WEATHER FILE- SEATTLE BOEING FI WA

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
EM1- ELECTRI	CITY 337.7	0.0	2281.0	522.9	340.6	2.2	25.0	466.6	0.0	8.9	0.0	0.0	3985.3
EM2- ELECTRI	759.9	45.1	116.6	189.3	15.9	0.0	433.2	290.6	59.5	0.0	1497.0	39.5	3447.0
EM3- ELECTRI MBTU	CITY 51.7	0.0	188.3	330.9	11.4	0.0	0.0	399.6	0.0	73.0	52.2	0.0	1107.0
FM1 NATURAL MBTU	-GAS 0.0 =====	0.0	188.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	188.3
MBTU	1149.0	45.1	2775.0	1043.0	367.9	2.2	458.3	1157.0	59.5	81.9	1550.0	39.5	8727.5

TOTAL SITE ENERGY 8727.53 MBTU 50.9 KBTU/SQFT-YR GROSS-AREA 50.9 KBTU/SQFT-YR NET-AREA TOTAL SOURCE ENERGY 25806.00 MBTU 150.5 KBTU/SQFT-YR GROSS-AREA 150.5 KBTU/SQFT-YR NET-AREA

PERCENT OF HOURS ANY SYSTEM ZONE OUTSIDE OF THROTTLING RANGE = 3.23
PERCENT OF HOURS ANY PLANT LOAD NOT SATISFIED = 0.33
HOURS ANY ZONE ABOVE COOLING THROTTLING RANGE = 250
HOURS ANY ZONE BELOW HEATING THROTTLING RANGE = 33

NOTE: ENERGY IS APPORTIONED HOURLY TO ALL END-USE CATEGORIES.

WEATHER FILE- SEATTLE BOEING FI WA

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
EM1- ELECTE	RICITY 98942.	0.	668432.	153202.	99788.	648.	7334.	136718.	0.	2617.	0.	0.	1167684.
EM2- ELECTE	RICITY 222655.	13200.	34166.	55465.	4666.	0.	126934.	85133.	17441.	0.	438719.	11587.	1009963.
EM3- ELECTE	RICITY 15142.	0.	55183.	96944.	3333.	0.	0.	117070.	0.	21388.	15291.	0.	324351.
FM1 NATURA	AL-GAS	0.	1883.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1883.

TOTAL ELECTRICITY 2501998. KWH 14.590 KWH /SQFT-YR GROSS-AREA 14.590 KWH /SQFT-YR NET-AREA TOTAL NATURAL-GAS 1883. THERM 0.011 THERM /SQFT-YR GROSS-AREA 0.011 THERM /SQFT-YR NET-AREA

PERCENT OF HOURS ANY SYSTEM ZONE OUTSIDE OF THROTTLING RANGE = 3.23
PERCENT OF HOURS ANY PLANT LOAD NOT SATISFIED = 0.33
HOURS ANY ZONE ABOVE COOLING THROTTLING RANGE = 250
HOURS ANY ZONE BELOW HEATING THROTTLING RANGE = 33

NOTE: ENERGY IS APPORTIONED HOURLY TO ALL END-USE CATEGORIES.

\*\*\* BUILDING \*\*\*

FLOOR AREA 171490 SQFT 15931 M2 VOLUME 1767951 CUFT 50068 M3

	COOLING LOAD		HEATING LOAD
TIME	JUN 21 7PM		DEC 21 4AM
DRY-BULB TEMP	83 F 28	C 24	F -4 C
WET-BULB TEMP	64 F 18	C 20	F -7 C
TOT HORIZONTAL SOLAR RAD	112 BTU/H.SQFT 352	W/M2 0	BTU/H.SQFT 0 W/M2
WINDSPEED AT SPACE	4.3 KTS 2.2	M/S 8.7	KTS 4.5 M/S
CLOUD AMOUNT 0(CLEAR)-10	0	10	

	SEI	NSIBLE	LAT	ENT	SENS	IBLE	
	(KBTU/H)	( KW )	(KBTU/H)	( KW )	(KBTU/H)	( KW )	
WALL CONDUCTION	100.445	29.430	0.000	0.000	-218.044	-63.887	
ROOF CONDUCTION	56.309	16.499	0.000	0.000	-53.475	-15.668	
WINDOW GLASS+FRM COND	87.804	25.727	0.000	0.000	-448.464	-131.400	
WINDOW GLASS SOLAR	549.696	161.061	0.000	0.000	8.395	2.460	
DOOR CONDUCTION	0.000	0.000	0.000	0.000	0.000	0.000	
INTERNAL SURFACE COND	0.000	0.000	0.000	0.000	0.000	0.000	
UNDERGROUND SURF COND	-8.430	-2.470	0.000	0.000	-41.864	-12.266	
OCCUPANTS TO SPACE	54.996	16.114	44.125	12.929	0.206	0.060	
LIGHT TO SPACE	177.940	52.136	0.000	0.000	52.069	15.256	
EQUIPMENT TO SPACE	644.745	188.910	33.337	9.768	5.003	1.466	
PROCESS TO SPACE	11.905	3.488	8.781	2.573	0.000	0.000	
INFILTRATION	8.383	2.456	0.083	0.024	-40.539	-11.878	
TOTAL	1683.793	493.351	86.325	25.293	-736.712	-215.857	
TOTAL / AREA	0.010	0.031	0.001	0.002	-0.004	-0.014	
TOTAL LOAD	1770.119	KBTU/H	518.645	KW	-736.712 KBTU/H	-215.857	KW
TOTAL LOAD / AREA	10.32	BTU/H.SQFT		W/M2	4.296 BTU/H.SQFT	13.549	W/M2

NOTE 1)THE ABOVE LOADS EXCLUDE OUTSIDE VENTILATION AIR
LOADS
2)TIMES GIVEN IN STANDARD TIME FOR THE LOCATION
IN CONSIDERATION
3)THE ABOVE LOADS ARE CALCULATED ASSUMING A
CONSTANT INDOOR SPACE TEMPERATURE

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WEATHER FILE- SEATTLE BOEING FI WA

\*\*\* BUILDING \*\*\*

FLOOR AREA 171490 SQFT 15931 M2 VOLUME 1767951 CUFT 50068 M3

	COOLING LOAD		HEATING	LOAD
TIME	JUL 23 8PM	1	JAN 5	5AM
DRY-BULB TEMP	88 F	31 C	21 F	-6 C
WET-BULB TEMP	68 F	20 C	18 F	-8 C
TOT HORIZONTAL SOLAR RAD	57 BTU/H.SQFT	179 W/M2	0 BTU/H.SQFT	0 W/M2
WINDSPEED AT SPACE	2.7 KTS	1.4 M/S	0.0 KTS	0.0 M/S
CLOUD AMOUNT 0(CLEAR)-10	0		10	

	SE	NSIBLE	LAT	ENT	SENSIBLE	
	(KBTU/H)	( KW )	(KBTU/H)	( KW )	(KBTU/H) (KW)	
						-
WALL CONDUCTION	121.419	35.576	0.000	0.000	-217.399 -63.698	В
ROOF CONDUCTION	58.541	17.152	0.000	0.000	-63.383 -18.571	
WINDOW GLASS+FRM COND	116.912	34.255	0.000	0.000	-411.821 -120.664	Į.
WINDOW GLASS SOLAR	526.494	154.263	0.000	0.000	37.796 11.074	Į.
DOOR CONDUCTION	0.000	0.000	0.000	0.000	0.000 0.000	)
INTERNAL SURFACE COND	0.000	0.000	0.000	0.000	0.000 0.000	)
UNDERGROUND SURF COND	-4.527	-1.326	0.000	0.000	-49.138 -14.397	,
OCCUPANTS TO SPACE	36.314	10.640	36.415	10.670	36.105 10.579	)
LIGHT TO SPACE	138.426	40.559	0.000	0.000	60.902 17.844	Į.
EQUIPMENT TO SPACE	458.553	134.356	23.376	6.849	95.679 28.034	Į.
PROCESS TO SPACE	6.974	2.043	4.829	1.415	3.271 0.958	3
INFILTRATION	11.897	3.486	3.375	0.989	-44.197 -12.950	)
						-
TOTAL	1471.003	431.004	67.995	19.923	-552.186 -161.790	)
TOTAL / AREA	0.009	0.027	0.000	0.001	-0.003 -0.010	)
TOTAL LOAD	1520 000	עסייון / נו	450 026	WW.	-552.186 KBTU/H -161.790	N IZW
TOTAL LOAD / AREA	8.97	BTU/H.SQFT	∠8.303	W / I⁴I∠	3.220 BTU/H.SQFT 10.155	w/M2

NOTE 1)THE ABOVE LOADS EXCLUDE OUTSIDE VENTILATION AIR
LOADS
2)TIMES GIVEN IN STANDARD TIME FOR THE LOCATION
IN CONSIDERATION
3)THE ABOVE LOADS ARE CALCULATED ASSUMING A
CONSTANT INDOOR SPACE TEMPERATURE

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NUMBER OF SPACES 216 EXTERIOR 160 INTERIOR 56


NORBER OF BLACED 210	BATBRIOR	100	111111	cion 5	3					
				LIGHTS		EQUIP				
	SPACE*FLOOR	SPACE		(WATT /		(WATT /	INFILTRATION		AREA	VOLUME
SPACE	MULTIPLIER	TYPE	AZIM	SQFT )	PEOPLE	SQFT )	METHOD	ACH	(SQFT )	(CUFT )
Spaces on floor: P2 Below-Gr	ade Flr									
P2A Core Spc (B.C1) STR	1.0	INT	0.0	0.69	0.0	0.20	NO-INFILT.	0.00	170.0	1749.3
P2A Core Spc (B.C2) ELV	1.0	INT	0.0	0.00	0.0	0.00	NO-INFILT.	0.00	161.5	1661.8
P2A Core Spc (B.C3) COR	1.0	INT	0.0	0.66	0.0	0.20	NO-INFILT.	0.00	237.5	2443.9
P2B Core Spc (B.C4) MECH	1.0	INT	0.0	0.95	0.0	0.00	NO-INFILT.	0.00	900.0	9261.0
P2B Core Spc (B.C5) STR	1.0	INT	0.0	0.69	0.0	0.20	NO-INFILT.	0.00	241.5	2485.0
P2B NW Perim Spc (B.NW6) XFM	R 1.0	INT	90.0	0.95	0.0	0.00	NO-INFILT.	0.00	957.0	9847.5
P2A Core Spc (B.C7) STO	1.0	INT	0.0	0.57	0.0	0.20	NO-INFILT.	0.00	221.0	2274.1
P2B SE Perim Spc (B.SE8) MEC	н 1.0	INT	-90.0	0.95	0.0	0.00	NO-INFILT.	0.00	378.0	3889.6
P2B NE Perim Spc (B.NE9) STC	1.0	INT	180.0	0.57	0.0	0.20	NO-INFILT.	0.00	414.0	4260.1
P2B South Perim Spc (B.S10)	PKG 1.0	INT	0.0	0.17	0.0	0.00	AIR-CHANGE	4.37	12495.5	128578.7
P2B NNE Perim Spc (B.NNE11)	ELEC 1.0	INT	-90.0	0.95	0.0	0.00	NO-INFILT.	0.00	1885.0	19396.7
P2B NNE Perim Spc (B.NNE12)	PKG 1.0	INT	90.0	0.17	0.0	0.00	AIR-CHANGE	4.37	6201.0	63808.3
P2A NNW Perim Spc (B.NNW13)	PKG 1.0	INT	180.0	0.17	0.0	0.00	AIR-CHANGE	4.37	1518.0	15620.2
Spaces on floor: P1 Below-Gr	ade Flr									
P1A Core Spc (B.C1) STR	1.0	EXT	0.0	0.69	0.0	0.20	NO-INFILT.	0.00	170.0	1700.0
P1A Core Spc (B.C2) ELV	1.0	EXT	0.0	0.00	0.0	0.00	NO-INFILT.	0.00	161.5	1615.0
P1A Core Spc (B.C3) COR	1.0	EXT	0.0	0.66	0.0	0.20	NO-INFILT.	0.00	237.5	2375.0
P1B Core Spc (B.C4) STR	1.0	EXT	0.0	0.69	0.0	0.20	NO-INFILT.	0.00	241.5	2415.0
P1B SE Perim Spc (B.SE5) MEC		EXT	-90.0	0.95	0.0	0.00	NO-INFILT.	0.00	238.0	2380.0
P1B South Perim Spc (B.S6) F		EXT	0.0	0.17	0.0	0.00	AIR-CHANGE	4.50	12847.5	128475.0
PlA West Perim Spc (B.W7) TR		EXT	0.0	0.57	0.0	0.00	NO-INFILT.	0.00	2435.0	24350.0
PlA NNW Perim Spc (B.NNW8) M		EXT	90.0	0.95	0.0	0.00	NO-INFILT.	0.00	1150.0	11500.0
P1B NNE Perim Spc (B.NNE9) F		EXT	-90.0	0.17	0.0	0.00	AIR-CHANGE	4.50	3916.0	39160.0
P1B ENE Perim Spc (B.ENE10)		EXT	180.0	0.95	0.0	0.00	NO-INFILT.	0.00	271.5	2715.0
PlB North Perim Spc (B.N11)		EXT	180.0	0.90	0.6	1.46	AIR-CHANGE	0.07	464.0	4640.0
P1B Core Spc (B.C12) COR	1.0	EXT	0.0	0.66	0.0	0.20	NO-INFILT.	0.00	460.0	4600.0
P1B North Perim Spc (B.N13)	APT4 1.0	EXT	180.0	0.90	3.1	1.46	AIR-CHANGE	0.07	2465.0	24650.0
P1B NE Perim Spc (B.NE14) AP	T1 1.0	EXT	-90.0	0.90	0.9	1.46	AIR-CHANGE	0.07	705.0	7050.0
Spaces on floor: L1 Ground F	lr									
L1A Core Spc (G.C1) STR	1.0	EXT	180.0	0.69	0.0	0.20	NO-INFILT.	0.00	556.8	5406.0
L1A Core Spc (G.C2) ELV	1.0	EXT	0.0	0.00	0.0	0.20	NO-INFILT.	0.00	161.5	1568.2
L1B Core Spc (G.C3) STR	1.0	EXT	-90.0	0.69	0.0	0.20	NO-INFILT.	0.00	500.0	4855.0
L1B Core Spc (G.C4) COR	1.0		180.0	0.66	0.0	0.20	NO-INFILT.	0.00	869.0	8438.0
L1B North Perim Spc (G.N5) A		EXT	180.0	0.90	3.3	1.46	AIR-CHANGE	0.08	2580.0	25051.8
L1B East Perim Spc (G.E6) AF		EXT	0.0	0.90	0.8	1.46	AIR-CHANGE	0.16	668.0	6486.3
L1B West Perim Spc (G.W7) AF		EXT	0.0	0.90	1.0	1.46	AIR-CHANGE	0.15	765.0	7428.1
L1B West Perim Spc (G.W8) AF		EXT	90.0	0.90	0.8	1.46	AIR-CHANGE	0.10	654.5	6355.2
L1B East Perim Spc (G.E9) AF			-90.0	0.90	0.9	1.46	AIR-CHANGE	0.10	713.5	6928.1
L1B East Perim Spc (G.E10) A		EXT	-90.0	0.90	0.7	1.46	AIR-CHANGE	0.21	519.0	5039.5
L1B South Perim Spc (G.S11)		EXT	0.0	0.90	2.5	1.46	AIR-CHANGE	0.09	1978.0	19206.4

EPORT- LV-B Summary of Spaces										TLE BOEING FI V
3B West Perim Spc (G.W7) APT1	1.0	EXT	90.0	0.90	0.8	1.46	AIR-CHANGE	0.10	654.5	6381.4
3B East Perim Spc (G.E8) APT1	1.0	EXT	-90.0	0.90	0.8	1.46	AIR-CHANGE	0.11	628.5	6127.9
3B East Perim Spc (G.E9) APT1	1.0	EXT	0.0	0.90	1.0	1.46	AIR-CHANGE	0.16	789.0	7692.8
3B South Perim Spc (G.S10) APT7	1.0	EXT	90.0	0.90	5.1	1.46	AIR-CHANGE	0.08	3981.5	38819.6
3B Core Spc (G.C11) ELEC	1.0	INT	0.0	0.95	0.0	0.00	NO-INFILT.	0.00	57.8	563.1
BA East Perim Spc (G.E12) GSHF	1.0	EXT	-90.0	0.00	0.0	0.00	AIR-CHANGE	6.15	38.2	372.9
3A East Perim Spc (G.E13) APT4	1.0	EXT	180.0	0.90	2.8	1.46	AIR-CHANGE	0.07	2229.8	21740.1
BA Core Spc (G.C14) TSHF	1.0	INT	0.0	0.00	0.0	0.00	AIR-CHANGE	6.15	27.0	263.2
BA Core Spc (G.C15) TRSH	1.0	INT	0.0	0.57	0.0	0.00	NO-INFILT.	0.00	54.0	526.5
BA Core Spc (G.C16) ELEC	1.0	INT	0.0	0.95	0.0	0.00	NO-INFILT.	0.00	65.0	633.8
3A NW Perim Spc (G.NW17) APT1	1.0	EXT	0.0	0.90	1.2	1.46	AIR-CHANGE	0.13	915.5	8926.1
BA North Perim Spc (G.N18) APT3	1.0	EXT	180.0	0.90	2.0	1.46	AIR-CHANGE	0.09	1566.5	15273.4
BB East Perim Spc (G.E19) APT1	1.0	EXT	0.0	0.90	0.9	1.46	AIR-CHANGE	0.18	714.0	6961.5
BA Core Spc (G.C20) STR	1.0	INT	0.0	0.69	0.0	0.20	NO-INFILT.	0.00	144.5	1408.9
BA West Perim Spc (G.W21) APT4	1.0	EXT	180.0	0.90	3.2	1.46	AIR-CHANGE	0.08	2478.2	24162.9
BA SW Perim Spc (G.SW22) APT1	1.0	EXT	0.0	0.90	1.2	1.46	AIR-CHANGE	0.12	944.2	9206.4
BA Core Spc (G.C23) COR	1.0	EXT	0.0	0.66	0.0	0.20	NO-INFILT.	0.00	681.2	6642.2
BA South Perim Spc (G.S24) APT3	1.0	EXT	-90.0	0.90	2.3	1.46	AIR-CHANGE	0.08	1832.5	17866.9
paces on floor: L4 Ground Flr										
A Core Spc (G.C1) ELV	1.0	INT	0.0	0.00	0.0	0.00	NO-INFILT.	0.00	161.5	1574.6
B Core Spc (G.C2) STR	1.0	INT	0.0	0.69	0.0	0.20	NO-INFILT.	0.00	241.5	2354.6
B North Perim Spc (G.N3) COR	1.0	EXT	180.0	0.66	0.0	0.20	AIR-CHANGE	0.06	1748.2	17045.4
B North Perim Spc (G.N4) APT4	1.0	EXT	180.0	0.90	3.7	1.46	AIR-CHANGE	0.08	2928.0	28548.0
B East Perim Spc (G.E5) APT1	1.0	EXT	0.0	0.90	1.3	1.46	AIR-CHANGE		984.0	9594.0
B West Perim Spc (G.W6) APT1	1.0	EXT	0.0	0.90	1.0	1.46	AIR-CHANGE		765.0	7458.8
B West Perim Spc (G.W7) APT1	1.0	EXT	90.0	0.90	0.8	1.46	AIR-CHANGE	0.10	654.5	6381.4
B East Perim Spc (G.E8) APT1	1.0	EXT	-90.0	0.90	0.8	1.46	AIR-CHANGE	0.11	628.5	6127.9
B East Perim Spc (G.E9) APT1	1.0	EXT	0.0	0.90	1.0	1.46	AIR-CHANGE	0.16	789.0	7692.8
B South Perim Spc (G.S10) APT7	1.0	EXT	90.0	0.90	5.1	1.46	AIR-CHANGE		3981.5	38819.6
B Core Spc (G.C11) ELEC	1.0	INT	0.0	0.95	0.0	0.00	NO-INFILT.	0.00	57.8	563.1
A East Perim Spc (G.E12) GSHF	1.0		-90.0	0.00	0.0	0.00	AIR-CHANGE		38.2	372.9
A East Perim Spc (G.E13) APT4	1.0		180.0	0.90	2.8	1.46	AIR-CHANGE		2229.8	21740.1
A Core Spc (G.C14) TSHF	1.0	INT	0.0	0.00	0.0	0.00	AIR-CHANGE		27.0	263.2
A Core Spc (G.C15) TRSH	1.0	INT	0.0	0.57	0.0	0.00	NO-INFILT.		54.0	526.5
A Core Spc (G.C16) ELEC	1.0	INT	0.0	0.95	0.0	0.00	NO-INFILT.		65.0	633.8
A NW Perim Spc (G.NW17) APT1	1.0	EXT	0.0	0.90	1.2	1.46	AIR-CHANGE		915.5	8926.1
A North Perim Spc (G.N18) APT3	1.0		180.0	0.90	2.0	1.46	AIR-CHANGE		1566.5	15273.4
B East Perim Spc (G.E19) APT1	1.0	EXT	0.0	0.90	0.9	1.46	AIR-CHANGE		714.0	6961.5
A Core Spc (G.C20) STR	1.0	INT	0.0	0.69	0.0	0.20	NO-INFILT.		144.5	1408.9
A West Perim Spc (G.W21) APT4	1.0	EXT	180.0	0.90	3.2	1.46	AIR-CHANGE		2478.2	24162.9
A SW Perim Spc (G.SW22) APT1	1.0	EXT	0.0	0.90	1.2	1.46	AIR-CHANGE		944.2	9206.4
AA Core Spc (G.C23) COR	1.0	INT	0.0	0.66	0.0	0.20	NO-INFILT.		681.2	6642.2
A South Perim Spc (G.S24) APT3	1.0		-90.0	0.90	2.3	1.46	AIR-CHANGE		1832.5	17866.9
paces on floor: L5 Ground Flr										
5A Core Spc (G.C1) ELV	1.0	INT	0.0	0.00	0.0	0.00	NO-INFILT.		161.5	1574.6
B Core Spc (G.C2) STR	1.0	INT	0.0	0.69	0.0	0.20	NO-INFILT.	0.00	241.5	2354.6
BB North Perim Spc (G.N3) COR	1.0		180.0	0.66	0.0	0.20	AIR-CHANGE		1748.2	17045.4
B North Perim Spc (G.N4) APT4	1.0		180.0	0.90	3.7	1.46	AIR-CHANGE	0.08	2928.0	28548.0
5B East Perim Spc (G.E5) APT1	1.0	EXT	0.0	0.90	1.3	1.46	AIR-CHANGE		984.0	9594.0
B West Perim Spc (G.W6) APT1	1.0	EXT	0.0	0.90	1.0	1.46	AIR-CHANGE		765.0	7458.8
B West Perim Spc (G.W7) APT1	1.0	EXT	90.0	0.90	0.8	1.46	AIR-CHANGE	0.10	654.5	6381.4
B East Perim Spc (G.E8) APT1	1.0		-90.0	0.90	0.8	1.46	AIR-CHANGE	0.11	628.5	6127.9
B East Perim Spc (G.E9) APT1	1.0	EXT	0.0	0.90	1.0	1.46	AIR-CHANGE	0 1 6	789.0	7692.8

REPORT- LV-B Summary of Spaces										TLE BOEING FI WA
L5B South Perim Spc (G.S10) APT7	1.0	EXT	90.0	0.90	5.1	1.46	AIR-CHANGE		3981.5	38819.6
L5B Core Spc (G.C11) ELEC	1.0	INT	0.0	0.95	0.0	0.00	NO-INFILT.	0.00	57.8	563.1
L5A East Perim Spc (G.E12) GSHF	1.0	EXT	-90.0	0.00	0.0	0.00	AIR-CHANGE	6.15	38.2	372.9
L5A East Perim Spc (G.E13) APT4	1.0	EXT	180.0	0.90	2.8	1.46	AIR-CHANGE	0.07	2229.8	21740.1
L5A Core Spc (G.C14) TSHF	1.0	INT	0.0	0.00	0.0	0.00	AIR-CHANGE	6.15	27.0	263.2
.5A Core Spc (G.C15) TRSH	1.0	INT	0.0	0.57	0.0	0.00	NO-INFILT.	0.00	54.0	526.5
.5A Core Spc (G.C16) ELEC	1.0	INT	0.0	0.95	0.0	0.00	NO-INFILT.	0.00	65.0	633.8
.5A NW Perim Spc (G.NW17) APT1	1.0	EXT	0.0	0.90	1.2	1.46	AIR-CHANGE	0.13	915.5	8926.1
.5A North Perim Spc (G.N18) APT3	1.0	EXT	180.0	0.90	2.0	1.46	AIR-CHANGE	0.09	1566.5	15273.4
5B East Perim Spc (G.E19) APT1	1.0	EXT	0.0	0.90	0.9	1.46	AIR-CHANGE	0.18	714.0	6961.5
5A Core Spc (G.C20) STR	1.0	INT	0.0	0.69	0.0	0.20	NO-INFILT.	0.00	144.5	1408.9
5A West Perim Spc (G.W21) APT4	1.0	EXT	180.0	0.90	3.2	1.46	AIR-CHANGE	0.08	2478.2	24162.9
5A SW Perim Spc (G.SW22) APT1	1.0	EXT	0.0	0.90	1.2	1.46	AIR-CHANGE	0.12	944.2	9206.4
5A Core Spc (G.C23) COR	1.0	INT	0.0	0.66	0.0	0.20	NO-INFILT.	0.00	681.2	6642.2
5A South Perim Spc (G.S24) APT3	1.0	EXT	-90.0	0.90	2.3	1.46	AIR-CHANGE	0.08	1832.5	17866.9
Spaces on floor: L6 Ground Flr										
6A Core Spc (G.C1) ELV	1.0	INT	0.0	0.00	0.0	0.00	NO-INFILT.	0.00	161.5	1574.6
6B Core Spc (G.C2) STR	1.0	INT	0.0	0.69	0.0	0.20	NO-INFILT.	0.00	241.5	2354.6
6B North Perim Spc (G.N3) COR	1.0	EXT	180.0	0.66	0.0	0.20	AIR-CHANGE	0.06	1748.2	17045.4
6B North Perim Spc (G.N4) APT4	1.0	EXT	180.0	0.90	3.7	1.46	AIR-CHANGE	0.08	2928.0	28548.0
6B East Perim Spc (G.E5) APT1	1.0	EXT	0.0	0.90	1.3	1.46	AIR-CHANGE	0.13	984.0	9594.0
6B West Perim Spc (G.W6) APT1	1.0	EXT	0.0	0.90	1.0	1.46	AIR-CHANGE	0.15	765.0	7458.8
SB West Perim Spc (G.W7) APT1	1.0	EXT	90.0	0.90	0.8	1.46	AIR-CHANGE	0.10	654.5	6381.4
5B East Perim Spc (G.E8) APT1	1.0	EXT	-90.0	0.90	0.8	1.46	AIR-CHANGE	0.11	628.5	6127.9
6B East Perim Spc (G.E9) APT1	1.0	EXT	0.0	0.90	1.0	1.46	AIR-CHANGE	0.16	789.0	7692.8
6B South Perim Spc (G.S10) APT7	1.0	EXT	90.0	0.90	5.1	1.46	AIR-CHANGE	0.08	3981.5	38819.6
6B Core Spc (G.C11) ELEC	1.0	INT	0.0	0.95	0.0	0.00	NO-INFILT.	0.00	57.8	563.1
6A East Perim Spc (G.E12) GSHF	1.0	EXT	-90.0	0.00	0.0	0.00	AIR-CHANGE	6.15	38.2	372.9
6A East Perim Spc (G.E13) APT4	1.0	EXT	180.0	0.90	2.8	1.46	AIR-CHANGE	0.07	2229.8	21740.1
6A Core Spc (G.C14) TSHF	1.0	INT	0.0	0.00	0.0	0.00	AIR-CHANGE	6.15	27.0	263.2
6A Core Spc (G.C15) TRSH	1.0	INT	0.0	0.57	0.0	0.00	NO-INFILT.	0.00	54.0	526.5
6A Core Spc (G.C16) ELEC	1.0	INT	0.0	0.95	0.0	0.00	NO-INFILT.	0.00	65.0	633.8
6A NW Perim Spc (G.NW17) APT1	1.0	EXT	90.0	0.90	0.9	1.46	AIR-CHANGE	0.14	731.2	7129.7
6A North Perim Spc (G.N18) APT3	1.0	EXT	180.0	0.90	1.8	1.46	AIR-CHANGE	0.08	1404.0	13689.0
6B East Perim Spc (G.E19) APT1	1.0	EXT	0.0	0.90	0.8	1.46	AIR-CHANGE	0.18	659.0	6425.2
6A Core Spc (G.C20) STR	1.0	INT	0.0	0.69	0.0	0.20	NO-INFILT.	0.00	144.5	1408.9
6A West Perim Spc (G.W21) APT4	1.0	EXT	180.0	0.90	3.2	1.46	AIR-CHANGE	0.08	2478.2	24162.9
6A SW Perim Spc (G.SW22) APT1	1.0	EXT	0.0	0.90	1.2	1.46	AIR-CHANGE	0.12	944.2	9206.4
6A Core Spc (G.C23) COR	1.0	EXT	0.0	0.66	0.0	0.20	NO-INFILT.	0.00	681.2	6642.2
6A South Perim Spc (G.S24) APT3	1.0	EXT	-90.0	0.90	2.3	1.46	AIR-CHANGE	0.08	1832.5	17866.9
paces on floor: L7 Ground Flr										
7A Core Spc (G.C1) ELV	1.0	INT	0.0	0.00	0.0	0.00	NO-INFILT.	0.00	161.5	1681.2
7B Core Spc (G.C2) STR	1.0	EXT	0.0	0.69	0.0	0.20	NO-INFILT.	0.00	241.5	2514.0
7B North Perim Spc (G.N3) COR	1.0	EXT	0.0	0.66	0.0	0.20	AIR-CHANGE	0.08	1748.2	18199.3
7B North Perim Spc (G.N4) APT4	1.0		180.0	0.90	3.4	1.46	AIR-CHANGE		2668.0	27773.9
7B East Perim Spc (G.E5) APT1	1.0	EXT	0.0	0.90	1.2	1.46	AIR-CHANGE		919.0	9566.8
7B West Perim Spc (G.W6) APT1	1.0	EXT	0.0	0.90	1.0	1.46	AIR-CHANGE		765.0	7963.6
7B West Perim Spc (G.W7) APT1	1.0	EXT	90.0	0.90	0.8	1.46	AIR-CHANGE		654.5	6813.3
7B East Perim Spc (G.E8) APT1	1.0	EXT	-90.0	0.90	0.8	1.46	AIR-CHANGE		628.5	6542.7
7B East Perim Spc (G.E9) APT1	1.0	EXT	0.0	0.90	1.0	1.46		0.15	789.0	8213.5
7B SSW Perim Spc (G.SSW10) APT7	1.0	EXT	0.0	0.90	5.1	1.46	AIR-CHANGE	0.08	3981.5	41447.4
7B Core Spc (G.C11) ELEC	1.0	EXT	0.0	0.95	0.0	0.00	NO-INFILT.	0.00	57.8	601.2
7A East Perim Spc (G.E12) GSHF	1.0	EVT	-90.0	0.00	0.0	0.00	AIR-CHANGE	5 76	38.2	398.2

CONDITIONED FLOOR AREA = 171490.0 SQFT
TOTAL INSTALLED LIGHTING POWER = 160.598 KW
TOTAL INSTALLED EQUIPMENT POWER = 218.728 KW

REPORT- LV-B Summary of Spaces								WEATH	HER FILE- SEA	TTLE BOEING FI WA
										-(CONTINUED)
L7A East Perim Spc (G.E13) APT2	1.0	EXT	-90.0	0.90	1.2	1.46	AIR-CHANGE	0.08	956.8	9959.8
L7A Core Spc (G.C14) TSHF	1.0	INT	0.0	0.00	0.0	0.00	AIR-CHANGE	5.76	27.0	281.1
L7A Core Spc (G.C15) TRSH	1.0	INT	0.0	0.57	0.0	0.00	NO-INFILT.	0.00	54.0	562.1
L7A Core Spc (G.C16) ELEC	1.0	INT	0.0	0.95	0.0	0.00	NO-INFILT.	0.00	65.0	676.6
L7A Core Spc (G.C17) STR	1.0	INT	0.0	0.69	0.0	0.20	NO-INFILT.	0.00	144.5	1504.2
L7A West Perim Spc (G.W18) APT2	1.0	EXT	0.0	0.90	1.3	1.46	AIR-CHANGE	0.08	999.0	10399.6
L7A SW Perim Spc (G.SW19) APT1	1.0	EXT	0.0	0.90	1.1	1.46	AIR-CHANGE	0.11	891.8	9283.1
L7A Core Spc (G.C20) COR	1.0	EXT	180.0	0.66	0.0	0.20	NO-INFILT.	0.00	623.0	6485.4
L7A NW Perim Spc (G.NW21) AMN	1.0	EXT	90.0	0.73	0.0	0.50	AIR-CHANGE	0.13	778.0	8099.0
L7A NE Perim Spc (G.NE22) AMN	1.0	EXT	180.0	0.73	0.0	0.50	AIR-CHANGE	0.12	829.5	8635.1
L7A SSE Perim Spc (G.SSE23) APT2	1.0	EXT	-90.0	0.90	1.6	1.46	AIR-CHANGE	0.09	1282.5	13350.8
Spaces on floor: L8 Ground Flr										
L8A Core Spc (G.C1) ELV	1.0	EXT	0.0	0.00	0.0	0.00	NO-INFILT.	0.00	161.5	1574.6
L8A East Perim Spc (G.E2) GSHF	1.0	EXT	-90.0	0.00	0.0	0.00	AIR-CHANGE	6.15	38.2	372.9
L8A East Perim Spc (G.E3) APT2	1.0	EXT	-90.0	0.90	1.2	1.46	AIR-CHANGE	0.08	956.8	9328.3
L8A Core Spc (G.C4) TSHF	1.0	EXT	0.0	0.00	0.0	0.00	AIR-CHANGE	6.15	27.0	263.2
L8A Core Spc (G.C5) TRSH	1.0	EXT	0.0	0.57	0.0	0.00	NO-INFILT.	0.00	54.0	526.5
L8A Core Spc (G.C6) ELEC	1.0	EXT	0.0	0.95	0.0	0.00	NO-INFILT.	0.00	65.0	633.8
L8A Core Spc (G.C7) STR	1.0	EXT	0.0	0.69	0.0	0.20	NO-INFILT.	0.00	144.5	1408.9
L8A West Perim Spc (G.W8) APT2	1.0	EXT	0.0	0.90	1.1	1.46	AIR-CHANGE	0.10	891.0	8687.2
L8A SW Perim Spc (G.SW9) APT1	1.0	EXT	0.0	0.90	0.9	1.46	AIR-CHANGE	0.14	688.5	6712.9
L8A Core Spc (G.C10) COR	1.0	EXT	0.0	0.66	0.0	0.20	NO-INFILT.	0.00	749.5	7307.6
L8A NW Perim Spc (G.NW11) APT1	1.0	EXT	90.0	0.90	1.0	1.46	AIR-CHANGE	0.14	776.5	7570.9
L8A NE Perim Spc (G.NE12) APT1	1.0	EXT	180.0	0.90	1.2	1.46	AIR-CHANGE	0.11	948.8	9250.3
L8A South Perim Spc (G.S13) APT1	1.0	EXT	0.0	0.90	0.7	1.46	AIR-CHANGE	0.14	540.0	5265.0
L8A SE Perim Spc (G.SE14) APT1	1.0	EXT	0.0	0.90	0.7	1.46	AIR-CHANGE	0.17	540.0	5265.0
BUILDING TOTALS					366.7	1.01			217166.2	2231328.8

