

Project:	Bullingata Summary
Location:	***** New York, NY
Scope of Work:	HVAC
Date:	11/05/20**



Item #	Ref. Sheet	Item Description	Unit	Quantity	Wastage	Quantity w/ Wastage	Unit Material Cost	Weight / Lbs.	Total Material Cost	Unit Manhour	Hourly Wage	Unit Labor Cost	Total Labor Cost	Sub Cost	Total Trade Cost
<b>DIVISION23-HVAC</b>															
<b>8th Floor</b>															
<b>Rectangular Ducts</b>															
6		(5" W x 4" D) Rectangular Duct	LF	204	10%	224	\$ 2.20	354	\$ 493.68	0.185	\$ 98.00	\$ 18.13	\$ 4,068.37	\$	4,562.05
7		(6" W x 6" D) Rectangular Duct	LF	305	10%	336	\$ 1.54	706	\$ 516.17	0.136	\$ 98.00	\$ 13.30	\$ 4,463.32	\$	4,979.49
8		(8" W x 6" D) Rectangular Duct	LF	430	10%	473	\$ 2.32	1160	\$ 1,097.36	0.175	\$ 98.00	\$ 17.15	\$ 8,111.95	\$	9,209.31
9		(8" W x 8" D) Rectangular Duct	LF	580	10%	638	\$ 2.85	1788	\$ 1,818.30	0.198	\$ 98.00	\$ 19.40	\$ 12,379.75	\$	14,198.05
10		(10" W x 10" D) Rectangular Duct	LF	147	10%	162	\$ 2.57	567	\$ 415.08	0.227	\$ 98.00	\$ 22.20	\$ 3,589.25	\$	4,004.34
11		(10" W x 8" D) Rectangular Duct	LF	147	10%	162	\$ 2.31	510	\$ 373.85	0.204	\$ 98.00	\$ 19.99	\$ 3,232.71	\$	3,606.56
12		(12" W x 10" D) Rectangular Duct	LF	256	10%	282	\$ 2.82	1086	\$ 794.68	0.249	\$ 98.00	\$ 24.40	\$ 6,871.60	\$	7,666.28
13		(12" W x 12" D) Rectangular Duct	LF	100	10%	110	\$ 3.08	463	\$ 338.47	0.272	\$ 98.00	\$ 26.61	\$ 2,926.77	\$	3,265.24
14		(14" W x 10" D) Rectangular Duct	LF	15	10%	17	\$ 4.02	70	\$ 66.33	0.352	\$ 98.00	\$ 34.50	\$ 569.18	\$	635.51
15		(14" W x 12" D) Rectangular Duct	LF	285	10%	314	\$ 4.10	1428	\$ 1,285.35	0.376	\$ 98.00	\$ 36.85	\$ 11,551.85	\$	12,837.20
16		(14" W x 14" D) Rectangular Duct	LF	17	10%	19	\$ 4.59	92	\$ 85.83	0.405	\$ 98.00	\$ 39.69	\$ 742.20	\$	828.04
17		(16" W x 10" D) Rectangular Duct	LF	8	10%	9	\$ 4.26	41	\$ 37.49	0.376	\$ 98.00	\$ 36.85	\$ 324.26	\$	361.75
18		(16" W x 12" D) Rectangular Duct	LF	153	10%	168	\$ 4.59	826	\$ 772.50	0.405	\$ 98.00	\$ 39.69	\$ 6,679.83	\$	7,452.32
19		(16" W x 14" D) Rectangular Duct	LF	30	10%	33	\$ 4.91	174	\$ 162.13	0.434	\$ 98.00	\$ 42.48	\$ 1,401.94	\$	1,564.07
20		(18" W x 12" D) Rectangular Duct	LF	46	10%	51	\$ 4.91	266	\$ 248.60	0.434	\$ 98.00	\$ 42.48	\$ 2,149.64	\$	2,398.24
21		(18" W x 14" D) Rectangular Duct	LF	190	10%	209	\$ 5.24	1172	\$ 1,096.10	0.463	\$ 98.00	\$ 45.35	\$ 9,478.05	\$	10,574.15
22		(18" W x 16" D) Rectangular Duct	LF	9	10%	10	\$ 5.57	59	\$ 55.12	0.491	\$ 98.00	\$ 48.14	\$ 476.61	\$	531.73
23		(20" W x 14" D) Rectangular Duct	LF	14	10%	15	\$ 5.57	92	\$ 85.74	0.491	\$ 98.00	\$ 48.14	\$ 741.39	\$	827.13
24		(20" W x 16" D) Rectangular Duct	LF	5	10%	6	\$ 5.90	35	\$ 32.44	0.521	\$ 98.00	\$ 51.01	\$ 280.55	\$	312.99
25		(22" W x 12" D) Rectangular Duct	LF	70	10%	77	\$ 6.22	459	\$ 479.09	0.549	\$ 98.00	\$ 53.80	\$ 4,142.75	\$	4,621.85
26		(22" W x 14" D) Rectangular Duct	LF	80	10%	88	\$ 6.50	555	\$ 572.22	0.574	\$ 98.00	\$ 56.23	\$ 4,948.02	\$	5,520.24
27		(24" W x 12" D) Rectangular Duct	LF	110	10%	121	\$ 6.85	763	\$ 828.85	0.598	\$ 98.00	\$ 58.60	\$ 7,091.08	\$	7,919.93
28		(24" W x 16" D) Rectangular Duct	LF	34	10%	37	\$ 6.55	263	\$ 245.10	0.578	\$ 98.00	\$ 56.67	\$ 2,119.40	\$	2,364.50
29		(24" W x 18" D) Rectangular Duct	LF	110	10%	121	\$ 6.88	891	\$ 832.06	0.607	\$ 98.00	\$ 59.46	\$ 7,194.84	\$	8,026.90
30		(26" W x 12" D) Rectangular Duct	LF	16	10%	18	\$ 6.22	118	\$ 109.51	0.549	\$ 98.00	\$ 53.80	\$ 946.92	\$	1,056.42
31		(26" W x 20" D) Rectangular Duct	LF	6	10%	7	\$ 7.53	54	\$ 49.70	0.665	\$ 98.00	\$ 65.12	\$ 429.80	\$	479.50
32		(26" W x 26" D) Rectangular Duct	LF	21	10%	23	\$ 8.50	211	\$ 196.35	0.750	\$ 98.00	\$ 73.50	\$ 1,697.85	\$	1,894.20
33		(28" W x 12" D) Rectangular Duct	LF	100	10%	110	\$ 6.55	1041	\$ 720.89	0.578	\$ 98.00	\$ 56.67	\$ 6,233.54	\$	6,954.42
34		(30" W x 12" D) Rectangular Duct	LF	42	10%	46	\$ 6.55	340	\$ 302.77	0.578	\$ 98.00	\$ 56.67	\$ 2,618.08	\$	2,920.86
35		(30" W x 20" D) Rectangular Duct	LF	70	10%	77	\$ 8.16	675	\$ 628.32	0.720	\$ 98.00	\$ 70.56	\$ 5,433.12	\$	6,061.44
36		(32" W x 14" D) Rectangular Duct	LF	10	10%	11	\$ 9.18	89	\$ 100.98	0.810	\$ 98.00	\$ 79.38	\$ 873.18	\$	974.16
37		(32" W x 20" D) Rectangular Duct	LF	5	10%	6	\$ 9.98	51	\$ 54.89	0.852	\$ 98.00	\$ 83.50	\$ 459.23	\$	514.12
38		(32" W x 24" D) Rectangular Duct	LF	70	10%	77	\$ 10.25	756	\$ 789.25	0.898	\$ 98.00	\$ 88.00	\$ 6,776.31	\$	7,565.56
39		(32" W x 30" D) Rectangular Duct	LF	5	10%	6	\$ 11.23	60	\$ 61.77	0.912	\$ 98.00	\$ 89.38	\$ 491.57	\$	553.33
40		(34" W x 20" D) Rectangular Duct	LF	9	10%	10	\$ 10.80	94	\$ 106.87	0.953	\$ 98.00	\$ 93.35	\$ 924.12	\$	1,030.99
41		(34" W x 34" D) Rectangular Duct	LF	100	10%	110	\$ 13.52	1311	\$ 1,486.65	1.193	\$ 98.00	\$ 116.87	\$ 12,855.15	\$	14,341.80
42		(38" W x 12" D) Rectangular Duct	LF	49	10%	54	\$ 9.95	473	\$ 536.04	0.878	\$ 98.00	\$ 86.00	\$ 4,635.13	\$	5,171.17
43		(38" W x 36" D) Rectangular Duct	LF	20	10%	22	\$ 14.71	286	\$ 323.51	1.298	\$ 98.00	\$ 127.16	\$ 2,797.41	\$	3,120.92
44		(42" W x 24" D) Rectangular Duct	LF	45	10%	50	\$ 13.94	573	\$ 690.03	1.230	\$ 98.00	\$ 120.54	\$ 5,966.73	\$	6,656.76
45		(42" W x 26" D) Rectangular Duct	LF	44	10%	48	\$ 13.75	577	\$ 665.50	1.250	\$ 98.00	\$ 122.50	\$ 5,929.00	\$	6,594.50
46		(48" W x 12" D) Rectangular Duct	LF	50	10%	55	\$ 11.99	578	\$ 659.18	1.058	\$ 98.00	\$ 103.64	\$ 5,699.93	\$	6,359.10
47		(48" W x 18" D) Rectangular Duct	LF	30	10%	33	\$ 13.18	382	\$ 434.78	1.163	\$ 98.00	\$ 113.93	\$ 3,759.53	\$	4,194.30
48		(48" W x 26" D) Rectangular Duct	LF	10	10%	11	\$ 14.71	143	\$ 161.76	1.298	\$ 98.00	\$ 127.16	\$ 1,398.71	\$	1,560.46
49		(48" W x 28" D) Rectangular Duct	LF	60	10%	66	\$ 14.98	879	\$ 988.68	1.300	\$ 98.00	\$ 127.40	\$ 8,408.40	\$	9,397.08
50		(54" W x 24" D) Rectangular Duct	LF	20	10%	22	\$ 16.02	301	\$ 352.50	1.414	\$ 98.00	\$ 138.55	\$ 3,048.05	\$	3,400.54
51		(58" W x 18" D) Rectangular Duct	LF	80	10%	88	\$ 18.02	1172	\$ 1,585.76	1.590	\$ 98.00	\$ 155.82	\$ 13,712.16	\$	15,297.92
52		(76" W x 18" D) Rectangular Duct	LF	15	10%	17	\$ 24.44	272	\$ 403.22	2.156	\$ 98.00	\$ 211.31	\$ 3,486.66	\$	3,889.88
<b>Flexible Duct</b>															
53		(6" Dia) Flexible Duct	LF	71	10%	78	\$ 3.02	-	\$ 235.86	0.045	\$ 98.00	\$ 4.41	\$ 344.42	\$	580.28
54		(8" Dia) Flexible Duct	LF	93	10%	102	\$ 3.85	-	\$ 393.86	0.048	\$ 98.00	\$ 4.70	\$ 481.22	\$	875.07
55		(10" Dia) Flexible Duct	LF	269	10%	296	\$ 4.85	-	\$ 1,435.12	0.035	\$ 98.00	\$ 3.43	\$ 1,014.94	\$	2,450.05

Project: \*\*\*\*\*  
Location: \*\*\*\*\* New York, NY  
Scope of Work: HVAC  
Date: 11/05/20\*\*\*



Table with columns: Item #, Ref. Sheet, Item Description, Unit, Quantity, Wastage, Quantity w/ Wastage, Unit Material Cost, Weight / Lbs., Total Material Cost, Unit Manhour, Hourly Wage, Unit Labor Cost, Total Labor Cost, Sub Cost, Total Trade Cost. Includes sub-section '10th Floor' and categories 'Rectangular Ducts', 'Circular Duct', and 'Flexible Duct'.

Project: \*\*\*\*\* Location: \*\*\*\*\* New York, NY Scope of Work: HVAC Date: 11/05/20\*\*\*



Main table with columns: Item #, Ref. Sheet, Item Description, Unit, Quantity, Wastage, Quantity w/ Wastage, Material Cost, Weight / Lbs., Total Material Cost, Unit Manhour, Hourly Wage, Unit Labor Cost, Total Labor Cost, Sub Cost, Total Trade Cost. Rows include Rectangular Ducts and Flexible Ducts for 13th, 14th, and 15th floors.

