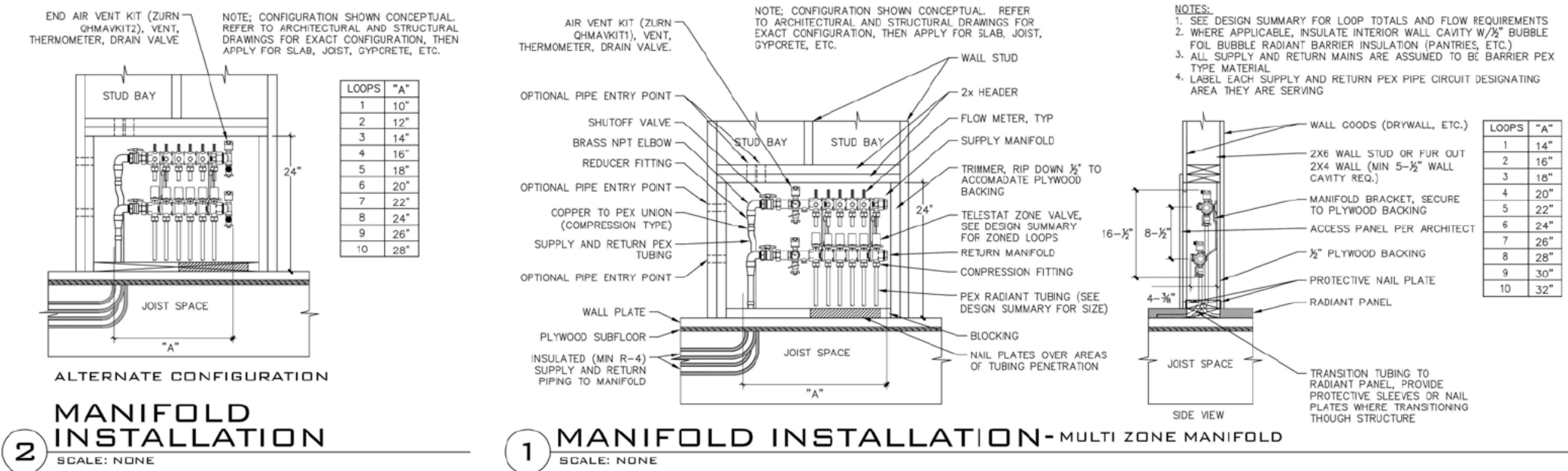
NAIL DOWN HARDWOOD OVER THERMALBOARD RADIANT FLOOR HEATING

VINYL OVER THERMALBOARD RADIANT FLOOR HEATING

TILE OVER THERMALBOARD RADIANT FLOOR HEATING

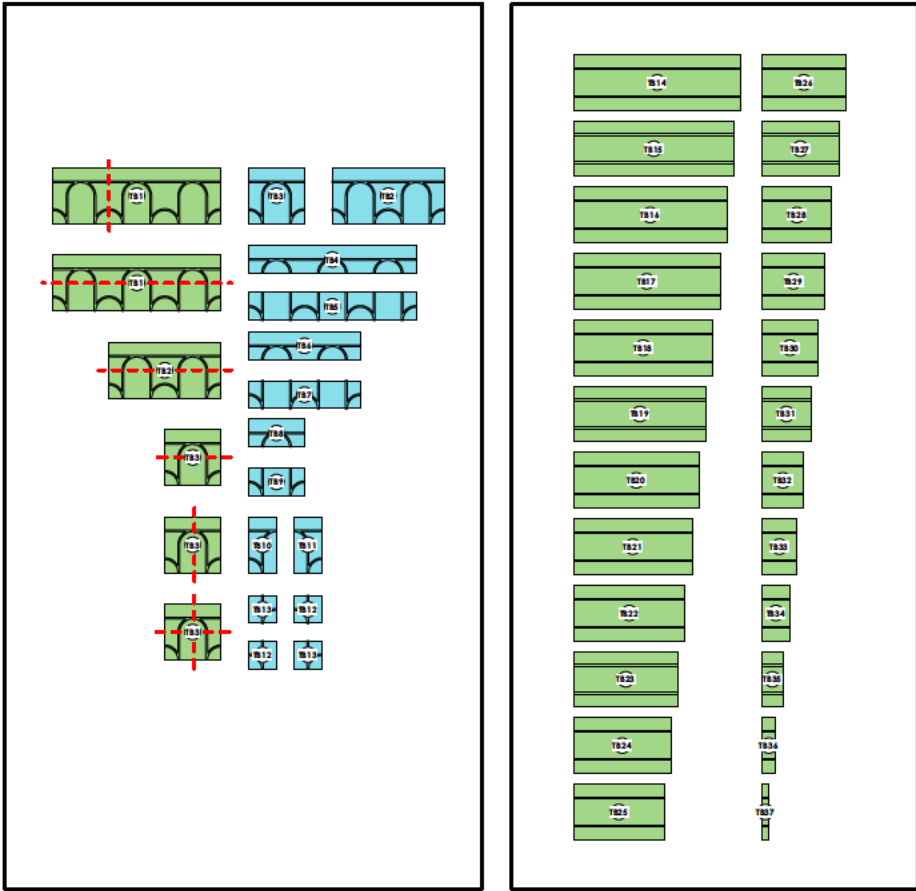
NOTE: TYPICAL INSTALLATION DETAILS ARE SHOWN. EXACT DETAILS MAY DIFFER BASED ON ARCHITECTURAL DESIGN. SOME FLOOR COVERINGS MAY NOT BE APPLICABLE TO THIS DESIGN AND OTHERS MY BE POSSIBLE. BE SURE TO READ AND INSTALL ACCORDING TO THE MOST RECENT THERMALBOARD DESIGN AND INSTALLATION MANUAL AS IT MAY CONTAIN 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



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



- 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.