WEATHER FILE- SEATTLE BOEING FI WA

NUMBER OF EXTERIOR SURFACES1003 (U-Value includes outside film; window includes frame and curb, if defined)

	WINDOW	NDOWSWALL		-W A L L + W I N D O W S-			
SURFACE	U-VALUE	AREA	U-VALUE	AREA	U-VALUE	AREA	AZIMUTH
	(BTU/HR-SQFT-F)	(SQFT)	(BTU/HR-SQFT-F)	(SQFT)	(BTU/HR-SQFT-F)	(SQFT)	
L1 West Slab (G.W7.S10)	0.000	0.00	0.235	22.78	0.235	22.78	NORTH
in space: L1B West Perim Spc (G	.W7) APT1						
L1 West Wall (G.W7.E10)	0.400	73.51	0.063	233.85	0.144	307.36	NORTH
in space: L1B West Perim Spc (G	.W7) APT1						
L1 West Slab (G.W8.S11)	0.000	0.00	0.235	10.05	0.235	10.05	NORTH
in space: L1B West Perim Spc (G	.W8) APT1						
L1 West Wall (G.W8.E11)	0.400	32.43	0.063	103.17	0.144	135.60	NORTH
in space: L1B West Perim Spc (G	.W8) APT1						
L1 West Slab (G.SW26.S36) \$X	0.000	0.00	0.235	4.69	0.235	4.69	NORTH
in space: L1A SW Perim Spc (G.S	W26) ELEC						
L1 West Wall (G.SW26.E36) \$X	0.000	0.00	0.063	63.28	0.063	63.28	NORTH
in space: L1A SW Perim Spc (G.S	W26) ELEC						
L1 West Slab (G.WNW27.S37)	0.000	0.00	0.235	12.40	0.235	12.40	NORTH
in space: L1A WNW Perim Spc (G.	WNW27) APT1						
L1 West Wall (G.WNW27.E37)	0.400	40.00	0.063	127.24	0.144	167.24	NORTH
in space: L1A WNW Perim Spc (G.	WNW27) APT1						
L2 West Slab (G.N4.S5)	0.000	0.00	0.235	3.35	0.235	3.35	NORTH
in space: L2B North Perim Spc (	G.N4) APT4						
L2 West Wall (G.N4.E5)	0.400	10.81	0.063	53.34	0.120	64.15	NORTH
in space: L2B North Perim Spc (	G.N4) APT4						
L2 West Slab (G.N4.S9)	0.000	0.00	0.235	3.35	0.235	3.35	NORTH
in space: L2B North Perim Spc (	G.N4) APT4						
L2 West Wall (G.N4.E9)	0.400	10.81	0.063	53.34	0.120	64.15	NORTH
in space: L2B North Perim Spc (	G.N4) APT4						
L2 West Slab (G.N4.S13)	0.000	0.00	0.235	3.35	0.235	3.35	NORTH
in space: L2B North Perim Spc (	G.N4) APT4						
L2 West Wall (G.N4.E13)	0.400	10.81	0.063	53.34	0.120	64.15	NORTH
in space: L2B North Perim Spc (	G.N4) APT4						
L2 West Slab (G.N4.S17)	0.000	0.00	0.235	3.35	0.235	3.35	NORTH
in space: L2B North Perim Spc (	G.N4) APT4						
L2 West Wall (G.N4.E17)	0.400	10.81	0.063	53.34	0.120	64.15	NORTH
in space: L2B North Perim Spc (	G.N4) APT4						
L2 West Slab (G.E5.S23)	0.000	0.00	0.235	3.35	0.235	3.35	NORTH
in space: L2B East Perim Spc (G	.E5) APT1						
L2 West Wall (G.E5.E23)	0.400	10.81	0.063	53.34	0.120	64.15	NORTH
in space: L2B East Perim Spc (G							
L2 West Slab (G.W6.S26)	0.000	0.00	0.235	22.78	0.235	22.78	NORTH
in space: L2B West Perim Spc (G							
L2 West Wall (G.W6.E26)	0.400	73.51	0.063	362.71	0.120	436.22	NORTH
in space: L2B West Perim Spc (G							
L2 West Slab (G.W7.S27)	0.000	0.00	0.235	10.05	0.235	10.05	NORTH
in space: L2B West Perim Spc (G							
L2 West Wall (G.W7.E27)	0.400	32.43	0.063	160.02	0.120	192.45	NORTH
in space: L2B West Perim Spc (G							-
L2 West Slab (G.S10.S33)	0.000	0.00	0.235	2.68	0.235	2.68	NORTH
in space: L2B South Perim Spc (		2.30					
L2 West Wall (G.S10.E33)	0.400	8.65	0.063	42.67	0.120	51.32	NORTH
in space: L2B South Perim Spc (		2.33			***		

in space: L3B North Perim Spc (G.N4) APT4

REPORT- LV-D Details of Exterior Surfaces WEATHER FILE- SEATTLE BOEING FI WA -----(CONTINUED)-----L2 West Slab (G.S10.S37) 0.000 0.00 0.235 0.235 2.68 NORTH 2.68 in space: L2B South Perim Spc (G.S10) APT6 0.400 L2 West Wall (G.S10.E37) 8.65 0.063 42.67 0.120 51.32 NORTH in space: L2B South Perim Spc (G.S10) APT6 L2 West Slab (G.S10.S41) 0.000 0.00 0.235 2.68 0.235 2.68 NORTH in space: L2B South Perim Spc (G.S10) APT6 8.65 0.063 42.67 0.120 51.32 NORTH L2 West Wall (G.S10.E41) in space: L2B South Perim Spc (G.S10) APT6 0.000 0.00 0.235 0.235 4.69 NORTH L2 West Slab (G.SSW12.S46) 4.69 in space: L2B SSW Perim Spc (G.SSW12) LOB 49.52 0.304 L2 West Wall (G.SSW12.E46) 0.063 40.29 89.81 NORTH in space: L2B SSW Perim Spc (G.SSW12) LOB L2 West Slab (G.WNW18.S60) 0.000 0.00 0.235 3.35 0.235 3.35 NORTH in space: L2A WNW Perim Spc (G.WNW18) APT1 L2 West Wall (G.WNW18.E60) 10.81 0.063 0.400 53.34 0.120 64.15 NORTH in space: L2A WNW Perim Spc (G.WNW18) APT1 L2 West Slab (G.WNW18.S64) 0.000 0.00 0.235 20.44 0.235 20.44 NORTH in space: L2A WNW Perim Spc (G.WNW18) APT1 65.94 325.37 L2 West Wall (G.WNW18.E64) 0.400 0.063 0.120 391.32 NORTH in space: L2A WNW Perim Spc (G.WNW18) APT1 0.235 L2 West Slab (G.N19.S68) 0.000 0.00 0.235 3.35 3.35 NORTH in space: L2A North Perim Spc (G.N19) APT2 L2 West Wall (G.N19.E68) 0.400 10.81 0.063 53.34 0.120 64.15 NORTH in space: L2A North Perim Spc (G.N19) APT2 0.000 0.00 0.235 3.35 0.235 3.35 NORTH L2 West Slab (G.N19.S72) in space: L2A North Perim Spc (G.N19) APT2 L2 West Wall (G.N19.E72) 0.400 10.81 0.063 53.34 0.120 64.15 NORTH in space: L2A North Perim Spc (G.N19) APT2 0 235 L2 West Slab (G.SW20.S76) 0.000 0 00 0 235 55 28 55 28 NORTH in space: L2A SW Perim Spc (G.SW20) RST L2 West Wall (G.SW20.E76) 0.500 583.60 0.063 474.88 0.304 1058.47 NORTH in space: L2A SW Perim Spc (G.SW20) RST L2 West Slab (G.E23.S82) 0.000 0.00 0.235 3.35 0.235 3.35 NORTH in space: L2B East Perim Spc (G.E23) APT1 L2 West Wall (G.E23.E82) 0.400 10.81 0.063 53.34 0.120 64.15 NORTH in space: L2B East Perim Spc (G.E23) APT1 L2 West Slab (G.NNW24.S84) 0.000 0.00 0.235 3.02 0.235 3.02 NORTH in space: L2A NNW Perim Spc (G.NNW24) STR L2 West Wall (G.NNW24.E84) 0.000 0.00 0.063 57.74 0.063 57.74 NORTH in space: L2A NNW Perim Spc (G.NNW24) STR 7.04 NORTH L2 West Slab (G.NNW24.S85) 0.000 0.00 0.235 7.04 0.235 in space: L2A NNW Perim Spc (G.NNW24) STR 134.71 134.71 NORTH L2 West Wall (G.NNW24.E85) 0.000 0.00 0.063 0.063 in space: L2A NNW Perim Spc (G.NNW24) STR L2 West Slab (G.W25.S86) 0.00 0.235 8.71 0.235 8.71 NORTH in space: L2A West Perim Spc (G.W25) STO L2 West Wall (G.W25.E86) 0.00 166.79 166.79 NORTH 0.000 0.063 0.063 in space: L2A West Perim Spc (G.W25) STO L2 West Slab (G.C26.S87) 0.00 0.235 0.235 4.02 NORTH 0.000 4.02 in space: L2A Core Spc (G.C26) COR 76.98 NORTH L2 West Wall (G.C26.E87) 0.000 0.00 0.063 76.98 0.063 in space: L2A Core Spc (G.C26) COR L3 West Slab (G.N4.S6) 0.000 0.00 0.235 3.35 0.235 3.35 NORTH in space: L3B North Perim Spc (G.N4) APT4 0.400 L3 West Wall (G.N4.E6) 10.81 0.063 34.59 0.143 45.40 NORTH in space: L3B North Perim Spc (G.N4) APT4 L3 West Slab (G.N4.S10) 0.000 0.00 0.235 3.35 0.235 3.35 NORTH

in space: L3B South Perim Spc (G.S10) APT7

REPORT- LV-D Details of Exterior Surfaces WEATHER FILE- SEATTLE BOEING FI WA -----(CONTINUED)-----L3 West Wall (G.N4.E10) 10.81 0.063 45.40 NORTH 0.400 34.59 0.143 in space: L3B North Perim Spc (G.N4) APT4 L3 West Slab (G.N4.S14) 0.000 0.00 0.235 3.35 0.235 3.35 NORTH in space: L3B North Perim Spc (G.N4) APT4 L3 West Wall (G.N4.E14) 10.81 0.063 34.59 0.143 45.40 NORTH in space: L3B North Perim Spc (G.N4) APT4 0.00 0.235 3.35 0.235 3.35 NORTH L3 West Slab (G.N4.S18) in space: L3B North Perim Spc (G.N4) APT4 L3 West Wall (G.N4.E18) 10.81 0.063 0.143 45.40 NORTH 34.59 in space: L3B North Perim Spc (G.N4) APT4 0.235 0.235 L3 West Slab (G.E5.S24) 0.00 3.35 3.35 NORTH in space: L3B East Perim Spc (G.E5) APT1 L3 West Wall (G.E5.E24) 0.400 10.81 0.063 34.59 0.143 45.40 NORTH in space: L3B East Perim Spc (G.E5) APT1 0.000 L3 West Slab (G.W6.S27) 0.235 22.78 0.00 0.235 22.78 NORTH in space: L3B West Perim Spc (G.W6) APT1 L3 West Wall (G.W6.E27) 0.400 73.51 0.063 235.21 0.143 308.72 NORTH in space: L3B West Perim Spc (G.W6) APT1 0.000 L3 West Slab (G.W7.S28) 0.00 0.235 10.05 0.235 10.05 NORTH in space: L3B West Perim Spc (G.W7) APT1 L3 West Wall (G.W7.E28) 0.400 32.43 0.063 103.77 0.143 136.20 NORTH in space: L3B West Perim Spc (G.W7) APT1 L3 West Slab (G.E9.S31) 0.000 0.00 0.235 1.34 0.235 1.34 NORTH in space: L3B East Perim Spc (G.E9) APT1 0.400 0.063 13.84 0.143 18.16 NORTH L3 West Wall (G.E9.E31) 4.32 in space: L3B East Perim Spc (G.E9) APT1 L3 West Slab (G.S10.S35) 0.000 0.00 0.235 5.36 0.235 5.36 NORTH in space: L3B South Perim Spc (G.S10) APT7 0 400 L3 West Wall (G.S10.E35) 17 30 0.063 55 34 0 143 72 64 NORTH in space: L3B South Perim Spc (G.S10) APT7 L3 West Slab (G.S10.S39) 0.000 0.00 0.235 1.34 0.235 1.34 NORTH in space: L3B South Perim Spc (G.S10) APT7 L3 West Wall (G.S10.E39) 0.400 4.32 0.063 13.84 0.143 18.16 NORTH in space: L3B South Perim Spc (G.S10) APT7 L3 West Slab (G.S10.S43) 0.000 0.00 0.235 1.34 0.235 1.34 NORTH in space: L3B South Perim Spc (G.S10) APT7 L3 West Wall (G.S10.E43) 0.400 0.063 13.84 0.143 18.16 NORTH 4.32 in space: L3B South Perim Spc (G.S10) APT7 L3 West Slab (G.S10.S47) 0.000 0.00 0.235 0.235 1.34 NORTH 1.34 in space: L3B South Perim Spc (G.S10) APT7 L3 West Wall (G.S10.E47) 0.063 0.143 18.16 NORTH 4.32 13.84 in space: L3B South Perim Spc (G.S10) APT7 L3 West Slab (G.S10.S51) 0.000 0.00 0.235 0.235 1.34 NORTH in space: L3B South Perim Spc (G.S10) APT7 L3 West Wall (G.S10.E51) 4.32 0.063 13.84 0.143 18.16 NORTH in space: L3B South Perim Spc (G.S10) APT7 L3 West Slab (G.S10.S55) 0.000 0.235 1.34 NORTH 0.00 0.235 1.34 in space: L3B South Perim Spc (G.S10) APT7 L3 West Wall (G.S10.E55) 4.32 0.063 0.143 18.16 NORTH 0.400 13.84 in space: L3B South Perim Spc (G.S10) APT7 L3 West Slab (G.S10.S59) 0.000 0.00 0.235 0.235 1.34 NORTH 1.34 in space: L3B South Perim Spc (G.S10) APT7 L3 West Wall (G.S10.E59) 0.400 4.32 0.063 13.84 0.143 18.16 NORTH in space: L3B South Perim Spc (G.S10) APT7 0.000 0.00 0.235 1.34 0.235 1.34 NORTH L3 West Slab (G.S10.S63) in space: L3B South Perim Spc (G.S10) APT7 0.400 4.32 0.063 13.84 0.143 18.16 NORTH L3 West Wall (G.S10.E63)

REPORT- LV-D Details of Exterior Surfaces WEATHER FILE- SEATTLE BOEING FI WA ----(CONTINUED)-----L3 West Slab (G.NW17.S71) 0.000 0.00 0.235 0.235 4.69 NORTH 4.69 in space: L3A NW Perim Spc (G.NW17) APT1 L3 West Wall (G.NW17.E71) 0.400 15.13 0.063 48.43 0.143 63.56 NORTH in space: L3A NW Perim Spc (G.NW17) APT1 L3 West Slab (G.NW17.S75) 0.000 0.00 0.235 20.44 0.235 20.44 NORTH in space: L3A NW Perim Spc (G.NW17) APT1 L3 West Wall (G.NW17.E75) 65.94 0.063 211.00 0.143 276.94 NORTH in space: L3A NW Perim Spc (G.NW17) APT1 0.000 0.00 0.235 0.235 3.35 NORTH L3 West Slab (G.N18.S79) 3.35 in space: L3A North Perim Spc (G.N18) APT3 10.81 L3 West Wall (G.N18.E79) 0.063 34.59 0.143 45.40 NORTH in space: L3A North Perim Spc (G.N18) APT3 L3 West Slab (G.N18.S83) 0.000 0.00 0.235 3.35 0.235 3.35 NORTH in space: L3A North Perim Spc (G.N18) APT3 L3 West Wall (G.N18.E83) 10.81 0.063 45.40 NORTH 0.400 34.59 0.143 in space: L3A North Perim Spc (G.N18) APT3 L3 West Slab (G.N18.S87) 0.000 0.00 0.235 0.235 3.35 NORTH 3.35 in space: L3A North Perim Spc (G.N18) APT3 0.400 10.81 45.40 NORTH L3 West Wall (G.N18.E87) 0.063 34.59 0.143 in space: L3A North Perim Spc (G.N18) APT3 0.235 0.235 L3 West Slab (G.E19.S93) 0.000 0.00 3.35 3.35 NORTH in space: L3B East Perim Spc (G.E19) APT1 L3 West Wall (G.E19.E93) 0.400 10.81 0.063 34.59 0.143 45.40 NORTH in space: L3B East Perim Spc (G.E19) APT1 0.000 L3 West Slab (G.W21.S95) 0.00 0.235 7.04 0.235 7.04 NORTH in space: L3A West Perim Spc (G.W21) APT4 L3 West Wall (G.W21.E95) 0.400 22.70 0.063 72.64 0.143 95.34 NORTH in space: L3A West Perim Spc (G.W21) APT4 0 000 0 235 L3 West Slab (G.W21.S97) 0 00 0 235 6 70 6 70 NORTH in space: L3A West Perim Spc (G.W21) APT4 L3 West Wall (G.W21.E97) 0 400 21.62 0.063 69.18 0.143 90.80 NORTH in space: L3A West Perim Spc (G.W21) APT4 L3 West Slab (G.W21.S99) 0.000 0.00 0.235 19.77 0.235 19.77 NORTH in space: L3A West Perim Spc (G.W21) APT4 L3 West Wall (G.W21.E99) 0.400 63.78 0.063 204.08 0.143 267.86 NORTH in space: L3A West Perim Spc (G.W21) APT4 L3 West Slab (G.W21.S101) 0.000 0.00 0.235 6.37 0.235 6.37 NORTH in space: L3A West Perim Spc (G.W21) APT4 20.54 0.063 65.72 0.143 86.26 NORTH L3 West Wall (G.W21.E101) in space: L3A West Perim Spc (G.W21) APT4 L3 West Slab (G.W21.S103) 0.000 0.00 0.235 6.70 0.235 6.70 NORTH in space: L3A West Perim Spc (G.W21) APT4 21.62 L3 West Wall (G.W21.E103) 0.063 69.18 0.143 90.80 NORTH in space: L3A West Perim Spc (G.W21) APT4 L3 West Slab (G.W21.S104) 0.00 0.235 4.02 0.235 4.02 NORTH in space: L3A West Perim Spc (G.W21) APT4 L3 West Wall (G.W21.E104) 12.97 54.48 NORTH 0.400 0.063 41.51 0.143 in space: L3A West Perim Spc (G.W21) APT4 L3 West Slab (G.SW22.S106) 0.00 0.235 0.235 4.69 NORTH 0.000 4.69 in space: L3A SW Perim Spc (G.SW22) APT1 L3 West Wall (G.SW22.E106) 0.400 15.13 0.063 48.43 0.143 63.56 NORTH in space: L3A SW Perim Spc (G.SW22) APT1 L3 West Slab (G.SW22.S108) 0.000 0.00 0.235 18.09 0.235 18.09 NORTH in space: L3A SW Perim Spc (G.SW22) APT1 L3 West Wall (G.SW22.E108) 0.400 58.37 0.063 186.79 0.143 245.16 NORTH in space: L3A SW Perim Spc (G.SW22) APT1 L4 West Wall (G.N4.E6) 0.400 10.81 0.063 37.94 0.138 48.75 NORTH in space: L4B North Perim Spc (G.N4) APT4

in space: L4A SW Perim Spc (G.SW22) APT1

in space: L5A West Perim Spc (G.W21) APT4

in space: L5A SW Perim Spc (G.SW22) APT1

0.400

15.13

0.063

53.12

0.138

68.25 NORTH

L5 West Wall (G.SW22.E106)

in space: L4B North Perim Spc (G.N4) APT4

REPORT- LV-D Details of Exterior Surfaces WEATHER FILE- SEATTLE BOEING FI WA -----(CONTINUED)-----L2 North Wall (G.WNW18.E61) 24.77 0.063 65.04 0.156 89.81 EAST 0.400 in space: L2A WNW Perim Spc (G.WNW18) APT1 L2 North Slab (G.WNW18.S63) 0.000 0.00 0.235 12.73 0.235 12.73 EAST in space: L2A WNW Perim Spc (G.WNW18) APT1 L3 North Slab (G.W21.S98) 0.00 0.235 3.35 0.235 3.35 EAST 0.000 in space: L3A West Perim Spc (G.W21) APT4 17.69 0.063 27.71 0.194 45.40 EAST L3 North Wall (G.W21.E98) in space: L3A West Perim Spc (G.W21) APT4 L2 North Wall (G.WNW18.E63) 0.400 67.22 0.063 176.55 0.156 243.77 EAST in space: L2A WNW Perim Spc (G.WNW18) APT1 115.54 L1 North Wall (G.WNW27.E39) 74.30 0.063 0.195 189.84 EAST in space: L1A WNW Perim Spc (G.WNW27) APT1 L1 North Slab (G.N28.S42) 0.000 0.00 0.235 34.84 0.235 34.84 EAST in space: L1A North Perim Spc (G.N28) APT3 L2 North Slab (G.N19.S65) 0.00 0.000 0.235 4.36 0.235 4.36 EAST in space: L2A North Perim Spc (G.N19) APT2 L3 North Slab (G.W21.S102) 0.000 0.00 0.235 0.235 3.35 EAST 3.35 in space: L3A West Perim Spc (G.W21) APT4 17.69 27.71 L3 North Wall (G.W21.E102) 0.400 0.063 0.194 45.40 EAST in space: L3A West Perim Spc (G.W21) APT4 L2 North Wall (G.N19.E65) 0.063 0.400 23.00 60.40 0.156 83.39 EAST in space: L2A North Perim Spc (G.N19) APT2 L2 North Slab (G.N19.S67) 0.000 0.00 0.235 7.37 0.235 7.37 EAST in space: L2A North Perim Spc (G.N19) APT2 0.400 38.92 0.063 102.21 0.156 141.13 EAST L2 North Wall (G.N19.E67) in space: L2A North Perim Spc (G.N19) APT2 L1 North Wall (G.N28.E42) 0.400 183.97 0.063 286.11 0.195 470.08 EAST in space: L1A North Perim Spc (G.N28) APT3 0 000 0 235 L1 North Slab (G.E29.S46) 0 00 0 235 11 39 11 39 EAST in space: L1B East Perim Spc (G.E29) APT1 L2 North Slab (G.N19.S69) 0 000 0.00 0.235 4.36 0.235 4.36 EAST in space: L2A North Perim Spc (G.N19) APT2 L2 North Wall (G.N19.E69) 0.400 23.00 0.063 60.40 0.156 83.39 EAST in space: L2A North Perim Spc (G.N19) APT2 L2 North Slab (G.N19.S71) 0.000 0.00 0.235 7.04 0.235 7.04 EAST in space: L2A North Perim Spc (G.N19) APT2 L4 North Wall (G.N3.E1) 145.05 0.063 254.70 0.185 399.75 EAST in space: L4B North Perim Spc (G.N3) COR L4 North Wall (G.N4.E3) 0.400 0.063 62.12 0.185 97.50 EAST 35.38 in space: L4B North Perim Spc (G.N4) APT4 L4 North Wall (G.N4.E5) 0.063 0.185 126.75 EAST 45.99 80.76 in space: L4B North Perim Spc (G.N4) APT4 L2 North Wall (G.N19.E71) 37.15 0.063 97.57 0.156 134.71 EAST in space: L2A North Perim Spc (G.N19) APT2 L4 North Wall (G.N4.E7) 0.400 35.38 0.063 62.12 0.185 97.50 EAST in space: L4B North Perim Spc (G.N4) APT4 L4 North Wall (G.N4.E9) 80.76 126.75 EAST 0.400 45.99 0.063 0.185 in space: L4B North Perim Spc (G.N4) APT4 L1 North Wall (G.E29.E46) 60.14 0.063 0.195 93.54 153.68 EAST in space: L1B East Perim Spc (G.E29) APT1 97.50 EAST L4 North Wall (G.N4.E11) 35.38 0.063 62.12 0.185 in space: L4B North Perim Spc (G.N4) APT4 L4 North Wall (G.N4.E13) 0.400 45.99 0.063 80.76 0.185 126.75 EAST in space: L4B North Perim Spc (G.N4) APT4 0.000 0.00 0.235 2.35 0.235 2.35 EAST L2 North Slab (G.C3.S1) in space: L2B Core Spc (G.C3) COR 0.400 35.38 0.063 62.12 0.185 97.50 EAST L4 North Wall (G.N4.E15)

in space: L2B North Perim Spc (G.N4) APT4

in space: L5B North Perim Spc (G.N4) APT4

REPORT- LV-D Details of Exterior Surfaces WEATHER FILE- SEATTLE BOEING FI WA ----(CONTINUED)-----L4 North Wall (G.N18.E84) 23.00 0.063 0.185 63.38 EAST 0.400 40.38 in space: L4A North Perim Spc (G.N18) APT3 0.400 L4 North Wall (G.N18.E86) 38.92 0.063 68.33 0.185 107.25 EAST in space: L4A North Perim Spc (G.N18) APT3 70.76 0.063 110.04 0.195 180.80 EAST L1 North Wall (G.E6.E7) in space: L1B East Perim Spc (G.E6) APT1 26.53 0.063 46.59 0.185 73.12 EAST L4 North Wall (G.E19.E90) in space: L4B East Perim Spc (G.E19) APT1 38.92 0.063 0.185 107.25 EAST L4 North Wall (G.E19.E92) 68.33 in space: L4B East Perim Spc (G.E19) APT1 0.235 0.235 L3 North Slab (G.N3.S1) 0.00 27.47 27.47 EAST in space: L3B North Perim Spc (G.N3) COR L4 North Wall (G.W21.E94) 17.69 0.063 31.06 0.185 48.75 EAST in space: L4A West Perim Spc (G.W21) APT4 L3 North Wall (G.N3.E1) 145.05 227.23 372.28 EAST 0.400 0.063 0.194 in space: L3B North Perim Spc (G.N3) COR 0.000 0.00 0.235 0.235 6.70 EAST L3 North Slab (G.N4.S3) 6.70 in space: L3B North Perim Spc (G.N4) APT4 17.69 L4 North Wall (G.W21.E98) 0.400 0.063 31.06 0.185 48.75 EAST in space: L4A West Perim Spc (G.W21) APT4 0.063 L3 North Wall (G.N4.E3) 0.400 35.38 55.42 0.194 90.80 EAST in space: L3B North Perim Spc (G.N4) APT4 L3 North Slab (G.N4.S5) 0.000 0.00 0.235 8.71 0.235 8.71 EAST in space: L3B North Perim Spc (G.N4) APT4 48.75 EAST L4 North Wall (G.W21.E102) 0.400 17.69 0.063 31.06 0.185 in space: L4A West Perim Spc (G.W21) APT4 L3 North Wall (G.N4.E5) 0.400 45.99 0.063 72.05 0.194 118.04 EAST in space: L3B North Perim Spc (G.N4) APT4 L1 North Slab (G.W7.S9) 0 000 0 00 0 235 15 08 0 235 15 08 EAST in space: L1B West Perim Spc (G.W7) APT1 L2 North Slab (G.N4.S10) 0 000 0.00 0.235 6.70 0.235 6.70 EAST in space: L2B North Perim Spc (G.N4) APT4 L3 North Slab (G.N4.S7) 0.000 0.00 0.235 6.70 0.235 6.70 EAST in space: L3B North Perim Spc (G.N4) APT4 L5 North Wall (G.N3.E1) 0.400 145.05 0.063 254.70 0.185 399.75 EAST in space: L5B North Perim Spc (G.N3) COR L5 North Wall (G.N4.E3) 0.063 62.12 0.185 97.50 EAST 35.38 in space: L5B North Perim Spc (G.N4) APT4 L5 North Wall (G.N4.E5) 45.99 0.063 80.76 0.185 126.75 EAST in space: L5B North Perim Spc (G.N4) APT4 L3 North Wall (G.N4.E7) 0.063 0.194 90.80 EAST 35.38 55.42 in space: L3B North Perim Spc (G.N4) APT4 L5 North Wall (G.N4.E7) 35.38 0.063 62.12 0.185 97.50 EAST in space: L5B North Perim Spc (G.N4) APT4 L5 North Wall (G.N4.E9) 45.99 0.063 80.76 0.185 126.75 EAST in space: L5B North Perim Spc (G.N4) APT4 L3 North Slab (G.N4.S9) 8.71 EAST 0.000 0.00 0.235 8.71 0.235 in space: L3B North Perim Spc (G.N4) APT4 L5 North Wall (G.N4.E11) 35.38 97.50 EAST 0.063 62.12 0.185 in space: L5B North Perim Spc (G.N4) APT4 L5 North Wall (G.N4.E13) 45.99 0.063 80.76 0.185 126.75 EAST in space: L5B North Perim Spc (G.N4) APT4 L3 North Wall (G.N4.E9) 0.400 45.99 0.063 72.05 0.194 118.04 EAST in space: L3B North Perim Spc (G.N4) APT4 0.400 35.38 0.063 62.12 0.185 97.50 EAST L5 North Wall (G.N4.E15) in space: L5B North Perim Spc (G.N4) APT4 L5 North Wall (G.N4.E17) 0.400 45.99 0.063 80.76 0.185 126.75 EAST

L5 North Wall (G.N18.E84)

in space: L5A North Perim Spc (G.N18) APT3

0.400

23.00

0.063

40.38

0.185

63.38 EAST

in space: L2B East Perim Spc (G.E5) APT1

in space: L1A Core Spc (G.C1) STR

L8 North Wall (G.NW11.E18)

in space: L8A NW Perim Spc (G.NW11) APT1

0.400

0.063

205.00

0.185

in space: L3B North Perim Spc (G.N3) COR

in space: L2B North Perim Spc (G.N4) APT4

REPORT- LV-D Details of Exterior Surfaces WEATHER FILE- SEATTLE BOEING FI WA -----(CONTINUED)-----L3 East Slab (G.N18.S77) 0.000 0.00 0.235 0.235 3.35 SOUTH 3.35 in space: L3A North Perim Spc (G.N18) APT3 L5 East Wall (G.N4.E12) 0.400 16.41 0.063 32.34 0.176 48.75 SOUTH in space: L5B North Perim Spc (G.N4) APT4 16.41 0.063 28.99 0.185 45.40 SOUTH L3 East Wall (G.N18.E77) in space: L3A North Perim Spc (G.N18) APT3 L2 East Slab (G.E13.S52) \$X 0.00 0.235 5.70 0.235 5.70 SOUTH 0.000 in space: L2A East Perim Spc (G.E13) GSHF L2 East Wall (G.E13.E52) \$X 0.00 0.063 109.06 0.063 109.06 SOUTH 0.000 in space: L2A East Perim Spc (G.E13) GSHF 16.41 32.34 0.176 L5 East Wall (G.N4.E16) 0.063 48.75 SOUTH in space: L5B North Perim Spc (G.N4) APT4 L3 East Slab (G.N4.S4) 0.000 0.00 0.235 3.35 0.235 3.35 SOUTH in space: L3B North Perim Spc (G.N4) APT4 L3 East Wall (G.N4.E4) 16.41 0.063 28.99 0.185 45.40 SOUTH 0.400 in space: L3B North Perim Spc (G.N4) APT4 L5 East Wall (G.E5.E20) 111.61 0.063 219.89 0.176 331.50 SOUTH 0.400 in space: L5B East Perim Spc (G.E5) APT1 L1 East Slab (G.NNE24.S30) 0.000 0.00 0.235 12.40 0.235 12.40 SOUTH in space: L1A NNE Perim Spc (G.NNE24) APT1 L5 East Wall (G.E5.E22) 0.063 48.75 SOUTH 0.400 16.41 32.34 0.176 in space: L5B East Perim Spc (G.E5) APT1 L1 East Wall (G.NNE24.E30) 0.400 60.73 0.063 106.51 0.185 167.24 SOUTH in space: L1A NNE Perim Spc (G.NNE24) APT1 3.35 SOUTH L3 East Slab (G.N18.S81) 0.000 0.00 0.235 3.35 0.235 in space: L3A North Perim Spc (G.N18) APT3 L3 East Wall (G.N18.E81) 0.400 16.41 0.063 28.99 0.185 45.40 SOUTH in space: L3A North Perim Spc (G.N18) APT3 0 000 0 235 L2 East Slab (G.E14.S54) 0 00 0 235 5 36 5 36 SOUTH in space: L2A East Perim Spc (G.E14) APT3 L2 East Wall (G.E14.E54) 0 400 26.26 0.063 76.38 0.149 102.64 SOUTH in space: L2A East Perim Spc (G.E14) APT3 L5 East Wall (G.E8.E29) 55.80 0.063 109.95 0.176 165.75 SOUTH in space: L5B East Perim Spc (G.E8) APT1 L2 East Slab (G.E14.S55) 0.000 0.00 0.235 37.19 0.235 37.19 SOUTH in space: L2A East Perim Spc (G.E14) APT3 L5 East Wall (G.E9.E33) 128.02 0.063 252.23 0.176 380.25 SOUTH in space: L5B East Perim Spc (G.E9) APT1 L2 East Wall (G.E14.E55) 0.400 182.18 0.063 529.88 0.149 712.07 SOUTH in space: L2A East Perim Spc (G.E14) APT3 0.00 L3 East Slab (G.N4.S8) 0.235 0.235 3.35 SOUTH 3.35 in space: L3B North Perim Spc (G.N4) APT4 L5 East Wall (G.S10.E37) 6.57 0.063 12.93 0.176 19.50 SOUTH in space: L5B South Perim Spc (G.S10) APT7 L3 East Wall (G.N4.E8) 16.41 0.063 28.99 0.185 45.40 SOUTH in space: L3B North Perim Spc (G.N4) APT4 L5 East Wall (G.S10.E41) 0.400 12.93 19.50 SOUTH 6.57 0.063 0.176 in space: L5B South Perim Spc (G.S10) APT7 L3 East Slab (G.N18.S85) 0.000 0.00 0.235 0.235 3.35 SOUTH 3.35 in space: L3A North Perim Spc (G.N18) APT3 19.50 SOUTH L5 East Wall (G.S10.E45) 0.400 6.57 0.063 12.93 0.176 in space: L5B South Perim Spc (G.S10) APT7 L3 East Wall (G.N18.E85) 0.400 16.41 0.063 28.99 0.185 45.40 SOUTH in space: L3A North Perim Spc (G.N18) APT3 L5 East Wall (G.S10.E49) 0.400 6.57 0.063 12.93 0.176 19.50 SOUTH in space: L5B South Perim Spc (G.S10) APT7 L2 East Slab (G.N4.S3) 0.000 0.00 0.235 3.35 0.235 3.35 SOUTH