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Location:	***** New York, NY
Scope of Work:	HVAC
Date:	11/05/20**



Item #	Ref. Sheet	Item Description	Unit	Quantity	Wastage	Quantity w/ Wastage	Unit Material Cost	Weight / Lbs.	Total Material Cost	Unit Manhour	Hourly Wage	Unit Labor Cost	Total Labor Cost	Sub Cost	Total Trade Cost
244		(18" W x 10" D) Rectangular Duct	LF	49	10%	54	\$ 4.91	265	\$ 264.81	0.434	\$ 98.00	\$ 42.48	\$ 2,289.83	\$	2,554.64
245		(18" W x 12" D) Rectangular Duct	LF	78	10%	86	\$ 4.91	451	\$ 421.54	0.434	\$ 98.00	\$ 42.48	\$ 3,645.04	\$	4,066.58
246		(18" W x 14" D) Rectangular Duct	LF	13	10%	14	\$ 5.24	81	\$ 75.00	0.463	\$ 98.00	\$ 45.35	\$ 648.50	\$	723.49
247		(20" W x 10" D) Rectangular Duct	LF	93	10%	102	\$ 5.57	538	\$ 569.56	0.491	\$ 98.00	\$ 48.14	\$ 4,924.98	\$	5,494.53
248		(20" W x 12" D) Rectangular Duct	LF	83	10%	91	\$ 5.57	512	\$ 508.31	0.491	\$ 98.00	\$ 48.14	\$ 4,395.41	\$	4,903.72
249		(22" W x 12" D) Rectangular Duct	LF	82	10%	90	\$ 6.22	538	\$ 561.22	0.549	\$ 98.00	\$ 53.80	\$ 4,852.94	\$	5,414.16
250		(22" W x 14" D) Rectangular Duct	LF	46	10%	51	\$ 6.50	320	\$ 329.03	0.574	\$ 98.00	\$ 56.23	\$ 2,845.11	\$	3,174.14
251		(24" W x 12" D) Rectangular Duct	LF	14	10%	15	\$ 6.85	98	\$ 105.49	0.598	\$ 98.00	\$ 58.60	\$ 902.50	\$	1,007.99
252		(24" W x 14" D) Rectangular Duct	LF	14	10%	15	\$ 6.50	103	\$ 100.14	0.574	\$ 98.00	\$ 56.23	\$ 865.90	\$	966.04
253		(26" W x 8" D) Rectangular Duct	LF	24	10%	26	\$ 6.22	158	\$ 164.21	0.607	\$ 98.00	\$ 59.49	\$ 1,570.43	\$	1,734.64
254		(26" W x 14" D) Rectangular Duct	LF	16	10%	18	\$ 7.53	124	\$ 132.53	0.601	\$ 98.00	\$ 58.90	\$ 1,036.60	\$	1,169.13
255		(28" W x 12" D) Rectangular Duct	LF	5	10%	6	\$ 9.18	39	\$ 50.49	0.710	\$ 98.00	\$ 69.58	\$ 382.69	\$	433.18
256		(28" W x 14" D) Rectangular Duct	LF	26	10%	29	\$ 9.18	211	\$ 262.55	0.810	\$ 98.00	\$ 79.38	\$ 2,270.27	\$	2,532.82
257		(28" W x 16" D) Rectangular Duct	LF	11	10%	12	\$ 9.18	94	\$ 111.08	0.710	\$ 98.00	\$ 69.58	\$ 841.92	\$	953.00
258		(28" W x 18" D) Rectangular Duct	LF	36	10%	40	\$ 9.18	320	\$ 363.53	0.710	\$ 98.00	\$ 69.58	\$ 2,755.37	\$	3,118.90
259		(30" W x 14" D) Rectangular Duct	LF	32	10%	35	\$ 9.12	272	\$ 321.02	0.578	\$ 98.00	\$ 56.64	\$ 1,433.09	\$	1,663.83
260		(30" W x 12" D) Rectangular Duct	LF	23	10%	25	\$ 9.12	187	\$ 230.74	0.578	\$ 98.00	\$ 56.64	\$ 1,930.09	\$	2,224.55
261		(30" W x 16" D) Rectangular Duct	LF	31	10%	34	\$ 9.12	275	\$ 310.99	0.578	\$ 98.00	\$ 56.64	\$ 1,313.90	\$	1,604.00
262		(32" W x 14" D) Rectangular Duct	LF	20	10%	22	\$ 8.50	178	\$ 187.00	0.750	\$ 98.00	\$ 73.50	\$ 1,617.00	\$	1,804.00
263		(32" W x 18" D) Rectangular Duct	LF	14	10%	15	\$ 8.50	135	\$ 130.90	0.750	\$ 98.00	\$ 73.50	\$ 1,131.90	\$	1,262.80
264		(34" W x 18" D) Rectangular Duct	LF	8	10%	9	\$ 8.50	81	\$ 74.80	0.750	\$ 98.00	\$ 73.50	\$ 646.80	\$	721.60
265		(34" W x 16" D) Rectangular Duct	LF	35	10%	39	\$ 8.50	338	\$ 327.25	0.750	\$ 98.00	\$ 73.50	\$ 2,829.75	\$	3,157.00
266		(36" W x 12" D) Rectangular Duct	LF	13	10%	14	\$ 8.50	121	\$ 121.55	0.750	\$ 98.00	\$ 73.50	\$ 1,051.05	\$	1,172.60
267		(36" W x 14" D) Rectangular Duct	LF	35	10%	39	\$ 8.50	338	\$ 327.25	0.750	\$ 98.00	\$ 73.50	\$ 2,829.75	\$	3,157.00
268		(42" W x 18" D) Rectangular Duct	LF	7	10%	8	\$ 12.40	81	\$ 95.48	0.912	\$ 98.00	\$ 89.38	\$ 688.20	\$	783.68
269		(46" W x 18" D) Rectangular Duct	LF	10	10%	11	\$ 12.40	124	\$ 136.40	0.912	\$ 98.00	\$ 89.38	\$ 883.14	\$	1,119.54
270		(56" W x 20" D) Rectangular Duct	LF	22	10%	24	\$ 13.40	323	\$ 324.28	0.300	\$ 98.00	\$ 29.40	\$ 711.48	\$	1,035.76
271		(56" W x 18" D) Rectangular Duct	LF	13	10%	14	\$ 13.40	186	\$ 191.62	0.300	\$ 98.00	\$ 29.40	\$ 420.42	\$	612.04
272		(14" W x 6" D) Rectangular Duct	LF	12	10%	13	\$ 4.10	47	\$ 54.12	0.376	\$ 98.00	\$ 36.85	\$ 486.39	\$	540.51
		<b>Flexible Duct</b>													
273		(6" Dia) Flexible Duct	LF	71	10%	78	\$ 3.02	-	\$ 235.86	0.045	\$ 98.00	\$ 4.41	\$ 344.42	\$	580.28
274		(8" Dia) Flexible Duct	LF	93	10%	102	\$ 3.85	-	\$ 393.86	0.048	\$ 98.00	\$ 4.70	\$ 481.22	\$	875.07
275		(10" Dia) Flexible Duct	LF	269	10%	296	\$ 4.85	-	\$ 1,435.12	0.035	\$ 98.00	\$ 3.43	\$ 1,014.94	\$	2,450.05
		<b>HVAC Fixtures</b>													
276		<b>8th Floor</b>													
277		(30"x30") Ceiling Diffuser	EA	4	0%	4	\$ 125.62	-	\$ 502.48	0.600	\$ 98.00	\$ 58.80	\$ 235.20	\$	737.68
278		(24"x24") Ceiling Diffuser	EA	13	0%	13	\$ 109.65	-	\$ 1,425.45	0.525	\$ 98.00	\$ 51.45	\$ 668.85	\$	2,094.30
279		(12"x12") Ceiling Diffuser	EA	12	0%	12	\$ 75.95	-	\$ 911.40	0.452	\$ 98.00	\$ 44.30	\$ 531.55	\$	1,442.95
280		(24"x24") Exhaust Register	EA	2	0%	2	\$ 109.65	-	\$ 219.30	0.525	\$ 98.00	\$ 51.45	\$ 102.90	\$	322.20
281		(12"x12") Exhaust Register	EA	6	0%	6	\$ 75.95	-	\$ 455.70	0.452	\$ 98.00	\$ 44.30	\$ 265.78	\$	721.48
282		Fan Power Terminal Unit Inlet Size: (16" Dia)	EA	26	0%	26	\$ 258.00	-	\$ 6,708.00	2.320	\$ 98.00	\$ 227.36	\$ 5,911.36	\$	12,619.36
283		Fan Power Terminal Unit Inlet Size: (12" Dia)	EA	16	0%	16	\$ 210.00	-	\$ 3,360.00	1.980	\$ 98.00	\$ 194.04	\$ 3,104.64	\$	6,464.64
284		Supple Mental AC Unit Model: T24SHC-4	EA	2	0%	2	\$ 4,215.00	-	\$ 8,430.00	4.250	\$ 98.00	\$ 416.50	\$ 833.00	\$	9,263.00
285		(20"x20") Door Access Exhaust Fan (CFM250)	EA	38	0%	38	\$ 198.00	-	\$ 7,524.00	1.200	\$ 98.00	\$ 117.60	\$ 4,468.80	\$	11,992.80
286		Manuf: GREENHECK Model: SQ-90	EA	1	0%	1	\$ 1,058.00	-	\$ 1,058.00	2.000	\$ 98.00	\$ 196.00	\$ 196.00	\$	1,254.00
287		Exhaust Fan (CFM600) Manuf: GREENHECK Model: SQ-120	EA	1	0%	1	\$ 2,119.85	-	\$ 2,119.85	2.350	\$ 98.00	\$ 230.30	\$ 230.30	\$	2,350.15
288		Cable Operator Damper	EA	215	0%	215	\$ 145.25	-	\$ 31,228.75	0.850	\$ 98.00	\$ 83.30	\$ 17,909.50	\$	49,138.25
289		Volume Damper	EA	37	0%	37	\$ 120.25	-	\$ 4,449.25	0.565	\$ 98.00	\$ 55.37	\$ 2,048.69	\$	6,497.94
290		(2'-0" Long) Linear Diffuser/(10"x8") Plenum Box Model: FL-10 CFM:50-150	EA	36	0%	36	\$ 158.65	-	\$ 5,711.40	0.952	\$ 98.00	\$ 93.30	\$ 3,358.66	\$	9,070.06
291		(3'-0" Long) Linear Diffuser/(12"x8") w/ Plenum Box Model: FL-10 CFM:151-225	EA	38	0%	38	\$ 198.62	-	\$ 7,547.56	1.350	\$ 98.00	\$ 132.30	\$ 5,027.40	\$	12,574.96
292		(4'-0" Long) Linear Diffuser/(12"x8") w/ Plenum Box Model: FL-10 CFM:225-300	EA	64	0%	64	\$ 215.32	-	\$ 13,780.48	1.480	\$ 98.00	\$ 145.04	\$ 9,282.56	\$	23,063.04
293		(12'-10" Long) Linear Diffuser/(12"x10") w/ Plenum Box	EA	77	0%	77	\$ 410.00	-	\$ 31,570.00	2.650	\$ 98.00	\$ 259.70	\$ 19,996.90	\$	51,566.90

Building Summary	
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Construction Estimation Services