in space: L5B East Perim Spc (G.E19) APT1

REPORT- LV-D Details of Exterior Surfaces					E- SEATTLE BOE	
L5 East Wall (G.S10.E53) 0.400 in space: L5B South Perim Spc (G.S10) APT7	6.57	0.063	12.93	0.176		SOUTH
in space: LDB North Perim Spc (G.310) APT4  in space: LDB North Perim Spc (G.N4) APT4	16.41	0.063	47.74	0.149	64.15	SOUTH
in space: L5B South Perim Spc (G.S10) APT7  in space: L5B South Perim Spc (G.S10) APT7	6.57	0.063	12.93	0.176	19.50	SOUTH
in space: L2A WNW Perim Spc (G.WNW18) APT1  in space: L2A WNW Perim Spc (G.WNW18) APT1	0.00	0.235	3.35	0.235	3.35	SOUTH
L5 East Wall (G.S10.E61) 0.400 in space: L5B South Perim Spc (G.S10) APT7	6.57	0.063	12.93	0.176	19.50	SOUTH
L2 East Wall (G.WNW18.E58) 0.400 in space: L2A WNW Perim Spc (G.WNW18) APT1	16.41	0.063	47.74	0.149	64.15	SOUTH
L5 East Wall (G.S10.E65) 0.400 in space: L5B South Perim Spc (G.S10) APT7	6.57	0.063	12.93	0.176	19.50	SOUTH
L5 East Wall (G.E12.E66) \$X 0.000 in space: L5A East Perim Spc (G.E12) GSHF	0.00	0.063	82.88	0.063	82.88	SOUTH
L3 East Slab (G.E19.S89) 0.000 in space: L3B East Perim Spc (G.E19) APT1	0.00	0.235	21.77	0.235	21.77	SOUTH
L5 East Wall (G.E13.E68) 0.400 in space: L5A East Perim Spc (G.E13) APT4	26.26	0.063	51.74	0.176	78.00	SOUTH
L5 East Wall (G.E13.E69) 0.400 in space: L5A East Perim Spc (G.E13) APT4	182.18	0.063	358.94	0.176	541.12	SOUTH
L3 East Wall (G.E19.E89) 0.400 in space: L3B East Perim Spc (G.E19) APT1	106.68	0.063	188.42	0.185	295.10	SOUTH
L2 East Slab (G.E5.S19) 0.000 in space: L2B East Perim Spc (G.E5) APT1	0.00	0.235	22.78	0.235	22.78	SOUTH
L5 East Wall (G.NW17.E73) 0.400 in space: L5A NW Perim Spc (G.NW17) APT1	16.41	0.063	32.34	0.176		SOUTH
L2 East Wall (G.E5.E19) 0.400 in space: L2B East Perim Spc (G.E5) APT1	111.61	0.063	324.61	0.149		SOUTH
L3 East Slab (G.E19.S91) 0.000 in space: L3B East Perim Spc (G.E19) APT1	0.00	0.235	3.35	0.235		SOUTH
L3 East Wall (G.E19.E91) 0.400 in space: L3B East Perim Spc (G.E19) APT1	16.41	0.063	28.99	0.185		SOUTH
L5 East Wall (G.N18.E77) 0.400 in space: L5A North Perim Spc (G.N18) APT3	16.41	0.063	32.34	0.176		SOUTH
L3 East Slab (G.N4.S12) 0.000 in space: L3B North Perim Spc (G.N4) APT4	0.00	0.235	3.35	0.235		SOUTH
L3 East Wall (G.N4.E12) 0.400 in space: L3B North Perim Spc (G.N4) APT4	16.41	0.063	28.99	0.185		SOUTH
L1 East Slab (G.E6.S6) 0.000 in space: L1B East Perim Spc (G.E6) APT1	0.00	0.235	19.43	0.235		SOUTH
L5 East Wall (G.N18.E81) 0.400 in space: L5A Morth Perim Spc (G.N18) APT3	16.41	0.063	32.34	0.176		SOUTH
L1 East Wall (G.E6.E6) 0.400 in space: L1B East Perim Spc (G.E6) APT1	95.19	0.063	166.97	0.185		SOUTH
L2 East Slab (G.E5.S21) 0.000 in space: L2B East Perim Spc (G.E5) APT1	0.00	0.235	3.35	0.235		SOUTH
L2 East Wall (G.E5.E21) 0.400 in space: L2B East Perim Spc (G.E5) APT1	16.41	0.063	47.74	0.149		SOUTH
L5 East Wall (G.N18.E85) 0.400 in space: L5A North Perim Spc (G.N18) APT3	16.41	0.063	32.34	0.176		SOUTH
L2 East Slab (G.WNW18.S62) 0.000 in space: L2A WNW Perim Spc (G.WNW18) APT1	0.00	0.235	3.35	0.235		SOUTH
L2 East Wall (G.WNW18.E62) 0.400 in space: L2A WNW Perim Spc (G.WNW18) APT1	16.41	0.063	47.74	0.149		SOUTH
L5 East Wall (G.E19.E89) 0.400	106.68	0.063	210.19	0.176	316.88	SOUTH

in space: L2B East Perim Spc (G.E8) APT1

REPORT- LV-D Details of Exterior Surfaces					LE- SEATTLE BOE	
L4 East Wall (G.N4.E4) 0.400 in space: L4B North Perim Spc (G.N4) APT4	16.41	0.063	32.34	0.176		SOUTH
L2 East Slab (G.N19.S70) 0.000 in space: L2A North Perim Spc (G.N19) APT2	0.00	0.235	3.35	0.235	3.35	SOUTH
L6 East Wall (G.N4.E16) 0.400 in space: L6B North Perim Spc (G.N4) APT4	16.41	0.063	32.34	0.176	48.75	SOUTH
L2 East Wall (G.N19.E70) 0.400 in space: L2A North Perim Spc (G.N19) APT2	16.41	0.063	47.74	0.149	64.15	SOUTH
L3 East Slab (G.E8.S29) 0.000 in space: L3B East Perim Spc (G.E8) APT1	0.00	0.235	11.39	0.235	11.39	SOUTH
L6 East Wall (G.E5.E20) 0.400 in space: L6B East Perim Spc (G.E5) APT1	111.61	0.063	219.89	0.176	331.50	SOUTH
L4 East Wall (G.N4.E8) 0.400 in space: L4B North Perim Spc (G.N4) APT4	16.41	0.063	32.34	0.176	48.75	SOUTH
L6 East Wall (G.E5.E22) 0.400 in space: L6B East Perim Spc (G.E5) APT1	16.41	0.063	32.34	0.176	48.75	SOUTH
L3 East Wall (G.E8.E29) 0.400 in space: L3B East Perim Spc (G.E8) APT1	55.80	0.063	98.56	0.185	154.36	SOUTH
L2 East Slab (G.E9.S29) 0.000 in space: L2B East Perim Spc (G.E9) APT1	0.00	0.235	18.76	0.235	18.76	SOUTH
L2 East Wall (G.E9.E29) 0.400 in space: L2B East Perim Spc (G.E9) APT1	91.91	0.063	267.33	0.149	359.24	SOUTH
L4 East Wall (G.N4.E12) 0.400 in space: L4B North Perim Spc (G.N4) APT4	16.41	0.063	32.34	0.176	48.75	SOUTH
L3 East Slab (G.E9.S33) 0.000 in space: L3B East Perim Spc (G.E9) APT1	0.00	0.235	26.13	0.235	26.13	SOUTH
L6 East Wall (G.E8.E29) 0.400 in space: L6B East Perim Spc (G.E8) APT1	55.80	0.063	109.95	0.176	165.75	SOUTH
L3 East Wall (G.E9.E33) 0.400 in space: L3B East Perim Spc (G.E9) APT1	128.02	0.063	226.10	0.185	354.12	SOUTH
L6 East Wall (G.E9.E33) 0.400 in space: L6B East Perim Spc (G.E9) APT1	128.02	0.063	252.23	0.176	380.25	SOUTH
L1 East Slab (G.E29.S43) 0.000 in space: L1B East Perim Spc (G.E29) APT1	0.00	0.235	0.67	0.235	0.67	SOUTH
L4 East Wall (G.N4.E16) 0.400 in space: L4B North Perim Spc (G.N4) APT4	16.41	0.063	32.34	0.176	48.75	SOUTH
L6 East Wall (G.S10.E37) 0.400 in space: L6B South Perim Spc (G.S10) APT7	6.57	0.063	12.93	0.176	19.50	SOUTH
L1 East Wall (G.E29.E43) 0.000 in space: L1B East Perim Spc (G.E29) APT1	0.00	0.063	9.04	0.063	9.04	SOUTH
L6 East Wall (G.S10.E41) 0.400 in space: L6B South Perim Spc (G.S10) APT7	6.57	0.063	12.93	0.176	19.50	SOUTH
L2 East Slab (G.SW20.S74) 0.000 in space: L2A SW Perim Spc (G.SW20) RST	0.00	0.235	8.38	0.235	8.38	SOUTH
L6 East Wall (G.S10.E45) 0.400 in space: L6B South Perim Spc (G.S10) APT7	6.57	0.063	12.93	0.176	19.50	SOUTH
L4 East Wall (G.E5.E20) 0.400 in space: L4B East Perim Spc (G.E5) APT1	111.61	0.063	219.89	0.176	331.50	SOUTH
L6 East Wall (G.S10.E49) 0.400 in space: L6B South Perim Spc (G.S10) APT7	6.57	0.063	12.93	0.176	19.50	SOUTH
L2 East Wall (G.SW20.E74) 0.500 in space: L2A SW Perim Spc (G.SW20) RST	88.42	0.063	71.95	0.304	160.38	SOUTH
L6 East Wall (G.S10.E53) 0.400 in space: L6B South Perim Spc (G.S10) APT7	6.57	0.063	12.93	0.176	19.50	SOUTH
L4 East Wall (G.E5.E22) 0.400 in space: L4B East Perim Spc (G.E5) APT1	16.41	0.063	32.34	0.176	48.75	SOUTH
in space: L6B South Perim Spc (G.S10) APT7  in space: L6B South Perim Spc (G.S10) APT7	6.57	0.063	12.93	0.176	19.50	SOUTH

in space: L7B East Perim Spc (G.E5) APT1

REPORT- LV-D Details of Exterior Surfaces WEATHER FILE- SEATTLE BOEING FI WA -----(CONTINUED)-----L3 East Slab (G.S10.S37) 0.000 0.00 0.235 0.235 1.34 SOUTH 1.34 in space: L3B South Perim Spc (G.S10) APT7 0.400 L6 East Wall (G.S10.E61) 6.57 0.063 12.93 0.176 19.50 SOUTH in space: L6B South Perim Spc (G.S10) APT7 L3 East Wall (G.S10.E37) 0.063 11.59 0.185 18.16 SOUTH 6.57 in space: L3B South Perim Spc (G.S10) APT7 L6 East Wall (G.S10.E65) 6.57 0.063 12.93 0.176 19.50 SOUTH in space: L6B South Perim Spc (G.S10) APT7 L6 East Wall (G.E12.E66) \$X 0.00 0.063 82.88 0.063 82.88 SOUTH 0.000 in space: L6A East Perim Spc (G.E12) GSHF 0.235 0.67 0.235 L2 East Slab (G.E9.S31) 0.00 0.67 SOUTH in space: L2B East Perim Spc (G.E9) APT1 L6 East Wall (G.E13.E68) 0.400 26.26 0.063 51.74 0.176 78.00 SOUTH in space: L6A East Perim Spc (G.E13) APT4 L6 East Wall (G.E13.E69) 182.18 0.063 358.94 0.176 541.12 SOUTH 0.400 in space: L6A East Perim Spc (G.E13) APT4 L2 East Wall (G.E9.E31) 3.28 0.063 0.149 12.83 SOUTH 0.400 9.55 in space: L2B East Perim Spc (G.E9) APT1 0.000 L3 East Slab (G.S10.S41) 0.00 0.235 1.34 0.235 1.34 SOUTH in space: L3B South Perim Spc (G.S10) APT7 55.80 0.063 109.95 0.176 165.75 SOUTH L4 East Wall (G.E8.E29) 0.400 in space: L4B East Perim Spc (G.E8) APT1 L6 East Wall (G.E19.E74) 0.400 106.68 0.063 210.19 0.176 316.88 SOUTH in space: L6B East Perim Spc (G.E19) APT1 L3 East Wall (G.S10.E41) 0.400 6.57 0.063 11.59 0.185 18.16 SOUTH in space: L3B South Perim Spc (G.S10) APT7 L4 East Wall (G.E9.E33) 0.400 128.02 0.063 252.23 0.176 380.25 SOUTH in space: L4B East Perim Spc (G.E9) APT1 0 000 0 235 21 77 SOUTH L2 East Slab (G.E23.S78) 0 00 0 235 21 77 in space: L2B East Perim Spc (G.E23) APT1 L2 East Wall (G.E23.E78) 0 400 106.68 0.063 310.29 0.149 416.98 SOUTH in space: L2B East Perim Spc (G.E23) APT1 L4 East Wall (G.S10.E37) 0.400 6.57 0.063 12.93 0.176 19.50 SOUTH in space: L4B South Perim Spc (G.S10) APT7 L3 East Slab (G.S10.S45) 0.000 0.00 0.235 1.34 0.235 1.34 SOUTH in space: L3B South Perim Spc (G.S10) APT7 L4 East Wall (G.S10.E41) 0.400 0.063 12.93 0.176 19.50 SOUTH 6.57 in space: L4B South Perim Spc (G.S10) APT7 L3 East Wall (G.S10.E45) 0.400 0.063 11.59 0.185 18.16 SOUTH 6.57 in space: L3B South Perim Spc (G.S10) APT7 L4 East Wall (G.S10.E45) 0.400 0.063 0.176 19.50 SOUTH 6.57 12.93 in space: L4B South Perim Spc (G.S10) APT7 L2 East Slab (G.N4.S11) 0.00 0.235 0.235 3.35 SOUTH in space: L2B North Perim Spc (G.N4) APT4 L4 East Wall (G.S10.E49) 6.57 0.063 12.93 0.176 19.50 SOUTH in space: L4B South Perim Spc (G.S10) APT7 L2 East Wall (G.N4.E11) 16.41 47.74 64.15 SOUTH 0.400 0.063 0.149 in space: L2B North Perim Spc (G.N4) APT4 L6 East Wall (G.S24.E91) 11.49 0.063 22.64 0.176 34.12 SOUTH in space: L6A South Perim Spc (G.S24) APT3 L4 East Wall (G.S10.E53) 0.400 6.57 0.063 12.93 0.176 19.50 SOUTH in space: L4B South Perim Spc (G.S10) APT7 L7 East Wall (G.N3.E3) 0.400 3.28 0.063 7.13 0.169 10.41 SOUTH in space: L7B North Perim Spc (G.N3) COR 0 000 L3 East Slab (G.S10.S49) 0.00 0.235 1.34 0.235 1.34 SOUTH in space: L3B South Perim Spc (G.S10) APT7 L7 East Wall (G.E5.E6) 0.400 111.61 0.063 242.33 0.169 353.94 SOUTH

REPORT- LV-D Details of Exterior Surfaces					E- SEATTLE BOE	
L4 East Wall (G.Sl0.E57) 0.400 in space: L4B South Perim Spc (G.Sl0) APT7	6.57	0.063	12.93	0.176	(CONTIN 19.50	SOUTH
L3 East Wall (G.Sl0.E49) 0.400 in space: L3B South Perim Spc (G.Sl0) APT7	6.57	0.063	11.59	0.185	18.16	SOUTH
L4 East Wall (G.Sl0.E61) 0.400 in space: L4B South Perim Spc (G.Sl0) APT7	6.57	0.063	12.93	0.176	19.50	SOUTH
L2 East Slab (G.E23.S80) 0.000 in space: L2B East Perim Spc (G.E23) APT1	0.00	0.235	3.35	0.235	3.35	SOUTH
L7 East Wall (G.E8.E12) 0.400 in space: L7B East Perim Spc (G.E8) APT1	55.80	0.063	121.17	0.169	176.97	SOUTH
L4 East Wall (G.S10.E65) 0.400 in space: L4B South Perim Spc (G.S10) APT7	6.57	0.063	12.93	0.176	19.50	SOUTH
L7 East Wall (G.E9.E16) 0.400 in space: L7B East Perim Spc (G.E9) APT1	128.02	0.063	277.97	0.169	405.99	SOUTH
L4 East Wall (G.E12.E66) \$X 0.000 in space: L4A East Perim Spc (G.E12) GSHF	0.00	0.063	82.88	0.063	82.88	SOUTH
L7 East Wall (G.SSW10.E19) 0.400 in space: L7B SSW Perim Spc (G.SSW10) APT7	6.57	0.063	14.25	0.169	20.82	SOUTH
L2 East Wall (G.E23.E80) 0.400 in space: L2B East Perim Spc (G.E23) APT1	16.41	0.063	47.74	0.149	64.15	SOUTH
L7 East Wall (G.SSW10.E23) 0.400 in space: L7B SSW Perim Spc (G.SSW10) APT7	6.57	0.063	14.25	0.169	20.82	SOUTH
L4 East Wall (G.E13.E68) 0.400 in space: L4A East Perim Spc (G.E13) APT4	26.26	0.063	51.74	0.176	78.00	SOUTH
L7 East Wall (G.SSW10.E27) 0.400 in space: L7B SSW Perim Spc (G.SSW10) APT7	6.57	0.063	14.25	0.169	20.82	SOUTH
L4 East Wall (G.E13.E69) 0.400 in space: L4A East Perim Spc (G.E13) APT4	182.18	0.063	358.94	0.176	541.12	SOUTH
L7 East Wall (G.SSW10.E31) 0.400 in space: L7B SSW Perim Spc (G.SSW10) APT7	6.57	0.063	14.25	0.169	20.82	SOUTH
L3 East Slab (G.S10.S53) 0.000 in space: L3B South Perim Spc (G.S10) APT7	0.00	0.235	1.34	0.235	1.34	SOUTH
L7 East Wall (G.SSW10.E35) 0.400 in space: L7B SSW Perim Spc (G.SSW10) APT7	6.57	0.063	14.25	0.169	20.82	SOUTH
L3 East Wall (G.S10.E53) 0.400 in space: L3B South Perim Spc (G.S10) APT7	6.57	0.063	11.59	0.185	18.16	SOUTH
L7 East Wall (G.SSW10.E39) 0.400 in space: L7B SSW Perim Spc (G.SSW10) APT7	6.57	0.063	14.25	0.169	20.82	SOUTH
L4 East Wall (G.NW17.E73) 0.400 in space: L4A NW Perim Spc (G.NW17) APT1	16.41	0.063	32.34	0.176	48.75	SOUTH
L7 East Wall (G.SSW10.E43) 0.400 in space: L7B SSW Perim Spc (G.SSW10) APT7	6.57	0.063	14.25	0.169	20.82	SOUTH
L2 East Slab (G.S10.S35) 0.000 in space: L2B South Perim Spc (G.S10) APT6	0.00	0.235	2.68	0.235	2.68	SOUTH
L7 East Wall (G.SSW10.E47) 0.400 in space: L7B SSW Perim Spc (G.SSW10) APT7	6.57	0.063	14.25	0.169	20.82	SOUTH
L2 East Wall (G.S10.E35) 0.400 in space: L2B South Perim Spc (G.S10) APT6	13.13	0.063	38.19	0.149	51.32	SOUTH
L7 East Wall (G.E12.E49) \$X 0.000 in space: L7A East Perim Spc (G.E12) GSHF	0.00	0.063	88.49	0.063	88.49	SOUTH
L7 East Wall (G.E13.E50) 0.400 in space: L7A East Perim Spc (G.E13) APT2	93.55	0.063	203.13	0.169	296.68	SOUTH
L3 East Slab (G.Sl0.S57) 0.000 in space: L3B South Perim Spc (G.Sl0) APT7	0.00	0.235	1.34	0.235	1.34	SOUTH
L4 East Wall (G.N18.E77) 0.400 in space: L4A North Perim Spc (G.N18) APT3	16.41	0.063	32.34	0.176	48.75	SOUTH
L3 East Wall (G.S10.E57) 0.400 in space: L3B South Perim Spc (G.S10) APT7	6.57	0.063	11.59	0.185	18.16	SOUTH

in space: L4B East Perim Spc (G.E9) APT1

REPORT- LV-D Details of Exterior Surfaces WEATHER FILE- SEATTLE BOEING FI WA -----(CONTINUED)-----L1 East Slab (G.E29.S45) 0.000 0.00 0.235 0.235 16.42 SOUTH 16.42 in space: L1B East Perim Spc (G.E29) APT1 0.400 L1 East Wall (G.E29.E45) 80.42 0.063 141.06 0.185 221.48 SOUTH in space: L1B East Perim Spc (G.E29) APT1 0.400 16.41 0.063 32.34 0.176 48.75 SOUTH L4 East Wall (G.N18.E81) in space: L4A North Perim Spc (G.N18) APT3 L7 East Wall (G.NE22.E58) 191.00 0.063 90.07 0.292 281.07 SOUTH in space: L7A NE Perim Spc (G.NE22) AMN L7 East Wall (G.SSE23.E59) 0.400 93.55 0.063 203.13 0.169 296.68 SOUTH in space: L7A SSE Perim Spc (G.SSE23) APT2 0.063 L8 East Wall (G.E2.E2) \$X 0.00 0.063 82.88 82.88 SOUTH in space: L8A East Perim Spc (G.E2) GSHF L8 East Wall (G.E3.E4) 0.400 93.55 0.063 184.32 0.176 277.88 SOUTH in space: L8A East Perim Spc (G.E3) APT2 L3 East Slab (G.S10.S61) 1.34 SOUTH 0.00 0.235 1.34 0.235 in space: L3B South Perim Spc (G.S10) APT7 L3 East Wall (G.S10.E61) 6.57 0.063 11.59 0.185 18.16 SOUTH 0.400 in space: L3B South Perim Spc (G.S10) APT7 29.54 L8 East Wall (G.C10.E15) 0.400 0.063 58.21 0.176 87.75 SOUTH in space: L8A Core Spc (G.C10) COR 0.000 L2 East Slab (G.S10.S39) 0.00 0.235 2.68 0.235 2.68 SOUTH in space: L2B South Perim Spc (G.S10) APT6 L4 East Wall (G.N18.E85) 0.400 16.41 0.063 32.34 0.176 48.75 SOUTH in space: L4A North Perim Spc (G.N18) APT3 0.400 13.13 0.063 38.19 0.149 51.32 SOUTH L2 East Wall (G.S10.E39) in space: L2B South Perim Spc (G.S10) APT6 L8 East Wall (G.NE12.E21) 0.400 90.27 0.063 177.86 0.176 268.12 SOUTH in space: L8A NE Perim Spc (G.NE12) APT1 0 400 155 22 L8 East Wall (G.SE14.E26) 78 78 0.063 0 176 234 00 SOUTH in space: L8A SE Perim Spc (G.SE14) APT1 L5 South Wall (G.S10.E64) 0 400 45.00 0.063 76.87 0.187 121.88 WEST in space: L5B South Perim Spc (G.S10) APT7 L1 South Slab (G.WNW27.S38) 0.000 0.00 0.235 10.05 0.235 10.05 WEST in space: L1A WNW Perim Spc (G.WNW27) APT1 L1 South Slab (G.E29.S47) 0.000 0.00 0.235 8.71 0.235 8.71 WEST in space: L1B East Perim Spc (G.E29) APT1 L2 South Slab (G.E9.S32) 0.000 0.00 0.235 12.06 0.235 12.06 WEST in space: L2B East Perim Spc (G.E9) APT1 L2 South Wall (G.E9.E32) 64.81 0.063 166.13 0.158 230.94 WEST 0.400 in space: L2B East Perim Spc (G.E9) APT1 L4 South Wall (G.W6.E25) 0.000 0.00 0.063 175.50 0.063 175.50 WEST in space: L4B West Perim Spc (G.W6) APT1 L5 South Wall (G.NW17.E70) 12.60 0.063 21.52 0.187 34.12 WEST in space: L5A NW Perim Spc (G.NW17) APT1 L1 South Wall (G.E29.E47) 0.00 0.063 117.52 0.063 117.52 WEST in space: L1B East Perim Spc (G.E29) APT1 L2 South Slab (G.WNW18.S56) 0.000 0.00 21.44 0.235 21.44 WEST 0.235 in space: L2A WNW Perim Spc (G.WNW18) APT1 L3 South Slab (G.NW17.S70) 0.000 0.00 0.235 2.35 0.235 2.35 WEST in space: L3A NW Perim Spc (G.NW17) APT1 0.400 L3 South Wall (G.NW17.E70) 12.60 0.063 19.18 0.197 31.78 WEST in space: L3A NW Perim Spc (G.NW17) APT1 L4 South Wall (G.E9.E30) 0.400 16.20 0.063 27.67 0.187 43.88 WEST in space: L4B East Perim Spc (G.E9) APT1 0.000 410.56 L2 South Wall (G.WNW18.E56) 0.00 0.063 0.063 410.56 WEST in space: L2A WNW Perim Spc (G.WNW18) APT1 L4 South Wall (G.E9.E32) 0.400 52.20 0.063 89.17 0.187 141.38 WEST

in space: L3B East Perim Spc (G.E9) APT1

in space: L3B East Perim Spc (G.E19) APT1

in space: L1B East Perim Spc (G.E6) APT1

REPORT- LV-D Details of Exterior Surfaces					E- SEATTLE BOE	
L6 South Wall (G.S10.E54) 0.400	16.20	0.063	27.67	0.187	43.88	
in space: L6B South Perim Spc (G.S10) APT7 L4 South Wall (G.W21.E100) 0.400	18.00	0.063	30.75	0.187	48.75	WEST
in space: L4A West Perim Spc (G.W21) APT4 L6 South Wall (G.S10.E56) 0.400	46.80	0.063	79.95	0.187	126.75	WEST
in space: L6B South Perim Spc (G.S10) APT7 L3 South Slab (G.W21.S96) 0.000	0.00	0.235	3.35	0.235	3.35	WEST
in space: L3A West Perim Spc (G.W21) APT4 L6 South Wall (G.S10.E58) 0.400	16.20	0.063	27.67	0.187	43.88	WEST
in space: L6B South Perim Spc (G.S10) APT7 L3 South Wall (G.W21.E96) 0.400	18.00	0.063	27.40	0.197	45.40	WEST
in space: L3A West Perim Spc (G.W21) APT4 L6 South Wall (G.S10.E60) 0.400	46.80	0.063	79.95	0.187	126.75	WEST
in space: L6B South Perim Spc (G.S10) APT7 L2 South Slab (G.SSW12.S47) 0.000	0.00	0.235	9.38	0.235	9.38	WEST
in space: L2B SSW Perim Spc (G.SSW12) LOB L6 South Wall (G.S10.E62) 0.400	16.20	0.063	27.67	0.187	43.88	WEST
in space: L6B South Perim Spc (G.S10) APT7 L3 South Slab (G.S10.S48) 0.000	0.00	0.235	8.71	0.235	8.71	WEST
in space: L3B South Perim Spc (G.S10) APT7 L6 South Wall (G.S10.E64) 0.400	45.00	0.063	76.87	0.187	121.88	WEST
in space: L6B South Perim Spc (G.S10) APT7 L4 South Wall (G.SW22.E105) 0.400	91.81	0.063	156.82	0.187	248.62	WEST
in space: L4A SW Perim Spc (G.SW22) APT1 L3 South Wall (G.S10.E48) 0.400	46.80	0.063	71.24	0.197	118.04	WEST
in space: L3B South Perim Spc (G.S10) APT7 L4 South Wall (G.SW22.E107) 0.400	27.00	0.063	46.12	0.187	73.12	WEST
in space: L4A SW Perim Spc (G.SW22) APT1 L2 South Wall (G.SSW12.E47) 0.500	99.03	0.063	80.59	0.304	179.62	WEST
in space: L2B SSW Perim Spc (G.SSW12) LOB L1 South Slab (G.E29.S44) 0.000	0.00	0.235	2.68	0.235	2.68	WEST
in space: L1B East Perim Spc (G.E29) APT1 L4 South Wall (G.S24.E110) 0.400	79.21	0.063	135.29	0.187	214.50	WEST
in space: L4A South Perim Spc (G.S24) APT3 L4 South Wall (G.S24.E111) 0.400	162.01	0.063	276.74	0.187	438.75	WEST
in space: L4A South Perim Spc (G.S24) APT3 L3 South Slab (G.S10.S50) 0.000	0.00	0.235	3.02	0.235	3.02	WEST
in space: L3B South Perim Spc (G.S10) APT7 L6 South Wall (G.E19.E73) 0.400	84.61	0.063	144.52	0.187	229.12	
in space: L6B East Perim Spc (G.E19) APT1 L3 South Slab (G.W21.S100) 0.000	0.00	0.235	3.35	0.235		WEST
in space: L3A West Perim Spc (G.W21) APT4 L3 South Wall (G.W21.E100) 0.400	18.00	0.063	27.40	0.197	45.40	
in space: L3A West Perim Spc (G.W21) APT4 L3 South Wall (G.S10.E50) 0.400	16.20	0.063	24.66	0.197	40.86	
in space: L3B South Perim Spc (G.S10) APT7						
L1 South Wall (G.E29.E44) 0.000 in space: L1B East Perim Spc (G.E29) APT1	0.00	0.063	36.16	0.063	36.16	
L6 South Wall (G.W21.E78) 0.400 in space: L6A West Perim Spc (G.W21) APT4	18.00	0.063	30.75	0.187	48.75	
L1 South Slab (G.W7.S8) 0.000 in space: L1B West Perim Spc (G.W7) APT1	0.00	0.235	12.06	0.235	12.06	
L3 South Slab (G.S10.S52) 0.000 in space: L3B South Perim Spc (G.S10) APT7	0.00	0.235	8.38	0.235		WEST
L3 South Wall (G.S10.E52) 0.400 in space: L3B South Perim Spc (G.S10) APT7	45.00	0.063	68.50	0.197	113.50	
L6 South Wall (G.W21.E82) 0.400	18.00	0.063	30.75	0.187	48.75	WEST

REPORT- LV-D Details of Exterior Surfaces					ILE- SEATTLE BOE	
L2 South Slab (G.SW20.S73) 0.000 in space: L2A SW Perim Spc (G.SW20) RST	0.00	0.235	26.13	0.235	26.13	
L2 South Wall (G.SW20.E73) 0.500	275.88	0.063	224.49	0.304	500.37	WEST
in space: L2A SW Perim Spc (G.SW20) RST L3 South Slab (G.S10.S54) 0.000	0.00	0.235	3.02	0.235	3.02	WEST
in space: L3B South Perim Spc (G.S10) APT7 L3 South Slab (G.SW22.S105) 0.000	0.00	0.235	17.09	0.235	17.09	WEST
in space: L3A SW Perim Spc (G.SW22) APT1 L6 South Wall (G.SW22.E87) 0.400	91.81	0.063	156.82	0.187	248.62	WEST
in space: L6A SW Perim Spc (G.SW22) APT1 L3 South Wall (G.SW22.E105) 0.400	91.81	0.063	139.73	0.197	231.54	WEST
in space: L3A SW Perim Spc (G.SW22) APT1 L6 South Wall (G.SW22.E89) 0.400 in space: L6A SW Perim Spc (G.SW22) APT1	27.00	0.063	46.12	0.187	73.12	WEST
13 South Wall (G.S10.E54) 0.400 in space: L3B South Perim Spc (G.S10) APT7	16.20	0.063	24.66	0.197	40.86	WEST
L1 South Slab (G.E10.S15) 0.000 in space: L1B East Perim Spc (G.E10) APT1	0.00	0.235	12.06	0.235	12.06	WEST
L6 South Wall (G.S24.E92) 0.400 in space: L6A South Perim Spc (G.S24) APT3	79.21	0.063	135.29	0.187	214.50	WEST
L6 South Wall (G.S24.E93) 0.400 in space: L6A South Perim Spc (G.S24) APT3	162.01	0.063	276.74	0.187	438.75	WEST
L7 South Wall (G.N3.E1) 0.400 in space: L7B North Perim Spc (G.N3) COR	79.21	0.063	149.81	0.180	229.02	WEST
L3 South Slab (G.SW22.S107) 0.000 in space: L3A SW Perim Spc (G.SW22) APT1	0.00	0.235	5.03	0.235	5.03	WEST
L3 South Wall (G.SW22.E107) 0.400 in space: L3A SW Perim Spc (G.SW22) APT1	27.00	0.063	41.10	0.197	68.10	WEST
L2 South Slab (G.SSW12.S50) 0.000 in space: L2B SSW Perim Spc (G.SSW12) LOB	0.00	0.235	20.10	0.235	20.10	WEST
L7 South Wall (G.E5.E5) 0.400 in space: L7B East Perim Spc (G.E5) APT1	79.21	0.063	149.81	0.180	229.02	WEST
L5 South Wall (G.E5.E19) 0.400 in space: L5B East Perim Spc (G.E5) APT1	79.21	0.063	135.29	0.187	214.50	WEST
L3 South Slab (G.S10.S56) 0.000 in space: L3B South Perim Spc (G.S10) APT7	0.00	0.235	8.71	0.235	8.71	WEST
L7 South Wall (G.W6.E8) 0.000 in space: L7B West Perim Spc (G.W6) APT1	0.00	0.063	187.38	0.063	187.38	WEST
L3 South Wall (G.S10.E56) 0.400 in space: L3B South Perim Spc (G.S10) APT7	46.80	0.063	71.24	0.197	118.04	WEST
L2 South Slab (G.SW20.S75) 0.000 in space: L2A SW Perim Spc (G.SW20) RST	0.00	0.235	5.36	0.235	5.36	WEST
L3 South Slab (G.S24.S110) 0.000 in space: L3A South Perim Spc (G.S24) APT3	0.00	0.235	14.74	0.235	14.74	
L3 South Wall (G.S24.E110) 0.400 in space: L3A South Perim Spc (G.S24) APT3	79.21	0.063	120.55	0.197	199.76	WEST
L7 South Wall (G.E9.E13) 0.400 in space: L7B East Perim Spc (G.E9) APT1	16.20	0.063	30.64	0.180	46.85	WEST
L5 South Wall (G.W6.E25) 0.000 in space: L5B West Perim Spc (G.W6) APT1	0.00	0.063	175.50	0.063	175.50	
L7 South Wall (G.E9.E15) 0.400 in space: L7B East Perim Spc (G.E9) APT1	52.20	0.063	98.74	0.180	150.94	
L3 South Slab (G.S24.S111) 0.000 in space: L3A South Perim Spc (G.S24) APT3	0.00	0.235	30.15	0.235	30.15	
L3 South Wall (G.S24.E111) 0.400 in space: L3A South Perim Spc (G.S24) APT3	162.01	0.063	246.59	0.197	408.60	
L7 South Wall (G.SSW10.E18) 0.400 in space: L7B SSW Perim Spc (G.SSW10) APT7	7.20	0.063	13.62	0.180	20.82	WEST