Item #	Ref. Sheet	Item Description	Unit	Quantity	Wastage	Quantity w/ Wastage	Unit Material Cost	Weight / Lbs.	Total Material Cost	Unit Manhour	Hourly Wage	Unit Labor Cost	Total Labor Cost	Sub Cost	Total Trade Cost
294		<b>10th Floor</b>													
295		Volume Damper	EA	83	0%	83	\$ 120.25	-	\$ 9,980.75	0.565	\$ 98.00	\$ 55.37	\$ 4,595.71	\$	14,576.46
296		Cable Operator Damper	EA	164	0%	164	\$ 145.25	-	\$ 23,821.00	0.850	\$ 98.00	\$ 83.30	\$ 13,661.20	\$	37,482.20
297		(20"x20") Door Access	EA	42	0%	42	\$ 198.00	-	\$ 8,316.00	1.200	\$ 98.00	\$ 117.60	\$ 4,939.20	\$	13,255.20
298		(24"x24") Ceiling Diffuser	EA	25	0%	25	\$ 109.65	-	\$ 2,741.25	0.525	\$ 98.00	\$ 51.45	\$ 1,286.25	\$	4,027.50
299		(30"x30") Ceiling Diffuser	EA	1	0%	1	\$ 125.62	-	\$ 125.62	0.600	\$ 98.00	\$ 58.80	\$ 58.80	\$	184.42
300		(12"x12") Ceiling Diffuser	EA	4	0%	4	\$ 75.95	-	\$ 303.80	0.452	\$ 98.00	\$ 44.30	\$ 177.18	\$	480.98
301		(12"x12") Exhaust Register	EA	10	0%	10	\$ 75.95	-	\$ 759.50	0.452	\$ 98.00	\$ 44.30	\$ 442.96	\$	1,202.46
302		(24"x24") Exhaust Register	EA	1	0%	1	\$ 109.65	-	\$ 109.65	0.525	\$ 98.00	\$ 51.45	\$ 51.45	\$	161.10
303		Fan Power Terminal Unit Inlet Size: (16"Dia)	EA	23	0%	23	\$ 258.00	-	\$ 5,934.00	2.320	\$ 98.00	\$ 227.36	\$ 5,229.28	\$	11,163.28
304		Fan Power Terminal Unit Inlet Size: (12"Dia)	EA	16	0%	16	\$ 210.00	-	\$ 3,360.00	1.980	\$ 98.00	\$ 194.04	\$ 3,104.64	\$	6,464.64
305		Supple Mental AC Unit Model: T24SHC-4	EA	2	0%	2	\$ 4,215.00	-	\$ 8,430.00	4.250	\$ 98.00	\$ 416.50	\$ 833.00	\$	9,263.00
306		Exhaust Fan (CFM200) Manuf: GREENHECK Model: SQ-80	EA	1	0%	1	\$ 2,119.85	-	\$ 2,119.85	2.350	\$ 98.00	\$ 230.30	\$ 230.30	\$	2,350.15
307		(2'-0"Long) Linear Diffuser/(10"x8") w/ Plenum Box Model:FL-10 CFM:50-150	EA	3	0%	3	\$ 158.65	-	\$ 475.95	0.952	\$ 98.00	\$ 93.30	\$ 279.89	\$	755.84
308		(3'-0"Long)Linear Diffuser/(12"x8") w/ Plenum Box Model:FL-10 CFM:151-225	EA	16	0%	16	\$ 198.62	-	\$ 3,177.92	1.350	\$ 98.00	\$ 132.30	\$ 2,116.80	\$	5,294.72
309		(4'-0"Long)Linear Diffuser/(12"x8") w/ Plenum Box Model:FL-10 CFM:225-300	EA	50	0%	50	\$ 215.32	-	\$ 10,766.00	1.480	\$ 98.00	\$ 145.04	\$ 7,252.00	\$	18,018.00
310		(2'-0"Long)Linear Diffuser/(10"x8") w/ Plenum Box Model:FL-10 CFM:50-150	EA	23	0%	23	\$ 158.65	-	\$ 3,648.95	0.952	\$ 98.00	\$ 93.30	\$ 2,145.81	\$	5,794.76
311		(4'-0"Long)Linear Diffuser/(12"x10") w/ Plenum Box Model:FL-10 CFM:225-300	EA	56	0%	56	\$ 215.32	-	\$ 12,057.92	1.480	\$ 98.00	\$ 145.04	\$ 8,122.24	\$	20,180.16
312		(3'-0"Long)Linear Diffuser/(12"x8") w/ Plenum Box Model:FL-10 CFM:151-225	EA	16	0%	16	\$ 198.62	-	\$ 3,177.92	1.350	\$ 98.00	\$ 132.30	\$ 2,116.80	\$	5,294.72
313		Cable Operator Damper	EA	164	0%	164	\$ 145.25	-	\$ 23,821.00	0.850	\$ 98.00	\$ 83.30	\$ 13,661.20	\$	37,482.20
314		<b>13th Floor</b>													
315		Fan Power Terminal Unit Inlet Size: (16"Dia)	EA	18	0%	18	\$ 258.00	-	\$ 4,644.00	2.320	\$ 98.00	\$ 227.36	\$ 4,092.48	\$	8,736.48
316		Fan Power Terminal Unit Inlet Size: (12"Dia)	EA	9	0%	9	\$ 210.00	-	\$ 1,890.00	1.980	\$ 98.00	\$ 194.04	\$ 1,746.36	\$	3,636.36
317		Supple Mental AC Unit Model: HPY06 CFM: 600	EA	2	0%	2	\$ 4,215.00	-	\$ 8,430.00	4.250	\$ 98.00	\$ 416.50	\$ 833.00	\$	9,263.00
318		Supple Mental AC Unit Model: HPY10 CFM: 1000	EA	1	0%	1	\$ 4,215.00	-	\$ 4,215.00	4.250	\$ 98.00	\$ 416.50	\$ 416.50	\$	4,631.50
319		(2'-0"L)Linear Diffuser/(10"x8") w/ Plenum Box Model:FL-10 CFM:50-150	EA	31	0%	31	\$ 158.65	-	\$ 4,918.15	0.952	\$ 98.00	\$ 93.30	\$ 2,892.18	\$	7,810.33
320		(3'-0"L)Linear Diffuser/(12"x8") w/ Plenum Box Model:FL-10 CFM:151-225	EA	65	0%	65	\$ 198.62	-	\$ 12,910.30	1.350	\$ 98.00	\$ 132.30	\$ 8,599.50	\$	21,509.80
321		(4'-0"L)Linear Diffuser/(12"x10") w/ Plenum Box Model:FL-10 CFM:225-300	EA	2	0%	2	\$ 215.32	-	\$ 430.64	1.480	\$ 98.00	\$ 145.04	\$ 290.08	\$	720.72
322		(2'-0"L)Linear Diffuser/(10"x8") w/ Plenum Box Model:FL-10 CFM:50-150	EA	28	0%	28	\$ 158.65	-	\$ 4,442.20	0.952	\$ 98.00	\$ 93.30	\$ 2,612.29	\$	7,054.49
323		(4'-0"L)Linear Diffuser/(12"x10") w/ Plenum Box Model:FL-10 CFM:151-300	EA	13	0%	13	\$ 215.32	-	\$ 2,799.16	1.480	\$ 98.00	\$ 145.04	\$ 1,885.52	\$	4,684.68
324		(24x24) Square Diffuser Manf:TITUS Model:OMNI	EA	41	0%	41	\$ 109.65	-	\$ 4,495.65	0.525	\$ 98.00	\$ 51.45	\$ 2,109.45	\$	6,605.10
325		(20"x20") Door Access	EA	33	0%	33	\$ 198.00	-	\$ 6,534.00	1.200	\$ 98.00	\$ 117.60	\$ 3,880.80	\$	10,414.80
326		Cable Operator Damper	EA	164	0%	164	\$ 145.25	-	\$ 23,821.00	0.850	\$ 98.00	\$ 83.30	\$ 13,661.20	\$	37,482.20
327		<b>14th Floor</b>													
328		Fan Power Terminal Unit Inlet Size: (12"Dia)	EA	10	0%	10	\$ 210.00	-	\$ 2,100.00	1.980	\$ 98.00	\$ 194.04	\$ 1,940.40	\$	4,040.40
329		Fan Power Terminal Unit Inlet Size: (16"Dia)	EA	18	0%	18	\$ 258.00	-	\$ 4,644.00	2.320	\$ 98.00	\$ 227.36	\$ 4,092.48	\$	8,736.48
330		Supple Mental AC Unit Model: HYP10 CFM: 1000	EA	5	0%	5	\$ 4,215.00	-	\$ 21,075.00	4.250	\$ 98.00	\$ 416.50	\$ 2,082.50	\$	23,157.50
331		(2'-0"L) Linear Diffuser w/ (10"x8")Plenum Box Model:FL-10 CFM:50-150	EA	37	0%	37	\$ 158.65	-	\$ 5,870.05	0.952	\$ 98.00	\$ 93.30	\$ 3,451.95	\$	9,322.00
332		(3'-0"L)Linear Diffuser w/ (12"x8")Plenum Box Model:FL-10 CFM:151-225	EA	63	0%	63	\$ 198.62	-	\$ 12,513.06	1.350	\$ 98.00	\$ 132.30	\$ 8,334.90	\$	20,847.96
333		(4'-0"L)Linear Diffuser w/ (12"x10")Plenum Box Model:FL-10 CFM:225-300	EA	4	0%	4	\$ 215.32	-	\$ 861.28	1.480	\$ 98.00	\$ 145.04	\$ 580.16	\$	1,441.44
334		(2'-0"L)Linear Diffuser w/ (10"x8")Plenum Box Model:FL-10 CFM:50-150	EA	15	0%	15	\$ 158.65	-	\$ 2,379.75	0.952	\$ 98.00	\$ 93.30	\$ 1,399.44	\$	3,779.19
335		(4'-0"L) Linear Diffuser w/ (12"x10")Plenum Box Model:FL-10 CFM:151-300	EA	30	0%	30	\$ 215.32	-	\$ 6,459.60	1.480	\$ 98.00	\$ 145.04	\$ 4,351.20	\$	10,810.80
336		(24x24)Square Diffuser Manf:TITUS Model:OMNI	EA	34	0%	34	\$ 109.65	-	\$ 3,728.10	0.525	\$ 98.00	\$ 51.45	\$ 1,749.30	\$	5,477.40
337		(20"x20") Door Access	EA	38	0%	38	\$ 198.00	-	\$ 7,524.00	1.200	\$ 98.00	\$ 117.60	\$ 4,468.80	\$	11,992.80
338		Water Detector	EA	1	0%	1	\$ 128.65	-	\$ 128.65	0.485	\$ 98.00	\$ 47.53	\$ 47.53	\$	176.18
339		Cable Operator Damper	EA	149	0%	149	\$ 145.25	-	\$ 21,642.25	0.850	\$ 98.00	\$ 83.30	\$ 12,411.70	\$	34,053.95

BuilingataSummary

Project: \*\*\*\*\*  
 Location: \*\*\*\*\* New York, NY  
 Scope of Work: HVAC  
 Date: 11/05/20\*\*\*



Item #	Ref. Sheet	Item Description	Unit	Quantity	Wastage	Quantity w/ Wastage	Unit Material Cost	Weight / Lbs.	Total Material Cost	Unit Manhour	Hourly Wage	Unit Labor Cost	Total Labor Cost	Sub Cost	Total Trade Cost
340		<b>15th Floor</b>													
341		(2'-0") Linear Diffuser w/ (10"x8") Plenum Box Model: FL-10 CFM: 50-150	EA	37	0%	37	\$ 158.65	-	\$ 5,870.05	0.952	\$ 98.00	\$ 93.30	\$ 3,451.95	\$ 9,322.00	
342		(3'-0") Linear Diffuser w/ (12"x8") Plenum Box Model: FL-10 CFM: 151-225	EA	62	0%	62	\$ 198.62	-	\$ 12,314.44	1.350	\$ 98.00	\$ 132.30	\$ 8,202.60	\$ 20,517.04	
343		(4'-0") Linear Diffuser w/ (12"x10") Plenum Box Model: FL-10 CFM: 225-300	EA	4	0%	4	\$ 215.32	-	\$ 861.28	1.480	\$ 98.00	\$ 145.04	\$ 580.16	\$ 1,441.44	
344		(2'-0") Linear Diffuser w/ (10"x8") Plenum Box Model: FL-10 CFM: 50-150	EA	15	0%	15	\$ 158.65	-	\$ 2,379.75	0.952	\$ 98.00	\$ 93.30	\$ 1,399.44	\$ 3,779.19	
345		(4'-0") Linear Diffuser w/ (12"x10") Plenum Box Model: FL-10 CFM: 151-300	EA	35	0%	35	\$ 215.32	-	\$ 7,536.20	1.480	\$ 98.00	\$ 145.04	\$ 5,076.40	\$ 12,612.60	
346		(24x24) Square Diffuser Manf: TITUS Model: OMNI	EA	34	0%	34	\$ 109.65	-	\$ 3,728.10	0.525	\$ 98.00	\$ 51.45	\$ 1,749.30	\$ 5,477.40	
347		Supple Mental AC Unit Model: HYP10 CFM: 1000	EA	3	0%	3	\$ 4,215.00	-	\$ 12,645.00	4.250	\$ 98.00	\$ 416.50	\$ 1,249.50	\$ 13,894.50	
348		Supple Mental AC Unit Model: HYP10 CFM: 1200	EA	1	0%	1	\$ 4,215.00	-	\$ 4,215.00	4.250	\$ 98.00	\$ 416.50	\$ 416.50	\$ 4,631.50	
349		Supple Mental AC Unit Model: HYP10 CFM: 600	EA	1	0%	1	\$ 4,215.00	-	\$ 4,215.00	4.250	\$ 98.00	\$ 416.50	\$ 416.50	\$ 4,631.50	
350		Supple Mental AC Unit Model: HYP10 CFM: 750	EA	1	0%	1	\$ 4,215.00	-	\$ 4,215.00	4.250	\$ 98.00	\$ 416.50	\$ 416.50	\$ 4,631.50	
351		Fan Power Terminal Unit Inlet Size: (16" Dia)	EA	18	0%	18	\$ 258.00	-	\$ 4,644.00	2.320	\$ 98.00	\$ 227.36	\$ 4,092.48	\$ 8,736.48	
352		Fan Power Terminal Unit Inlet Size: (12" Dia)	EA	10	0%	10	\$ 210.00	-	\$ 2,100.00	1.980	\$ 98.00	\$ 194.04	\$ 1,940.40	\$ 4,040.40	
353		(20"x20") Door Access	EA	40	0%	40	\$ 198.00	-	\$ 7,920.00	1.200	\$ 98.00	\$ 117.60	\$ 4,704.00	\$ 12,624.00	
354		Cable Operator Damper	EA	153	0%	153	\$ 145.25	-	\$ 22,223.25	0.850	\$ 98.00	\$ 83.30	\$ 12,744.90	\$ 34,968.15	
<b>Subtotal(Electrical)</b>									<b>\$ 612,862</b>				<b>\$ 1,007,602</b>		<b>\$ 1,620,464</b>

Veracity Estimating



Quantity	Description	Unit
468.6	FT	
255.4	FT	
146.9	FT	
678.6	FT	
276.4	FT	
48.7	FT	
50		
7.0		
45.0	FT	
100.2	FT	
162.8	FT	
16.5	FT	
350.2	FT	
146.8	FT	
109.8	FT	
86.2	FT	
48.3	FT	
88.8	FT	
28.2	FT	
13.7	FT	
37.0	FT	
4.5	FT	
20.1	FT	
263.7	FT	
78.5	FT	
8.9	FT	
33.0	FT	
5.5	FT	
38.3	FT	
84.0	FT	
2.0		
71.4	FT	
3.0		
32.5	FT	
1.0		
12.5	FT	
1.0		
30.8	FT	
6.5	FT	
32.7	FT	
44.6	FT	
43.2	FT	
8.5	FT	
28.4	FT	
42.9	FT	
2.0		
58.5	FT	
1.0		
13.6	FT	
4.3	FT	
16.3	FT	
1.0		
1.0		
1.0		
2.0		
15.0	FT	
14.8	FT	
41.4	FT	
1.0		
61.5	FT	
5.0	FT	
7.4	FT	
38.0		
64.0		
77.0		
28.0		
13.0		
25.0		
4.0		
13.0		
12.0		
2.0		
6.0		
82.0	FT	
288.2	FT	
70.4	FT	
1.0		
155.0		
213.0		
173.0		
26.0		
18.0		
2.0		
38.0		
1.0		
1.0		
2.0		



- (8"x8") Rectangular Duct
- (12"x10") Rectangular Duct
- (10"x8") Rectangular Duct
- (8"x8") Rectangular Duct
- (14"x12") Rectangular Duct
- (22"x12") Rectangular Duct
- (48"x12") Rectangular Duct
- (8"x8") Rectangular Duct
- (18"x12") Rectangular Duct
- (18"x14") Rectangular Duct
- (16"x12") Rectangular Duct
- (22"x12") Rectangular Duct
- (6"x6") Rectangular Duct
- (10"x10") Rectangular Duct
- (24"x12") Rectangular Duct
- (28"x12") Rectangular Duct
- (38"x12") Rectangular Duct
- (12"x12") Rectangular Duct
- (16"x14") Rectangular Duct
- (20"x14") Rectangular Duct
- (6"x6") Rectangular Duct
- (32"x30") Rectangular Duct
- (26"x26") Rectangular Duct
- (5"x4") Rectangular Duct
- (18"x14") Rectangular Duct
- (18"x16") Rectangular Duct
- (24"x16") Rectangular Duct
- (26"x20") Rectangular Duct
- (30"x20") Rectangular Duct
- (34"x34") Rectangular Duct
- (34"x34") Rectangular Duct
- (24"x18") Rectangular Duct
- (48"x18") Rectangular Duct
- (42"x24") Rectangular Duct
- (42"x24") Rectangular Duct
- (38"x36") Rectangular Duct
- (38"x36") Rectangular Duct
- (22"x14") Rectangular Duct
- (48"x26") Rectangular Duct
- (24"x18") Rectangular Duct
- (22"x14") Rectangular Duct
- (42"x26") Rectangular Duct
- (34"x20") Rectangular Duct
- (30"x20") Rectangular Duct
- (48"x28") Rectangular Duct
- (48"x28") Rectangular Duct
- (32"x24") Rectangular Duct
- (32"x24") Rectangular Duct
- (54"x24") Rectangular Duct
- (32"x20") Rectangular Duct
- (14"x14") Rectangular Duct
- (54"x24") Rectangular Duct
- (6"x6") Rectangular Duct
- (76"x18") Rectangular Duct
- (58"x18") Rectangular Duct
- (26"x12") Rectangular Duct
- (14"x10") Rectangular Duct
- (30"x12") Rectangular Duct
- (14"x12") Rectangular Duct
- (58"x18") Rectangular Duct
- (20"x16") Rectangular Duct
- (16"x10") Rectangular Duct
- (3'-0" Long) Linear Diffuser W/ (12"x8") Plenum Box
- (4'-0" Long) Linear Diffuser W/ (12"x8") Plenum Box
- (12'-10" Long) Linear Diffuser W/ (12"x10") Plenum Box
- (2'-0" Long) Linear Diffuser W/ (10"x8") Plenum Box
- (2'-0" Long) Linear Diffuser W/ (10"x8") Plenum Box
- Fire Smoke Detector
- (30"x30") Ceiling Diffuser
- (24"x24") Ceiling Diffuser
- (12"x12") Ceiling Diffuser
- (24"x24") Exhaust Register
- (12"x12") Exhaust Register
- (8" Dia) Flexible Duct
- (10" Dia) Flexible Duct
- (6" Dia) Flexible Duct
- (32"x14") Rectangular Duct
- Radius Elbow
- Tee
- Transition
- Fan Power Terminal Unit
- Fan Power Terminal Unit
- AC Unit
- (20"x20") Door Access
- Exhaust Fan (CFM 250)
- Exhaust Fan (CFM 600)
- Condensate Pump

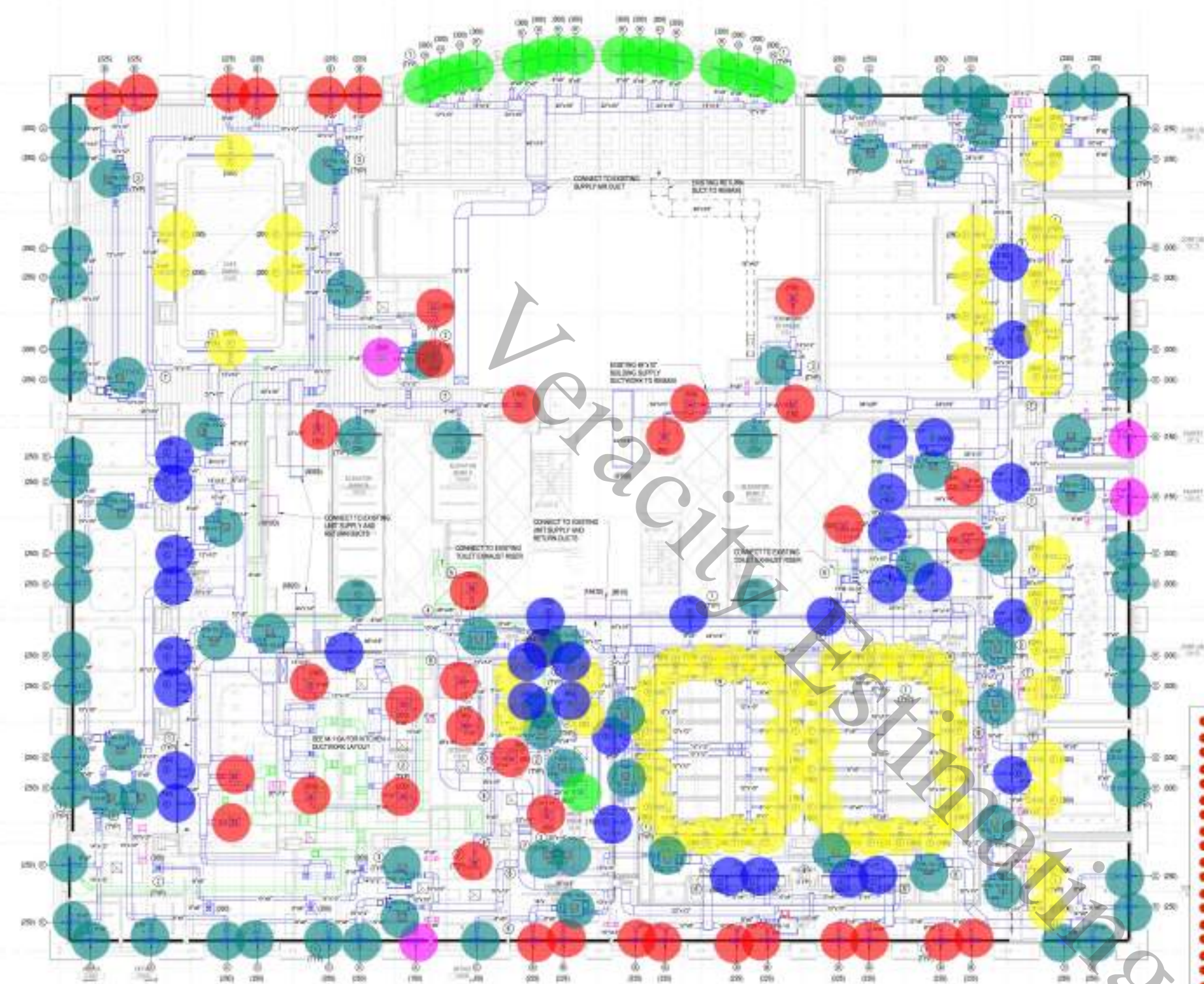
**GENERAL NOTES**

1. MECHANICAL CONTRACTOR SHALL PROVIDE NECESSARY SUPPLEMENTARY STEEL MEMBERS FOR THE SUPPORT OF SUSPENDED EQUIPMENT.
2. PROVIDE ACCESS DOORS FOR VALVES, VENTS, ETC.
3. MECHANICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY WELLS IN ALL FLOORING FOR THE TRANSFERENCE CONTROL DUCTS, PRESSURE SENSORS, FLOW METERS, ETC.
4. COORDINATE WITH THE ARCHITECT FOR THE EXACT LOCATION OF THROUGH ROADS.
5. PROVIDE VOLUME DAMPER AT EACH BRANCH/TEE & REGISTER AND CALL OUTPUSHING EQUIPMENT FOR BRANCH DUCT, REGISTER & EXHAUST REGISTER.
6. PROVIDE NON-ACCESSIBLE CEILING.
7. PROVIDE TRANSFER & CUTS ONLY WHERE THE WALLS OF LIFT SHAFT.
8. PROVIDE ACCESS TO ALL HANGERS FOR UNIT.

**REFERENCES**

1. PROVIDE CEILING LINEAR DIFFUSER.
2. PROVIDE 10" AT SQUARE OUTGASING (ENCL. 2, 3, 4 & 5) ETC.
3. PROVIDE ACCESS DOORS TO ALL HANGERS AND UNITS.
4. PROVIDE COORDINATE FOR HANGERS AND UNITS.
5. EXISTING FIBER OPTIC CABLES SHALL BE REPLACED WITH NEW FIBER.
6. PROVIDE PDA REQUIRED.
7. COORDINATE WITH ARCHITECT FOR STRUCTURAL ENGINEER.





FAN POWERED TERMINAL UNIT SCHEDULE 10TH FLOOR						
UNIT	MODEL	CFM	SPM	HP	Comments	
12" OA A	C	800	1.8	13		
12" OA B	C	950	1.8	13		
12" OA C	C	1000	1.8	13		
12" OA D	C	1000	1.8	13		
12" OA E	C	1000	1.8	13		
12" OA F	C	750	1.8	13		
12" OA G	C	800	1.8	13		
12" OA H	C	800	1.8	13		
12" OA I	C	800	1.8	13		
12" OA J	C	800	1.8	13		
12" OA K	C	800	1.8	13		
12" OA L	C	800	1.8	13		
12" OA M	C	800	1.8	13		
12" OA N	C	800	1.8	13		
12" OA O	C	800	1.8	13		
12" OA P	C	800	1.8	13		
12" OA Q	C	800	1.8	13		
12" OA R	C	800	1.8	13		
12" OA S	C	800	1.8	13		
12" OA T	C	800	1.8	13		
12" OA U	C	800	1.8	13		
12" OA V	C	800	1.8	13		
12" OA W	C	800	1.8	13		
12" OA X	C	800	1.8	13		
12" OA Y	C	800	1.8	13		
12" OA Z	C	800	1.8	13		

SUPPLEMENTAL AD UNIT SCHEDULE 10TH FLOOR						
UNIT	MODEL	CFM	SPM	HP	Comments	
12" OA A	C	800	1.8	13		
12" OA B	C	950	1.8	13		
12" OA C	C	1000	1.8	13		
12" OA D	C	1000	1.8	13		
12" OA E	C	1000	1.8	13		
12" OA F	C	750	1.8	13		
12" OA G	C	800	1.8	13		
12" OA H	C	800	1.8	13		
12" OA I	C	800	1.8	13		
12" OA J	C	800	1.8	13		
12" OA K	C	800	1.8	13		
12" OA L	C	800	1.8	13		
12" OA M	C	800	1.8	13		
12" OA N	C	800	1.8	13		
12" OA O	C	800	1.8	13		
12" OA P	C	800	1.8	13		
12" OA Q	C	800	1.8	13		
12" OA R	C	800	1.8	13		
12" OA S	C	800	1.8	13		
12" OA T	C	800	1.8	13		
12" OA U	C	800	1.8	13		
12" OA V	C	800	1.8	13		
12" OA W	C	800	1.8	13		
12" OA X	C	800	1.8	13		
12" OA Y	C	800	1.8	13		
12" OA Z	C	800	1.8	13		

- (4'-0" Long) Linear Diffuser W/ (12" ... 50.0
- (3'-0" Long) Linear Diffuser W/ (12" ... 16.0
- (3'-0" Long) Linear Diffuser W/ (12" ... 16.0
- (4'-0" Long) Linear Diffuser W/ (12" ... 56.0
- (2'-0" Long) Linear Diffuser W/ (10" ... 23.0
- (2'-0" Long) Linear Diffuser W/ (10" ... 3.0
- Fan Power Terminal Unit 23.0
- Fan Power Terminal Unit 16.0
- AC Unit 2.0
- Exhaust Fan (CFM 200) 1.0
- Condensate Pump 2.0
- (20"x20") Door Access 42.0
- (24"x24") Ceiling Diffuser 23.0
- (30"x30") Ceiling Diffuser 1.0
- (12"x12") Ceiling Diffuser 4.0
- (12"x12") Exhaust Register 10.0
- (24"x24") Exhaust Register 1.0

**GENERAL NOTES**

1. MECHANICAL CONTRACTOR SHALL PROVIDE NECESSARY SUPPLEMENTARY STEEL MEMBERS FOR THE SUPPORT OF SUSPENDED EQUIPMENT.
2. PROVIDE ACCESS DOORS FOR VALVES, VENTS, ETC.
3. MECHANICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY WELLS IN ALL FLOOR SLABS FOR THE TRANSFER OF CONTROL DUCTS, PRESSURE SENSORS, FLOW METERS, ETC.
4. COORDINATE WITH THE ARCHITECT FOR THE EXACT LOCATION OF THROUGHPUTS.
5. PROVIDE VOLUME DAMPERS AT DUCT BRANCHES TO REGISTER AND DUCT OPENING EQUIPMENT FOR BRANCH DUCT, REGISTER, DUCT, DAMPERS, FROM NON-ACCESSIBLE CEILING.
6. PROVIDE TRAMPERS IN CEILING WHERE THE WALLS OF UPPER SLAB.
7. PROVIDE ACCESS TO ALL HIR FORMS FOR UNITS.

**REFERENCES**

1. PROVIDE CEILING LINEAR DIFFUSER.
2. PROVIDE VENT SQUARE OUTGASING DEVICE (24" x 18").
3. PROVIDE ACCESS DOORS TO ALL HIR AND MECH UNITS.
4. PROVIDE CLEARANCE FOR EQUIPMENT AND SERVICE.
5. EXISTING FIBER OPTIC BUNDLES SHALL BE TO BE REPLACED WITH NEW FIBER.
6. PROVIDE PDM REQUIRE.
7. COORDINATE WITH ARCHITECT FOR STRUCTURAL ENGINEER.