in space: L5B South Perim Spc (G.S10) APT7

L1 Flr (G.WNW25.I109) \$X

in space: L1A WNW Perim Spc (G.WNW25) STO

0.000

0.00

0.038

1431.25

0.038

1431.25 FLOOR

in space: L2A WNW Perim Spc (G.WNW18) APT1

REPORT- LV-D Details of Exterior Surfaces WEATHER FILE- SEATTLE BOEING FI WA ----(CONTINUED)----L1 Flr (G.E9.I50) 0.000 0.00 0.038 713.50 0.038 713.50 FLOOR in space: L1B East Perim Spc (G.E9) APT1 L2 Flr (G.NNW24) 1 0.000 0.00 0.038 13.50 0.038 13.50 FLOOR in space: L2A NNW Perim Spc (G.NNW24) STR L2 Flr (G.NNW24) 2 0.000 0.00 0.038 42.00 0.038 42.00 FLOOR in space: L2A NNW Perim Spc (G.NNW24) STR P1 Flr (B.NNE9.I35) \$X 0.00 0.038 3916.00 0.038 3916.00 FLOOR in space: P1B NNE Perim Spc (B.NNE9) PKG L1 Flr (G.SW26.I112) 0.000 0.00 0.038 42.00 0.038 42.00 FLOOR in space: L1A SW Perim Spc (G.SW26) ELEC L3 Flr (G.SW22) 1 0.00 0.038 52.50 0.038 52.50 FLOOR in space: L3A SW Perim Spc (G.SW22) APT1 L3 Flr (G.C23) 1 0.000 0.00 0.038 33.00 0.038 33.00 FLOOR in space: L3A Core Spc (G.C23) COR L2 Flr (G.W25) 1 52.00 0.000 0.00 0.038 0.038 52.00 FLOOR in space: L2A West Perim Spc (G.W25) STO P1 Flr (B.ENE10.I44) 0.000 0.038 271.50 0.038 271.50 FLOOR 0.00 in space: P1B ENE Perim Spc (B.ENE10) MECH L3 Flr (G.E9) 1 0.000 0.00 0.038 231.00 0.038 231.00 FLOOR in space: L3B East Perim Spc (G.E9) APT1 L1 Flr (G.E10.I52) 0.000 0.038 0.00 0.038 519.00 519.00 FLOOR in space: L1B East Perim Spc (G.E10) APT1 L2 Flr (G.C26) 1 0.000 0.00 0.038 18.00 0.038 18.00 FLOOR in space: L2A Core Spc (G.C26) COR 0.000 L2 Flr (G.C26) 2 0.038 231.00 0.038 231.00 FLOOR 0.00 in space: L2A Core Spc (G.C26) COR L3 Flr (G.S24) 1 0.000 0.00 0.038 591.75 0.038 591.75 FLOOR in space: L3A South Perim Spc (G.S24) APT3 0 000 0 038 L2 Flr (G.C26) 3 0 00 0.038 38 50 38 50 FLOOR in space: L2A Core Spc (G.C26) COR L1 Flr (G.N5.I41) 0.000 0.00 0.038 2580.00 0.038 2580.00 FLOOR in space: L1B North Perim Spc (G.N5) APT4 P1 Flr (B.N11.I45) 0.000 0.00 0.038 464.00 0.038 464.00 FLOOR in space: P1B North Perim Spc (B.N11) APT1 L1 Flr (G.SW26) 1 0.000 0.00 0.038 42.00 0.038 42.00 FLOOR in space: L1A SW Perim Spc (G.SW26) ELEC L3 Flr (G.NW17) 1 0.000 0.00 0.038 157.50 0.038 157.50 FLOOR in space: L3A NW Perim Spc (G.NW17) APT1 L1 Flr (G.WNW27.I113) 0.000 0.00 0.038 493.50 0.038 493.50 FLOOR in space: L1A WNW Perim Spc (G.WNW27) APT1 P1 Flr (B.C1.I1) 0.00 0.038 170.00 0.038 170.00 FLOOR in space: P1A Core Spc (B.C1) STR L1 Flr (G.E6.I43) 0.00 0.038 668.00 0.038 668.00 FLOOR in space: L1B East Perim Spc (G.E6) APT1 P1 Flr (B.C12.I47) 0.000 0.00 0.038 460.00 0.038 460.00 FLOOR in space: P1B Core Spc (B.C12) COR 0.000 0.00 1978.00 1978.00 FLOOR L1 Flr (G.S11.I53) 0.038 0.038 in space: L1B South Perim Spc (G.S11) APT5 P1 Flr (B.N13.I52) 0.000 0.00 0.038 2465.00 0.038 2465.00 FLOOR in space: P1B North Perim Spc (B.N13) APT4 L1 Flr (G.C12.I58) 0.000 0.00 0.038 82.50 0.038 82.50 FLOOR in space: L1B Core Spc (G.C12) ELEC L1 Flr (G.WNW27) 1 0.000 0.00 0.038 493.50 0.038 493.50 FLOOR in space: L1A WNW Perim Spc (G.WNW27) APT1 0.000 0.00 0.038 1326.00 0.038 1326.00 FLOOR L1 Flr (G.N28.I117) in space: L1A North Perim Spc (G.N28) APT3 L2 Flr (G.WNW18) 1 0.000 0.00 0.038 222.50 0.038 222.50 FLOOR

in space: P1B SE Perim Spc (B.SE5) MECH

in space: P1B NNE Perim Spc (B.NNE9) PKG

in space: L5B East Perim Spc (G.E19) APT1

0.000

0.00

0.047

55.00

0.047

55.00 ROOF

L5 Roof (G.E19) 1

REPORT- LV-D Details of Exterior Surfaces WEATHER FILE- SEATTLE BOEING FI WA ----(CONTINUED)----P1 Flr (B.S6.I7) \$X 0.000 0.00 0.038 12847.50 0.038 12847.50 FLOOR in space: P1B South Perim Spc (B.S6) PKG L2 Flr (G.SW20) 1 0.000 0.00 0.038 63.00 0.038 63.00 FLOOR in space: L2A SW Perim Spc (G.SW20) RST L1 Flr (G.C20.I94) 0.000 0.00 0.038 27.00 0.038 27.00 FLOOR in space: L1A Core Spc (G.C20) TSHF 0.000 0.00 0.038 284.00 0.038 284.00 FLOOR L2 Flr (G.E5) 1 in space: L2B East Perim Spc (G.E5) APT1 0.000 0.00 0.038 65.00 0.038 65.00 FLOOR L2 Flr (G.E5) 2 in space: L2B East Perim Spc (G.E5) APT1 0.000 429.50 0.038 L1 Flr (G.E29) 1 0.00 0.038 429.50 FLOOR in space: L1B East Perim Spc (G.E29) APT1 L1 Flr (G.C21.I97) 0.000 0.00 0.038 54.00 0.038 54.00 FLOOR in space: L1A Core Spc (G.C21) COR L1 Flr (G.C22.I101) 244.00 0.000 0.00 0.038 0.038 244.00 FLOOR in space: L1A Core Spc (G.C22) COR L1 Flr (G.C23.I106) 0.000 0.038 0.038 65.00 FLOOR 0.00 65.00 in space: L1A Core Spc (G.C23) ELEC L1 Flr (G.NNE24.I107) 0.000 0.00 0.038 749.25 0.038 749.25 FLOOR in space: L1A NNE Perim Spc (G.NNE24) APT1 0.038 L1 Flr (G.C2.I12) 0.000 0.00 0.038 161.50 161.50 FLOOR in space: L1A Core Spc (G.C2) ELV L1 Flr (G.C3.I14) 0.000 0.00 0.038 500.00 0.038 500.00 FLOOR in space: L1B Core Spc (G.C3) STR P1 Flr (B.W7.I30) \$X 0.000 0.038 2435.00 0.038 2435.00 FLOOR 0.00 in space: P1A West Perim Spc (B.W7) TRSH L1 Flr (G.W8.I49) 0.000 0.00 0.038 654.50 0.038 654.50 FLOOR in space: L1B West Perim Spc (G.W8) APT1 0 000 0 038 L2 Flr (G.E23) 1 0 00 0.038 229 50 229 50 FLOOR in space: L2B East Perim Spc (G.E23) APT1 L8 Flr (G.NW11) 1 0.000 0.00 0.038 16.50 0.038 16.50 FLOOR in space: L8A NW Perim Spc (G.NW11) APT1 L2 Flr (G.E23) 2 0.000 0.00 0.038 55.00 0.038 55.00 FLOOR in space: L2B East Perim Spc (G.E23) APT1 L3 Flr (G.S10) 1 0.000 0.00 0.038 914.50 0.038 914.50 FLOOR in space: L3B South Perim Spc (G.S10) APT7 17.25 FLOOR L8 Flr (G.NE12) 1 0.00 0.038 17.25 0.038 in space: L8A NE Perim Spc (G.NE12) APT1 P1 Flr (B.NNW8.I34) \$X 0.000 0.00 0.038 1150.00 0.038 1150.00 FLOOR in space: P1A NNW Perim Spc (B.NNW8) MECH L1 Flr (G.C4.I23) 0.000 0.00 0.038 869.00 0.038 869.00 FLOOR in space: L1B Core Spc (G.C4) COR 867.75 FLOOR L3 Flr (G.W21) 1 0.00 0.038 867.75 0.038 in space: L3A West Perim Spc (G.W21) APT4 P1 Roof (B.NNW8) 1 0.00 0.047 1150.00 0.047 1150.00 ROOF in space: P1A NNW Perim Spc (B.NNW8) MECH L1 Roof (G.SSW15) 1 0.00 319.00 319.00 ROOF 0.000 0.047 0.047 in space: L1A SSW Perim Spc (G.SSW15) FIT P1 Roof (B.S6) 2 0.000 0.00 0.047 412.00 0.047 412.00 ROOF in space: P1B South Perim Spc (B.S6) PKG 0.000 L7 Roof (G.E5) 1 0.00 0.047 919.00 0.047 919.00 ROOF in space: L7B East Perim Spc (G.E5) APT1 L6 Roof (G.E19) 1 0.000 0.00 0.047 659.00 0.047 659.00 ROOF in space: L6B East Perim Spc (G.E19) APT1 0.000 2027.75 2027.75 ROOF P1 Roof (B.NNE9) 1 0.00 0.047 0.047

in space: L8A Core Spc (G.C5) TRSH

P2 North Wall (B.NW6.U8) \$X

in space: P2B NW Perim Spc (B.NW6) XFMR

0.000

0.00

0.500

339.57

0.500

339.57 UNDERGRND

WEATHER FILE- SEATTLE BOEING FI WA -----(CONTINUED)------

	WINDOW	S	WALL	. = = = =	-WALL+WIN	DOWS-	
SURFACE	U-VALUE	AREA	U-VALUE	AREA	U-VALUE	AREA	AZIMUTH
	(BTU/HR-SQFT-F)	(SQFT)	(BTU/HR-SQFT-F)	(SQFT)	(BTU/HR-SQFT-F)	(SQFT)	
P2 Flr (B.C7.U9)	0.000	0.00	0.500	221.00	0.500	221.00	UNDERGRND
in space: P2A Core Spc (B.C7) S	0.000	0.00	0.500	378.00	0.500	378.00	UNDERGRND
P2 Flr (B.SE8.U10) in space: P2B SE Perim Spc (B.S		0.00	0.500	3/8.00	0.500	3/8.00	UNDERGRND
P2 East Wall (B.SE8.U11) \$X	0.000	0.00	0.500	216.09	0.500	216.09	UNDERGRND
in space: P2B SE Perim Spc (B.S		0.00	0.500	210.05	0.500	210.05	ONDERGRAD
P2 South Wall (B.SE8.U12) \$X	0.000	0.00	0.500	185.22	0.500	185.22	UNDERGRND
in space: P2B SE Perim Spc (B.S	SE8) MECH						
P2 Flr (B.NE9.U13)	0.000	0.00	0.500	414.00	0.500	414.00	UNDERGRND
in space: P2B NE Perim Spc (B.N							
P2 North Wall (B.NE9.U14) \$X	0.000	0.00	0.500	185.22	0.500	185.22	UNDERGRND
in space: P2B NE Perim Spc (B.N							
P2 East Wall (B.NE9.U15) \$X	0.000	0.00	0.500	236.67	0.500	236.67	UNDERGRND
in space: P2B NE Perim Spc (B.N		0.00	0 500	10405 50	0.500	10405 50	
P2 Flr (B.S10.U16)	0.000	0.00	0.500	12495.50	0.500	12495.50	UNDERGRND
in space: P2B South Perim Spc ( P2 South Wall (B.S10.U17) \$X	0.000	0.00	0.500	2387.28	0.500	2387.28	UNDERGRND
in space: P2B South Perim Spc (		0.00	0.500	2307.20	0.500	2307.20	UNDERGRIND
P2 East Wall (B.S10.U18) \$X	0.000	0.00	0.500	360.15	0.500	360.15	UNDERGRND
in space: P2B South Perim Spc (		0.00	0.500	500.15	0.500	300.13	ONDERGRAD
P2 West Wall (B.S10.U19) \$X	0.000	0.00	0.500	648.27	0.500	648.27	UNDERGRND
in space: P2B South Perim Spc (							
P2 Flr (B.NNE11.U20)	0.000	0.00	0.500	1885.00	0.500	1885.00	UNDERGRND
in space: P2B NNE Perim Spc (B.	NNE11) ELEC						
P2 East Wall (B.NNE11.U21) \$X	0.000	0.00	0.500	164.64	0.500	164.64	UNDERGRND
in space: P2B NNE Perim Spc (B.	NNE11) ELEC						
P2 North Wall (B.NNE11.U22) \$X	0.000	0.00	0.500	164.64	0.500	164.64	UNDERGRND
in space: P2B NNE Perim Spc (B.							
P2 West Wall (B.NNE11.U23) \$X	0.000	0.00	0.500	61.74	0.500	61.74	UNDERGRND
in space: P2B NNE Perim Spc (B.							
P2 Flr (B.NNE12.U24)	0.000	0.00	0.500	6201.00	0.500	6201.00	UNDERGRND
in space: P2B NNE Perim Spc (B.		0 00	0 500	267 54	0 500	267 54	INDEDCEND
P2 East Wall (B.NNE12.U25) \$X in space: P2B NNE Perim Spc (B.	0.000	0.00	0.500	267.54	0.500	267.54	UNDERGRND
P2 North Wall (B.NNE12.U26) \$X	0.000	0.00	0.500	1203.93	0.500	1203.93	UNDERGRND
in space: P2B NNE Perim Spc (B.		0.00	0.300	1203.93	0.300	1203.73	UNDERGRID
P2 Flr (B.NNW13.U27)	0.000	0.00	0.500	1518.00	0.500	1518.00	UNDERGRND
in space: P2A NNW Perim Spc (B.	NNW13) PKG						
P2 North Wall (B.NNW13.U28) \$X	0.000	0.00	0.500	679.14	0.500	679.14	UNDERGRND
in space: P2A NNW Perim Spc (B.	NNW13) PKG						
P2 West Wall (B.NNW13.U29) \$X	0.000	0.00	0.500	236.67	0.500	236.67	UNDERGRND
in space: P2A NNW Perim Spc (B.	NNW13) PKG						
P1 East Wall (B.SE5.U1) \$X	0.000	0.00	0.500	170.00	0.500	170.00	UNDERGRND
in space: P1B SE Perim Spc (B.S							
P1 South Wall (B.SE5.U2) \$X	0.000	0.00	0.500	140.00	0.500	140.00	UNDERGRND
in space: P1B SE Perim Spc (B.S		0.00	0 500	0260 00	0.500	0260 00	
P1 South Wall (B.S6.U3) \$X	0.000	0.00	0.500	2360.00	0.500	2360.00	UNDERGRND
in space: P1B South Perim Spc ( P1 East Wall (B.S6.U4) \$X	0.000	0.00	0.500	230.00	0.500	230.00	UNDERGRND
in space: P1B South Perim Spc (		0.00	0.500	230.00	0.500	230.00	UNDERGRND
P1 West Wall (B.S6.U5) \$X	0.000	0.00	0.500	400.00	0.500	400.00	UNDERGRND
in space: PlB South Perim Spc (		3.00	2.300				
P1 West Wall (B.W7.U6)	0.000	0.00	0.500	580.00	0.500	580.00	UNDERGRND
in space: P1A West Perim Spc (E	3.W7) TRSH						

WEATHER FILE- SEATTLE BOEING FI WA -----(CONTINUED)------

SURFACE	W I N D O W U-VALUE (BTU/HR-SQFT-F)	AREA	WALL U-VALUE (BTU/HR-SQFT-F)	 AREA (SQFT)	-W A L L + W I N U-VALUE (BTU/HR-SQFT-F)	D O W S- AREA (SQFT)	AZIMUTH
P1 West Wall (B.NNW8.U7) \$X in space: P1A NNW Perim Spc (B.	0.000 NNW8) MECH	0.00	0.500	230.00	0.500	230.00	UNDERGRND
P1 North Wall (B.NNW8.U8) \$X	0.000	0.00	0.500	500.00	0.500	500.00	UNDERGRND
in space: P1A NNW Perim Spc (B. P1 East Wall (B.NNE9.U9) \$X	NNW8) MECH 0.000	0.00	0.500	310.00	0.500	310.00	UNDERGRND
in space: P1B NNE Perim Spc (B. P1 North Wall (B.NNE9.U10) \$X	NNE9) PKG 0.000	0.00	0.500	650.00	0.500	650.00	UNDERGRND
in space: P1B NNE Perim Spc (B.	NNE9) PKG						
P1 North Wall (B.NNE9.U11) \$X in space: P1B NNE Perim Spc (B.	0.000 NNE9) PKG	0.00	0.500	30.00	0.500	30.00	UNDERGRND
P1 North Wall (B.ENE10.U12) in space: P1B ENE Perim Spc (B.	0.000 ENE10) MECH	0.00	0.500	110.00	0.500	110.00	UNDERGRND
P1 East Wall (B.ENE10.U13)	0.000	0.00	0.500	225.00	0.500	225.00	UNDERGRND
in space: P1B ENE Perim Spc (B. L1 East Slab (G.E10.S13)	0.000	0.00	0.500	18.76	0.500	18.76	UNDERGRND
in space: L1B East Perim Spc (G L1 South Slab (G.S11.S16)	G.E10) APT1 0.000	0.00	0.500	305.63	0.500	305.63	UNDERGRND
in space: L1B South Perim Spc (	G.S11) APT5						
L1 South Slab (G.SSW13.S17) in space: L1B SSW Perim Spc (G.	0.000 SSW13) CONF	0.00	0.500	23.45	0.500	23.45	UNDERGRND
L1 South Wall (G.SSW13.E17) in space: L1B SSW Perim Spc (G.	0.000	0.00	0.500	316.40	0.500	316.40	UNDERGRND
L1 West Slab (G.SSW13.S18)	0.000	0.00	0.500	4.69	0.500	4.69	UNDERGRND
in space: L1B SSW Perim Spc (G. L1 West Wall (G.SSW13.E18)	SSW13) CONF 0.000	0.00	0.500	63.28	0.500	63.28	UNDERGRND
in space: L1B SSW Perim Spc (G. L1 South Slab (G.SSW15.S19)	SSW13) CONF 0.000	0.00	0.500	33.50	0.500	33.50	UNDERGRND
in space: L1A SSW Perim Spc (G.	SSW15) FIT						
L1 South Wall (G.SSW15.E19) in space: L1A SSW Perim Spc (G.	0.000 SSW15) FIT	0.00	0.500	452.00	0.500	452.00	UNDERGRND
L1 East Slab (G.SSW15.S20)	0.000	0.00	0.500	8.38	0.500	8.38	UNDERGRND
in space: L1A SSW Perim Spc (G. L1 East Wall (G.SSW15.E20)	0.000	0.00	0.500	113.00	0.500	113.00	UNDERGRND
in space: L1A SSW Perim Spc (G. L1 South Slab (G.SSW15.S21)	SSW15) FIT 0.000	0.00	0.500	5.36	0.500	5.36	UNDERGRND
in space: L1A SSW Perim Spc (G.	SSW15) FIT						
L1 South Wall (G.SSW15.E21) in space: L1A SSW Perim Spc (G.	0.000 SSW15) FIT	0.00	0.500	72.32	0.500	72.32	UNDERGRND
L1 West Slab (G.SSW15.S22) in space: L1A SSW Perim Spc (G.	0.000	0.00	0.500	19.43	0.500	19.43	UNDERGRND
L1 West Wall (G.SSW15.E22)	0.000	0.00	0.500	262.16	0.500	262.16	UNDERGRND
in space: L1A SSW Perim Spc (G. L1 South Slab (G.S17.S23)	SSW15) FIT 0.000	0.00	0.500	31.49	0.500	31.49	UNDERGRND
in space: L1A South Perim Spc (	(G.S17) LOB 0.000	0.00	0.500	424.88	0.500	424.88	UNDERGRND
L1 South Wall (G.S17.E23) in space: L1A South Perim Spc (		0.00	0.500	424.00	0.500	424.00	UNDERGRND
L1 West Slab (G.WNW25.S31) \$X in space: L1A WNW Perim Spc (G.	0.000 WNW25) STO	0.00	0.500	21.11	0.500	21.11	UNDERGRND
L1 West Wall (G.WNW25.E31) \$X	0.000	0.00	0.500	284.76	0.500	284.76	UNDERGRND
in space: L1A WNW Perim Spc (G. L1 North Slab (G.WNW25.S32) \$X	0.000	0.00	0.500	9.38	0.500	9.38	UNDERGRND
in space: L1A WNW Perim Spc (G. L1 North Wall (G.WNW25.E32) \$X	WNW25) STO 0.000	0.00	0.500	126.56	0.500	126.56	UNDERGRND
in space: L1A WNW Perim Spc (G.							

REPORT- LV-D Details of Exterior Surfaces -----(CONTINUED)------

WEATHER FILE- SEATTLE BOEING FI WA

	W I N D O W	S	W A L L		-W A L L + W I N	D O W S-	
SURFACE	U-VALUE	AREA	U-VALUE	AREA	U-VALUE	AREA	AZIMUTH
	(BTU/HR-SQFT-F)	(SQFT)	(BTU/HR-SQFT-F)	(SQFT)	(BTU/HR-SQFT-F)	(SQFT)	
L1 West Slab (G.WNW25.S33) \$X	0.000	0.00	0.500	21.77	0.500	21.77	UNDERGRND
in space: L1A WNW Perim Spc (0	G.WNW25) STO						
L1 West Wall (G.WNW25.E33) \$X	0.000	0.00	0.500	293.80	0.500	293.80	UNDERGRND
in space: L1A WNW Perim Spc (0	G.WNW25) STO						

WEATHER FILE- SEATTLE BOEING FI WA -----(CONTINUED)------

	AVERAGE U-VALUE/WINDOWS (BTU/HR-SQFT-F)	AVERAGE U-VALUE/WALLS (BTU/HR-SQFT-F)	AVERAGE U-VALUE WALLS+WINDOWS (BTU/HR-SQFT-F)	WINDOW AREA (SQFT)	WALL AREA (SQFT)	WINDOW+WALL AREA (SQFT)
NORTH	0.416	0.068	0.150	4108.67	13243.39	17352.07
EAST	0.406	0.070	0.187	8688.83	16286.25	24975.08
SOUTH	0.402	0.069	0.171	5671.99	12785.93	18457.93
WEST	0.411	0.069	0.181	7289.52	14946.46	22235.99
FLOOR	0.000	0.038	0.038	0.00	53373.25	53373.25
ROOF	0.000	0.047	0.047	0.00	33528.25	33528.25
ALL WALLS	0.408	0.069	0.174	25759.07	57262.00	83021.05
WALLS+ROOFS	0.408	0.061	0.138	25759.07	90790.25	116549.30
UNDERGRND	0.000	0.497	0.497	0.00	42262.29	42262.29
BUILDING	0.408	0.153	0.184	25759.07	186425.80	212184.86

NUMBER OF UNDERGROUND SURFACES 64

SURFACE		AREA	CONSTRUCTION	U-VALUE
NAME	MULTIPLIER	(SQFT )	NAME	(BTU/HR-SQFT-F)
P2 Flr (B.C1.U1)	1.0	170.00	Below-Grade Wall Const	0.500
P2 Flr (B.C2.U2)	1.0	161.50	Below-Grade Wall Const	0.500
P2 Flr (B.C3.U3)	1.0	237.50	Proposed ALL Joist Floor Const	0.033
P2 Flr (B.C4.U4)	1.0	900.00	Below-Grade Wall Const	0.500
P2 Flr (B.C5.U5)	1.0	241.50	Below-Grade Wall Const	0.500
P2 Flr (B.NW6.U6)	1.0	957.00	Below-Grade Wall Const	0.500
P2 West Wall (B.NW6.U7) \$X	1.0	298.41	Below-Grade Wall Const	0.500
P2 North Wall (B.NW6.U8) \$X	1.0	339.57	Below-Grade Wall Const	0.500
P2 Flr (B.C7.U9)	1.0	221.00	Below-Grade Wall Const	0.500
P2 Flr (B.SE8.U10)	1.0	378.00	Below-Grade Wall Const	0.500
P2 East Wall (B.SE8.U11) \$X	1.0	216.09	Below-Grade Wall Const	0.500
P2 South Wall (B.SE8.U12) \$X	1.0	185.22	Below-Grade Wall Const	0.500
P2 Flr (B.NE9.U13)	1.0	414.00	Below-Grade Wall Const	0.500
P2 North Wall (B.NE9.U14) \$X	1.0	185.22	Below-Grade Wall Const	0.500
P2 East Wall (B.NE9.U15) \$X	1.0	236.67	Below-Grade Wall Const	0.500
P2 Flr (B.S10.U16)	1.0	12495.50	Below-Grade Wall Const	0.500
P2 South Wall (B.S10.U17) \$X	1.0	2387.28	Below-Grade Wall Const	0.500
P2 East Wall (B.S10.U18) \$X	1.0	360.15	Below-Grade Wall Const	0.500
P2 West Wall (B.S10.U19) \$X	1.0	648.27	Below-Grade Wall Const	0.500
P2 Flr (B.NNE11.U20)	1.0	1885.00	Below-Grade Wall Const	0.500
P2 East Wall (B.NNE11.U21) \$X	1.0	164.64	Below-Grade Wall Const	0.500
P2 North Wall (B.NNE11.U22) \$	x 1.0	164.64	Below-Grade Wall Const	0.500
P2 West Wall (B.NNE11.U23) \$X	1.0	61.74	Below-Grade Wall Const	0.500
P2 Flr (B.NNE12.U24)	1.0	6201.00	Below-Grade Wall Const	0.500
P2 East Wall (B.NNE12.U25) \$X	1.0	267.54	Below-Grade Wall Const	0.500
P2 North Wall (B.NNE12.U26) \$	x 1.0	1203.93	Below-Grade Wall Const	0.500
P2 Flr (B.NNW13.U27)	1.0	1518.00	Below-Grade Wall Const	0.500
P2 North Wall (B.NNW13.U28) \$	x 1.0	679.14	Below-Grade Wall Const	0.500
P2 West Wall (B.NNW13.U29) \$X	1.0	236.67	Below-Grade Wall Const	0.500
P1 East Wall (B.SE5.U1) \$X	1.0	170.00	Below-Grade Wall Const	0.500
P1 South Wall (B.SE5.U2) \$X	1.0	140.00	Below-Grade Wall Const	0.500
P1 South Wall (B.S6.U3) \$X	1.0	2360.00	Below-Grade Wall Const	0.500
P1 East Wall (B.S6.U4) \$X	1.0	230.00	Below-Grade Wall Const	0.500
P1 West Wall (B.S6.U5) \$X	1.0	400.00	Below-Grade Wall Const	0.500
Pl West Wall (B.W7.U6)	1.0	580.00	Below-Grade Wall Const	0.500
P1 West Wall (B.NNW8.U7) \$X	1.0	230.00	Below-Grade Wall Const	0.500
P1 North Wall (B.NNW8.U8) \$X	1.0	500.00	Below-Grade Wall Const	0.500
P1 East Wall (B.NNE9.U9) \$X	1.0	310.00	Below-Grade Wall Const	0.500
P1 North Wall (B.NNE9.U10) \$X	1.0	650.00	Below-Grade Wall Const	0.500
Pl North Wall (B.NNE9.Ull) \$X	1.0	30.00	Below-Grade Wall Const	0.500
Pl North Wall (B.ENE10.U12)	1.0	110.00	Below-Grade Wall Const	0.500
P1 East Wall (B.ENE10.U13)	1.0	225.00	Below-Grade Wall Const	0.500
L1 East Slab (G.E10.S13)	1.0	18.76	Below-Grade Wall Const	0.500
L1 South Slab (G.S11.S16)	1.0	305.63	Below-Grade Wall Const	0.500
L1 South Slab (G.SSW13.S17)	1.0	23.45	Below-Grade Wall Const	0.500
L1 South Wall (G.SSW13.E17)	1.0	316.40	Below-Grade Wall Const	0.500
L1 West Slab (G.SSW13.S18)	1.0	4.69	Below-Grade Wall Const	0.500
L1 West Wall (G.SSW13.E18)	1.0	63.28	Below-Grade Wall Const	0.500
L1 South Slab (G.SSW15.S19)	1.0	33.50	Below-Grade Wall Const	0.500
L1 South Wall (G.SSW15.E19)	1.0	452.00	Below-Grade Wall Const	0.500
L1 East Slab (G.SSW15.S20)	1.0	8.38	Below-Grade Wall Const	0.500
L1 East Wall (G.SSW15.E20)	1.0	113.00	Below-Grade Wall Const	0.500

REPORT- LV-E Details of Underground Surfaces

WEATHER FILE- SEATTLE BOEING FI WA

-----(CONTINUED)------

SURFACE		AREA	CONSTRUCTION	U-VALUE
NAME	MULTIPLIER	(SQFT )	NAME	(BTU/HR-SQFT-F)
L1 South Slab (G.SSW15.S21)	1.0	5.36	Below-Grade Wall Const	0.500
L1 South Wall (G.SSW15.E21)	1.0	72.32	Below-Grade Wall Const	0.500
L1 West Slab (G.SSW15.S22)	1.0	19.43	Below-Grade Wall Const	0.500
L1 West Wall (G.SSW15.E22)	1.0	262.16	Below-Grade Wall Const	0.500
L1 South Slab (G.S17.S23)	1.0	31.49	Below-Grade Wall Const	0.500
L1 South Wall (G.S17.E23)	1.0	424.88	Below-Grade Wall Const	0.500
L1 West Slab (G.WNW25.S31) \$X	1.0	21.11	Below-Grade Wall Const	0.500
L1 West Wall (G.WNW25.E31) \$X	1.0	284.76	Below-Grade Wall Const	0.500
L1 North Slab (G.WNW25.S32) \$X	1.0	9.38	Below-Grade Wall Const	0.500
L1 North Wall (G.WNW25.E32) \$X	1.0	126.56	Below-Grade Wall Const	0.500
L1 West Slab (G.WNW25.S33) \$X	1.0	21.77	Below-Grade Wall Const	0.500
L1 West Wall (G.WNW25.E33) \$X	1.0	293.80	Below-Grade Wall Const	0.500

NUMBER OF SCHEDULES 175

Schedule: Misc Fans kW Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: T24 Nonres Heating Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN SAT HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

Schedule: T24 Nonres Cooling Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: T24 Nonres Lights Ann Type of Schedule: FRACTION

-----(CONTINUED)------

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.10 0.10 0.10 0.10 0.10 0.20 0.40 0.70 0.90 0.90 0.90 0.85 0.85 0.90 0.90 0.90 0.90 0.90 0.90 0.35 0.10 0.10 0.10 0.10 0.10 0.10

FOR DAYS SAT

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.10 0.10 0.10 0.10 0.10 0.20 0.40 0.70 0.90 0.90 0.95 0.85 0.85 0.50 0.50 0.20 0.15 0.80 0.35 0.10 0.10 0.10 0.10 0.10

FOR DAYS HDD

FOR DAYS CDD

Schedule: T24 Nonres Equipment Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

Schedule: T24 Nonres Fans Ann Type of Schedule: ON/OFF

THROUGH 31 12

FOR DAYS SUN HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0.

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0. 0. 1. 1. 1. 1. 1. 1. 1. 1. 1. 0. 0. 0.

FOR DAYS SAT

HOUR 1 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 1. 1. 1. 1. 1. 1. 0. 0. 0. 0.

Schedule: T24 Nonres Infiltration Ann Type of Schedule: FRACTION

-----(CONTINUED)------

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: T24 Nonres People Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

-----(CONTINUED)------

FOR DAYS CDD

Schedule: T24 Nonres Hot Water Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: T24 Hotel Equipment Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

FOR DAYS HDD

 REPORT- LV-G Details of Schedules

WEATHER FILE- SEATTLE BOEING FI WA

FOR DAYS CDD

-----(CONTINUED)------

Schedule: T24 Hotel Infiltration Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: T24 Hotel People Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

FOR DAYS HDD

FOR DAYS CDD

Schedule: T24 Hotel Hot Water Ann Type of Schedule: FRACTION

REPORT- LV-G Details of Schedules

S WEATHER FILE- SEATTLE BOEING FI WA

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: T24 Res Setback Heating Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: T24 Res Setback Cooling Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: T24 Res no Setback Heating Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: T24 Res no Setback Cooling Ann Type of Schedule: TEMPERATURE

-----(CONTINUED)

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: T24 Res Lights Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

FOR DAYS HDD

FOR DAYS CDD

Schedule: T24 Res Equipment Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

FOR DAYS HDD

 REPORT- LV-G Details of Schedules

WEATHER FILE- SEATTLE BOEING FI WA

FOR DAYS CDD

-----(CONTINUED)------

Schedule: T24 Res Fans Ann Type of Schedule: ON/OFF

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: T24 Res Infiltration Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: T24 Res People Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

FOR DAYS HDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FOR DAYS CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

 $1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00\ 1.00$ 

Schedule: T24 Res Hot Water Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

 $0.01\ 0.01\ 0.01\ 0.01\ 0.02\ 0.04\ 0.09\ 0.11\ 0.09\ 0.07\ 0.05\ 0.04\ 0.04\ 0.03\ 0.03\ 0.03\ 0.04\ 0.05\ 0.05\ 0.05\ 0.04\ 0.04\ 0.04\ 0.02$ 

Schedule: T24 Retail Heating Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

 $60.0\ 60.0\ 60.0\ 60.0\ 60.0\ 63.0\ 65.0\ 68.0\ 70.0\ 70.0\ 70.0\ 70.0\ 70.0\ 70.0\ 70.0\ 70.0\ 70.0\ 70.0\ 70.0\ 65.0\ 65.0\ 65.0\ 65.0$ 

Schedule: T24 Retail Cooling Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

 $80.0\ 80.0\ 80.0\ 80.0\ 80.0\ 74.0$ 

Schedule: T24 Retail Lights Ann Type of Schedule: FRACTION

-----(CONTINUED)------

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

FOR DAYS HDD

FOR DAYS CDD

Schedule: T24 Retail Equipment Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

FOR DAYS HDD

FOR DAYS CDD

Schedule: T24 Retail Fans Ann Type of Schedule: ON/OFF

REPORT- LV-G Details of Schedules

S WEATHER FILE- SEATTLE BOEING FI WA

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: T24 Retail Infiltration Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: T24 Retail People Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

FOR DAYS HDD

FOR DAYS CDD

Schedule: T24 Retail Hot Water Ann Type of Schedule: FRACTION

-----(CONTINUED)------

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: ASHRAE Assembly Occupancy Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON THE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

Schedule: ASHRAE Assembly Lighting Ann Type of Schedule: FRACTION

-----(CONTINUED)------

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

Schedule: ASHRAE Assembly HVAC Ann Type of Schedule: ON/OFF

THROUGH 31 12

FOR DAYS SUN SAT HOL

HOUR 1 6 8 9 10 11 12 13 14 15 17 22 23 16 18 19 20 21 24 0. 0. 0. 0. 1. 1. 1.

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 1. 1. 1. 1.

Schedule: ASHRAE Assembly Hot Water Ann Type of Schedule: FRACTION

-----(CONTINUED)------

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE Assembly Heating Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN SAT HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

Schedule: ASHRAE Assembly Cooling Ann Type of Schedule: TEMPERATURE

FOR DAYS SUN SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

 $95.0 \ 95.0 \ 95.0 \ 95.0 \ 95.0 \ 75.0 \$ 

-----(CONTINUED)------

FOR DAYS MON TUE WED THU FRI HDD CDD

 $95.0\ 95.0\ 95.0\ 95.0\ 75.0\ 75.0\ 75.0\ 75.0\ 75.0\ 75.0\ 75.0\ 75.0\ 75.0\ 75.0\ 75.0\ 75.0\ 75.0\ 75.0\ 75.0$ 

Schedule: ASHRAE Health Occupancy Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

 $0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.05\ 0.05\ 0.05\ 0.05\ 0.05\ 0.05\ 0.05\ 0.05\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00$ 

FOR DAYS MON TUE WED THU FRI

 $0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.10\ 0.50\ 0.80\ 0.80\ 0.80\ 0.80\ 0.80\ 0.80\ 0.80\ 0.80\ 0.80\ 0.80\ 0.00\ 0.20\ 0.30\ 0.30\ 0.20\ 0.20\ 0.20\ 0.00$ 

FOR DAYS SAT

 $0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.10\ 0.30\ 0.40\ 0.40\ 0.40\ 0.40\ 0.40\ 0.40\ 0.40\ 0.40\ 0.40\ 0.00\ 0.20\ 0.20\ 0.20\ 0.20\ 0.20$ 

FOR DAYS HDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

 $0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00$ 

FOR DAYS CDD

Schedule: ASHRAE Health Lighting Ann Type of Schedule: FRACTION

-----(CONTINUED)------

THROUGH 31 12

FOR DAYS SUN SAT

FOR DAYS MON TUE WED THU FRI

FOR DAYS HOL

FOR DAYS HDD

FOR DAYS CDD

Schedule: ASHRAE Health HVAC Ann Type of Schedule: ON/OFF

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

HOUR 1 2 3 5 7 8 9 10 11 12 13 14 15 16 4 6 17 18 19 20 21 22 23 24 1.