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**Project Name**

DPN-450 Les Restack

**Project Number**

06-2118-500

**Description**

MECHANICAL CONTROLS DETAILS  
BASCT - FLOOR 06 (MAGNETING  
FLOOR 06)

**Scale**

1/8" = 1'-0"

**Price**

**M-308.00**  
DOB NEW JOB # XX XXXX

**FAN POWERED TERMINAL UNIT SCHEDULE 8TH FLOOR**

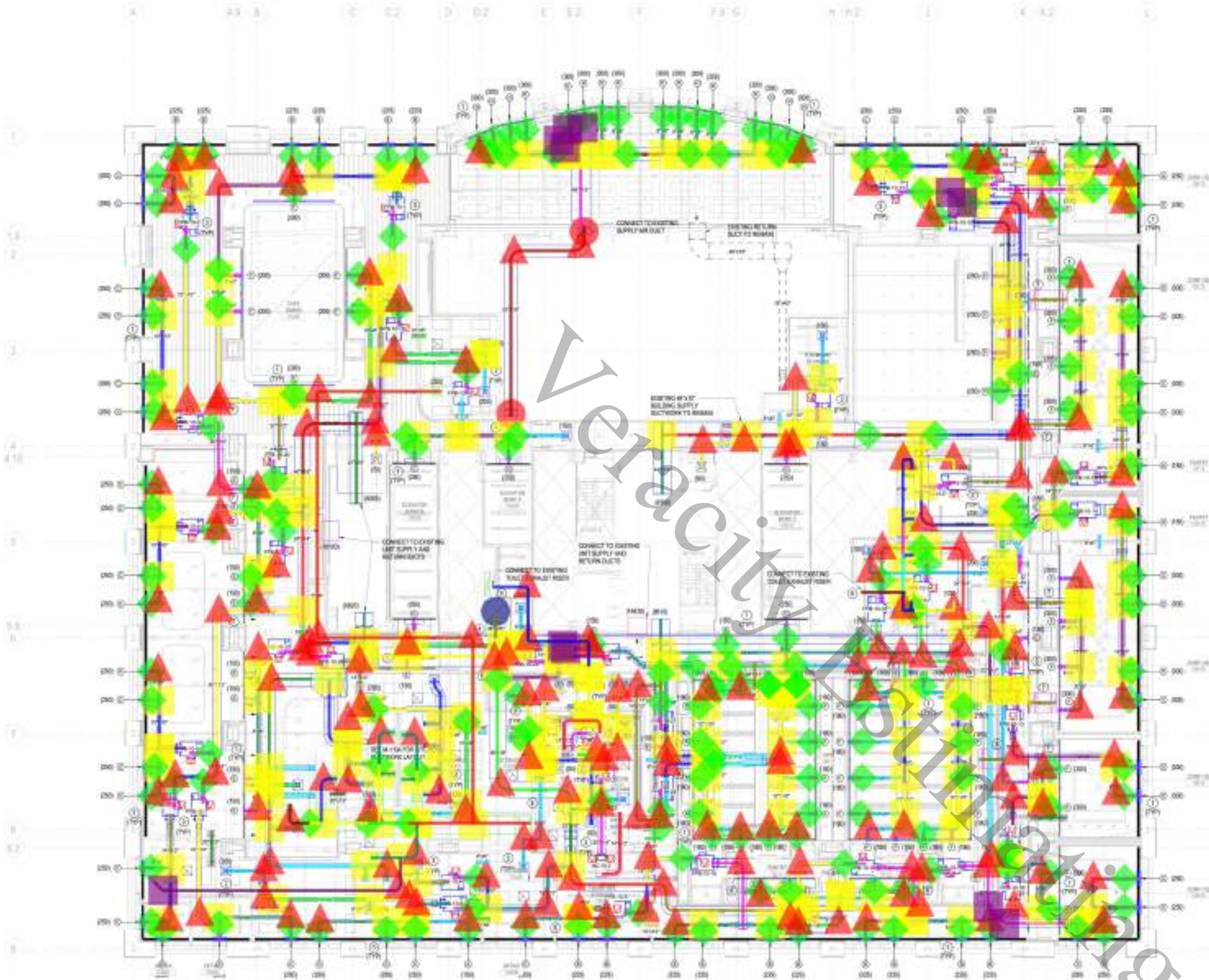
UNIT NUMBER	INLET	UNIT TYPE	MODEL (D/TP/F)	CFM	CFM	CFM	Comments
FVB-8-1	12" OA	C	D	1800	2.7	1.2	
FVB-8-2	12" OA	C	D	1800	2.7	1.2	
FVB-8-3	12" OA	D	E	1800	3.8	3.4	
FVB-8-4	12" OA	D	E	1800	3.8	3.4	
FVB-8-5	12" OA	D	E	1800	3.8	3.4	
FVB-8-6	12" OA	C	D	1320	2.7	1.2	
FVB-8-7	12" OA	C	D	1500	2.7	1.2	
FVB-8-8	12" OA	C	D	1800	2.7	1.2	
FVB-8-9	12" OA	C	D	1800	2.7	1.2	
FVB-8-10	12" OA	C	D	1800	2.7	1.2	
FVB-8-11	12" OA	C	D	1320	2.7	1.2	
FVB-8-12	12" OA	C	D	1320	2.7	1.2	
FVB-8-13	12" OA	C	D	1320	2.7	1.2	
FVB-8-14	12" OA	A	B	600	1.2	1.0	
FVB-8-15	12" OA	A	B	600	1.2	1.0	
FVB-8-16	12" OA	C	D	1320	2.7	1.2	
FVB-8-17	12" OA	C	D	1800	2.7	1.2	
FVB-8-18	12" OA	A	B	600	1.2	1.0	
FVB-8-19	12" OA	C	D	1400	2.7	1.2	
FVB-8-20	12" OA	F	C	800	1.0	1.0	
FVB-8-21	12" OA	F	C	800	1.0	1.0	
FVB-8-22	12" OA	G	D	1000	1.2	1.0	
FVB-8-23	12" OA	F	C	800	1.0	1.0	
FVB-8-24	12" OA	F	C	800	1.0	1.0	
FVB-8-25	12" OA	F	C	800	1.0	1.0	
FVB-8-26	12" OA	F	C	800	1.0	1.0	
FVB-8-27	12" OA	F	C	800	1.0	1.0	
FVB-8-28	12" OA	F	C	800	1.0	1.0	
FVB-8-29	12" OA	F	C	800	1.0	1.0	
FVB-8-30	12" OA	F	C	800	1.0	1.0	
FVB-8-31	12" OA	F	C	800	1.0	1.0	
FVB-8-32	12" OA	F	C	800	1.0	1.0	
FVB-8-33	12" OA	F	C	800	1.0	1.0	
FVB-8-34	12" OA	F	C	800	1.0	1.0	
FVB-8-35	12" OA	F	C	800	1.0	1.0	
FVB-8-36	12" OA	F	C	800	1.0	1.0	
FVB-8-37	12" OA	F	C	800	1.0	1.0	
FVB-8-38	12" OA	F	C	800	1.0	1.0	
FVB-8-39	12" OA	F	C	800	1.0	1.0	
FVB-8-40	12" OA	F	C	800	1.0	1.0	
FVB-8-41	12" OA	F	C	800	1.0	1.0	
FVB-8-42	12" OA	F	C	800	1.0	1.0	
FVB-8-43	12" OA	F	C	800	1.0	1.0	
FVB-8-44	12" OA	F	C	800	1.0	1.0	

**SUPPLEMENTAL AC UNIT SCHEDULE 8TH FLOOR**

Mark	SERVICE SPACE	UNIT TYPE	MODEL	HEIGHT	MBH	CFM	CFM	Comments
AC-8-1	EP	D	T26B4RC-4	25.0	17.0	6.2	308	
AC-8-2	RV ROOM	D	T26B4RC-4	25.0	17.0	6.2	308	

**NOTES**  
1. TEMPERATURE SPACES TO BE PROVIDED BY THE BUILDING





[18" W x 8" D] Rectangular Duct	22.4 FT	
[18" W x 14" D] Rectangular Duct	591.0 FT	
Flexible Duct	117.2 FT	
[24" W x 16" D] Rectangular Duct	17.3 FT	
[48" W x 16" D] Rectangular Duct	9.8 FT	
[40" W x 16" D] Rectangular Duct	66.4 FT	
[32" W x 16" D] Rectangular Duct	3.0	
[32" W x 16" D] Rectangular Duct (10')	76.6 FT	
[26" W x 10" D] Rectangular Duct	31.2 FT	
[26" W x 8" D] Rectangular Duct	97.2 FT	
[16" W x 8" D] Rectangular Duct	107.2 FT	
[44" W x 14" D] Rectangular Duct	43.1 FT	
[64" W x 10" D] Rectangular Duct	484.9 FT	
[6" W x 6" D] Rectangular Duct	198.2 FT	
[5" W x 4" D] Rectangular Duct	377.4 FT	
[12" W x 10" D] Rectangular Duct	219.5 FT	
[8" W x 6" D] Rectangular Duct	135.8 FT	
[12" W x 12" D] Rectangular Duct	14.0 FT	
[34" W x 28" D] Rectangular Duct	19.8 FT	
[18" W x 16" D] Rectangular Duct	173.5 FT	
[14" W x 12" D] Rectangular Duct	19.8 FT	
[24" W x 12" D] Rectangular Duct	18" W x 12" D] Rectangular Duct	52.5 FT
[16" W x 12" D] Rectangular Duct	114.5 FT	
[14" W x 10" D] Rectangular Duct	24.0 FT	
[10" W x 8" D] Rectangular Duct	256.2 FT	
[12" W x 6" D] Rectangular Duct	4.3 FT	
[10" W x 10" D] Rectangular Duct	194.1 FT	
[22" W x 10" D] Rectangular Duct	58.4 FT	
[20" W x 6" D] Rectangular Duct	13.5 FT	
[30" W x 10" D] Rectangular Duct	17.5 FT	
[36" W x 16" D] Rectangular Duct	12.1 FT	
[34" W x 14" D] Rectangular Duct	27.1 FT	
[22" W x 14" D] Rectangular Duct	38.2 FT	
[14" W x 8" D] Rectangular Duct	4.4 FT	
[24" W x 14" D] Rectangular Duct	59.5 FT	
[26" W x 12" D] Rectangular Duct	47.8 FT	
[20" W x 12" D] Rectangular Duct	53.2 FT	
[16" W x 10" D] Rectangular Duct	33.0 FT	
[20" W x 10" D] Rectangular Duct	64.5 FT	
[30" W x 12" D] Rectangular Duct	6.8 FT	
[40" W x 18" D] Rectangular Duct	26.3 FT	
[32" W x 18" D] Rectangular Duct	66.3 FT	
[22" W x 12" D] Rectangular Duct	48.5 FT	
[30" W x 16" D] Rectangular Duct	3.5 FT	
[14" W x 14" D] Rectangular Duct	32.2 FT	
[12" W x 8" D] Rectangular Duct	51.7 FT	
[30" W x 14" D] Rectangular Duct	19.5 FT	
[36" W x 18" D] Rectangular Duct	41.0 FT	
[46" W x 18" D] Rectangular Duct	31.7 FT	
[20" W x 16" D] Rectangular Duct	28.3 FT	
[20" W x 14" D] Rectangular Duct	19.7 FT	
[58" W x 18" D] Rectangular Duct	7.4 FT	
[26" W x 16" D] Rectangular Duct	6.0 FT	
[90 D] Radius Elbow	187.0	
Tee	238.0	
Transition	211.0	
[45 D] Radius Elbow	11.0	
[5" W x 4" D] Rectangular Duct	51.3 FT	
[6" W x 6" D] Rectangular Duct	66.5 FT	
[10" W x 8" D] Rectangular Duct	6.6 FT	
[10" W x 10" D] Rectangular Duct	8.0 FT	
[12" W x 12" D] Rectangular Duct	17.0 FT	
[8" W x 8" D] Rectangular Duct	148.1 FT	
[48" W x 26" D] Rectangular Duct	8.7 FT	
[48" W x 26" D] Rectangular Duct	1.0	
[8" Dia] Circular Duct	58.8 FT	
[18" W x 12" D] Rectangular Duct	42.3 FT	
[44" W x 28" D] Rectangular Duct	26.4 FT	
[44" W x 22" D] Rectangular Duct	8.4 FT	
[24" W x 18" D] Rectangular Duct	35.4 FT	
[22" W x 14" D] Rectangular Duct	11.9 FT	
[10" W x 8" D] Rectangular Duct (20)	5.9 FT	
[8" W x 8" D] Rectangular Duct (20)	18.3 FT	
[20" W x 12" D] Rectangular Duct (20)	21.9 FT	
[46" W x 12" D] Rectangular Duct (20)	24.0 FT	
[30" W x 12" D] Rectangular Duct (20)	3.4 FT	
[14" W x 12" D] Rectangular Duct (20)	31.8 FT	
[6" W x 6" D] Rectangular Duct (20)	5.9 FT	
[10" W x 10" D] Rectangular Duct (20)	3.0 FT	
[10" W x 10" D] Rectangular Duct (20)	3.0 FT	