Schedule: ASHRAE Health Hot Water Ann Type of Schedule: FRACTION

-----(CONTINUED)------

FOR DAYS SUN SAT

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS HOL

Schedule: ASHRAE Health Elevator Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE Health Heating Ann Type of Schedule: TEMPERATURE

-----(CONTINUED)

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: ASHRAE Health Cooling Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: ASHRAE Homotel Occupancy Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

-----(CONTINUED)------

FOR DAYS CDD

Schedule: ASHRAE Homotel Lighting Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

Schedule: ASHRAE Homotel HVAC Ann Type of Schedule: ON/OFF

REPORT- LV-G Details of Schedules

WEATHER FILE- SEATTLE BOEING FI WA

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

-----(CONTINUED)------

Schedule: ASHRAE Homotel Hot Water Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

0.25 0.20 0.20 0.20 0.20 0.30 0.50 0.50 0.55 0.55 0.50 0.40 0.40 0.30 0.30 0.40 0.40 0.50 0.40 0.50 0.40 0.50 0.40 0.20

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

0.20 0.15 0.15 0.15 0.20 0.25 0.50 0.60 0.55 0.45 0.40 0.45 0.40 0.35 0.30 0.30 0.30 0.40 0.55 0.60 0.50 0.55 0.45 0.25

FOR DAYS SAT

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

 $0.20 \ \ 0.15 \ \ 0.15 \ \ 0.15 \ \ 0.20 \ \ 0.25 \ \ 0.40 \ \ 0.50 \ \ 0.50 \ \ 0.45 \ \ 0.50 \ \ 0.45 \ \ 0.40 \ \ 0.40 \ \ 0.35 \ \ 0.40 \ \ 0.55 \ \ 0.55 \ \ 0.50 \ \ 0.55 \ \ 0.40 \ \ 0.30 \ \ 0.30 \ \ 0.40 \ \ 0.30 \ \ 0.40 \ \ 0.50 \ \ \ 0.50 \ \ 0.50 \ \ 0.50 \ \ 0.50 \ \ 0.50 \ \ 0.50 \ \ 0.50 \ \ 0.50 \ \ 0.50 \ \ \ 0.50 \ \ 0.50 \ \ 0.50 \ \ 0.50 \ \ 0.50 \ \ 0.50 \ \ 0.50 \ \ 0.50 \ \ 0.50 \ \ 0.50 \$ 

Schedule: ASHRAE Homotel Elevator Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.55 0.55 0.43 0.43 0.43 0.43 0.52 0.52 0.65 0.65 0.65 0.53 0.60 0.53 0.51 0.50 0.44 0.64 0.62 0.65 0.63 0.63 0.40 0.40 0.40

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

REPORT- LV-G Details of Schedules

WEATHER FILE- SEATTLE BOEING FI WA

-----(CONTINUED)-----

FOR DAYS SAT

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.44 0.35 0.35 0.35 0.35 0.35 0.35 0.40 0.32 0.45 0.45 0.42 0.60 0.65 0.65 0.65 0.65 0.65 0.65 0.75 0.80 0.80 0.75 0.55 0.55

Schedule: ASHRAE Homotel Heating Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: ASHRAE Homotel Cooling Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: ASHRAE Lt Manf Occupancy Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

-----(CONTINUED)------

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

Schedule: ASHRAE Lt Manf Lighting Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

-----(CONTINUED)------

FOR DAYS CDD

Schedule: ASHRAE Lt Manf HVAC Ann Type of Schedule: ON/OFF

THROUGH 31 12

FOR DAYS SUN HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FOR DAYS SAT

HOUR 1 2. 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Schedule: ASHRAE Lt Manf Hot Water Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

-----(CONTINUED)------

FOR DAYS SAT

Schedule: ASHRAE Lt Manf Elevator Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE Lt Manf Heating Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

-----(CONTINUED)------

FOR DAYS SAT

Schedule: ASHRAE Lt Manf Cooling Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON THE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE Office Occupancy Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.00 0.00 0.00 0.00 0.00 0.00 0.05 0.0

FOR DAYS MON TUE WED THU FRI

-----(CONTINUED)------

FOR DAYS SAT

FOR DAYS HDD CDD

Schedule: ASHRAE Office Lighting Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Schedule: ASHRAE Office HVAC Ann Type of Schedule: ON/OFF

THROUGH 31 12

FOR DAYS SUN HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FOR DAYS MON TUE WED THU FRI HDD CDD

5 6 8 9 10 11 12 13 14 17 18 21 22 15 16 19 20 23 24

0. 0. 0. 0. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 0.

FOR DAYS SAT

HOUR 1 2 5 6 8 9 10 11 12 13 3 4 14 15 16 17 18 19 20 21 22 23 24

0. 0. 0. 0. 0. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 0. 0. 0. 0. 0.

Schedule: ASHRAE Office Hot Water Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

 $0.04 \ 0.04 \$ 

FOR DAYS MON TUE WED THU FRI HDD CDD

 $0.05\ 0.05\ 0.05\ 0.05\ 0.05\ 0.08\ 0.07\ 0.19\ 0.35\ 0.38\ 0.39\ 0.47\ 0.57\ 0.54\ 0.34\ 0.33\ 0.44\ 0.26\ 0.21\ 0.15\ 0.17\ 0.08\ 0.05\ 0.05$ 

FOR DAYS SAT

 $0.05\ 0.05\ 0.05\ 0.05\ 0.05\ 0.08\ 0.07\ 0.11\ 0.15\ 0.21\ 0.19\ 0.23\ 0.20\ 0.19\ 0.15\ 0.12\ 0.14\ 0.07\ 0.07\ 0.07\ 0.07\ 0.09\ 0.05\ 0.05$ 

Schedule: ASHRAE Office Elevator Ann Type of Schedule: FRACTION

-----(CONTINUED)------

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE Office Heating Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE Office Cooling Ann Type of Schedule: TEMPERATURE

-----(CONTINUED)------

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE Restaurant Occupancy Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

-----(CONTINUED)------

Schedule: ASHRAE Restaurant Lighting Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

Schedule: ASHRAE Restaurant HVAC Ann Type of Schedule: ON/OFF

\_\_\_\_\_\_(CONTINUED)------

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

FOR DAYS SAT

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Schedule: ASHRAE Restaurant Hot Water Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

 $0.25\ 0.20\ 0.20\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.50\ 0.50\ 0.40\ 0.30\ 0.30\ 0.30\ 0.40\ 0.50\ 0.50\ 0.40\ 0.50\ 0.40\ 0.50$ 

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

 $0.20\ 0.15\ 0.15\ 0.00\ 0.00\ 0.00\ 0.00\ 0.60\ 0.55\ 0.45\ 0.40\ 0.45\ 0.40\ 0.35\ 0.30\ 0.30\ 0.30\ 0.40\ 0.55\ 0.60\ 0.55\ 0.45\ 0.25$ 

FOR DAYS SAT

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Schedule: ASHRAE Restaurant Heating Ann Type of Schedule: TEMPERATURE

-----(CONTINUED)------

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE Restaurant Cooling Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE Retail Occupancy Ann Type of Schedule: FRACTION

-----(CONTINUED)------

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

Schedule: ASHRAE Retail Lighting Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

\_\_\_\_\_(CONTINUED)------

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

Schedule: ASHRAE Retail HVAC Ann Type of Schedule: ON/OFF

THROUGH 31 12

FOR DAYS SUN HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 1. 1. 1. 1. 1. 1. 1. 0. 0. 0. 0. 0. 0.

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0. 0. 0. 0. 0. 1. 1. 1. 1. 1. 1. 1. 1. 0. 0.

FOR DAYS SAT

HOUR 1 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18 19 21 22 23 20 24 1. 1. 1. 1. 1. 1.

Schedule: ASHRAE Retail Hot Water Ann Type of Schedule: FRACTION

-----(CONTINUED)------

FOR DAYS SUN HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.07 0.07 0.07 0.06 0.06 0.06 0.07 0.10 0.12 0.14 0.29 0.31 0.36 0.36 0.34 0.35 0.37 0.34 0.25 0.27 0.21 0.16 0.10 0.06

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.11 0.10 0.08 0.06 0.06 0.06 0.07 0.20 0.24 0.27 0.42 0.54 0.59 0.60 0.49 0.48 0.47 0.46 0.44 0.36 0.29 0.22 0.16 0.13

Schedule: ASHRAE Retail Elevator Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE Retail Heating Ann Type of Schedule: TEMPERATURE

-----(CONTINUED)------

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE Retail Cooling Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE School Occupancy Ann Type of Schedule: FRACTION

-----(CONTINUED)------

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

Schedule: ASHRAE School Lighting Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

\_\_\_\_\_(CONTINUED)------

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

Schedule: ASHRAE School HVAC Ann Type of Schedule: ON/OFF

THROUGH 31 12

FOR DAYS SUN HOL

HOUR 1 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0.

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0. 0. 0. 0. 1. 1. 1. 1. 1. 1. 1. 0.

FOR DAYS SAT

HOUR 1 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0. 1. 1. 0. 0. 0. 0. 0. 0.

Schedule: ASHRAE School Hot Water Ann Type of Schedule: FRACTION

-----(CONTINUED)------

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE School Elevator Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN SAT HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

Schedule: ASHRAE School Heating Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

-----(CONTINUED)------

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE School Cooling Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: ASHRAE Warehouse Occupancy Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

-----(CONTINUED)------

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

Schedule: ASHRAE Warehouse Lighting Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

-----(CONTINUED)------

FOR DAYS HDD

FOR DAYS CDD

Schedule: ASHRAE Warehouse HVAC Ann Type of Schedule: ON/OFF

THROUGH 31 12

FOR DAYS SUN HOL

7 8 HOUR 1 4 5 6 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0. 0. 0. 0. 0. 0. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 0. 0. 0. 0. 0 0. 0.

FOR DAYS SAT

HOUR 1 2 3 4 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0. 0. 0. 0. 1. 1. 1. 0. 0. 0. 0. 0.

Schedule: ASHRAE Warehouse Hot Water Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

-----(CONTINUED)

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.02 0.02 0.02 0.02 0.05 0.07 0.07 0.10 0.30 0.36 0.36 0.46 0.57 0.43 0.38 0.40 0.30 0.18 0.03 0.03 0.03 0.03 0.03 0.03

FOR DAYS SAT

Schedule: ASHRAE Warehouse Elevator Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN SAT HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

Schedule: ASHRAE Warehouse Heating Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

-----(CONTINUED)------

FOR DAYS SAT

Schedule: ASHRAE Warehouse Cooling Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON THE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: eQUEST Res Ltg Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN

FOR DAYS MON TUE WED THU FRI

-----(CONTINUED)------

FOR DAYS SAT

FOR DAYS HOL HDD CDD

Schedule: eQUEST Res El Eqp Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN SAT

FOR DAYS MON TUE WED THU FRI HOL HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.15 0.15 0.15 0.15 0.15 0.20 0.30 0.80 0.40 0.20 0.20 0.20 0.20 0.20 0.20 0.30 0.40 0.60 0.80 0.60 0.40 0.30 0.15 0.15

Schedule: eQUEST Res Gas Eqp Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN

FOR DAYS MON TUE WED THU FRI HOL

FOR DAYS SAT

-----(CONTINUED)------

FOR DAYS HDD

FOR DAYS CDD

Schedule: eQUEST Res Inf Sch Type of Schedule: MULTIPLIER

THROUGH 31 3

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 8

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST Retail Inf Sch Type of Schedule: FRACTION

REPORT- LV-G Details of Schedules

S WEATHER FILE- SEATTLE BOEING FI WA

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST Retail Fans Sch Type of Schedule: ON/OFF/FLAG

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST Stair Occ Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST Parking Lobby Ht-T Sch Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST Parking Lobby Cl-T Sch Type of Schedule: TEMPERATURE

REPORT- LV-G Details of Schedules

es WEATHER FILE- SEATTLE BOEING FI WA

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST Low-Use Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST On/Off/Flag Sch Type of Schedule: ON/OFF/FLAG

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST Always On Sch Fraction Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST Always Off Sch Fraction Type of Schedule: FRACTION

------(CONTINUED)------

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST Always On Sch On/Off/Flag Type of Schedule: ON/OFF/FLAG

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST Always Off Sch On/Off/Fla Type of Schedule: ON/OFF/FLAG

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST Temperature On/Off/Flag S Type of Schedule: ON/OFF/FLAG

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST Dummy Tempered Air Sch Type of Schedule: TEMPERATURE

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST No Heat Ht-T Sch Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST Ext Lighting Sch Type of Schedule: FRACTION

THROUGH 31 1

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 28 2

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 3

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 4

-----(CONTINUED)

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.60 0.60 0.60 0.60 0.60 0.60 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.25 0.70 0.90 0.90 0.90 0.80 0.70

THROUGH 31 5

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 6

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 7

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 8

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 9

-----(CONTINUED)------

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 10

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 11

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: eQUEST Office MinOA Sch Type of Schedule: FRAC/DESIGN

THROUGH 31 12

FOR DAYS SUN SAT HOL

REPORT- LV-G Details of Schedules

WEATHER FILE- SEATTLE BOEING FI WA

(CONTINUED)------

FOR DAYS MON TUE WED THU FRI HDD CDD

Schedule: eQUEST Retail MinOA Sch Type of Schedule: FRAC/DESIGN

THROUGH 31 12

FOR DAYS SUN

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

FOR DAYS SAT

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

FOR DAYS HOL

Schedule: eQUEST School MinOA Sch Type of Schedule: FRAC/DESIGN

THROUGH 31 12

FOR DAYS SUN SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

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FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

0.00 0.00

Schedule: eQUEST Off Equipment Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

 $0.04\ 0.04\ 0.04\ 0.04\ 0.04\ 0.04\ 0.04\ 0.04\ 0.04\ 0.04\ 0.04\ 0.04\ 0.04\ 0.04\ 0.04\ 0.04\ 0.04\ 0.04\ 0.04$ 

FOR DAYS MON TUE WED THU FRI

 $0.12\ \ 0.12\ \ 0.12\ \ 0.12\ \ 0.12\ \ 0.12\ \ 0.12\ \ 0.12\ \ 0.12\ \ 0.12\ \ 0.12\ \ 0.12\ \ 0.12\ \ 0.12\ \ 0.12\ \ 0.12$ 

FOR DAYS HDD

 $0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00$ 

FOR DAYS CDD

 $0.12\ 0.12\ 0.12\ 0.12\ 0.12\ 0.12\ 0.12\ 0.12\ 0.12\ 0.12\ 0.00$ 

Schedule: EQUEST Conf Occupancy Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

 $0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.60\ 0.60\ 0.60\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00\ 0.00$ 

-----(CONTINUED)------

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

Schedule: EQUEST Conf Equip Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

-----(CONTINUED)------

FOR DAYS CDD

Schedule: EQUEST Conf Lighting Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Schedule: Storage Lighting Sch Type of Schedule: FRACTION

REPORT- LV-G Details of Schedules

WEATHER FILE- SEATTLE BOEING FI WA

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

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Schedule: eQUEST Garage Exh Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Resi Exh Fan Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.74 0.73 0.73 0.74 0.76 0.83 0.95 1.00 0.95 0.89 0.85 0.81 0.80 0.80 0.79 0.78 0.82 0.84 0.85 0.83 0.82 0.81 0.80 0.77

Schedule: Freeze Protect Heat Sch Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Corridor Heat Sch Type of Schedule: TEMPERATURE

------(CONTINUED)------

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Corridor Cool Sch Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: NYES Residential Ltg Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Hourly Report Schedule Type of Schedule: ON/OFF

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

FOR DAYS HDD CDD

7 HOUR 1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0. 0. 0. 0. 0.

Schedule: Misc Fans Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Garage Lighting Occ Sensors Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Corr Ltg Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: No Cooling Sch Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: SCLRSCElecYear Type of Schedule: FLAG

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

-----(CONTINUED)------

THROUGH 28 2

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

THROUGH 31 3

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 4

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 5

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

THROUGH 30 6

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

-----(CONTINUED)------

THROUGH 31 7

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

THROUGH 31 8

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 9

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 10

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 11

eQUEST 3.65 Residential Multi Family Tem

DOE-2.3-50h 1/13/2023 10:20:00 BDL RUN 7

REPORT- LV-G Details of Schedules

chedules WEATHER FILE- SEATTLE BOEING FI WA

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: SCLMDCElecYear Type of Schedule: FLAG

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: SCLSMCElecYear Type of Schedule: FLAG

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: SCLLGCElecYear Type of Schedule: FLAG

eQUEST 3.65 Residential Multi Family Tem

DOE-2.3-50h 1/13/2023 10:20:00 BDL RUN 7

REPORT- LV-G Details of Schedules

S WEATHER FILE- SEATTLE BOEING FI WA

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI SAT HDD CDD

Schedule: SCLHDCElecYear Type of Schedule: FLAG

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI SAT HDD CDD

Schedule: PSERate25ElecYear Type of Schedule: FLAG

THROUGH 31 3

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 9

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

-----(CONTINUED)------

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: PSERate26ElecYear Type of Schedule: FLAG

THROUGH 31 3

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 9

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Booster Pump Ann Type of Schedule: FRACTION

-----(CONTINUED)------

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: RS-29 Resi Inf Ann Type of Schedule: MULTIPLIER

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: RS-29 Non Res Inf Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

FOR DAYS SAT

Schedule: RS-29 Retail Inf Ann Type of Schedule: FRACTION

.....(CONTINUED)------

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Min Cooling Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: EQUEST Lobby Occupancy Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Resi Setback Heating ANN Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Resi Setback Cooling ANN Type of Schedule: TEMPERATURE

-----(CONTINUED)------

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Resi Fan Cycling Sch Type of Schedule: ON/OFF/FLAG

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Res Amenity Occ Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN SAT HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

Schedule: Res Amenity Ltg Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN SAT HOL

.....(CONTINUED)------

FOR DAYS MON TUE WED THU FRI HDD CDD

Schedule: Res Amenity Eqp Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN SAT HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

Schedule: Res Amenity Htg Sch Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN SAT HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

Schedule: Res Amenity Clq Sch Type of Schedule: TEMPERATURE

-----(CONTINUED)------

FOR DAYS SUN SAT HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

Schedule: Res Amenity Fan Sch Type of Schedule: ON/OFF/FLAG

THROUGH 31 12

FOR DAYS SUN SAT HOL

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 1. 1. 1. 1. 1. 0. 0. 0.

Schedule: RS-29 Res Heating Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: RS-29 Res Cooling Ann Type of Schedule: TEMPERATURE

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

-----(CONTINUED)------

Schedule: Pool Water Heat Boiler Annual Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Pool Air Heat Temp Annual Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Pool Air Cool Temp Annual Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Pool Ventilation on/off Annual Type of Schedule: ON/OFF/FLAG

-----(CONTINUED)------

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Dummy Schedule Annual Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Ext Lighting Sch Type of Schedule: FRACTION

THROUGH 31 1

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 28 2

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 3

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 4

-----(CONTINUED)

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.60 0.60 0.60 0.60 0.60 0.60 0.60 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.25 0.70 0.90 0.90 0.90 0.80 0.70

THROUGH 31 5

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 6

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 7

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 8

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 9

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

-----(CONTINUED)------

THROUGH 31 10

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 11

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: DHW Eqp NRes Sch Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

 -----(CONTINUED)------

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.08 0.05 0.05 0.05 0.05 0.05 0.06 0.12 0.27 0.47 0.47 0.33 0.32 0.47 0.76 0.72 0.69 0.63 0.55 0.47 0.40 0.37 0.23 0.14

FOR DAYS HDD

Schedule: S1 Sys1 (PVVT) Fan Sch Type of Schedule: ON/OFF/FLAG

THROUGH 31 12

FOR DAYS SUN SAT HOL HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 1. 1. 1. 1. 1. 1. 1. 1. 0. 0. 0. 0. 0. 0. 0. 1. 1. 1. 1 1. 1. 1.

FOR DAYS MON TUE WED THU FRI

HOUR 1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 1. 1. 1. 1. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 1.

Schedule: S1 Sys1 (PVVT) Cool Sch Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Schedule: S1 Sys1 (PVVT) Heat Sch Type of Schedule: TEMPERATURE

-----(CONTINUED)------

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: XFRM Cooling Ann Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: 2015 SEC DHW Inlet Temp Type of Schedule: TEMPERATURE

THROUGH 31 1

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 28 2

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

-----(CONTINUED)

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 4

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 5

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 6

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 7

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 8

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

-----(CONTINUED)

THROUGH 30 9

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 10

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 30 11

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Always Off Type of Schedule: ON/OFF

REPORT- LV-G Details of Schedules

WEATHER FILE- SEATTLE BOEING FI WA

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

-----(CONTINUED)------

Schedule: Res Cooling\_BadBOI Type of Schedule: TEMPERATURE

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: Constant Res HW Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 0.01 0.01 0.01 0.01 0.02 0.04 0.09 0.11 0.09 0.07 0.05 0.04 0.04 0.03 0.03 0.03 0.03 0.04 0.05 0.05 0.05 0.04 0.04 0.04 0.02

FOR DAYS MON TUE WED THU FRI HDD CDD

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Schedule: MF Lobby Occupancy Ann Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

Schedule: ASHRAE RST Exhaust - Low Type of Schedule: FRACTION

THROUGH 31 12

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

Schedule: ASHRAE RST Exhaust - High Type of Schedule: FRACTION

-----(CONTINUED)------

FOR DAYS SUN HOL

FOR DAYS MON TUE WED THU FRI

FOR DAYS SAT

FOR DAYS HDD

FOR DAYS CDD

Schedule: CHW Supply Temp Reset Type of Schedule: RESET-TEMP

THROUGH 31 12

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 80.0 60.0 54.0 44.0 1. 24. 0.0 0.0 0.0 0.0

Schedule: Dirt Depre Windows Type of Schedule: FRACTION

eQUEST 3.65 Residential Multi Family Tem

DOE-2.3-50h 1/13/2023 10:20:00 BDL RUN 7

REPORT- LV-G Details of Schedules

WEATHER FILE- SEATTLE BOEING FI WA

-----(CONTINUED)------

FOR DAYS SUN MON TUE WED THU FRI SAT HOL

HOUR 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

## NUMBER OF WINDOWS 593

(Note: u-values include outside air film)

|                               |            |         |        |       | LOCATION OF | ORIGIN  |       |      |           |         |
|-------------------------------|------------|---------|--------|-------|-------------|---------|-------|------|-----------|---------|
|                               |            | GLASS   | GLASS  | GLASS | IN          | SURFACE | FRAME | CURB | FRAME     | CURB    |
| WINDOW                        |            | AREA    | HEIGHT | WIDTH | COOR        | DINATES | AR    | EA   | U-VAI     | LUE     |
| NAME                          | MULTIPLIER | (SQFT ) | (FT)   | (FT)  | X (FT)      | Y (FT)  | (SQF  | Γ)   | (BTU/HR-S | SQFT-F) |
| Window 593                    | 1.0        | 56.61   | 3.54   | 16.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| Window 592                    | 1.0        | 300.72  | 3.54   | 85.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| Window 591                    | 1.0        | 70.76   | 3.54   | 20.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 North Win (G.C4.E3.W1)     | 1.0        | 12.38   | 3.54   | 3.50  | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 North Win (G.N5.E4.W1)     | 1.0        | 325.49  | 3.54   | 92.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 South Win (G.E6.E5.W1)     | 1.0        | 57.60   | 3.60   | 16.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 East Win (G.E6.E6.W1)      | 1.0        | 95.19   | 3.28   | 29.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 North Win (G.E6.E7.W1)     | 1.0        | 70.76   | 3.54   | 20.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 North Win (G.W7.E9.W1)     | 1.0        | 79.60   | 3.54   | 22.50 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 West Win (G.W7.E10.W1)     | 1.0        | 73.51   | 2.16   | 34.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 West Win (G.W8.E11.W1)     | 1.0        | 32.43   | 2.16   | 15.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 East Win (G.E9.E12.W1)     | 1.0        | 59.09   | 3.28   | 18.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 East Win (G.E10.E13.W1)    | 1.0        | 91.91   | 3.28   | 28.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 North Win (G.E10.E14.W1)   | 1.0        | 74.30   | 3.54   | 21.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 South Win (G.E10.E15.W1)   | 1.0        | 64.81   | 3.60   | 18.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 South Win (G.S11.E16.W1)   | 1.0        | 309.63  | 3.60   | 86.00 | 0.00        | 0.10    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 North Win (G.S17.E24.W1)   | 1.0        | 265.27  | 7.07   | 37.50 | 0.00        | 1.00    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 East Win (G.S17.E25.W1)    | 1.0        | 7.07    | 7.07   | 1.00  | 0.00        | 1.00    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 East Win (G.E19.E27.W1)    | 1.0        | 93.55   | 3.28   | 28.50 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 East Win (G.NNE24.E30.W1)  | 1.0        | 60.73   | 3.28   | 18.50 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 West Win (G.WNW27.E37.W1)  | 1.0        | 40.00   | 2.16   | 18.50 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 North Win (G.WNW27.E39.W1) | 1.0        | 74.30   | 3.54   | 21.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 North Win (G.N28.E42.W1)   | 1.0        | 183.97  | 3.54   | 52.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 East Win (G.E29.E45.W1)    | 1.0        | 80.42   | 3.28   | 24.50 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L1 North Win (G.E29.E46.W1)   | 1.0        | 60.14   | 3.54   | 17.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 North Win (G.C3.E1.W1)     | 1.0        | 12.38   | 3.54   | 3.50  | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 North Win (G.N4.E2.W1)     | 1.0        | 35.38   | 3.54   | 10.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 East Win (G.N4.E3.W1)      | 1.0        | 16.41   | 3.28   | 5.00  | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 North Win (G.N4.E4.W1)     | 1.0        | 45.99   | 3.54   | 13.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 West Win (G.N4.E5.W1)      | 1.0        | 10.81   | 2.16   | 5.00  | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 North Win (G.N4.E6.W1)     | 1.0        | 35.38   | 3.54   | 10.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 East Win (G.N4.E7.W1)      | 1.0        | 16.41   | 3.28   | 5.00  | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 North Win (G.N4.E8.W1)     | 1.0        | 45.99   | 3.54   | 13.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 West Win (G.N4.E9.W1)      | 1.0        | 10.81   | 2.16   | 5.00  | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 North Win (G.N4.E10.W1)    | 1.0        | 35.38   | 3.54   | 10.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 East Win (G.N4.E11.W1)     | 1.0        | 16.41   | 3.28   | 5.00  | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 North Win (G.N4.E12.W1)    | 1.0        | 45.99   | 3.54   | 13.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 West Win (G.N4.E13.W1)     | 1.0        | 10.81   | 2.16   | 5.00  | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 North Win (G.N4.E14.W1)    | 1.0        | 35.38   | 3.54   | 10.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 East Win (G.N4.E15.W1)     | 1.0        | 16.41   | 3.28   | 5.00  | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 North Win (G.N4.E16.W1)    | 1.0        | 45.99   | 3.54   | 13.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 West Win (G.N4.E17.W1)     | 1.0        | 10.81   | 2.16   | 5.00  | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 South Win (G.E5.E18.W1)    | 1.0        | 79.21   | 3.60   | 22.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 East Win (G.E5.E19.W1)     | 1.0        | 111.61  | 3.28   | 34.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 North Win (G.E5.E20.W1)    | 1.0        | 45.99   | 3.54   | 13.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 East Win (G.E5.E21.W1)     | 1.0        | 16.41   | 3.28   | 5.00  | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 North Win (G.E5.E22.W1)    | 1.0        | 45.99   | 3.54   | 13.00 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 West Win (G.E5.E23.W1)     | 1.0        | 10.81   | 2.16   | 5.00  | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 North Win (G.W6.E25.W1)    | 1.0        | 79.60   | 3.54   | 22.50 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |

-----(CONTINUED)------

|   |            | GLASS          | GLASS        | GLASS | LOCATION OF | ORIGIN<br>SURFACE | FRAME | CURB | FRAME     | CURB  |
|---|------------|----------------|--------------|-------|-------------|-------------------|-------|------|-----------|-------|
| WINDOW  |            | AREA           | HEIGHT       | WIDTH |             | DINATES           | AR    |      | U-VAI     |       |
| NAME  | MULTIPLIER | (SQFT )        | (FT)         | (FT)  | X (FT)      | Y (FT)            | (SQF  |      | (BTU/HR-S |       |
|   |            |                |              |       |             |                   |       |      |           |       |
| L2 West Win (G.W6.E26.W1)                               | 1.0        | 73.51          | 2.16         | 34.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 West Win (G.W7.E27.W1)                               | 1.0        | 32.43          | 2.16         | 15.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.E8.E28.W1)                               | 1.0        | 55.80          | 3.28         | 17.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.E9.E29.W1)                               | 1.0        | 91.91          | 3.28         | 28.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 North Win (G.E9.E30.W1)                              | 1.0        | 74.30          | 3.54         | 21.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.E9.E31.W1)                               | 1.0        | 3.28           | 3.28         | 1.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 South Win (G.E9.E32.W1)                              | 1.0        | 64.81          | 3.60         | 18.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 West Win (G.S10.E33.W1)                              | 1.0        | 8.65           | 2.16         | 4.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 South Win (G.S10.E34.W1)                             | 1.0        | 75.61          | 3.60         | 21.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.S10.E35.W1)                              | 1.0        | 13.13          | 3.28         | 4.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 South Win (G.S10.E36.W1)                             | 1.0        | 46.80          | 3.60         | 13.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 West Win (G.S10.E37.W1)                              | 1.0        | 8.65           | 2.16         | 4.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 South Win (G.S10.E38.W1)                             | 1.0        | 79.21          | 3.60<br>3.28 | 22.00 | 0.00        | 3.12<br>3.12      | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.S10.E39.W1) L2 South Win (G.S10.E40.W1)  | 1.0        | 13.13<br>46.80 | 3.60         | 13.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 West Win (G.S10.E40.W1)                              | 1.0        | 8.65           | 2.16         | 4.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 South Win (G.S10.E41.W1)                             | 1.0        | 79.21          | 3.60         | 22.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.S10.E43.W1)                              | 1.0        | 13.13          | 3.28         | 4.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 South Win (G.S10.E43.W1)                             | 1.0        | 21.60          | 3.60         | 6.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 South Win (G.S10.E45.W1)                             | 1.0        | 36.00          | 3.60         | 10.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 West Win (G.SSW12.E46.W1)                            | 1.0        | 49.52          | 7.07         | 7.00  | 0.00        | 1.00              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 South Win (G.SSW12.E47.W1)                           | 1.0        | 99.03          | 7.07         | 14.00 | 0.00        | 1.00              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 North Win (G.SSW12.E48.W1)                           | 1.0        | 265.27         | 7.07         | 37.50 | 0.00        | 1.00              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.SSW12.E49.W1)                            | 1.0        | 7.07           | 7.07         | 1.00  | 0.00        | 1.00              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 South Win (G.SSW12.E50.W1)                           | 1.0        | 212.22         | 7.07         | 30.00 | 0.00        | 1.00              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 South Win (G.SSW12.E51.W1)                           | 1.0        | 35.37          | 7.07         | 5.00  | 0.00        | 1.00              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 North Win (G.E14.E53.W1)                             | 1.0        | 12.38          | 3.54         | 3.50  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.E14.E54.W1)                              | 1.0        | 26.26          | 3.28         | 8.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.E14.E55.W1)                              | 1.0        | 182.18         | 3.28         | 55.50 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 North Win (G.WNW18.E57.W1)                           | 1.0        | 23.00          | 3.54         | 6.50  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.WNW18.E58.W1)                            | 1.0        | 16.41          | 3.28         | 5.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 North Win (G.WNW18.E59.W1)                           | 1.0        | 38.92          | 3.54         | 11.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 West Win (G.WNW18.E60.W1)                            | 1.0        | 10.81          | 2.16         | 5.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 North Win (G.WNW18.E61.W1)                           | 1.0        | 24.77          | 3.54         | 7.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.WNW18.E62.W1)                            | 1.0        | 16.41          | 3.28         | 5.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 North Win (G.WNW18.E63.W1)                           | 1.0        | 67.22          | 3.54         | 19.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 West Win (G.WNW18.E64.W1)                            | 1.0        | 65.94          | 2.16         | 30.50 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 North Win (G.N19.E65.W1)                             | 1.0        | 23.00          | 3.54         | 6.50  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.N19.E66.W1)                              | 1.0        | 16.41          | 3.28         | 5.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 North Win (G.N19.E67.W1)                             | 1.0        | 38.92          | 3.54         | 11.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 West Win (G.N19.E68.W1)                              | 1.0        | 10.81          | 2.16         | 5.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 North Win (G.N19.E69.W1)                             | 1.0        | 23.00          | 3.54         | 6.50  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.N19.E70.W1)                              | 1.0        | 16.41          | 3.28         | 5.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 North Win (G.N19.E71.W1) L2 West Win (G.N19.E72.W1)  | 1.0        | 37.15<br>10.81 | 3.54<br>2.16 | 10.50 | 0.00        | 3.12<br>3.12      | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 West Win (G.NI9.E/2.WI) L2 South Win (G.SW20.E73.W1) | 1.0        | 275.88         | 7.07         | 39.00 | 0.00        | 1.00              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.SW20.E74.W1)                             | 1.0        | 88.42          | 7.07         | 12.50 | 0.00        | 1.00              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 South Win (G.SW20.E74.WI)                            | 1.0        | 56.59          | 7.07         | 8.00  | 0.00        | 1.00              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 West Win (G.SW20.E76.W1)                             | 1.0        | 583.60         | 7.07         | 82.50 | 0.00        | 1.00              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 South Win (G.E23.E77.W1)                             | 1.0        | 84.61          | 3.60         | 23.50 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 East Win (G.E23.E78.W1)                              | 1.0        | 106.68         | 3.28         | 32.50 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L2 North Win (G.E23.E79.W1)                             | 1.0        | 26.53          | 3.54         | 7.50  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
|   |            |                |              |       |             |                   |       |      |           |       |