[30" W x 10" D] Rectangular Duct	17.5 FT
[36" W x 16" D] Rectangular Duct	12.1 FT
[34" W x 14" D] Rectangular Duct	27.1 FT
[22" W x 14" D] Rectangular Duct	38.2 FT
[14" W x 8" D] Rectangular Duct	4.4 FT
[24" W x 14" D] Rectangular Duct	59.5 FT
[26" W x 12" D] Rectangular Duct	47.8 FT
[20" W x 12" D] Rectangular Duct	53.2 FT
[16" W x 10" D] Rectangular Duct	33.0 FT
[20" W x 10" D] Rectangular Duct	64.5 FT
[30" W x 12" D] Rectangular Duct	6.8 FT
[40" W x 18" D] Rectangular Duct	26.3 FT
[32" W x 18" D] Rectangular Duct	66.3 FT
[22" W x 12" D] Rectangular Duct	48.5 FT
[30" W x 16" D] Rectangular Duct	3.5 FT
[14" W x 14" D] Rectangular Duct	32.2 FT
[12" W x 8" D] Rectangular Duct	51.7 FT
[30" W x 14" D] Rectangular Duct	19.5 FT
[36" W x 18" D] Rectangular Duct	41.0 FT
[46" W x 18" D] Rectangular Duct	31.7 FT
[20" W x 16" D] Rectangular Duct	28.3 FT
[20" W x 14" D] Rectangular Duct	19.7 FT
[58" W x 18" D] Rectangular Duct	7.4 FT
[26" W x 16" D] Rectangular Duct	6.0 FT
[90 D] Radius Elbow	187.0
Tee	238.0
Transition	211.0
[45 D] Radius Elbow	11.0
[5" W x 4" D] Rectangular Duct	51.3 FT
[6" W x 6" D] Rectangular Duct	66.5 FT
[10" W x 8" D] Rectangular Duct	6.6 FT
[10" W x 10" D] Rectangular Duct	8.0 FT
[12" W x 12" D] Rectangular Duct	17.0 FT
[8" W x 8" D] Rectangular Duct	148.1 FT
[48" W x 26" D] Rectangular Duct	8.7 FT
[48" W x 26" D] Rectangular Duct	1.0
[8" Dia] Circular Duct	58.8 FT
[18" W x 12" D] Rectangular Duct	42.3 FT
[44" W x 28" D] Rectangular Duct	26.4 FT
[44" W x 22" D] Rectangular Duct	8.4 FT
[24" W x 18" D] Rectangular Duct	35.4 FT
[22" W x 14" D] Rectangular Duct	11.9 FT
[10" W x 8" D] Rectangular Duct (20)	5.9 FT
[8" W x 8" D] Rectangular Duct (20)	18.3 FT
[20" W x 12" D] Rectangular Duct (20)	21.9 FT
[46" W x 12" D] Rectangular Duct (20)	24.0 FT
[30" W x 12" D] Rectangular Duct (20)	3.4 FT
[14" W x 12" D] Rectangular Duct (20)	31.8 FT
[6" W x 6" D] Rectangular Duct (20)	5.9 FT
[10" W x 10" D] Rectangular Duct (20)	3.0 FT
[10" W x 10" D] Rectangular Duct (20)	3.0 FT

**GENERAL NOTES**

1. MECHANICAL CONTRACTOR SHALL PROVIDE RECESSARY SUPPLEMENTARY STEEL MEMBERS FOR THE SUPPORT OF SUSPENDED EQUIPMENT.
2. PROVIDE ACCESS DOORS FOR VALVES, VENTS, ETC.
3. MECHANICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY WELLS IN ALL FLOORING FOR THE TEMPERATURE CONTROL, CONTROL, PRESSURE, SENSORS, FLOW METERS, ETC.
4. COORDINATE WITH THE ARCHITECT FOR THE EXACT LOCATION OF THROUGH ROADS.
5. PROVIDE VALVE CARRIER AT EACH BRANCH/OBJECT & REGISTER AND CALL OUTLETING EQUIPMENT FOR BRANCH DUCT, REGISTER/SUPPLY EXHAUSTER.
6. PROVIDE NON-ACCESSIBLE CEILING.
7. PROVIDE THROUGH ROADS ONLY WHERE THE WALLS OF LIGHTS ARE.
8. PROVIDE ACCESS TO ALL FIRE FORMS FOR UNITS.

**REFERENCES**

1. PROVIDE CEILING UNDER DIFFUSER.
2. PROVIDE 10" AT SQUARE OUTGASERS UNDER 2" IN 4" SIZES.
3. PROVIDE ACCESS DOORS TO ALL FIRE AND ALARMS.
4. PROVIDE CLEARANCE FOR EQUIPMENT AND SERVICE.
5. EXISTING FID AT BUILDING ENTRY ARE TO BE REPLACED WITH NEW FID.
6. PROVIDE PDM AS REQUIRED.
7. COORDINATE WITH ARCHITECT FOR STRUCTURAL ENGINEER.



**Gensler**

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**Watermark Consulting Group LLC**  
300 West 10th Street, New York, NY 10011  
Tel: 212 691 1000  
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**Tad.**  
300 West 10th Street, New York, NY 10011  
Tel: 212 691 1000  
Fax: 212 691 1001

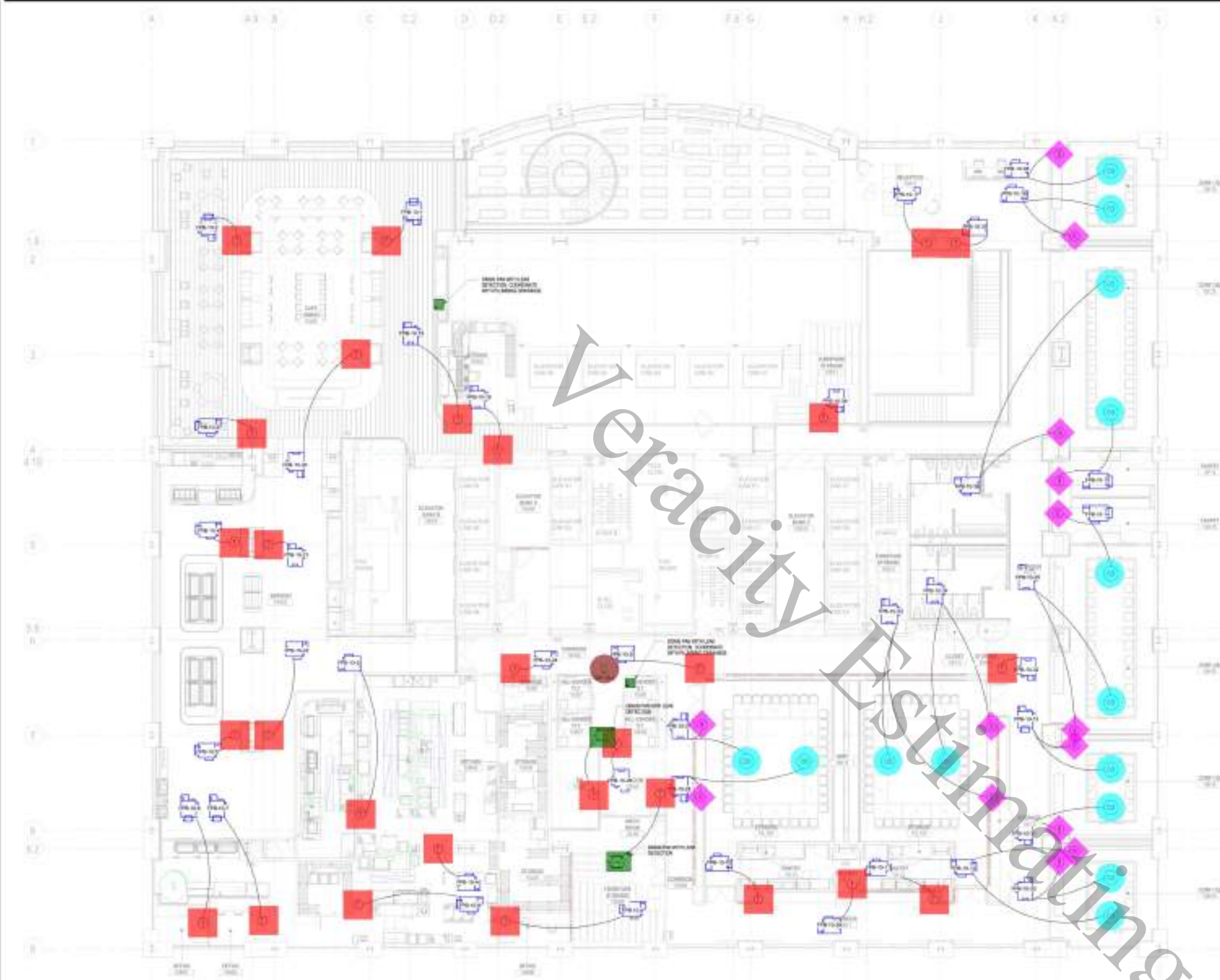
**cbb**  
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**RG**  
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**Longman Lindsey**  
300 West 10th Street, New York, NY 10011  
Tel: 212 691 1000  
Fax: 212 691 1001

UNIT NUMBER	INLET	UNIT MODEL (DTPS/F)	CFM	SPM	HP	Comments
FPS-10-1	12" OA	B	800	1.8	13	
FPS-10-2	12" OA	B	800	1.8	13	
FPS-10-3	12" OA	B	800	1.8	13	
FPS-10-4	12" OA	B	800	1.8	13	
FPS-10-5	12" OA	B	800	1.8	13	
FPS-10-6	12" OA	B	800	1.8	13	
FPS-10-7	12" OA	A	800	1.2	10	
FPS-10-8	12" OA	B	800	1.8	13	
FPS-10-9	12" OA	B	800	1.8	13	
FPS-10-10	12" OA	B	800	1.8	13	
FPS-10-11	12" OA	B	800	1.8	13	
FPS-10-12	12" OA	B	800	1.8	13	
FPS-10-13	12" OA	A	800	1.2	10	
FPS-10-14	12" OA	C	1300	2.7	18	
FPS-10-15	12" OA	C	1300	2.7	18	
FPS-10-16	12" OA	B	800	1.8	13	
FPS-10-17	12" OA	B	800	1.8	13	
FPS-10-18	12" OA	B	800	1.8	13	
FPS-10-19	12" OA	B	800	1.8	13	
FPS-10-20	12" OA	C	1300	2.7	18	
FPS-10-21	12" OA	B	800	1.8	13	
FPS-10-22	12" OA	C	800	1.8	13	
FPS-10-23	12" OA	F	800	1.8	13	
FPS-10-24	12" OA	F	800	1.8	13	
FPS-10-25	12" OA	F	800	1.8	13	
FPS-10-26	12" OA	F	800	1.8	13	
FPS-10-27	12" OA	G	1440	3.0	19	
FPS-10-28	12" OA	D	1440	3.0	19	
FPS-10-29	12" OA	G	1440	3.0	19	
FPS-10-30	12" OA	F	800	1.8	13	
FPS-10-31	12" OA	F	800	1.8	13	
FPS-10-32	12" OA	F	800	1.8	13	
FPS-10-33	12" OA	D	1440	3.0	19	
FPS-10-34	12" OA	D	1440	3.0	19	
FPS-10-35	12" OA	G	1440	3.0	19	
FPS-10-36	12" OA	D	1440	3.0	19	
FPS-10-37	12" OA	G	1440	3.0	19	
FPS-10-38	12" OA	F	800	1.8	13	
FPS-10-39	12" OA	F	800	1.8	13	

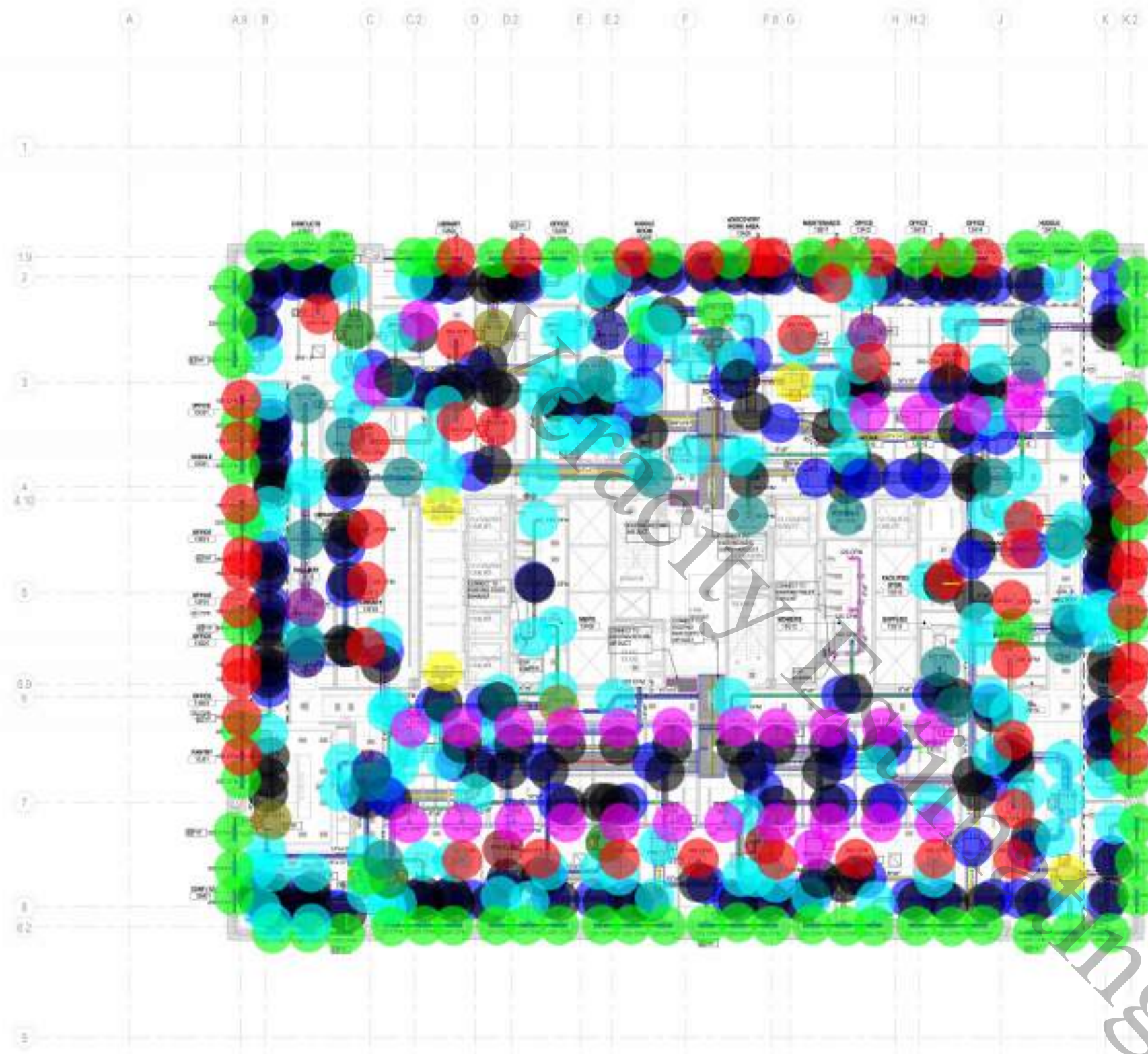
Mark	REVISE	UNIT	MODEL	INLET	INLET DIA	SPM	CFM	Comments
AC-10-1	06	D	1340RAC-4	20.0	17.0	3.2	800	
AC-10-2	AV P1000	D	1340RAC-4	20.0	17.0	3.2	800	



• T	28.0	■
• B	14.0	◆
• CO	14.0	●
• TXF-10-1	1.0	●
■ Drain Pan	49.7 SQ FT	■

NOTES  
1. TEMPERATURE SENSORS TO BE PROVIDED BY THE BUILDING





(8" W x 6" D) Rectangular Duct	655.3 FT
(12" W x 8" D) Rectangular Duct	109.2 FT
(14" W x 10" D) Rectangular Duct	114.5 FT
(16" W x 12" D) Rectangular Duct	69.1 FT
(16" W x 14" D) Rectangular Duct	3.3 FT
(20" W x 14" D) Rectangular Duct	22.0 FT
(14" W x 14" D) Rectangular Duct	48.1 FT
(24" W x 12" D) Rectangular Duct	134.0 FT
(28" W x 16" D) Rectangular Duct	7.7 FT
(46" W x 16" D) Rectangular Duct	13.3 FT
(48" W x 18" D) Rectangular Duct	10.5 FT
(30" W x 16" D) Rectangular Duct	9.3 FT
(30" W x 14" D) Rectangular Duct	27.5 FT
(22" W x 14" D) Rectangular Duct	28.3 FT
(14" W x 12" D) Rectangular Duct	176.8 FT
(16" W x 10" D) Rectangular Duct	55.7 FT
(10" W x 8" D) Rectangular Duct	101.6 FT
(14" W x 8" D) Rectangular Duct	48.9 FT
(6" W x 6" D) Rectangular Duct	668.7 FT
(24" W x 14" D) Rectangular Duct	37.4 FT
(22" W x 12" D) Rectangular Duct	67.2 FT
(20" W x 12" D) Rectangular Duct	78.1 FT
(26" W x 12" D) Rectangular Duct	6.6 FT
(16" W x 8" D) Rectangular Duct	57.1 FT
(8" W x 8" D) Rectangular Duct	108.6 FT
(58" W x 22" D) Rectangular Duct	38.6 FT
(10" W x 10" D) Rectangular Duct	150.9 FT
(18" W x 10" D) Rectangular Duct	107.1 FT
(18" W x 14" D) Rectangular Duct	5.9 FT
(20" W x 10" D) Rectangular Duct	35.2 FT
(18" W x 18" D) Rectangular Duct	14.8 FT
(12" W x 10" D) Rectangular Duct	116.2 FT
(18" W x 12" D) Rectangular Duct	72.5 FT
(12" W x 12" D) Rectangular Duct	21.2 FT
(46" W x 18" D) Rectangular Duct	6.1 FT
(42" W x 16" D) Rectangular Duct	15.2 FT
(32" W x 16" D) Rectangular Duct	39.3 FT
(50" W x 18" D) Rectangular Duct	9.0 FT
(42" W x 18" D) Rectangular Duct	21.5 FT
(36" W x 18" D) Rectangular Duct	8.2 FT
Tee	169.0
(90 D) Bend	114.0
Duct Transition	121.0
FPB-13-1	1.0
FPB-13-3	1.0
FPB-13-5	1.0
FPB-13-4	1.0
FPB-13-20	1.0
FPB-13-2	1.0
FPB-13-22	1.0
FPB-13-7	1.0
FPB-13-19	1.0
FPB-13-21	1.0
FPB-13-8	1.0
FPB-13-6	1.0
FPB-13-23	1.0
FPB-13-10	1.0
FPB-13-24	1.0
FPB-13-11	1.0
FPB-13-25	1.0
FPB-13-12	1.0
FPB-13-26	1.0
FPB-13-13	1.0
FPB-13-14	1.0
FPB-13-15	1.0
FPB-13-27	1.0
FPB-13-16	1.0
FPB-13-17	1.0
FPB-13-9	1.0
FPB-13-18	1.0
AC-13-1	1.0
AC-13-2	1.0
AC-13-3	1.0
B	65.0
A	31.0
E	28.0
F	13.0
(24x24) Square Diffuser	23.0
(24x24) Square Diffuser	17.0
(24x24) Square Diffuser	1.0
C	2.0

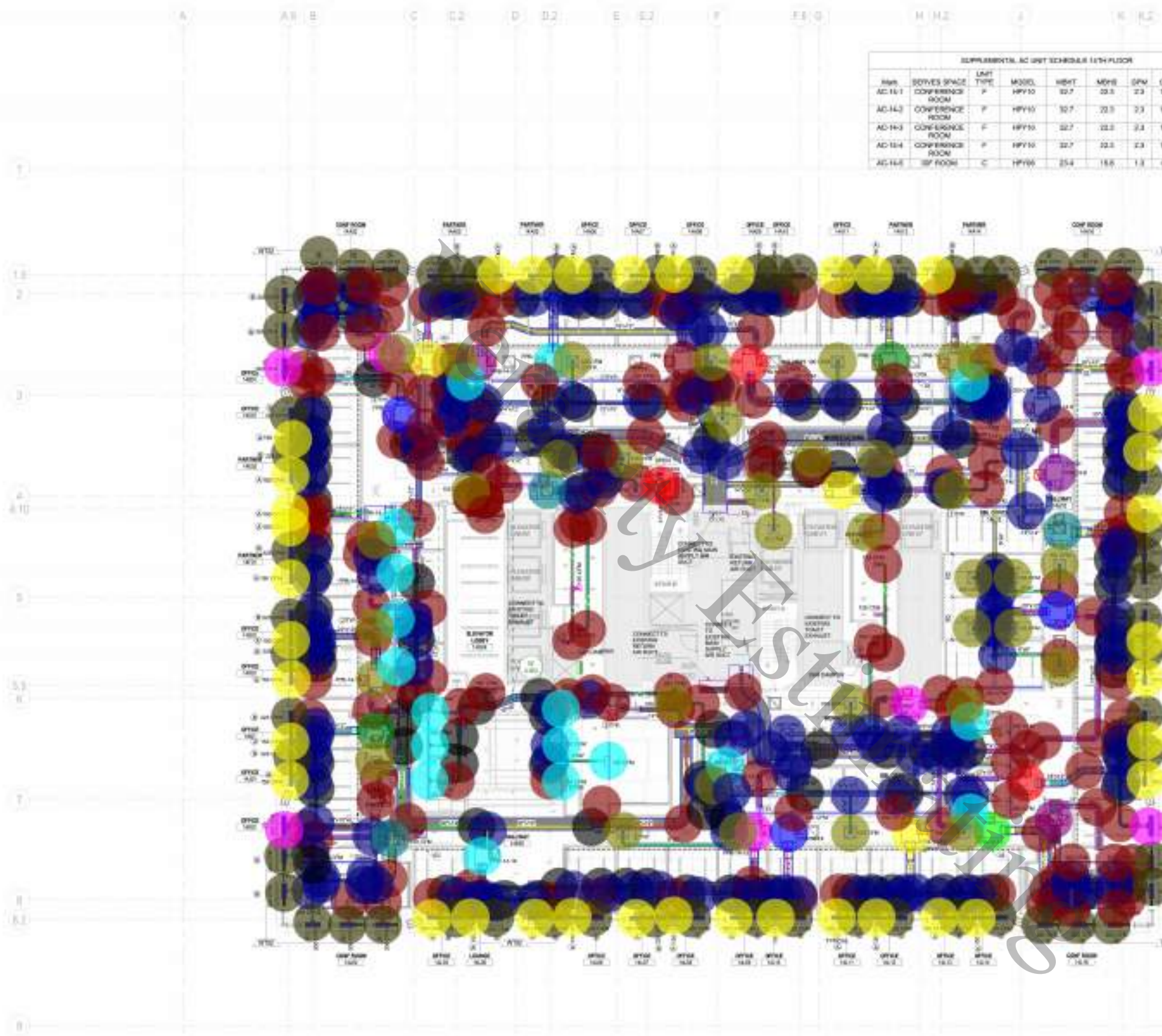
**GENERAL NOTES**

1. MECHANICAL CONTRACTOR SHALL PROVIDE NECESSARY SUPPLEMENTARY STEEL BRACKETS FOR THE SUPPORT OF SUSPENDED EQUIPMENT.
2. PROVIDE ACCESS COVERS FOR RISES, VENTS, ETC.
3. MECHANICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY WELLS IN ALL FLOOR FINISHES FOR THE TEMPERATURE CONTROL DEVICES, PRESSURE SENSING, FLOOR METERS, ETC.
4. COORDINATE WITH THE ARCHITECT FOR THE EXACT LOCATION OF THERMOSTATS.
5. PROVIDE COLLAR SUPPORTS AT EACH BRANCH DUCT & REQUIRED LADDER/SERVICE CHAMBER FOR BRANCH DUCT, REGISTER & LINEAR DIFFUSER ABOUT 8" FROM CEILING FINISH.
6. PROVIDE DUCT TRANSITION ONLY WHERE THE WELLS GO UP/DOWN.
7. PROVIDE BOTTOM ACCESS TO ALL RAU FROM BOX UNITS.

**REFERENCES**

1. PROVIDE COIL AT LINEAR DIFFUSER.
2. PROVIDE 10" AT SQUARE DIFFUSERS OVER 36" x 48".
3. PROVIDE ACCESS CLEARANCE TO ALL RAU AND AC UNITS.
4. PROVIDE CLEARANCE FOR MANIFOLDS AND AIRFLOW.
5. EXISTING FRO AT BUILDING FROM RAU UNITS TO BE REPLACED WITH NEW FRO.





UNIT	SERVER SPACE	UNIT TYPE	MODEL	HEIGHT	DEPTH	WIDTH	CFM
AC-14-1	CONFERENCE ROOM	P	HYP10	30.7	23.3	23	1000
AC-14-2	CONFERENCE ROOM	P	HYP10	30.7	23.3	23	1000
AC-14-3	CONFERENCE ROOM	P	HYP10	30.7	23.3	23	1000
AC-14-4	CONFERENCE ROOM	P	HYP10	30.7	23.3	23	1000
AC-14-5	SERVER ROOM	C	HYP10	35.4	15.8	1.3	800

- 6" W x 6" D Rectangular Duct 557.5 FT
- 14" W x 10" D Rectangular Duct 64.8 FT
- 22" W x 14" D Rectangular Duct 45.3 FT
- 10" W x 8" D Rectangular Duct 174.0 FT
- 8" W x 6" D Rectangular Duct 529.2 FT
- 8" W x 8" D Rectangular Duct 128.6 FT
- 12" W x 8" D Rectangular Duct 16.7 FT
- 18" W x 12" D Rectangular Duct 77.8 FT
- 30" W x 12" D Rectangular Duct 22.6 FT
- 10" W x 10" D Rectangular Duct 165.1 FT
- 14" W x 8" D Rectangular Duct 6.3 FT
- 18" W x 10" D Rectangular Duct 68.8 FT
- 14" W x 12" D Rectangular Duct 130.4 FT
- 20" W x 10" D Rectangular Duct 115.7 FT
- 12" W x 10" D Rectangular Duct 311.6 FT
- 16" W x 12" D Rectangular Duct 85.7 FT
- 16" W x 10" D Rectangular Duct 80.1 FT
- 18" W x 8" D Rectangular Duct 3.9 FT
- 20" W x 12" D Rectangular Duct 87.5 FT
- 24" W x 14" D Rectangular Duct 14.2 FT
- 36" W x 12" D Rectangular Duct 12.1 FT
- 24" W x 12" D Rectangular Duct 13.1 FT
- 56" W x 18" D Rectangular Duct 12.6 FT
- 34" W x 16" D Rectangular Duct 54.2 FT
- 28" W x 16" D Rectangular Duct 10.1 FT
- 22" W x 12" D Rectangular Duct 81.7 FT
- 26" W x 14" D Rectangular Duct 15.2 FT
- 42" W x 18" D Rectangular Duct 6.6 FT
- 12" W x 12" D Rectangular Duct 26.8 FT
- 36" W x 14" D Rectangular Duct 34.5 FT
- 32" W x 14" D Rectangular Duct 19.8 FT
- 46" W x 18" D Rectangular Duct 9.8 FT
- 14" W x 14" D Rectangular Duct 33.0 FT
- 28" W x 14" D Rectangular Duct 16.3 FT
- 18" W x 14" D Rectangular Duct 12.7 FT
- 5" W x 4" D Rectangular Duct 26.1 FT
- 18" W x 8" D Rectangular Duct 12.7 FT
- 28" W x 18" D Rectangular Duct 35.6 FT
- 30" W x 16" D Rectangular Duct 36.7 FT
- 30" W x 14" D Rectangular Duct 32.0 FT
- 16" W x 14" D Rectangular Duct 12.4 FT
- 34" W x 16" D Rectangular Duct 7.8 FT
- 56" W x 20" D Rectangular Duct 21.1 FT
- 32" W x 18" D Rectangular Duct 13.3 FT
- 28" W x 12" D Rectangular Duct 4.5 FT
- 26" W x 8" D Rectangular Duct 23.4 FT
- 12" W x 6" D Rectangular Duct 3.6 FT
- Tees 175.0
- 90° D Bend 129.0
- Duct Transition 129.0
- FPB-14-1 Fan Powered Terminal Unit Inlet Dia: 16" Model: DCFM: 1180 1.0
- FPB-14-3 1.0
- FPB-14-22 1.0
- FPB-14-24 1.0
- FPB-14-25 1.0
- FPB-14-16 1.0
- FPB-14-28 Fan Powered Terminal Unit Inlet Dia: 16" Model: DCFM: 1580 1.0
- FPB-14-17 1.0
- FPB-14-18 1.0
- FPB-14-19 1.0
- FPB-14-20 1.0
- FPB-14-2 1.0
- FPB-14-4 Fan Powered Terminal Unit Inlet Dia: 16" Model: DCFM: 1280 1.0
- FPB-14-21 1.0
- FPB-14-5 1.0
- FPB-14-6 1.0
- FPB-14-23 1.0
- FPB-14-7 1.0
- FPB-14-8 Fan Powered Terminal Unit Inlet Dia: 12" Model: CCFM: 1000 1.0
- FPB-14-9 1.0
- FPB-14-10 1.0
- FPB-14-11 1.0
- FPB-14-26 1.0
- FPB-14-12 1.0
- FPB-14-13 Fan Powered Terminal Unit Inlet Dia: 16" Model: DCFM: 1500 1.0
- FPB-14-14 1.0
- FPB-14-15 1.0
- FPB-14-27 1.0
- AC-14-1 1.0
- AC-14-2 1.0
- AC-14-5 Supplemental AC Unit Model: HYP10CFM: 800 1.0
- AC-14-3 1.0
- AC-14-4 1.0
- A 37.0
- E 15.0
- C 4.0
- F(4'-0" L) Linear Diffuser Model: FL-10CFM: 151-300 38.0
- B 83.0
- (24x24) Square Diffuser 32.0
- (24x24) Square Diffuser 2.0