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|   |            |                 |              |                | LOCATION OF | OPICIN       |       |      |           |         |
|---|------------|-----------------|--------------|----------------|-------------|--------------|-------|------|-----------|---------|
|   |            | GLASS           | GLASS        | GLASS          |             | SURFACE      | FRAME | CURB | FRAME     | CURB    |
| WINDOW  |            | AREA            | HEIGHT       | WIDTH          |             | RDINATES     | ARI   |      | U-VAI     |         |
| NAME  | MULTIPLIER | (SQFT )         | (FT)         | (FT)           | X (FT)      | Y (FT)       | (SQF  | Γ)   | (BTU/HR-S | SQFT-F) |
|   |            |                 |              |                |             |              |       |      |           |         |
| L2 East Win (G.E23.E80.W1)                            | 1.0        | 16.41           | 3.28         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 North Win (G.E23.E81.W1)                           | 1.0        | 38.92           | 3.54         | 11.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 West Win (G.E23.E82.W1)                            | 1.0        | 10.81           | 2.16         | 5.00           | 0.00        | 3.12<br>1.00 | 0.00  | 0.00 | 0.384     | 0.000   |
| L2 South Win (G.S27.E88.W1) L3 North Win (G.N3.E1.W1) | 1.0        | 84.89<br>145.05 | 7.07<br>3.54 | 12.00<br>41.00 | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 East Win (G.N3.E1.W1)                              | 1.0        | 3.28            | 3.28         | 1.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 North Win (G.N4.E3.W1)                             | 1.0        | 35.38           | 3.54         | 10.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 East Win (G.N4.E4.W1)                              | 1.0        | 16.41           | 3.28         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 North Win (G.N4.E5.W1)                             | 1.0        | 45.99           | 3.54         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 West Win (G.N4.E6.W1)                              | 1.0        | 10.81           | 2.16         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 North Win (G.N4.E7.W1)                             | 1.0        | 35.38           | 3.54         | 10.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 East Win (G.N4.E8.W1)                              | 1.0        | 16.41           | 3.28         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 North Win (G.N4.E9.W1)                             | 1.0        | 45.99           | 3.54         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 West Win (G.N4.E10.W1)                             | 1.0        | 10.81           | 2.16         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 North Win (G.N4.E11.W1)                            | 1.0        | 35.38           | 3.54         | 10.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 East Win (G.N4.E12.W1)                             | 1.0        | 16.41           | 3.28         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 North Win (G.N4.E13.W1)                            | 1.0        | 45.99           | 3.54         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 West Win (G.N4.E14.W1)                             | 1.0        | 10.81           | 2.16         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 North Win (G.N4.E15.W1)                            | 1.0        | 35.38           | 3.54         | 10.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 East Win (G.N4.E16.W1)                             | 1.0        | 16.41           | 3.28         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 North Win (G.N4.E17.W1)                            | 1.0        | 45.99           | 3.54         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 West Win (G.N4.E18.W1)                             | 1.0        | 10.81           | 2.16         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 South Win (G.E5.E19.W1)                            | 1.0        | 79.21           | 3.60         | 22.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 East Win (G.E5.E20.W1)                             | 1.0        | 111.61          | 3.28         | 34.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 North Win (G.E5.E21.W1)                            | 1.0        | 45.99           | 3.54         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 East Win (G.E5.E22.W1)                             | 1.0        | 16.41           | 3.28         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 North Win (G.E5.E23.W1)                            | 1.0        | 45.99           | 3.54         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 West Win (G.E5.E24.W1)                             | 1.0        | 10.81           | 2.16         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 North Win (G.W6.E26.W1)                            | 1.0        | 79.60           | 3.54         | 22.50          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 West Win (G.W6.E27.W1)                             | 1.0        | 73.51           | 2.16         | 34.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 West Win (G.W7.E28.W1)                             | 1.0        | 32.43           | 2.16         | 15.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 East Win (G.E8.E29.W1)                             | 1.0        | 55.80           | 3.28         | 17.00<br>4.50  | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 South Win (G.E9.E30.W1) L3 West Win (G.E9.E31.W1)  | 1.0        | 16.20<br>4.32   | 3.60<br>2.16 | 2.00           | 0.00        | 3.12<br>3.12 | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 South Win (G.E9.E31.W1)                            | 1.0        | 52.20           | 3.60         | 14.50          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 East Win (G.E9.E33.W1)                             | 1.0        | 128.02          | 3.28         | 39.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 North Win (G.E9.E34.W1)                            | 1.0        | 77.83           | 3.54         | 22.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 West Win (G.S10.E35.W1)                            | 1.0        | 17.30           | 2.16         | 8.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 South Win (G.S10.E36.W1)                           | 1.0        | 7.20            | 3.60         | 2.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 East Win (G.S10.E37.W1)                            | 1.0        | 6.57            | 3.28         | 2.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 South Win (G.S10.E38.W1)                           | 1.0        | 12.60           | 3.60         | 3.50           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 West Win (G.S10.E39.W1)                            | 1.0        | 4.32            | 2.16         | 2.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 South Win (G.S10.E40.W1)                           | 1.0        | 46.80           | 3.60         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 East Win (G.S10.E41.W1)                            | 1.0        | 6.57            | 3.28         | 2.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 South Win (G.S10.E42.W1)                           | 1.0        | 16.20           | 3.60         | 4.50           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 West Win (G.S10.E43.W1)                            | 1.0        | 4.32            | 2.16         | 2.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 South Win (G.S10.E44.W1)                           | 1.0        | 46.80           | 3.60         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 East Win (G.S10.E45.W1)                            | 1.0        | 6.57            | 3.28         | 2.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 South Win (G.S10.E46.W1)                           | 1.0        | 16.20           | 3.60         | 4.50           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 West Win (G.S10.E47.W1)                            | 1.0        | 4.32            | 2.16         | 2.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 South Win (G.S10.E48.W1)                           | 1.0        | 46.80           | 3.60         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
| L3 East Win (G.S10.E49.W1)                            | 1.0        | 6.57            | 3.28         | 2.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384     | 0.000   |
|   |            |                 |              |                |             |              |       |      |           |         |

WEATHER FILE- SEATTLE BOEING FI WA REPORT- LV-H Details of Windows -----(CONTINUED)------

|  |            | GLASS          | GLASS        | GLASS          | LOCATION OF | ORIGIN<br>SURFACE | FRAME        | CURB | FRAME          | CURB  |
|--|------------|----------------|--------------|----------------|-------------|-------------------|--------------|------|----------------|-------|
| WINDOW   |            | AREA           | HEIGHT       | WIDTH          |             | DINATES           | F KAME<br>AR |      | FRAME<br>U-VAI |       |
| NAME   | MULTIPLIER | (SQFT )        | (FT)         | (FT)           | X (FT)      | Y (FT)            | (SQF         |      | (BTU/HR-S      |       |
|  |            |                | . ,          | . ,            | • •         | , ,               |              | •    |                |       |
| L3 South Win (G.S10.E50.W1)                              | 1.0        | 16.20          | 3.60         | 4.50           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 West Win (G.S10.E51.W1)                               | 1.0        | 4.32           | 2.16         | 2.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 South Win (G.S10.E52.W1)                              | 1.0        | 45.00          | 3.60         | 12.50          | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 East Win (G.S10.E53.W1)                               | 1.0        | 6.57           | 3.28         | 2.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 South Win (G.S10.E54.W1)                              | 1.0        | 16.20          | 3.60         | 4.50           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 West Win (G.S10.E55.W1)                               | 1.0        | 4.32           | 2.16         | 2.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 South Win (G.S10.E56.W1)                              | 1.0        | 46.80          | 3.60         | 13.00          | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 East Win (G.S10.E57.W1)                               | 1.0        | 6.57           | 3.28         | 2.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 South Win (G.S10.E58.W1)                              | 1.0        | 16.20          | 3.60         | 4.50           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 West Win (G.S10.E59.W1)                               | 1.0        | 4.32           | 2.16         | 2.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 South Win (G.S10.E60.W1)                              | 1.0        | 46.80          | 3.60         | 13.00          | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 East Win (G.S10.E61.W1)                               | 1.0        | 6.57           | 3.28         | 2.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 South Win (G.S10.E62.W1)                              | 1.0        | 16.20          | 3.60         | 4.50           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 West Win (G.S10.E63.W1)                               | 1.0        | 4.32           | 2.16         | 2.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 South Win (G.S10.E64.W1)                              | 1.0        | 45.00          | 3.60         | 12.50          | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 East Win (G.S10.E65.W1)                               | 1.0        | 6.57           | 3.28         | 2.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 North Win (G.E13.E67.W1)                              | 1.0        | 12.38          | 3.54         | 3.50           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 East Win (G.E13.E68.W1)                               | 1.0        | 26.26          | 3.28         | 8.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 East Win (G.E13.E69.W1)                               | 1.0        | 182.18         | 3.28         | 55.50          | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 South Win (G.NW17.E70.W1)                             | 1.0        | 12.60          | 3.60         | 3.50           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 West Win (G.NW17.E71.W1)                              | 1.0        | 15.13          | 2.16         | 7.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 North Win (G.NW17.E72.W1)                             | 1.0        | 24.77          | 3.54         | 7.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 East Win (G.NW17.E73.W1)                              | 1.0        | 16.41          | 3.28         | 5.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 North Win (G.NW17.E74.W1) L3 West Win (G.NW17.E75.W1) | 1.0        | 67.22<br>65.94 | 3.54<br>2.16 | 19.00<br>30.50 | 0.00        | 3.12<br>3.12      | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 West Win (G.NWI/.E/5.WI) L3 North Win (G.N18.E76.W1)  | 1.0        | 23.00          | 3.54         | 6.50           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 North Win (G.N18.E76.WI) L3 East Win (G.N18.E77.W1)   | 1.0        | 16.41          | 3.54         | 5.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 North Win (G.N18.E78.W1)                              | 1.0        | 38.92          | 3.20         | 11.00          | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 West Win (G.N18.E79.W1)                               | 1.0        | 10.81          | 2.16         | 5.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 North Win (G.N18.E80.W1)                              | 1.0        | 23.00          | 3.54         | 6.50           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 East Win (G.N18.E81.W1)                               | 1.0        | 16.41          | 3.28         | 5.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 North Win (G.N18.E82.W1)                              | 1.0        | 37.15          | 3.54         | 10.50          | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 West Win (G.N18.E83.W1)                               | 1.0        | 10.81          | 2.16         | 5.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 North Win (G.N18.E84.W1)                              | 1.0        | 23.00          | 3.54         | 6.50           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 East Win (G.N18.E85.W1)                               | 1.0        | 16.41          | 3.28         | 5.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 North Win (G.N18.E86.W1)                              | 1.0        | 38.92          | 3.54         | 11.00          | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 West Win (G.N18.E87.W1)                               | 1.0        | 10.81          | 2.16         | 5.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 South Win (G.E19.E88.W1)                              | 1.0        | 84.61          | 3.60         | 23.50          | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 East Win (G.E19.E89.W1)                               | 1.0        | 106.68         | 3.28         | 32.50          | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 North Win (G.E19.E90.W1)                              | 1.0        | 26.53          | 3.54         | 7.50           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 East Win (G.E19.E91.W1)                               | 1.0        | 16.41          | 3.28         | 5.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 North Win (G.E19.E92.W1)                              | 1.0        | 38.92          | 3.54         | 11.00          | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 West Win (G.E19.E93.W1)                               | 1.0        | 10.81          | 2.16         | 5.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 North Win (G.W21.E94.W1)                              | 1.0        | 17.69          | 3.54         | 5.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 West Win (G.W21.E95.W1)                               | 1.0        | 22.70          | 2.16         | 10.50          | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 South Win (G.W21.E96.W1)                              | 1.0        | 18.00          | 3.60         | 5.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 West Win (G.W21.E97.W1)                               | 1.0        | 21.62          | 2.16         | 10.00          | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 North Win (G.W21.E98.W1)                              | 1.0        | 17.69          | 3.54         | 5.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 West Win (G.W21.E99.W1)                               | 1.0        | 63.78          | 2.16         | 29.50          | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 South Win (G.W21.E100.W1)                             | 1.0        | 18.00          | 3.60         | 5.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 West Win (G.W21.E101.W1)                              | 1.0        | 20.54          | 2.16         | 9.50           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |
| L3 North Win (G.W21.E102.W1)                             | 1.0        | 17.69          | 3.54         | 5.00           | 0.00        | 3.12              | 0.00         | 0.00 | 0.384          | 0.000 |

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|  |            | GLASS          | GLASS        | GLASS         | LOCATION OF | ORIGIN<br>SURFACE | FRAME | CURB | FRAME    | CURB  |
|--|------------|----------------|--------------|---------------|-------------|-------------------|-------|------|----------|-------|
| WINDOW   |            | AREA           | HEIGHT       | WIDTH         |             | DINATES           | AR    |      | U-VA     |       |
| NAME   | MULTIPLIER | (SQFT )        | (FT)         | (FT)          | X (FT)      | Y (FT)            | (SQF  |      | (BTU/HR- |       |
|  |            |                |              |               |             |                   |       |      |          |       |
| L3 West Win (G.W21.E103.W1)                          | 1.0        | 21.62          | 2.16         | 10.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L3 West Win (G.W21.E104.W1)                          | 1.0        | 12.97          | 2.16         | 6.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L3 South Win (G.SW22.E105.W1)                        | 1.0        | 91.81          | 3.60         | 25.50         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L3 West Win (G.SW22.E106.W1)                         | 1.0        | 15.13          | 2.16         | 7.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L3 South Win (G.SW22.E107.W1)                        | 1.0        | 27.00          | 3.60         | 7.50          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L3 West Win (G.SW22.E108.W1)                         | 1.0        | 58.37          | 2.16         | 27.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L3 East Win (G.S24.E109.W1)                          | 1.0        | 11.49          | 3.28         | 3.50          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L3 South Win (G.S24.E110.W1)                         | 1.0        | 79.21          | 3.60         | 22.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L3 South Win (G.S24.E111.W1)                         | 1.0        | 162.01         | 3.60         | 45.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 North Win (G.N3.E1.W1)                            | 1.0        | 145.05         | 3.54         | 41.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 East Win (G.N3.E2.W1)                             | 1.0        | 3.28           | 3.28         | 1.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 North Win (G.N4.E3.W1)                            | 1.0        | 35.38          | 3.54         | 10.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 East Win (G.N4.E4.W1)                             | 1.0        | 16.41          | 3.28         | 5.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 North Win (G.N4.E5.W1)                            | 1.0        | 45.99          | 3.54         | 13.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 West Win (G.N4.E6.W1)                             | 1.0        | 10.81          | 2.16         | 5.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 North Win (G.N4.E7.W1)                            | 1.0        | 35.38          | 3.54         | 10.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 East Win (G.N4.E8.W1)                             | 1.0        | 16.41          | 3.28         | 5.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 North Win (G.N4.E9.W1)                            | 1.0        | 45.99          | 3.54         | 13.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 West Win (G.N4.E10.W1)                            | 1.0        | 10.81          | 2.16         | 5.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 North Win (G.N4.E11.W1)                           | 1.0        | 35.38          | 3.54         | 10.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 East Win (G.N4.E12.W1)                            | 1.0        | 16.41          | 3.28         | 5.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 North Win (G.N4.E13.W1)                           | 1.0        | 45.99          | 3.54         | 13.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 West Win (G.N4.E14.W1)                            | 1.0        | 10.81<br>35.38 | 2.16<br>3.54 | 5.00<br>10.00 | 0.00        | 3.12<br>3.12      | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 North Win (G.N4.E15.W1) L4 East Win (G.N4.E16.W1) | 1.0        | 16.41          | 3.28         | 5.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 North Win (G.N4.E16.W1)                           | 1.0        | 45.99          | 3.20         | 13.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 West Win (G.N4.E18.W1)                            | 1.0        | 10.81          | 2.16         | 5.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 South Win (G.E5.E19.W1)                           | 1.0        | 79.21          | 3.60         | 22.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 East Win (G.E5.E20.W1)                            | 1.0        | 111.61         | 3.28         | 34.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 North Win (G.E5.E21.W1)                           | 1.0        | 45.99          | 3.54         | 13.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 East Win (G.E5.E22.W1)                            | 1.0        | 16.41          | 3.28         | 5.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 North Win (G.E5.E23.W1)                           | 1.0        | 45.99          | 3.54         | 13.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 West Win (G.E5.E24.W1)                            | 1.0        | 10.81          | 2.16         | 5.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 North Win (G.W6.E26.W1)                           | 1.0        | 79.60          | 3.54         | 22.50         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 West Win (G.W6.E27.W1)                            | 1.0        | 73.51          | 2.16         | 34.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 West Win (G.W7.E28.W1)                            | 1.0        | 32.43          | 2.16         | 15.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 East Win (G.E8.E29.W1)                            | 1.0        | 55.80          | 3.28         | 17.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 South Win (G.E9.E30.W1)                           | 1.0        | 16.20          | 3.60         | 4.50          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 West Win (G.E9.E31.W1)                            | 1.0        | 4.32           | 2.16         | 2.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 South Win (G.E9.E32.W1)                           | 1.0        | 52.20          | 3.60         | 14.50         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 East Win (G.E9.E33.W1)                            | 1.0        | 128.02         | 3.28         | 39.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 North Win (G.E9.E34.W1)                           | 1.0        | 77.83          | 3.54         | 22.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 West Win (G.S10.E35.W1)                           | 1.0        | 17.30          | 2.16         | 8.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 South Win (G.S10.E36.W1)                          | 1.0        | 7.20           | 3.60         | 2.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 East Win (G.S10.E37.W1)                           | 1.0        | 6.57           | 3.28         | 2.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 South Win (G.S10.E38.W1)                          | 1.0        | 12.60          | 3.60         | 3.50          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 West Win (G.S10.E39.W1)                           | 1.0        | 4.32           | 2.16         | 2.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 South Win (G.S10.E40.W1)                          | 1.0        | 46.80          | 3.60         | 13.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 East Win (G.S10.E41.W1)                           | 1.0        | 6.57           | 3.28         | 2.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 South Win (G.S10.E42.W1)                          | 1.0        | 16.20          | 3.60         | 4.50          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 West Win (G.S10.E43.W1)                           | 1.0        | 4.32           | 2.16         | 2.00          | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |
| L4 South Win (G.S10.E44.W1)                          | 1.0        | 46.80          | 3.60         | 13.00         | 0.00        | 3.12              | 0.00  | 0.00 | 0.384    | 0.000 |

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|   |            | GI NGG          | GT 3 GG         | GT 3 GG        | LOCATION OF |                    | FDAME       | GUID D     | ED ME          | GIID D      |
|---|------------|-----------------|-----------------|----------------|-------------|--------------------|-------------|------------|----------------|-------------|
| WINDOW  |            | GLASS<br>AREA   | GLASS<br>HEIGHT | GLASS<br>WIDTH |             | SURFACE<br>DINATES | FRAME<br>AR | CURB<br>EA | FRAME<br>U-VAI | CURB<br>LUE |
| NAME  | MULTIPLIER | (SQFT )         | (FT)            | (FT)           | X (FT)      | Y (FT)             | (SQF        |            | (BTU/HR-S      |             |
|   |            |                 |                 |                |             |                    |             |            |                |             |
| L4 East Win (G.S10.E45.W1)                                | 1.0        | 6.57            | 3.28            | 2.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 South Win (G.S10.E46.W1)                               | 1.0        | 16.20           | 3.60            | 4.50           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 West Win (G.S10.E47.W1)                                | 1.0        | 4.32            | 2.16            | 2.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 South Win (G.S10.E48.W1)                               | 1.0        | 46.80           | 3.60            | 13.00          | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 East Win (G.S10.E49.W1)                                | 1.0        | 6.57            | 3.28            | 2.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 South Win (G.S10.E50.W1)                               | 1.0        | 16.20           | 3.60            | 4.50           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 West Win (G.S10.E51.W1)                                | 1.0        | 4.32            | 2.16            | 2.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 South Win (G.S10.E52.W1)                               | 1.0        | 45.00           | 3.60            | 12.50          | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 East Win (G.S10.E53.W1)                                | 1.0        | 6.57            | 3.28            | 2.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 South Win (G.S10.E54.W1) L4 West Win (G.S10.E55.W1)    | 1.0        | 16.20<br>4.32   | 2.16            | 4.50           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 South Win (G.S10.E56.W1)                               | 1.0        | 46.80           | 3.60            | 13.00          | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 East Win (G.S10.E50.W1)                                | 1.0        | 6.57            | 3.28            | 2.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 South Win (G.S10.E57.W1)                               | 1.0        | 16.20           | 3.60            | 4.50           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 West Win (G.S10.E59.W1)                                | 1.0        | 4.32            | 2.16            | 2.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 South Win (G.S10.E60.W1)                               | 1.0        | 46.80           | 3.60            | 13.00          | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 East Win (G.S10.E61.W1)                                | 1.0        | 6.57            | 3.28            | 2.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 South Win (G.S10.E62.W1)                               | 1.0        | 16.20           | 3.60            | 4.50           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 West Win (G.S10.E63.W1)                                | 1.0        | 4.32            | 2.16            | 2.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 South Win (G.S10.E64.W1)                               | 1.0        | 45.00           | 3.60            | 12.50          | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 East Win (G.S10.E65.W1)                                | 1.0        | 6.57            | 3.28            | 2.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 North Win (G.E13.E67.W1)                               | 1.0        | 12.38           | 3.54            | 3.50           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 East Win (G.E13.E68.W1)                                | 1.0        | 26.26           | 3.28            | 8.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 East Win (G.E13.E69.W1)                                | 1.0        | 182.18          | 3.28            | 55.50          | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 South Win (G.NW17.E70.W1)                              | 1.0        | 12.60           | 3.60            | 3.50           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 West Win (G.NW17.E71.W1)                               | 1.0        | 15.13           | 2.16            | 7.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 North Win (G.NW17.E72.W1)                              | 1.0        | 24.77           | 3.54            | 7.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 East Win (G.NW17.E73.W1)                               | 1.0        | 16.41           | 3.28            | 5.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 North Win (G.NW17.E74.W1)                              | 1.0        | 67.22           | 3.54            | 19.00          | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 West Win (G.NW17.E75.W1)                               | 1.0        | 65.94           | 2.16            | 30.50          | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 North Win (G.N18.E76.W1)                               | 1.0        | 23.00           | 3.54            | 6.50           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 East Win (G.N18.E77.W1)                                | 1.0        | 16.41           | 3.28            | 5.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 North Win (G.N18.E78.W1)                               | 1.0        | 38.92           | 3.54            | 11.00          | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 West Win (G.N18.E79.W1)                                | 1.0        | 10.81           | 2.16            | 5.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 North Win (G.N18.E80.W1)                               | 1.0        | 23.00           | 3.54            | 6.50           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 East Win (G.N18.E81.W1)                                | 1.0        | 16.41           | 3.28            | 5.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 North Win (G.N18.E82.W1)                               | 1.0        | 37.15           | 3.54            | 10.50          | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 West Win (G.N18.E83.W1)                                | 1.0        | 10.81           | 2.16            | 5.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 North Win (G.N18.E84.W1)                               | 1.0        | 23.00           | 3.54            | 6.50           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 East Win (G.N18.E85.W1)                                | 1.0        | 16.41           | 3.28            | 5.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 North Win (G.N18.E86.W1)                               | 1.0        | 38.92           | 3.54            | 11.00          | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 West Win (G.N18.E87.W1)                                | 1.0        | 10.81           | 2.16            | 5.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 South Win (G.E19.E88.W1)<br>L4 East Win (G.E19.E89.W1) | 1.0        | 84.61<br>106.68 | 3.60<br>3.28    | 23.50          | 0.00        | 3.12<br>3.12       | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 North Win (G.E19.E90.W1)                               | 1.0        | 26.53           | 3.54            | 7.50           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 East Win (G.E19.E90.W1)                                | 1.0        | 16.41           | 3.28            | 5.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 North Win (G.E19.E92.W1)                               | 1.0        | 38.92           | 3.54            | 11.00          | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 West Win (G.E19.E92.W1)                                | 1.0        | 10.81           | 2.16            | 5.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 North Win (G.W21.E94.W1)                               | 1.0        | 17.69           | 3.54            | 5.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 West Win (G.W21.E94.W1)                                | 1.0        | 22.70           | 2.16            | 10.50          | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 South Win (G.W21.E96.W1)                               | 1.0        | 18.00           | 3.60            | 5.00           | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
| L4 West Win (G.W21.E97.W1)                                | 1.0        | 21.62           | 2.16            | 10.00          | 0.00        | 3.12               | 0.00        | 0.00       | 0.384          | 0.000       |
|   |            |                 |                 |                |             |                    |             |            |                |             |

REPORT- LV-H Details of Windows

WEATHER FILE- SEATTLE BOEING FI WA -----(CONTINUED)------

|  |               |                |              |                | LOCATION OF |              |       |      |          |          |
|--|---------------|----------------|--------------|----------------|-------------|--------------|-------|------|----------|----------|
|  |               | GLASS          | GLASS        | GLASS          |             | SURFACE      | FRAME | CURB | FRAME    | CURB     |
| WINDOW   | MIII MEDI EDD | AREA           |              | WIDTH          |             | DINATES      | AR    |      | U-VA     |          |
| NAME   | MULTIPLIER    | (SQFT )        | (FT)         | (FT)           | X (FT)      | Y (FT)       | (SQF  | T )  | (BTU/HR- | SQF:I-F) |
| L4 North Win (G.W21.E98.W1)                            | 1.0           | 17.69          | 3.54         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L4 West Win (G.W21.E99.W1)                             | 1.0           | 63.78          | 2.16         | 29.50          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L4 South Win (G.W21.E100.W1)                           | 1.0           | 18.00          | 3.60         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L4 West Win (G.W21.E101.W1)                            | 1.0           | 20.54          | 2.16         | 9.50           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L4 North Win (G.W21.E102.W1)                           | 1.0           | 17.69          | 3.54         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L4 West Win (G.W21.E103.W1)                            | 1.0           | 21.62          | 2.16         | 10.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L4 West Win (G.W21.E104.W1)                            | 1.0           | 12.97          | 2.16         | 6.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L4 South Win (G.SW22.E105.W1)                          | 1.0           | 91.81          | 3.60         | 25.50          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L4 West Win (G.SW22.E106.W1)                           | 1.0           | 15.13          | 2.16         | 7.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L4 South Win (G.SW22.E107.W1)                          | 1.0           | 27.00          | 3.60         | 7.50           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L4 West Win (G.SW22.E108.W1)                           | 1.0           | 58.37          | 2.16         | 27.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L4 East Win (G.S24.E109.W1)                            | 1.0           | 11.49          | 3.28         | 3.50           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L4 South Win (G.S24.E110.W1)                           | 1.0           | 79.21          | 3.60         | 22.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L4 South Win (G.S24.E111.W1)                           | 1.0           | 162.01         | 3.60         | 45.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 North Win (G.N3.E1.W1)                              | 1.0           | 145.05         | 3.54         | 41.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 East Win (G.N3.E2.W1)                               | 1.0           | 3.28           | 3.28         | 1.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 North Win (G.N4.E3.W1)                              | 1.0           | 35.38          | 3.54         | 10.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 East Win (G.N4.E4.W1)                               | 1.0           | 16.41          | 3.28         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 North Win (G.N4.E5.W1)                              | 1.0           | 45.99          | 3.54         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 West Win (G.N4.E6.W1)                               | 1.0           | 10.81          | 2.16         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 North Win (G.N4.E7.W1)                              | 1.0           | 35.38          | 3.54         | 10.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 East Win (G.N4.E8.W1)                               | 1.0           | 16.41          | 3.28         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 North Win (G.N4.E9.W1)                              | 1.0           | 45.99          | 3.54         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 West Win (G.N4.E10.W1)                              | 1.0           | 10.81          | 2.16         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 North Win (G.N4.E11.W1)                             | 1.0           | 35.38          | 3.54         | 10.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 East Win (G.N4.E12.W1)                              | 1.0           | 16.41          | 3.28         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 North Win (G.N4.E13.W1)                             | 1.0           | 45.99          | 3.54         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 West Win (G.N4.E14.W1)                              | 1.0           | 10.81          | 2.16         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 North Win (G.N4.E15.W1)                             | 1.0           | 35.38          | 3.54         | 10.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 East Win (G.N4.E16.W1)                              | 1.0           | 16.41          | 3.28         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 North Win (G.N4.E17.W1)                             | 1.0           | 45.99          | 3.54         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 West Win (G.N4.E18.W1)                              | 1.0           | 10.81          | 2.16         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 South Win (G.E5.E19.W1)                             | 1.0           | 79.21          | 3.60         | 22.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 East Win (G.E5.E20.W1)                              | 1.0           | 111.61         | 3.28         | 34.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 North Win (G.E5.E21.W1)                             | 1.0           | 45.99          | 3.54         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 East Win (G.E5.E22.W1)                              | 1.0           | 16.41          | 3.28         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 North Win (G.E5.E23.W1)                             | 1.0           | 45.99          | 3.54         | 13.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 West Win (G.E5.E24.W1)                              | 1.0           | 10.81          | 2.16         | 5.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 North Win (G.W6.E26.W1)                             | 1.0           | 79.60          | 3.54         | 22.50          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 West Win (G.W6.E27.W1)                              | 1.0           | 73.51          | 2.16         | 34.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 West Win (G.W7.E28.W1)                              | 1.0           | 32.43          | 2.16         | 15.00          | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 East Win (G.E8.E29.W1) L5 South Win (G.E9.E30.W1)   | 1.0           | 55.80          | 3.28         | 17.00<br>4.50  | 0.00        | 3.12<br>3.12 | 0.00  | 0.00 | 0.384    | 0.000    |
|  | 1.0           | 16.20          | 3.60         |                | 0.00        |              | 0.00  |      | 0.384    |          |
| L5 West Win (G.E9.E31.W1)                              | 1.0           | 4.32           | 2.16         | 2.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 South Win (G.E9.E32.W1) L5 East Win (G.E9.E33.W1)   | 1.0           | 52.20          | 3.60<br>3.28 | 14.50<br>39.00 | 0.00        | 3.12<br>3.12 | 0.00  | 0.00 | 0.384    | 0.000    |
|  | 1.0           | 128.02         | 3.28         | 22.00          | 0.00        |              | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 North Win (G.E9.E34.W1) L5 West Win (G.S10.E35.W1)  | 1.0           | 77.83<br>17.30 | 2.16         | 8.00           | 0.00        | 3.12<br>3.12 | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 West Win (G.SIU.E35.WI) L5 South Win (G.SIU.E36.WI) | 1.0           | 7.20           | 3.60         | 2.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 East Win (G.S10.E37.W1)                             | 1.0           | 6.57           | 3.28         | 2.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 East Win (G.S10.E37.W1) L5 South Win (G.S10.E38.W1) | 1.0           | 12.60          | 3.60         | 3.50           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| L5 West Win (G.S10.E30.W1)                             | 1.0           | 4.32           | 2.16         | 2.00           | 0.00        | 3.12         | 0.00  | 0.00 | 0.384    | 0.000    |
| 23 #CDC #III (0.DIU.E37.WI)                            | 1.0           | 7.52           | 2.10         | 2.00           | 0.00        | J.12         | 0.00  | 0.00 | 0.304    | 0.000    |

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|   |            | GI NGG          | GT 3 GG         | GLASS         | LOCATION OF | ORIGIN<br>SURFACE | FDAME       | GUID D | ED ME          | GIID D |
|---|------------|-----------------|-----------------|---------------|-------------|-------------------|-------------|--------|----------------|--------|
| WINDOW  |            | GLASS<br>AREA   | GLASS<br>HEIGHT | WIDTH         |             | DINATES           | FRAME<br>AR | CURB   | FRAME<br>U-VAI | CURB   |
| NAME  | MULTIPLIER | (SQFT )         | (FT)            | (FT)          | X (FT)      | Y (FT)            | (SQF        |        | (BTU/HR-S      |        |
|   |            |                 | , ,             | . ,           | , ,         | , ,               |             | •      |                | ~ /    |
| L5 South Win (G.S10.E40.W1)                             | 1.0        | 46.80           | 3.60            | 13.00         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 East Win (G.S10.E41.W1)                              | 1.0        | 6.57            | 3.28            | 2.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 South Win (G.S10.E42.W1)                             | 1.0        | 16.20           | 3.60            | 4.50          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 West Win (G.S10.E43.W1)                              | 1.0        | 4.32            | 2.16            | 2.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 South Win (G.S10.E44.W1)                             | 1.0        | 46.80           | 3.60            | 13.00         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 East Win (G.S10.E45.W1)                              | 1.0        | 6.57            | 3.28            | 2.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 South Win (G.S10.E46.W1)                             | 1.0        | 16.20           | 3.60            | 4.50          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 West Win (G.S10.E47.W1)                              | 1.0        | 4.32            | 2.16            | 2.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 South Win (G.S10.E48.W1)                             | 1.0        | 46.80           | 3.60            | 13.00         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 East Win (G.S10.E49.W1)                              | 1.0        | 6.57            | 3.28            | 2.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 South Win (G.S10.E50.W1)                             | 1.0        | 16.20           | 3.60            | 4.50          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 West Win (G.S10.E51.W1)                              | 1.0        | 4.32            | 2.16            | 2.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 South Win (G.S10.E52.W1)                             | 1.0        | 45.00           | 3.60            | 12.50         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 East Win (G.S10.E53.W1)                              | 1.0        | 6.57            | 3.28            | 2.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 South Win (G.S10.E54.W1)                             | 1.0        | 16.20           | 3.60            | 4.50          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 West Win (G.S10.E55.W1)                              | 1.0        | 4.32            | 2.16            | 2.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 South Win (G.S10.E56.W1)                             | 1.0        | 46.80           | 3.60            | 13.00         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 East Win (G.S10.E57.W1)                              | 1.0        | 6.57            | 3.28            | 2.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 South Win (G.S10.E58.W1)                             | 1.0        | 16.20           | 3.60            | 4.50          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 West Win (G.S10.E59.W1)                              | 1.0        | 4.32            | 2.16            | 2.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 South Win (G.S10.E60.W1)                             | 1.0        | 46.80           | 3.60            | 13.00         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 East Win (G.S10.E61.W1)                              | 1.0        | 6.57            | 3.28            | 2.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 South Win (G.S10.E62.W1)                             | 1.0        | 16.20           | 3.60            | 4.50          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 West Win (G.S10.E63.W1)                              | 1.0        | 4.32            | 2.16            | 2.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 South Win (G.S10.E64.W1)                             | 1.0        | 45.00           | 3.60            | 12.50         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 East Win (G.S10.E65.W1)                              | 1.0        | 6.57            | 3.28            | 2.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 North Win (G.E13.E67.W1)                             | 1.0        | 12.38<br>26.26  | 3.54            | 3.50<br>8.00  | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 East Win (G.E13.E68.W1)                              | 1.0        |                 |                 |               | 0.00        | 3.12              | 0.00        |        |                |        |
| L5 East Win (G.E13.E69.W1) L5 South Win (G.NW17.E70.W1) | 1.0<br>1.0 | 182.18<br>12.60 | 3.28<br>3.60    | 55.50<br>3.50 | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 West Win (G.NW17.E70.W1)                             | 1.0        | 15.13           | 2.16            | 7.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 North Win (G.NW17.E71.W1)                            | 1.0        | 24.77           | 3.54            | 7.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 East Win (G.NW17.E73.W1)                             | 1.0        | 16.41           | 3.28            | 5.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 North Win (G.NW17.E73.W1)                            | 1.0        | 67.22           | 3.54            | 19.00         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 West Win (G.NW17.E75.W1)                             | 1.0        | 65.94           | 2.16            | 30.50         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 North Win (G.N18.E76.W1)                             | 1.0        | 23.00           | 3.54            | 6.50          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 East Win (G.N18.E77.W1)                              | 1.0        | 16.41           | 3.28            | 5.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 North Win (G.N18.E78.W1)                             | 1.0        | 38.92           | 3.54            | 11.00         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 West Win (G.N18.E79.W1)                              | 1.0        | 10.81           | 2.16            | 5.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 North Win (G.N18.E80.W1)                             | 1.0        | 23.00           | 3.54            | 6.50          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 East Win (G.N18.E81.W1)                              | 1.0        | 16.41           | 3.28            | 5.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 North Win (G.N18.E82.W1)                             | 1.0        | 37.15           | 3.54            | 10.50         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 West Win (G.N18.E83.W1)                              | 1.0        | 10.81           | 2.16            | 5.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 North Win (G.N18.E84.W1)                             | 1.0        | 23.00           | 3.54            | 6.50          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 East Win (G.N18.E85.W1)                              | 1.0        | 16.41           | 3.28            | 5.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 North Win (G.N18.E86.W1)                             | 1.0        | 38.92           | 3.54            | 11.00         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 West Win (G.N18.E87.W1)                              | 1.0        | 10.81           | 2.16            | 5.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 South Win (G.E19.E88.W1)                             | 1.0        | 84.61           | 3.60            | 23.50         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 East Win (G.E19.E89.W1)                              | 1.0        | 106.68          | 3.28            | 32.50         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 North Win (G.E19.E90.W1)                             | 1.0        | 26.53           | 3.54            | 7.50          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 East Win (G.E19.E91.W1)                              | 1.0        | 16.41           | 3.28            | 5.00          | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
| L5 North Win (G.E19.E92.W1)                             | 1.0        | 38.92           | 3.54            | 11.00         | 0.00        | 3.12              | 0.00        | 0.00   | 0.384          | 0.000  |
|   |            |                 |                 |               |             |                   |             |        |                |        |