**GENERAL NOTES**

1. MECHANICAL CONTRACTOR SHALL PROVIDE NECESSARY SUPPLEMENTARY STEEL BRACKETS FOR THE SUPPORT OF SUSPENDED EQUIPMENT.
2. PROVIDE ACCESS COVERS FOR RISES, VENTS, ETC.
3. MECHANICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY WELLS IN SLABING REQUIRED FOR THE TEMPERATURE CONTROL DEVICES, PRESSURE SENSING, FLOOR METERS, ETC.
4. COORDINATE WITH THE ARCHITECT FOR THE EXACT LOCATION OF THERMOSTATS.
5. PROVIDE COLLAR SUPPORTS AT EACH BRANCH DUCT & REGISTER LOCATIONS (SHOWS) CHAMFER FOR BRANCH DUCT, REGISTER & LINEAR DIFFUSER ABOUT REGISTER/CHAMFER CORNER.
6. PROVIDE 2" DIA. TUBULAR DUCT ONLY WHERE THE WELLS GO UP TO SLAB. PROVIDE BOTTOM ACCESS TO ALL RISE FROM BOX UNITS.

**REFERENCES**

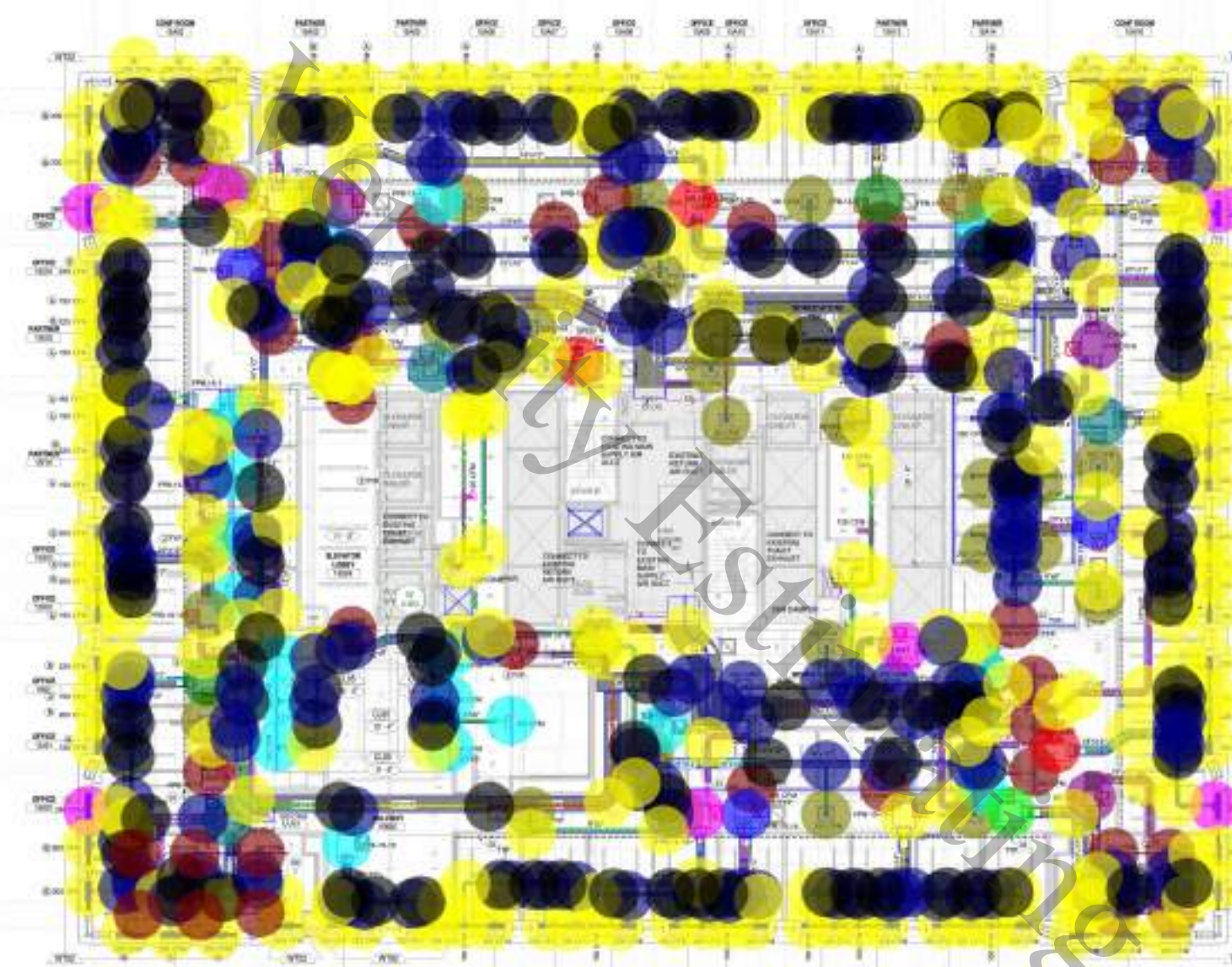
1. PROVIDE COG AT LINEAR DIFFUSER.
2. PROVIDE 10" AT SQUARE DIFFUSERS 2000-3000-34 IN & 4 IN.
3. PROVIDE ACCESS CLEARANCE TO ALL RISERS AND DUCTS.
4. PROVIDE CLEARANCES FOR MANIFOLDS AND AIRFLOW.
5. REGISTER 150 AT BUILDING RISER 150MM TO BE REPLACED WITH 100MM.

FLOOR 14 MECHANICAL PLAN  
1/8" = 1'-0"



SUPPLEMENTAL AC UNIT SCHEDULE 15TH FLOOR

UNIT	TYPE	MODEL	MMBT	MBHS	CFM	SPR
AC-15-1	CONFERENCE ROOM	F	HYP10	30.7	3.3	1000
AC-15-2	CONFERENCE ROOM	F	HYP10	30.7	3.3	1000
AC-15-3	CONFERENCE ROOM	F	HYP10	30.7	3.3	1000
AC-15-4	CONFERENCE ROOM	H	HYP12	40.0	3.4	1300
AC-15-5	BY ROOM	C	HYP10	30.4	3.6	1000
AC-15-6	BY ROOM	S	HYP10	30.4	3.1	750



(22" W x 12" D) Rectangular Duct  
 (8" W x 6" D) Rectangular Duct  
 (8" W x 6" D) Rectangular Duct  
 (5" W x 4" D) Rectangular Duct  
 (8" W x 8" D) Rectangular Duct  
 (14" W x 12" D) Rectangular Duct  
 (18" W x 10" D) Rectangular Duct  
 (10" W x 8" D) Rectangular Duct  
 (12" W x 10" D) Rectangular Duct  
 (10" W x 10" D) Rectangular Duct  
 (20" W x 10" D) Rectangular Duct  
 (12" W x 8" D) Rectangular Duct  
 (14" W x 10" D) Rectangular Duct  
 (18" W x 12" D) Rectangular Duct  
 (14" W x 14" D) Rectangular Duct  
 (22" W x 14" D) Rectangular Duct  
 (16" W x 10" D) Rectangular Duct  
 (20" W x 12" D) Rectangular Duct  
 (16" W x 12" D) Rectangular Duct  
 (16" W x 8" D) Rectangular Duct  
 (16" W x 14" D) Rectangular Duct  
 (12" W x 6" D) Rectangular Duct  
 (24" W x 14" D) Rectangular Duct  
 (26" W x 8" D) Rectangular Duct  
 (30" W x 14" D) Rectangular Duct  
 (24" W x 12" D) Rectangular Duct  
 (28" W x 12" D) Rectangular Duct  
 (30" W x 16" D) Rectangular Duct  
 (32" W x 18" D) Rectangular Duct  
 (46" W x 18" D) Rectangular Duct  
 (56" W x 20" D) Rectangular Duct  
 (42" W x 18" D) Rectangular Duct  
 (34" W x 18" D) Rectangular Duct  
 (28" W x 18" D) Rectangular Duct  
 (12" W x 12" D) Rectangular Duct  
 (18" W x 8" D) Rectangular Duct  
 (18" W x 14" D) Rectangular Duct  
 (32" W x 14" D) Rectangular Duct  
 (28" W x 14" D) Rectangular Duct  
 (36" W x 14" D) Rectangular Duct  
 (26" W x 14" D) Rectangular Duct  
 (28" W x 16" D) Rectangular Duct  
 (34" W x 16" D) Rectangular Duct  
 (56" W x 18" D) Rectangular Duct  
 (36" W x 12" D) Rectangular Duct  
 (30" W x 12" D) Rectangular Duct  
 (14" W x 6" D) Rectangular Duct  
 (90 D) Bend  
 F  
 (24x24) Square Diffuser  
 (24x24) Square DiffuserManf: TITUSModel: OMNICFM: 151-300  
 Tee  
 E  
 C  
 A  
 B(3'-0" L) Linear DiffuserModel: FL-10CFM: 151-225  
 AC-15-5  
 AC-15-2  
 AC-15-3  
 AC-15-4Supplemental AC UnitModel: HYP10CFM: 1200  
 AC-15-1  
 FPB-15-3  
 FPB-15-22  
 FPB-15-24  
 FPB-15-25Fan Powered Terminal UnitInlet Dia: 16"Model: DCFM: 1200  
 FPB-15-28  
 FPB-15-16  
 FPB-15-17  
 FPB-15-18  
 FPB-15-19Fan Powered Terminal UnitInlet Dia: 16"Model: DCFM: 1280  
 FPB-15-20  
 FPB-15-2  
 FPB-15-1  
 FPB-15-21  
 FPB-15-4Fan Powered Terminal UnitInlet Dia: 16"Model: DCFM: 1280  
 FPB-15-5  
 FPB-15-23  
 FPB-15-6  
 FPB-15-7  
 FPB-15-8Fan Powered Terminal UnitInlet Dia: 12"Model: CCFM: 1000  
 FPB-15-9  
 FPB-15-10  
 FPB-15-26  
 FPB-15-11Fan Powered Terminal UnitInlet Dia: 12"Model: CCFM: 1030  
 FPB-15-12  
 FPB-15-13  
 FPB-15-14  
 FPB-15-15  
 FPB-15-27Fan Powered Terminal UnitInlet Dia: 16"Model: DCFM: 1550  
 Duct Transition  
 AC-15-6

**GENERAL NOTES**

- MECHANICAL CONTRACTOR SHALL PROVIDE NECESSARY SUPPLEMENTARY STEEL MEMBERS FOR THE SUPPORT OF SUSPENDED EQUIPMENT.
- PROVIDE ACCESS DOORS FOR ALL UNITS, VIEW'S, ETC.
- MECHANICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY WELLS AND RISERS REQUIRED FOR THE TEMPERATURE CONTROL, PRESSURE, BRIDGES, FLAME METERS, ETC.
- COORDINATE WITH THE ARCHITECT FOR THE EXACT LOCATIONS OF THERMOSTATS.
- PROVIDE VSD AND DAMPERS AT EACH BRANCH, COCK & RESISTANCE COCK.
- DRINK/COMBINATION BRANCH DUCT, BRIDGES & LINEAR DIFFUSERS.
- NOTE: NON-ACCESSIBLE CEILING.
- PROVIDE 3" DIA TRANSPARENT TUBING WHERE THE VALVE IS UP TO 8" DIA.
- PROVIDE BOTTOM ACCESS TO ALL RAN POWER BUS UNITS.

**REFERENCE NOTES**

- PROVIDE 0.04" LINEAR DIFFUSER.
- PROVIDE 1/2" W/ SQUARE DIFFUSERS 2000, 3000, 4000 & 5000.
- PROVIDE ACCESS CLEARANCE TO ALL UNITS AND AC UNITS.
- PROVIDE CLEARANCE FOR MAIN RISERS AND BRIDGES.
- EXISTING FLOOR RISING OVER TANKS ARE TO BE REPLACED WITH NEW FLOOR.

FLOOR 15 MECHANICAL PLAN  
15F-150