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|   |            |                |              |               | LOCATION OF | ORIGIN  |       |      |           |         |
|---|------------|----------------|--------------|---------------|-------------|---------|-------|------|-----------|---------|
|   |            | GLASS          | GLASS        | GLASS         |             | SURFACE | FRAME | CURB | FRAME     | CURB    |
| WINDOW  |            | AREA           | HEIGHT       | WIDTH         | COOR        | DINATES | ARE   | A    | U-VAI     | LUE     |
| NAME  | MULTIPLIER | (SQFT )        | (FT)         | (FT)          | X (FT)      | Y (FT)  | (SQFT | ')   | (BTU/HR-S | SQFT-F) |
| L5 West Win (G.E19.E93.W1)                                    | 1.0        | 10.81          | 2.16         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 North Win (G.W21.E94.W1)                                   | 1.0        | 17.69          | 3.54         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 West Win (G.W21.E95.W1)                                    | 1.0        | 22.70          | 2.16         | 10.50         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 South Win (G.W21.E96.W1)                                   | 1.0        | 18.00          | 3.60         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 West Win (G.W21.E97.W1)                                    | 1.0        | 21.62          | 2.16         | 10.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 North Win (G.W21.E98.W1)                                   | 1.0        | 17.69          | 3.54         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 West Win (G.W21.E99.W1)                                    | 1.0        | 63.78          | 2.16         | 29.50         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 South Win (G.W21.E100.W1)                                  | 1.0        | 18.00          | 3.60         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 West Win (G.W21.E101.W1)                                   | 1.0        | 20.54          | 2.16         | 9.50          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 North Win (G.W21.E102.W1)                                  | 1.0        | 17.69          | 3.54         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 West Win (G.W21.E103.W1)                                   | 1.0        | 21.62          | 2.16         | 10.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 West Win (G.W21.E104.W1)                                   | 1.0        | 12.97          | 2.16         | 6.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 South Win (G.SW22.E105.W1)                                 | 1.0        | 91.81          | 3.60         | 25.50         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 West Win (G.SW22.E106.W1) L5 South Win (G.SW22.E107.W1)    | 1.0        | 15.13          | 2.16<br>3.60 | 7.00<br>7.50  | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 South Win (G.SW22.E107.W1)<br>L5 West Win (G.SW22.E108.W1) | 1.0        | 27.00<br>58.37 | 2.16         | 27.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 East Win (G.S24.E109.W1)                                   | 1.0        | 11.49          | 3.28         | 3.50          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 South Win (G.S24.E105.W1)                                  | 1.0        | 79.21          | 3.60         | 22.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L5 South Win (G.S24.E110.W1)                                  | 1.0        | 162.01         | 3.60         | 45.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 North Win (G.N3.E1.W1)                                     | 1.0        | 145.05         | 3.54         | 41.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 East Win (G.N3.E2.W1)                                      | 1.0        | 3.28           | 3.28         | 1.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 North Win (G.N4.E3.W1)                                     | 1.0        | 35.38          | 3.54         | 10.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 East Win (G.N4.E4.W1)                                      | 1.0        | 16.41          | 3.28         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 North Win (G.N4.E5.W1)                                     | 1.0        | 45.99          | 3.54         | 13.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 West Win (G.N4.E6.W1)                                      | 1.0        | 10.81          | 2.16         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 North Win (G.N4.E7.W1)                                     | 1.0        | 35.38          | 3.54         | 10.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 East Win (G.N4.E8.W1)                                      | 1.0        | 16.41          | 3.28         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 North Win (G.N4.E9.W1)                                     | 1.0        | 45.99          | 3.54         | 13.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 West Win (G.N4.E10.W1)                                     | 1.0        | 10.81          | 2.16         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 North Win (G.N4.E11.W1)                                    | 1.0        | 35.38          | 3.54         | 10.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 East Win (G.N4.E12.W1)                                     | 1.0        | 16.41          | 3.28         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 North Win (G.N4.E13.W1)                                    | 1.0        | 45.99          | 3.54         | 13.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 West Win (G.N4.E14.W1)                                     | 1.0        | 10.81          | 2.16         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 North Win (G.N4.E15.W1)                                    | 1.0        | 35.38          | 3.54         | 10.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 East Win (G.N4.E16.W1)                                     | 1.0        | 16.41          | 3.28         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 North Win (G.N4.E17.W1)                                    | 1.0        | 45.99          | 3.54         | 13.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 West Win (G.N4.E18.W1)                                     | 1.0        | 10.81          | 2.16         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 South Win (G.E5.E19.W1)                                    | 1.0        | 79.21          | 3.60         | 22.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 East Win (G.E5.E20.W1)                                     | 1.0        | 111.61         | 3.28         | 34.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 North Win (G.E5.E21.W1)                                    | 1.0        | 45.99          | 3.54         | 13.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 East Win (G.E5.E22.W1)                                     | 1.0        | 16.41          | 3.28         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 North Win (G.E5.E23.W1)                                    | 1.0        | 45.99          | 3.54         | 13.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 West Win (G.E5.E24.W1)                                     | 1.0        | 10.81          | 2.16         | 5.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 North Win (G.W6.E26.W1)                                    | 1.0        | 79.60          | 3.54         | 22.50         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 West Win (G.W6.E27.W1)                                     | 1.0        | 73.51          | 2.16         | 34.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 West Win (G.W7.E28.W1)                                     | 1.0        | 32.43          | 2.16         | 15.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 East Win (G.E8.E29.W1) L6 South Win (G.E9.E30.W1)          | 1.0        | 55.80<br>16.20 | 3.28         | 17.00<br>4.50 | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 South Win (G.E9.E30.W1) L6 West Win (G.E9.E31.W1)          | 1.0        | 4.32           | 2.16         | 2.00          | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 South Win (G.E9.E31.W1)                                    | 1.0        | 52.20          | 3.60         | 14.50         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 East Win (G.E9.E32.W1)                                     | 1.0        | 128.02         | 3.28         | 39.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| L6 North Win (G.E9.E34.W1)                                    | 1.0        | 77.83          | 3.54         | 22.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.384     | 0.000   |
| Lo Hoteli Will (G.EJ.EJT.WI)                                  | 1.0        | 11.03          | 3.34         | 22.00         | 0.00        | 3.12    | 0.00  | 0.00 | 0.504     | 0.000   |

-----(CONTINUED)------

|  |            | GLASS         | GLASS        | GLASS        | LOCATION OF | ORIGIN<br>SURFACE | FRAME        | CURB | FRAME     | CURB  |
|--|------------|---------------|--------------|--------------|-------------|-------------------|--------------|------|-----------|-------|
| WINDOW   |            | AREA          | HEIGHT       | WIDTH        |             | DINATES           | F KAME<br>AR |      | U-VAI     |       |
| NAME   | MULTIPLIER | (SQFT )       | (FT)         | (FT)         | X (FT)      | Y (FT)            | (SQF         |      | (BTU/HR-S |       |
|  |            |               |              |              |             |                   |              |      |           | -     |
| L6 West Win (G.S10.E35.W1)                             | 1.0        | 17.30         | 2.16         | 8.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E36.W1)                            | 1.0        | 7.20          | 3.60         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 East Win (G.S10.E37.W1)                             | 1.0        | 6.57          | 3.28         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E38.W1)                            | 1.0        | 12.60         | 3.60         | 3.50         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 West Win (G.S10.E39.W1)                             | 1.0        | 4.32          | 2.16         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E40.W1)                            | 1.0        | 46.80         | 3.60         | 13.00        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 East Win (G.S10.E41.W1)                             | 1.0        | 6.57          | 3.28         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E42.W1)                            | 1.0        | 16.20         | 3.60         | 4.50         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 West Win (G.S10.E43.W1)                             | 1.0        | 4.32          | 2.16         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E44.W1)                            | 1.0        | 46.80         | 3.60         | 13.00        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 East Win (G.S10.E45.W1)                             | 1.0        | 6.57          | 3.28         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E46.W1)                            | 1.0        | 16.20         | 3.60         | 4.50         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 West Win (G.S10.E47.W1)                             | 1.0        | 4.32          | 2.16         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E48.W1)                            | 1.0        | 46.80         | 3.60         | 13.00        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 East Win (G.S10.E49.W1)                             | 1.0        | 6.57          | 3.28         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E50.W1)                            | 1.0        | 16.20         | 3.60         | 4.50         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 West Win (G.S10.E51.W1)                             | 1.0        | 4.32          | 2.16         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E52.W1)                            | 1.0        | 45.00         | 3.60         | 12.50        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 East Win (G.S10.E53.W1)                             | 1.0        | 6.57          | 3.28         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E54.W1)                            | 1.0        | 16.20         | 3.60         | 4.50         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 West Win (G.S10.E55.W1)                             | 1.0        | 4.32          | 2.16         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E56.W1)                            | 1.0        | 46.80         | 3.60         | 13.00        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 East Win (G.S10.E57.W1) L6 South Win (G.S10.E58.W1) | 1.0        | 6.57<br>16.20 | 3.28<br>3.60 | 2.00<br>4.50 | 0.00        | 3.12<br>3.12      | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E58.W1) L6 West Win (G.S10.E59.W1) | 1.0        | 4.32          | 2.16         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E59.W1)                            | 1.0        | 46.80         | 3.60         | 13.00        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 East Win (G.S10.E60.W1)                             | 1.0        | 6.57          | 3.28         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E62.W1)                            | 1.0        | 16.20         | 3.60         | 4.50         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 West Win (G.S10.E63.W1)                             | 1.0        | 4.32          | 2.16         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S10.E64.W1)                            | 1.0        | 45.00         | 3.60         | 12.50        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 East Win (G.S10.E65.W1)                             | 1.0        | 6.57          | 3.28         | 2.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 North Win (G.E13.E67.W1)                            | 1.0        | 12.38         | 3.54         | 3.50         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 East Win (G.E13.E68.W1)                             | 1.0        | 26.26         | 3.28         | 8.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 East Win (G.E13.E69.W1)                             | 1.0        | 182.18        | 3.28         | 55.50        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 West Win (G.NW17.E70.W1)                            | 1.0        | 70.26         | 2.16         | 32.50        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 North Win (G.NW17.E71.W1)                           | 1.0        | 79.60         | 3.54         | 22.50        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 North Win (G.N18.E72.W1)                            | 1.0        | 183.97        | 3.54         | 52.00        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.E19.E73.W1)                            | 1.0        | 84.61         | 3.60         | 23.50        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 East Win (G.E19.E74.W1)                             | 1.0        | 106.68        | 3.28         | 32.50        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 North Win (G.E19.E75.W1)                            | 1.0        | 65.45         | 3.54         | 18.50        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 North Win (G.W21.E76.W1)                            | 1.0        | 17.69         | 3.54         | 5.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 West Win (G.W21.E77.W1)                             | 1.0        | 22.70         | 2.16         | 10.50        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.W21.E78.W1)                            | 1.0        | 18.00         | 3.60         | 5.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 West Win (G.W21.E79.W1)                             | 1.0        | 21.62         | 2.16         | 10.00        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 North Win (G.W21.E80.W1)                            | 1.0        | 17.69         | 3.54         | 5.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 West Win (G.W21.E81.W1)                             | 1.0        | 63.78         | 2.16         | 29.50        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.W21.E82.W1)                            | 1.0        | 18.00         | 3.60         | 5.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 West Win (G.W21.E83.W1)                             | 1.0        | 20.54         | 2.16         | 9.50         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 North Win (G.W21.E84.W1)                            | 1.0        | 17.69         | 3.54         | 5.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 West Win (G.W21.E85.W1)                             | 1.0        | 21.62         | 2.16         | 10.00        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 West Win (G.W21.E86.W1)                             | 1.0        | 12.97         | 2.16         | 6.00         | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.SW22.E87.W1)                           | 1.0        | 91.81         | 3.60         | 25.50        | 0.00        | 3.12              | 0.00         | 0.00 | 0.384     | 0.000 |

REPORT- LV-H Details of Windows

WEATHER FILE- SEATTLE BOEING FI WA -----(CONTINUED)------

|  |            | GLASS         | GLASS  | GLASS | LOCATION OF | ORIGIN<br>SURFACE | FRAME | CURB | FRAME     | CURB  |
|--|------------|---------------|--------|-------|-------------|-------------------|-------|------|-----------|-------|
| WINDOW   |            | AREA          | HEIGHT | WIDTH |             | DINATES           | AR    |      | U-VAI     |       |
| NAME   | MULTIPLIER | (SQFT )       | (FT)   | (FT)  | X (FT)      | Y (FT)            | (SQF  |      | (BTU/HR-S |       |
|  |            |               |        |       |             |                   |       |      |           |       |
| L6 West Win (G.SW22.E88.W1)                                | 1.0        | 15.13         | 2.16   | 7.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.SW22.E89.W1)                               | 1.0        | 27.00         | 3.60   | 7.50  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L6 West Win (G.SW22.E90.W1)                                | 1.0        | 58.37         | 2.16   | 27.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L6 East Win (G.S24.E91.W1)                                 | 1.0        | 11.49         | 3.28   | 3.50  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S24.E92.W1)                                | 1.0        | 79.21         | 3.60   | 22.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L6 South Win (G.S24.E93.W1)                                | 1.0        | 162.01        | 3.60   | 45.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.N3.E1.W1)                                  | 1.0        | 79.21         | 3.60   | 22.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 North Win (G.N3.E2.W1)                                  | 1.0        | 145.05        | 3.54   | 41.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 East Win (G.N3.E3.W1)                                   | 1.0        | 3.28          | 3.28   | 1.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 North Win (G.N4.E4.W1)                                  | 1.0        | 325.49        | 3.54   | 92.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.E5.E5.W1)                                  | 1.0        | 79.21         | 3.60   | 22.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 East Win (G.E5.E6.W1)                                   | 1.0        | 111.61        | 3.28   | 34.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 North Win (G.E5.E7.W1)                                  | 1.0        | 91.99         | 3.54   | 26.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 North Win (G.W6.E9.W1)                                  | 1.0        | 79.60         | 3.54   | 22.50 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 West Win (G.W6.E10.W1)                                  | 1.0        | 73.51         | 2.16   | 34.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 West Win (G.W7.E11.W1)                                  | 1.0        | 32.43         | 2.16   | 15.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 East Win (G.E8.E12.W1)                                  | 1.0        | 55.80         | 3.28   | 17.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.E9.E13.W1)                                 | 1.0        | 16.20         | 3.60   | 4.50  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 West Win (G.E9.E14.W1)                                  | 1.0        | 4.32          | 2.16   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.E9.E15.W1)                                 | 1.0        | 52.20         | 3.60   | 14.50 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 East Win (G.E9.E16.W1)                                  | 1.0        | 128.02        | 3.28   | 39.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 North Win (G.E9.E17.W1)                                 | 1.0        | 77.83         | 3.54   | 22.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.SSW10.E18.W1)                              | 1.0        | 7.20          | 3.60   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 East Win (G.SSW10.E19.W1)                               | 1.0        | 6.57<br>12.60 | 3.28   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.SSW10.E20.W1) L7 West Win (G.SSW10.E21.W1) | 1.0        | 4.32          | 2.16   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 West Win (G.SSWIU.E2I.WI) L7 South Win (G.SSWIU.E22.WI) | 1.0        | 46.80         | 3.60   | 13.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 East Win (G.SSW10.E22.W1)                               | 1.0        | 6.57          | 3.28   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.SSW10.E23.W1)                              | 1.0        | 16.20         | 3.60   | 4.50  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 West Win (G.SSW10.E24.W1)                               | 1.0        | 4.32          | 2.16   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.SSW10.E25.W1)                              | 1.0        | 46.80         | 3.60   | 13.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 East Win (G.SSW10.E20.W1)                               | 1.0        | 6.57          | 3.28   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.SSW10.E28.W1)                              | 1.0        | 16.20         | 3.60   | 4.50  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 West Win (G.SSW10.E29.W1)                               | 1.0        | 4.32          | 2.16   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.SSW10.E30.W1)                              | 1.0        | 46.80         | 3.60   | 13.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 East Win (G.SSW10.E31.W1)                               | 1.0        | 6.57          | 3.28   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.SSW10.E32.W1)                              | 1.0        | 16.20         | 3.60   | 4.50  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 West Win (G.SSW10.E33.W1)                               | 1.0        | 4.32          | 2.16   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.SSW10.E34.W1)                              | 1.0        | 45.00         | 3.60   | 12.50 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 East Win (G.SSW10.E35.W1)                               | 1.0        | 6.57          | 3.28   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.SSW10.E36.W1)                              | 1.0        | 16.20         | 3.60   | 4.50  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 West Win (G.SSW10.E37.W1)                               | 1.0        | 4.32          | 2.16   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.SSW10.E38.W1)                              | 1.0        | 46.80         | 3.60   | 13.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 East Win (G.SSW10.E39.W1)                               | 1.0        | 6.57          | 3.28   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.SSW10.E40.W1)                              | 1.0        | 16.20         | 3.60   | 4.50  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 West Win (G.SSW10.E41.W1)                               | 1.0        | 4.32          | 2.16   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.SSW10.E42.W1)                              | 1.0        | 46.80         | 3.60   | 13.00 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 East Win (G.SSW10.E43.W1)                               | 1.0        | 6.57          | 3.28   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.SSW10.E44.W1)                              | 1.0        | 16.20         | 3.60   | 4.50  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 West Win (G.SSW10.E45.W1)                               | 1.0        | 4.32          | 2.16   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 South Win (G.SSW10.E46.W1)                              | 1.0        | 45.00         | 3.60   | 12.50 | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |
| L7 East Win (G.SSW10.E47.W1)                               | 1.0        | 6.57          | 3.28   | 2.00  | 0.00        | 3.12              | 0.00  | 0.00 | 0.384     | 0.000 |

-----(CONTINUED)------

(Note: u-values include outside air film)

|   |  |  |              |   | LOCATION OF O  | RIGIN |   |   |  |             |
|---|--|--|--------------|---|--|-------|---|---|--|-------------|
|   |  | GLASS  | GLASS        | GLASS   | IN SU  | RFACE | FRAME   | CURB  | FRAME  | CURB        |
| WINDOW  |  | AREA   | HEIGHT       | WIDTH   | COORDI   | NATES | AR  | EA  | U-VAI  | LUE         |
| NAME  | MULTIPLIER   | (SQFT )  | (FT)         | (FT)  | X (FT) Y   | (FT)  | (SQF  | Τ)  | (BTU/HR-S  | SQFT-F)     |
| L7 West Win (G.SSW10.E48.W1)  | 1.0  | 71.35  | 2.16         | 33.00   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L7 East Win (G.E13.E50.W1)  | 1.0  | 93.55  | 3.28         | 28.50   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L7 West Win (G.W18.E51.W1)  | 1.0  | 77.83  | 2.16         | 36.00   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L7 South Win (G.SW19.E52.W1)  | 1.0  | 91.81  | 3.60         | 25.50   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L7 West Win (G.SW19.E53.W1)   | 1.0  | 73.51  | 2.16         | 34.00   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L7 North Win (G.C20.E54.W1)   | 1.0  | 40.69  | 3.54         | 11.50   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L7 West Win (G.NW21.E55.W1)   | 1.0  | 222.83   | 7.07         | 31.50   | 0.00   | 1.00  | 0.00  | 0.00  | 0.384  | 0.000       |
| L7 North Win (G.NW21.E56.W1)  | 1.0  | 194.53   | 7.07         | 27.50   | 0.00   | 1.00  | 0.00  | 0.00  | 0.384  | 0.000       |
| L7 North Win (G.NE22.E57.W1)  | 1.0  | 222.83   | 7.07         | 31.50   | 0.00   | 1.00  | 0.00  | 0.00  | 0.384  | 0.000       |
| L7 East Win (G.NE22.E58.W1)   | 1.0  | 191.00   | 7.07         | 27.00   | 0.00   | 1.00  | 0.00  | 0.00  | 0.384  | 0.000       |
| L7 East Win (G.SSE23.E59.W1)  | 1.0  | 93.55  | 3.28         | 28.50   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L7 South Win (G.SSE23.E60.W1)   | 1.0  | 162.01   | 3.60         | 45.00   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L8 East Win (G.E3.E4.W1)  | 1.0  | 93.55  | 3.28         | 28.50   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L8 West Win (G.W8.E10.W1)   | 1.0  | 77.83  | 2.16         | 36.00   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L8 South Win (G.SW9.E12.W1)   | 1.0  | 81.01  | 3.60         | 22.50   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L8 West Win (G.SW9.E13.W1)  | 1.0  | 63.78  | 2.16         | 29.50   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L8 East Win (G.C10.E15.W1)  | 1.0  | 29.54  | 3.28         | 9.00  | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L8 West Win (G.NW11.E17.W1)   | 1.0  | 69.18  | 2.16         | 32.00   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L8 North Win (G.NW11.E18.W1)  | 1.0  | 116.75   | 3.54         | 33.00   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L8 North Win (G.NE12.E20.W1)  | 1.0  | 122.06   | 3.54         | 34.50   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L8 East Win (G.NE12.E21.W1)   | 1.0  | 90.27  | 3.28         | 27.50   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L8 South Win (G.S13.E23.W1)   | 1.0  | 81.01  | 3.60         | 22.50   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L8 South Win (G.SE14.E25.W1)  | 1.0  | 81.01  | 3.60<br>3.28 | 22.50   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
| L8 East Win (G.SE14.E26.W1)   | 1.0  | 78.78  | 3.28         | 24.00   | 0.00   | 3.12  | 0.00  | 0.00  | 0.384  | 0.000       |
|   |  | GT 3.GG  | MIMPE        | D.  | GENTED OF  |       | 37.300  | QT 3 QQ   | GUDDA G  |             |
| MINDOM  | CEMP V OK  | GLASS  | NUMBE        |   | CENTER-OF-   |       | GLASS   | GLASS<br>SOLAR  | SURFACI<br>ROUGH (   |             |
| WINDOW<br>NAME  | SETBACK  | SHADING  |              | r   | GLASS U-VALUE  |       | SIBLE   |   |  | JPEN        |
| IMPIL   | (ET)   | COFFF  |              | c /   | (PTII/UD_COPT_F)   |       | סוא ג סיו   |   |  | \TTO        |
|   | (FT)   | COEFF  | PANE         | S (   | (BTU/HR-SQFT-F)  |       | TRANS   | TRANS   | AREA RA  | OITA        |
| Window 593  | 0.00   | 0.46   | PANE         | 1   | 0.400  |       | 0.600   | TRANS<br>0.878  | 1.000  | )           |
| Window 592  | 0.00   | 0.46<br>0.46   | PANE         | 1   | 0.400  |       | 0.600<br>0.600  | TRANS<br>0.878<br>0.878   | 1.000<br>1.000   | )           |
| Window 592<br>Window 591  | 0.00<br>0.00<br>0.00   | 0.46<br>0.46<br>0.46   | PANE         | 1<br>1<br>1   | 0.400<br>0.400<br>0.400  |       | 0.600<br>0.600<br>0.600   | TRANS 0.878 0.878 0.878   | 1.000<br>1.000<br>1.000  | )           |
| Window 592<br>Window 591<br>Ll North Win (G.C4.E3.W1)   | 0.00<br>0.00<br>0.00<br>0.00   | 0.46<br>0.46<br>0.46<br>0.46   | PANE         | 1<br>1<br>1   | 0.400<br>0.400<br>0.400<br>0.400   |       | 0.600<br>0.600<br>0.600   | TRANS 0.878 0.878 0.878 0.878   | 1.000<br>1.000<br>1.000<br>1.000   | )<br>)<br>) |
| Window 592<br>Window 591<br>L1 North Win (G.C4.E3.W1)<br>L1 North Win (G.N5.E4.W1)  | 0.00<br>0.00<br>0.00<br>0.00<br>0.00   | 0.46<br>0.46<br>0.46<br>0.46   | PANE         | 1<br>1<br>1<br>1  | 0.400<br>0.400<br>0.400<br>0.400<br>0.400  |       | 0.600<br>0.600<br>0.600<br>0.600  | TRANS 0.878 0.878 0.878 0.878   | 1.000<br>1.000<br>1.000<br>1.000   |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.N5.E4.W1) L1 South Win (G.E6.E5.W1)   | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00   | 0.46<br>0.46<br>0.46<br>0.46<br>0.46   | PANE         | 1<br>1<br>1<br>1<br>1   | 0.400<br>0.400<br>0.400<br>0.400<br>0.400  | :     | 0.600<br>0.600<br>0.600<br>0.600<br>0.600   | TRANS 0.878 0.878 0.878 0.878 0.878   | 1.000<br>1.000<br>1.000<br>1.000<br>1.000  |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.N5.E4.W1) L1 South Win (G.E6.E5.W1) L1 East Win (G.E6.E6.W1)  | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00   | 0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46   | PANE         | 1<br>1<br>1<br>1<br>1<br>1  | 0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400  |       | 0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600  | 0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878   | 1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000   |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.N5.E4.W1) L1 South Win (G.E6.E5.W1) L1 East Win (G.E6.E6.W1) L1 North Win (G.E6.E7.W1)  | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00   | 0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46   | PANE         | 1<br>1<br>1<br>1<br>1<br>1<br>1   | 0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400  |       | 0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600  | 0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878   | 1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000  |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.N5.E4.W1) L1 South Win (G.E6.E5.W1) L1 East Win (G.E6.E6.W1) L1 North Win (G.E6.E7.W1) L1 North Win (G.W7.E9.W1)  | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00   | 0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46   | PANE         | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1  | 0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400  |       | 0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600   | 0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878  | 1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000   |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.M5.E4.W1) L1 South Win (G.E6.E5.W1) L1 East Win (G.E6.E6.W1) L1 North Win (G.E6.E7.W1) L1 North Win (G.W7.E9.W1) L1 West Win (G.W7.E10.W1)  | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.0  | 0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46   | PANE         | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1   | 0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400   |       | 0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600  | 0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878                                     | 1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000   |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.N5.E4.W1) L1 South Win (G.E6.E5.W1) L1 East Win (G.E6.E6.W1) L1 North Win (G.E6.E7.W1) L1 North Win (G.W7.E9.W1) L1 West Win (G.W7.E10.W1) L1 West Win (G.W8.E11.W1)  | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.0  | 0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46   | PANE         | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1   | 0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400   |       | 0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600   | 0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878                            | 1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000   |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.M5.E4.W1) L1 South Win (G.E6.E5.W1) L1 East Win (G.E6.E6.W1) L1 North Win (G.E6.E7.W1) L1 North Win (G.W7.E9.W1) L1 West Win (G.W7.E10.W1) L1 West Win (G.W8.E11.W1) L1 East Win (G.E9.E12.W1)  | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.0  | 0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46   | PANE         | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1   | 0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400  |       | 0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600   | 0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878                   | AREA RA  1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000   |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.N5.E4.W1) L1 South Win (G.E6.E5.W1) L1 East Win (G.E6.E6.W1) L1 North Win (G.E6.E7.W1) L1 North Win (G.W7.E9.W1) L1 West Win (G.W7.E10.W1) L1 West Win (G.W8.E11.W1)  | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.0  | 0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46   | PANE         | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1                                    | 0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400   |       | 0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600   | 0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878                            | 1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000   |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.N5.E4.W1) L1 South Win (G.E6.E5.W1) L1 East Win (G.E6.E5.W1) L1 North Win (G.E6.E7.W1) L1 North Win (G.W7.E9.W1) L1 West Win (G.W7.E10.W1) L1 West Win (G.W8.E11.W1) L1 East Win (G.E9.E12.W1) L1 East Win (G.E9.E12.W1)  | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.0  | 0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46   | PANE         | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1                               | 0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400                                     |       | 0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600   | 0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878          | AREA RA  1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000   |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.N5.E4.W1) L1 South Win (G.E6.E5.W1) L1 East Win (G.E6.E6.W1) L1 North Win (G.E6.E7.W1) L1 North Win (G.W7.E9.W1) L1 West Win (G.W7.E10.W1) L1 West Win (G.W8.E11.W1) L1 East Win (G.E9.E12.W1) L1 East Win (G.E9.E12.W1) L1 East Win (G.E10.E13.W1) L1 North Win (G.E10.E14.W1)   | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.0  | 0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46   | PANE         | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1                | 0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400                            |       | 0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600  | 0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878          | AREA RA  1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000   |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.N5.E4.W1) L1 South Win (G.E6.E5.W1) L1 East Win (G.E6.E6.W1) L1 North Win (G.E6.E7.W1) L1 North Win (G.W7.E9.W1) L1 West Win (G.W7.E10.W1) L1 West Win (G.W8.E11.W1) L1 East Win (G.E9.E12.W1) L1 East Win (G.E10.E13.W1) L1 North Win (G.E10.E13.W1) L1 South Win (G.E10.E14.W1)   | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.0  | 0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46   | PANE         | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | 0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400                   |       | 0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600  | 0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878<br>0.878 | 1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000<br>1.000  |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.M5.E4.W1) L1 South Win (G.E6.E5.W1) L1 East Win (G.E6.E5.W1) L1 North Win (G.E6.E7.W1) L1 North Win (G.W7.E9.W1) L1 West Win (G.W7.E10.W1) L1 West Win (G.W8.E11.W1) L1 East Win (G.E9.E12.W1) L1 East Win (G.E10.E13.W1) L1 North Win (G.E10.E13.W1) L1 South Win (G.E10.E15.W1) L1 South Win (G.E10.E15.W1)   | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00                 | 0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46                 | PANE         | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | 0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400                   |       | 0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600   | TRANS 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878                               | AREA RA  1.000             |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.M5.E4.W1) L1 South Win (G.E6.E5.W1) L1 East Win (G.E6.E7.W1) L1 North Win (G.E6.E7.W1) L1 North Win (G.W7.E9.W1) L1 North Win (G.W7.E10.W1) L1 West Win (G.W7.E10.W1) L1 East Win (G.E9.E12.W1) L1 East Win (G.E10.E13.W1) L1 North Win (G.E10.E14.W1) L1 South Win (G.E10.E15.W1) L1 South Win (G.S11.E16.W1) L1 North Win (G.S11.E16.W1)  | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.0  | 0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46         | PANE         | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | 0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400 |       | 0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600                                     | 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878                         | AREA RA  1.000 |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.M5.E4.W1) L1 South Win (G.E6.E5.W1) L1 East Win (G.E6.E7.W1) L1 North Win (G.E6.E7.W1) L1 North Win (G.W7.E9.W1) L1 North Win (G.W7.E10.W1) L1 West Win (G.W7.E10.W1) L1 East Win (G.E9.E12.W1) L1 East Win (G.E9.E12.W1) L1 East Win (G.E10.E13.W1) L1 North Win (G.E10.E14.W1) L1 South Win (G.E10.E15.W1) L1 South Win (G.S11.E16.W1) L1 North Win (G.S17.E24.W1) L1 East Win (G.S17.E24.W1)   | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46         | PANE         | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | 0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.500                   |       | 0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600 | 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878                         | AREA RA  1.000 |             |
| Window 592 Window 591 L1 North Win (G.C4.E3.W1) L1 North Win (G.N5.E4.W1) L1 South Win (G.E6.E5.W1) L1 East Win (G.E6.E6.W1) L1 North Win (G.E6.E7.W1) L1 North Win (G.W7.E9.W1) L1 West Win (G.W7.E10.W1) L1 West Win (G.W7.E10.W1) L1 East Win (G.E9.E12.W1) L1 East Win (G.E9.E12.W1) L1 East Win (G.E10.E13.W1) L1 South Win (G.E10.E15.W1) L1 South Win (G.E10.E16.W1) L1 North Win (G.S17.E24.W1) L1 East Win (G.S17.E24.W1) L1 East Win (G.S17.E25.W1) L1 East Win (G.S17.E25.W1) L1 East Win (G.S17.E25.W1) | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46<br>0.46 | PANE         | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | 0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.400<br>0.500<br>0.500<br>0.400 |       | 0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600<br>0.600          | 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878 0.878                   | AREA RA  1.000 |             |

-----(CONTINUED)------

|                               |         | GLASS   | NUMBER | CENTER-OF-      | GLASS   | GLASS | SURFACE TO |
|-------------------------------|---------|---------|--------|-----------------|---------|-------|------------|
| WINDOW                        | SETBACK | SHADING | OF     | GLASS U-VALUE   | VISIBLE | SOLAR | ROUGH OPEN |
| NAME                          | (FT)    | COEFF   | PANES  | (BTU/HR-SQFT-F) | TRANS   | TRANS | AREA RATIO |
| L1 North Win (G.N28.E42.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L1 East Win (G.E29.E45.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L1 North Win (G.E29.E46.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.C3.E1.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.N4.E2.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 East Win (G.N4.E3.W1)      | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.N4.E4.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 West Win (G.N4.E5.W1)      | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.N4.E6.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 East Win (G.N4.E7.W1)      | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.N4.E8.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 West Win (G.N4.E9.W1)      | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.N4.E10.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 East Win (G.N4.E11.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.N4.E12.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 West Win (G.N4.E13.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.N4.E14.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 East Win (G.N4.E15.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.N4.E16.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 West Win (G.N4.E17.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 South Win (G.E5.E18.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 East Win (G.E5.E19.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.E5.E20.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 East Win (G.E5.E21.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.E5.E22.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 West Win (G.E5.E23.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.W6.E25.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 West Win (G.W6.E26.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 West Win (G.W7.E27.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 East Win (G.E8.E28.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 East Win (G.E9.E29.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.E9.E30.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 East Win (G.E9.E31.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 South Win (G.E9.E32.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 West Win (G.S10.E33.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 South Win (G.S10.E34.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 East Win (G.S10.E35.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 South Win (G.S10.E36.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 West Win (G.S10.E37.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 South Win (G.S10.E38.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 East Win (G.S10.E39.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 South Win (G.S10.E40.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 West Win (G.S10.E41.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 South Win (G.S10.E42.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 East Win (G.S10.E43.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 South Win (G.S10.E44.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 South Win (G.S10.E45.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L2 West Win (G.SSW12.E46.W1)  | 0.00    | 0.46    | 1      | 0.500           | 0.600   | 0.878 | 1.000      |
| L2 South Win (G.SSW12.E47.W1) | 0.00    | 0.46    | 1      | 0.500           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.SSW12.E48.W1) | 0.00    | 0.46    | 1      | 0.500           | 0.600   | 0.878 | 1.000      |
| L2 East Win (G.SSW12.E49.W1)  | 0.00    | 0.46    | 1      | 0.500           | 0.600   | 0.878 | 1.000      |
| L2 South Win (G.SSW12.E50.W1) | 0.00    | 0.46    | 1      | 0.500           | 0.600   | 0.878 | 1.000      |
| L2 South Win (G.SSW12.E51.W1) | 0.00    | 0.46    | 1      | 0.500           | 0.600   | 0.878 | 1.000      |
| L2 North Win (G.E14.E53.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |

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|  | anmn 1 av | GLASS            | NUMBER      | CENTER-OF-      | GLASS            | GLASS          | SURFACE TO               |
|--|-----------|------------------|-------------|-----------------|------------------|----------------|--------------------------|
| WINDOW<br>NAME                                       | SETBACK   | SHADING<br>COEFF | OF<br>PANES | GLASS U-VALUE   | VISIBLE<br>TRANS | SOLAR<br>TRANS | ROUGH OPEN<br>AREA RATIO |
| NAME   | (FT)      | COEFF            | PANES       | (BTU/HR-SQFT-F) | IRANS            | IRANS          | AREA RAIIO               |
| L2 East Win (G.E14.E54.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 East Win (G.E14.E55.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 North Win (G.WNW18.E57.W1)                        | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 East Win (G.WNW18.E58.W1)                         | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 North Win (G.WNW18.E59.W1)                        | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 West Win (G.WNW18.E60.W1)                         | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 North Win (G.WNW18.E61.W1)                        | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 East Win (G.WNW18.E62.W1)                         | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 North Win (G.WNW18.E63.W1)                        | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 West Win (G.WNW18.E64.W1)                         | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 North Win (G.N19.E65.W1)                          | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 East Win (G.N19.E66.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 North Win (G.N19.E67.W1)                          | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 West Win (G.N19.E68.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 North Win (G.N19.E69.W1)                          | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 East Win (G.N19.E70.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 North Win (G.N19.E71.W1)                          | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 West Win (G.N19.E72.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 South Win (G.SW20.E73.W1)                         | 0.00      | 0.46             | 1           | 0.500           | 0.600            | 0.878          | 1.000                    |
| L2 East Win (G.SW20.E74.W1)                          | 0.00      | 0.46             | 1           | 0.500           | 0.600            | 0.878          | 1.000                    |
| L2 South Win (G.SW20.E75.W1)                         | 0.00      | 0.46             | 1           | 0.500           | 0.600            | 0.878          | 1.000                    |
| L2 West Win (G.SW20.E76.W1)                          | 0.00      | 0.46             | 1           | 0.500           | 0.600            | 0.878          | 1.000                    |
| L2 South Win (G.E23.E77.W1)                          | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 East Win (G.E23.E78.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 North Win (G.E23.E79.W1)                          | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 East Win (G.E23.E80.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 North Win (G.E23.E81.W1)                          | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 West Win (G.E23.E82.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L2 South Win (G.S27.E88.W1)                          | 0.00      | 0.46             | 1           | 0.500           | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.N3.E1.W1)                            | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 East Win (G.N3.E2.W1)                             | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.N4.E3.W1)                            | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 East Win (G.N4.E4.W1)                             | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.N4.E5.W1)                            | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.N4.E6.W1)                             | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.N4.E7.W1)                            | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 East Win (G.N4.E8.W1)                             | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.N4.E9.W1)                            | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.N4.E10.W1)                            | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.N4.E11.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 East Win (G.N4.E12.W1)                            | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.N4.E13.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.N4.E14.W1)                            | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.N4.E15.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 East Win (G.N4.E16.W1)                            | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.N4.E17.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.N4.E18.W1)                            | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 South Win (G.E5.E19.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 East Win (G.E5.E20.W1)                            | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.E5.E21.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 East Win (G.E5.E22.W1)                            | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.E5.E23.W1)                           | 0.00      | 0.46             | 1           | 0.400           | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.E5.E24.W1) L3 North Win (G.W6.E26.W1) | 0.00      | 0.46<br>0.46     | 1<br>1      | 0.400           | 0.600<br>0.600   | 0.878<br>0.878 | 1.000                    |
| TO NOTCH WIN (G.WO.E20.WI)                           | 0.00      | 0.40             | 1           | 0.400           | 0.000            | 0.0/8          | 1.000                    |

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|  |         | GLASS        | NUMBER | CENTER-OF-      | GLASS          | GLASS          | SURFACE TO |
|--|---------|--------------|--------|-----------------|----------------|----------------|------------|
| WINDOW   | SETBACK | SHADING      | OF     | GLASS U-VALUE   | VISIBLE        | SOLAR          | ROUGH OPEN |
| NAME   | (FT)    | COEFF        | PANES  | (BTU/HR-SQFT-F) | TRANS          | TRANS          | AREA RATIO |
| 12 West Win (C M6 E27 W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1 000      |
| L3 West Win (G.W6.E27.W1)                            | 0.00    | 0.46         |        | 0.400           |                |                | 1.000      |
| L3 West Win (G.W7.E28.W1) L3 East Win (G.E8.E29.W1)  | 0.00    | 0.46<br>0.46 | 1<br>1 | 0.400           | 0.600          | 0.878<br>0.878 | 1.000      |
|  |         |              | 1      | 0.400           | 0.600          |                | 1.000      |
| L3 South Win (G.E9.E30.W1) L3 West Win (G.E9.E31.W1) | 0.00    | 0.46<br>0.46 | 1      | 0.400           | 0.600<br>0.600 | 0.878<br>0.878 | 1.000      |
| L3 South Win (G.E9.E31.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 East Win (G.E9.E33.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 North Win (G.E9.E33.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 West Win (G.E9.E34.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E35.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 East Win (G.S10.E30.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E37.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 West Win (G.S10.E30.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E40.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 East Win (G.S10.E40.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E42.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 West Win (G.S10.E42.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E43.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 East Win (G.S10.E44.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E46.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 West Win (G.S10.E47.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E48.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 East Win (G.S10.E49.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E50.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 West Win (G.S10.E51.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E52.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 East Win (G.S10.E53.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E54.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 West Win (G.S10.E55.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E56.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 East Win (G.S10.E57.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E58.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 West Win (G.S10.E59.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E60.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 East Win (G.S10.E61.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E62.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 West Win (G.S10.E63.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.S10.E64.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 East Win (G.S10.E65.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 North Win (G.E13.E67.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 East Win (G.E13.E68.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 East Win (G.E13.E69.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 South Win (G.NW17.E70.W1)                         | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 West Win (G.NW17.E71.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 North Win (G.NW17.E72.W1)                         | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 East Win (G.NW17.E73.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 North Win (G.NW17.E74.W1)                         | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 West Win (G.NW17.E75.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 North Win (G.N18.E76.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 East Win (G.N18.E77.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 North Win (G.N18.E78.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 West Win (G.N18.E79.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 North Win (G.N18.E80.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L3 East Win (G.N18.E81.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
|  |         |              |        |                 |                |                |            |

| REPORT- LV-H Details of Window | ws<br>  |         |        |               |         |         | ATTLE BOEING FI WA |  |
|--------------------------------|---------|---------|--------|---------------|---------|---------|--------------------|--|
|                                |         |         |        |               |         |         | ,                  |  |
|                                |         | GT 3 GG | MIMPER | GENTEED OF    | GT 3.GG | GT 3 GG | GUDENGE MO         |  |
|                                |         | GLASS   | NUMBER | CENTER-OF-    | GLASS   | GLASS   | SURFACE TO         |  |
| WINDOW                         | SETBACK | SHADING | OF     | GLASS U-VALUE | VISIBLE | SOLAR   | ROUGH OPEN         |  |

| WINDOW   | SETBACK | GLASS<br>SHADING | NUMBER<br>OF | CENTER-OF-<br>GLASS U-VALUE | GLASS<br>VISIBLE | GLASS<br>SOLAR | SURFACE TO<br>ROUGH OPEN |
|--|---------|------------------|--------------|-----------------------------|------------------|----------------|--------------------------|
| NAME   | (FT)    | COEFF            | PANES        | (BTU/HR-SQFT-F)             | TRANS            | TRANS          | AREA RATIO               |
| WANTE  | (11)    | COEFF            | FANES        | (BIO/IR SQFI F)             | INAND            | IKANS          | AREA RAIIO               |
| L3 North Win (G.N18.E82.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.N18.E83.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.N18.E84.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 East Win (G.N18.E85.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.N18.E86.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.N18.E87.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 South Win (G.E19.E88.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 East Win (G.E19.E89.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.E19.E90.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 East Win (G.E19.E91.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.E19.E92.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.E19.E93.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.W21.E94.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.W21.E95.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 South Win (G.W21.E96.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.W21.E97.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.W21.E98.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.W21.E99.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 South Win (G.W21.E100.W1)                         | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.W21.E101.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 North Win (G.W21.E102.W1)                         | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.W21.E103.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.W21.E104.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 South Win (G.SW22.E105.W1)                        | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.SW22.E106.W1)                         | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 South Win (G.SW22.E107.W1)                        | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 West Win (G.SW22.E108.W1)                         | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 East Win (G.S24.E109.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 South Win (G.S24.E110.W1)                         | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L3 South Win (G.S24.E111.W1)                         | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 North Win (G.N3.E1.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 East Win (G.N3.E2.W1)                             | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 North Win (G.N4.E3.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 East Win (G.N4.E4.W1)                             | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 North Win (G.N4.E5.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 West Win (G.N4.E6.W1)                             | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 North Win (G.N4.E7.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 East Win (G.N4.E8.W1)                             | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 North Win (G.N4.E9.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 West Win (G.N4.E10.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 North Win (G.N4.E11.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 East Win (G.N4.E12.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 North Win (G.N4.E13.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 West Win (G.N4.E14.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 North Win (G.N4.E15.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 East Win (G.N4.E16.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 North Win (G.N4.E17.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 West Win (G.N4.E18.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 South Win (G.E5.E19.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 East Win (G.E5.E20.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600<br>0.600   | 0.878<br>0.878 | 1.000                    |
| L4 North Win (G.E5.E21.W1)                           |         | 0.46             | 1            |                             |                  |                |                          |
| L4 East Win (G.E5.E22.W1)                            | 0.00    |                  |              | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L4 North Win (G.E5.E23.W1) L4 West Win (G.E5.E24.W1) | 0.00    | 0.46<br>0.46     | 1<br>1       | 0.400                       | 0.600<br>0.600   | 0.878<br>0.878 | 1.000                    |
| DI WEST WITH (G.ES.EZ4.WI)                           | 0.00    | 0.40             | 1            | 0.400                       | 0.000            | 0.0/0          | 1.000                    |

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|  |         | GLASS        | NUMBER | CENTER-OF-      | GLASS          | GLASS          | SURFACE TO |
|--|---------|--------------|--------|-----------------|----------------|----------------|------------|
| WINDOW   | SETBACK | SHADING      | OF     | GLASS U-VALUE   | VISIBLE        | SOLAR          | ROUGH OPEN |
| NAME   | (FT)    | COEFF        | PANES  | (BTU/HR-SQFT-F) | TRANS          | TRANS          | AREA RATIO |
|  | (/      |              |        | (===,======,    |                |                |            |
| L4 North Win (G.W6.E26.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.W6.E27.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.W7.E28.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.E8.E29.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.E9.E30.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.E9.E31.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.E9.E32.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.E9.E33.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 North Win (G.E9.E34.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.S10.E35.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S10.E36.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.S10.E37.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S10.E38.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.S10.E39.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S10.E40.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.S10.E41.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S10.E42.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.S10.E43.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S10.E44.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.S10.E45.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S10.E46.W1) L4 West Win (G.S10.E47.W1) | 0.00    | 0.46<br>0.46 | 1<br>1 | 0.400<br>0.400  | 0.600<br>0.600 | 0.878<br>0.878 | 1.000      |
| L4 South Win (G.S10.E47.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.S10.E49.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S10.E49.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.S10.E51.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S10.E52.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.S10.E53.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S10.E54.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.S10.E55.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S10.E56.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.S10.E57.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S10.E58.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.S10.E59.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S10.E60.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.S10.E61.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S10.E62.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.S10.E63.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S10.E64.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.S10.E65.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 North Win (G.E13.E67.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.E13.E68.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.E13.E69.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.NW17.E70.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.NW17.E71.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 North Win (G.NW17.E72.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.NW17.E73.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 North Win (G.NW17.E74.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.NW17.E75.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 North Win (G.N18.E76.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.N18.E77.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 North Win (G.N18.E78.W1) L4 West Win (G.N18.E79.W1) | 0.00    | 0.46<br>0.46 | 1<br>1 | 0.400           | 0.600<br>0.600 | 0.878<br>0.878 | 1.000      |
| L4 West Win (G.N18.E79.W1) L4 North Win (G.N18.E80.W1) | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| DE MOLCH WIN (G.MIO.EGU.WI)                            | 0.00    | 0.40         | 1      | 0.400           | 0.000          | 0.070          | 1.000      |

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|  |         | GLASS        | NUMBER | CENTER-OF-      | GLASS          | GLASS          | SURFACE TO |
|--|---------|--------------|--------|-----------------|----------------|----------------|------------|
| WINDOW   | SETBACK | SHADING      | OF     | GLASS U-VALUE   | VISIBLE        | SOLAR          | ROUGH OPEN |
| NAME   | (FT)    | COEFF        | PANES  | (BTU/HR-SQFT-F) | TRANS          | TRANS          | AREA RATIO |
| L4 East Win (G.N18.E81.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 North Win (G.N18.E82.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.N18.E83.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 North Win (G.N18.E84.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.N18.E85.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 North Win (G.N18.E86.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.N18.E87.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.E19.E88.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.E19.E89.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 North Win (G.E19.E90.W1) L4 East Win (G.E19.E91.W1) | 0.00    | 0.46         | 1<br>1 | 0.400           | 0.600          | 0.878<br>0.878 | 1.000      |
| L4 North Win (G.E19.E91.W1)                            | 0.00    | 0.46<br>0.46 | 1      | 0.400           | 0.600<br>0.600 | 0.878          | 1.000      |
| L4 West Win (G.E19.E92.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 North Win (G.W21.E94.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.W21.E94.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.W21.E96.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.W21.E90.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 North Win (G.W21.E98.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.W21.E99.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.W21.E100.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.W21.E101.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 North Win (G.W21.E102.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.W21.E103.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.W21.E104.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.SW22.E105.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.SW22.E106.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.SW22.E107.W1)                          | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 West Win (G.SW22.E108.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 East Win (G.S24.E109.W1)                            | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S24.E110.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L4 South Win (G.S24.E111.W1)                           | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 North Win (G.N3.E1.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 East Win (G.N3.E2.W1)                               | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 North Win (G.N4.E3.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 East Win (G.N4.E4.W1)                               | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 North Win (G.N4.E5.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 West Win (G.N4.E6.W1)                               | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 North Win (G.N4.E7.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 East Win (G.N4.E8.W1)                               | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 North Win (G.N4.E9.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 West Win (G.N4.E10.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 North Win (G.N4.E11.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 East Win (G.N4.E12.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 North Win (G.N4.E13.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 West Win (G.N4.E14.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 North Win (G.N4.E15.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 East Win (G.N4.E16.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 North Win (G.N4.E17.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 West Win (G.N4.E18.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 South Win (G.E5.E19.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 East Win (G.E5.E20.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 North Win (G.E5.E21.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 East Win (G.E5.E22.W1)                              | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
| L5 North Win (G.E5.E23.W1)                             | 0.00    | 0.46         | 1      | 0.400           | 0.600          | 0.878          | 1.000      |
|  |         |              |        |                 |                |                |            |

|  |                 | ar 2 a a         |              | grumen or                   | GT 3 GG          | ar 2 a a       | arren an ma              |
|--|-----------------|------------------|--------------|-----------------------------|------------------|----------------|--------------------------|
| WINDOW   | CEMBACK         | GLASS<br>SHADING | NUMBER<br>OF | CENTER-OF-<br>GLASS U-VALUE | GLASS            | GLASS<br>SOLAR | SURFACE TO               |
| NAME   | SETBACK<br>(FT) | COEFF            | PANES        | (BTU/HR-SOFT-F)             | VISIBLE<br>TRANS | TRANS          | ROUGH OPEN<br>AREA RATIO |
| NAPIE  | (11)            | COEFF            | FAMES        | (BIO/IR SQFI F)             | TIVANS           | IIANS          | AREA RATIO               |
| L5 West Win (G.E5.E24.W1)                              | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.W6.E26.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.W6.E27.W1)                              | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.W7.E28.W1)                              | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.E8.E29.W1)                              | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.E9.E30.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.E9.E31.W1)                              | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.E9.E32.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.E9.E33.W1)                              | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.E9.E34.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.S10.E35.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E36.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.S10.E37.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E38.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.S10.E39.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E40.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.S10.E41.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E42.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.S10.E43.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E44.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.S10.E45.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E46.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.S10.E47.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E48.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.S10.E49.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E50.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.S10.E51.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E52.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.S10.E53.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E54.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.S10.E55.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E56.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.S10.E57.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E58.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.S10.E59.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E60.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.S10.E61.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E62.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.S10.E63.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S10.E64.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.S10.E65.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.E13.E67.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.E13.E68.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.E13.E69.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.NW17.E70.W1)                           | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.NW17.E71.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.NW17.E72.W1)                           | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.NW17.E73.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.NW17.E74.W1)                           | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.NW17.E75.W1)                            | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.N18.E76.W1)                            | 0.00            | 0.46             |              | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.N18.E77.W1)                             | 0.00            | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.N18.E78.W1) L5 West Win (G.N18.E79.W1) | 0.00            | 0.46<br>0.46     | 1<br>1       | 0.400                       | 0.600<br>0.600   | 0.878<br>0.878 | 1.000                    |
| TO MESC MITT (G.MIO.E/3.WI)                            | 0.00            | 0.40             | 1            | 0.400                       | 0.000            | 0.0/0          | 1.000                    |

-----(CONTINUED)------

|  |         | GI NGG           | MIMDED       | CENTERD OF                  | GT AGG           | GT 3 GG        | GUDEAGE MO               |
|--|---------|------------------|--------------|-----------------------------|------------------|----------------|--------------------------|
| WINDOW   | SETBACK | GLASS<br>SHADING | NUMBER<br>OF | CENTER-OF-<br>GLASS U-VALUE | GLASS<br>VISIBLE | GLASS<br>SOLAR | SURFACE TO<br>ROUGH OPEN |
| NAME   | (FT)    | COEFF            | PANES        | (BTU/HR-SQFT-F)             | TRANS            | TRANS          | AREA RATIO               |
|  | (11)    | 00211            | 1111120      | (210)1111 0011 1)           | 114110           | 114110         | 111211 1111110           |
| L5 North Win (G.N18.E80.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.N18.E81.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.N18.E82.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.N18.E83.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.N18.E84.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.N18.E85.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.N18.E86.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.N18.E87.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.E19.E88.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.E19.E89.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.E19.E90.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.E19.E91.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.E19.E92.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.E19.E93.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.W21.E94.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.W21.E95.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.W21.E96.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.W21.E97.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.W21.E98.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.W21.E99.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.W21.E100.W1)                         | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.W21.E101.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 North Win (G.W21.E102.W1)                         | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.W21.E103.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.W21.E104.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.SW22.E105.W1)                        | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.SW22.E106.W1)                         | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.SW22.E107.W1)                        | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 West Win (G.SW22.E108.W1)                         | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 East Win (G.S24.E109.W1)                          | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S24.E110.W1)                         | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L5 South Win (G.S24.E111.W1)                         | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 North Win (G.N3.E1.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 East Win (G.N3.E2.W1)                             | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 North Win (G.N4.E3.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 East Win (G.N4.E4.W1)                             | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 North Win (G.N4.E5.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 West Win (G.N4.E6.W1)                             | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 North Win (G.N4.E7.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 East Win (G.N4.E8.W1)                             | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 North Win (G.N4.E9.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 West Win (G.N4.E10.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 North Win (G.N4.E11.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 East Win (G.N4.E12.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 North Win (G.N4.E13.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 West Win (G.N4.E14.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 North Win (G.N4.E15.W1) L6 East Win (G.N4.E16.W1) | 0.00    | 0.46<br>0.46     | 1            | 0.400                       | 0.600<br>0.600   | 0.878<br>0.878 | 1.000                    |
| L6 Morth Win (G.N4.E16.W1)                           | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 West Win (G.N4.E17.W1) L6 West Win (G.N4.E18.W1)  | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 West Win (G.N4.E18.W1) L6 South Win (G.E5.E19.W1) | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 East Win (G.E5.E19.W1)                            | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 East Win (G.E5.E20.W1) L6 North Win (G.E5.E21.W1) | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| L6 North Win (G.E5.E21.W1) L6 East Win (G.E5.E22.W1) | 0.00    | 0.46             | 1            | 0.400                       | 0.600            | 0.878          | 1.000                    |
| HO EGSC WIII (G.EJ.EZZ.WI)                           | 0.00    | 0.40             | 1            | 0.400                       | 0.000            | 0.070          | 1.000                    |

-----(CONTINUED)------

|  |         | GLASS   | NUMBER | CENTER-OF-      | GLASS   | GLASS | SURFACE TO |
|--|---------|---------|--------|-----------------|---------|-------|------------|
| WINDOW   | SETBACK | SHADING | OF     | GLASS U-VALUE   | VISIBLE | SOLAR | ROUGH OPEN |
| NAME   | (FT)    | COEFF   | PANES  | (BTU/HR-SOFT-F) | TRANS   | TRANS | AREA RATIO |
| WAME   | (FI)    | COEFF   | PANES  | (BIU/HK-SQFI-F) | IRANS   | CMMAI | AREA RAIIO |
| L6 North Win (G.E5.E23.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.E5.E24.W1)                              | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 North Win (G.W6.E26.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.W6.E27.W1)                              | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.W7.E28.W1)                              | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 East Win (G.E8.E29.W1)                              | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.E9.E30.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.E9.E31.W1)                              | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.E9.E32.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 East Win (G.E9.E33.W1)                              | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
|  |         |         | 1      |                 |         |       |            |
| L6 North Win (G.E9.E34.W1)                             | 0.00    | 0.46    |        | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.S10.E35.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E36.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 East Win (G.S10.E37.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E38.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.S10.E39.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E40.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 East Win (G.S10.E41.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E42.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.S10.E43.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E44.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 East Win (G.S10.E45.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E46.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.S10.E47.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E48.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 East Win (G.S10.E49.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E50.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.S10.E51.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E52.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 East Win (G.S10.E53.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E54.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.S10.E55.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E56.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 East Win (G.S10.E57.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E58.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.S10.E59.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E60.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 East Win (G.S10.E61.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E62.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.S10.E63.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S10.E64.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 East Win (G.S10.E65.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 North Win (G.E13.E67.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 East Win (G.E13.E68.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 East Win (G.E13.E69.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.NW17.E70.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 North Win (G.NW17.E71.W1)                           | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 North Win (G.N18.E72.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.E19.E73.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 East Win (G.E19.E74.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 North Win (G.E19.E74.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 North Win (G.W21.E76.W1)                            | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.W21.E76.W1)                             | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.W21.E77.W1) L6 South Win (G.W21.E78.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| TO SOUCH WIN (G.WZI.E/O.WI)                            | 0.00    | 0.40    | 1      | 0.400           | 0.000   | 0.0/0 | 1.000      |

-----(CONTINUED)------

|                               |         | GLASS   | NUMBER | CENTER-OF-      | GLASS   | GLASS | SURFACE TO |
|-------------------------------|---------|---------|--------|-----------------|---------|-------|------------|
| WINDOW                        | SETBACK | SHADING | OF     | GLASS U-VALUE   | VISIBLE | SOLAR | ROUGH OPEN |
| NAME                          | (FT)    | COEFF   | PANES  | (BTU/HR-SQFT-F) | TRANS   | TRANS | AREA RATIO |
| L6 West Win (G.W21.E79.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 North Win (G.W21.E80.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.W21.E81.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.W21.E82.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.W21.E83.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 North Win (G.W21.E84.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.W21.E85.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.W21.E86.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.SW22.E87.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.SW22.E88.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.SW22.E89.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 West Win (G.SW22.E90.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 East Win (G.S24.E91.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S24.E92.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L6 South Win (G.S24.E93.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.N3.E1.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 North Win (G.N3.E2.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.N3.E3.W1)      | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 North Win (G.N4.E4.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.E5.E5.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.E5.E6.W1)      | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 North Win (G.E5.E7.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 North Win (G.W6.E9.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 West Win (G.W6.E10.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 West Win (G.W7.E11.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.E8.E12.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.E9.E13.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 West Win (G.E9.E14.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.E9.E15.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.E9.E16.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 North Win (G.E9.E17.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E18.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.SSW10.E19.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E20.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 West Win (G.SSW10.E21.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E22.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.SSW10.E23.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E24.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 West Win (G.SSW10.E25.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E26.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.SSW10.E27.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E28.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 West Win (G.SSW10.E29.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E30.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.SSW10.E31.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E32.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 West Win (G.SSW10.E33.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E34.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.SSW10.E35.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E36.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 West Win (G.SSW10.E37.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E38.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.SSW10.E39.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E40.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
|                               |         |         |        |                 |         |       |            |

REPORT- LV-H Details of Windows

WEATHER FILE- SEATTLE BOEING FI WA -----(CONTINUED)------

|                               |         | GLASS   | NUMBER | CENTER-OF-      | GLASS   | GLASS | SURFACE TO |
|-------------------------------|---------|---------|--------|-----------------|---------|-------|------------|
| WINDOW                        | SETBACK | SHADING | OF     | GLASS U-VALUE   | VISIBLE | SOLAR | ROUGH OPEN |
| NAME                          | (FT)    | COEFF   | PANES  | (BTU/HR-SQFT-F) | TRANS   | TRANS | AREA RATIO |
| L7 West Win (G.SSW10.E41.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E42.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.SSW10.E43.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E44.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 West Win (G.SSW10.E45.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSW10.E46.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.SSW10.E47.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 West Win (G.SSW10.E48.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.E13.E50.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 West Win (G.W18.E51.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SW19.E52.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 West Win (G.SW19.E53.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 North Win (G.C20.E54.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 West Win (G.NW21.E55.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 North Win (G.NW21.E56.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 North Win (G.NE22.E57.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.NE22.E58.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 East Win (G.SSE23.E59.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L7 South Win (G.SSE23.E60.W1) | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L8 East Win (G.E3.E4.W1)      | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L8 West Win (G.W8.E10.W1)     | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L8 South Win (G.SW9.E12.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L8 West Win (G.SW9.E13.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L8 East Win (G.C10.E15.W1)    | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L8 West Win (G.NW11.E17.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L8 North Win (G.NW11.E18.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L8 North Win (G.NE12.E20.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L8 East Win (G.NE12.E21.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L8 South Win (G.S13.E23.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L8 South Win (G.SE14.E25.W1)  | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
| L8 East Win (G.SE14.E26.W1)   | 0.00    | 0.46    | 1      | 0.400           | 0.600   | 0.878 | 1.000      |
|                               |         |         |        |                 |         |       |            |

NUMBER OF CONSTRUCTIONS 29 DELAYED 25 QUICK 4

|                              | U-VALUE       |             | SURFACE   |         | NUMBER OF |
|------------------------------|---------------|-------------|-----------|---------|-----------|
| CONSTRUCTION                 |               | SURFACE     | ROUGHNESS | SURFACE | RESPONSE  |
| NAME (B                      | TU/HR-SQFT-F) | ABSORPTANCE | INDEX     | TYPE    | FACTORS   |
| 2015 SEC ALL Deck Roof Const | 0.027         | 0.70        | 3         | DELAYED | 4         |
| 2015 SEC ALL Mass Wall Const | 0.057         | 0.70        | 3         | DELAYED | 9         |
| 2015 SEC ALL Stl Fm Wall Con | st 0.055      | 0.70        | 3         | DELAYED | 6         |
| 2015 SEC ALL BG Mass Wall Co | nst 0.070     | 0.70        | 3         | DELAYED | 9         |
| 2015 SEC ALL Joist Floor Con | st 0.029      | 0.75        | 3         | DELAYED | 6         |
| Proposed ALL Deck Roof Const | 0.017         | 0.70        | 3         | DELAYED | 4         |
| Proposed ALL Mass Wall Const | 0.285         | 0.70        | 3         | DELAYED | 9         |
| Proposed ALL Stl Fm Wall Con | st 0.164      | 0.70        | 3         | DELAYED | 6         |
| Proposed ALL BG Mass Wall Co | nst 0.196     | 0.70        | 3         | DELAYED | 9         |
| Proposed ALL Joist Floor Con | st 0.033      | 0.75        | 3         | DELAYED | 6         |
| A90.1-07 NR_R Roof Const     | 0.048         | 0.70        | 3         | DELAYED | 5         |
| A90.1-07 NR Abv-G Wall Const | 0.065         | 0.70        | 3         | DELAYED | 6         |
| A90.1-07 R Abv-G Wall Const  | 0.065         | 0.70        | 3         | DELAYED | 6         |
| A90.1-07 NR Floor Const      | 0.038         | 0.70        | 3         | DELAYED | 6         |
| A90.1-07 R Floor Const       | 0.038         | 0.70        | 3         | DELAYED | 6         |
| A90.1-07 NR Mass Wall Const  | 0.104         | 0.70        | 3         | DELAYED | 9         |
| A90.1-07 R Mass Wall Const   | 0.090         | 0.70        | 3         | DELAYED | 9         |
| Interior CMU Wall Const      | 0.491         | 0.70        | 3         | DELAYED | 6         |
| Interior Frame Wall Const    | 0.132         | 0.70        | 3         | DELAYED | 4         |
| Interior Ceiling Const       | 0.514         | 0.70        | 3         | DELAYED | 3         |
| Interior Floor Const         | 0.813         | 0.70        | 3         | DELAYED | 5         |
| Exposed Slab Edge Const      | 0.260         | 0.70        | 3         | DELAYED | 9         |
| Below-Grade Wall Const       | 0.500         | 0.70        | 3         | QUICK   | 0         |
| Concrete Slab Wall Const     | 0.743         | 0.70        | 3         | DELAYED | 7         |
| Resi Core Walls Const        | 0.283         | 0.70        | 3         | DELAYED | 15        |
| Default Air Wall Constructio | n 2.700       | 0.70        | 3         | QUICK   | 0         |
| Below Grade Unins Concrete W | all 0.278     | 0.70        | 3         | QUICK   | 0         |
| Exposed Garage Walls         | 0.740         | 0.70        | 3         | QUICK   | 0         |
| Proposed ALL Wd Fm Wall Cons | t 0.049       | 0.70        | 3         | DELAYED | 6         |

|                         | LIGHTS           | TASK           | MISC              | SPACE             | SPACE           | HEAT           | PUMPS            | VENT             | REFRIG         | HT PUMP           | DOMEST            | EXT            | TOTAL              |
|-------------------------|------------------|----------------|-------------------|-------------------|-----------------|----------------|------------------|------------------|----------------|-------------------|-------------------|----------------|--------------------|
|                         | LIGHIS           | LIGHTS         | EQUIP             | HEATING           | COOLING         | REJECT         | & AUX            | FANS             | DISPLAY        | SUPPLEM           | HOT WTR           | USAGE          |                    |
|                         |                  |                |                   |                   |                 |                |                  |                  |                |                   |                   |                |                    |
| JAN                     | 00621            | 1101           | 64245             | 62018             | 0.5             | 0.1            | 11262            | 00043            | 1.400          | 10605             | 41555             | 1000           | 055050             |
| KWH                     | 28631.<br>83.301 | 1121.<br>6.028 | 64345.<br>185.872 | 63817.<br>320.202 | 97.<br>4.769    | 21.<br>0.051   | 11363.<br>15.276 | 28943.<br>54.214 | 1482.<br>3.329 | 12625.<br>182.290 | 41555.<br>144.559 | 1278.<br>3.299 | 255278.<br>808.340 |
| MAX KW<br>DAY/HR        | 2/8              | 1/8            | 2/21              | 5/ 8              | 19/14           | 29/15          | 15.276           | 54.214           | 2/19           | 5/ 8              | 144.559           | 1/18           | 5/ 8               |
| PEAK ENDUSE             | 52.524           | 6.028          | 97.192            | 320.202           | 0.102           | 0.014          | 15.276           | 51.297           | 1.239          | 182.290           | 81.078            | 1.100          | 3/ 0               |
| PEAK PCT                | 6.5              | 0.7            | 12.0              | 39.6              | 0.0             | 0.0            | 1.9              | 6.3              | 0.2            | 22.6              | 10.0              | 0.1            |                    |
|                         |                  |                |                   |                   |                 |                |                  |                  |                |                   |                   |                |                    |
| FEB                     |                  |                | =                 |                   |                 |                |                  |                  | 4000           | 0.680             |                   |                |                    |
| KWH                     | 25829.           | 1013.          | 58120.            | 45723.            | 734.            | 19.            | 10263.           | 26077.           | 1338.          | 3678.             | 38083.            | 898.           | 211775.            |
| MAX KW<br>DAY/HR        | 83.301<br>1/8    | 6.028<br>1/8   | 185.872<br>1/21   | 193.807<br>13/8   | 24.012<br>22/16 | 0.054<br>21/13 | 15.454<br>15/16  | 54.203<br>16/10  | 3.329<br>1/19  | 102.018<br>27/ 7  | 145.960<br>1/7    | 3.299<br>1/20  | 638.566<br>27/ 7   |
| PEAK ENDUSE             | 39.954           | 2.411          | 96.295            | 183.258           | 0.102           | 0.017          | 15.276           | 51.100           | 1.626          | 102.018           | 145.960           | 0.550          | 21/ 1              |
| PEAK PCT                | 6.3              | 0.4            | 15.1              | 28.7              | 0.102           | 0.017          | 2.4              | 8.0              | 0.3            | 16.0              | 22.9              | 0.330          |                    |
|                         |                  |                |                   |                   |                 |                |                  |                  |                |                   |                   |                |                    |
| MAR                     | 20550            | 1101           | 64245             | 24110             | 1065            | 27             | 11265            | 20746            | 1400           | 650               | 41500             | 004            | 014051             |
| KWH                     | 28550.<br>83.301 | 1121.<br>6.028 | 64347.<br>185.872 | 34112.<br>147.167 | 1865.           | 27.<br>0.210   | 11365.<br>15.459 | 28749.<br>54.212 | 1482.<br>3.329 | 658.<br>66.292    | 41580.<br>144.559 | 994.<br>3.299  | 214851.<br>557.922 |
| MAX KW<br>DAY/HR        | 1/8              | 1/8            | 1/21              | 2/ 8              | 69.415<br>29/16 | 29/16          | 8/13             | 23/10            | 1/19           | 2/ 7              | 1/ 7              | 1/20           | 2/ 7               |
| PEAK ENDUSE             | 37.226           | 2.411          | 94.951            | 143.842           | 0.101           | 0.020          | 15.276           | 51.144           | 1.548          | 66.292            | 144.559           | 0.550          | 2/ /               |
| PEAK PCT                | 6.7              | 0.4            | 17.0              | 25.8              | 0.0             | 0.020          | 2.7              | 9.2              | 0.3            | 11.9              | 25.9              | 0.330          |                    |
|                         |                  |                |                   |                   |                 |                |                  |                  |                |                   |                   |                |                    |
| APR                     |                  |                |                   |                   |                 |                |                  |                  |                |                   |                   |                |                    |
| KWH                     | 27712.           | 1085.          | 62342.            | 20472.            | 5028.           | 30.            | 11023.           | 27768.           | 1431.          | 197.              | 39028.            | 962.           | 197078.            |
| MAX KW                  | 83.301           | 6.028          | 185.872           | 112.606           | 47.942          | 0.131<br>12/19 | 15.461           | 54.204           | 3.329          | 51.669            | 141.757           | 3.299          | 512.387<br>24/ 7   |
| DAY/HR<br>PEAK ENDUSE   | 1/ 8<br>39.954   | 1/ 8<br>2.411  | 1/21<br>96.295    | 24/ 7<br>112.606  | 20/16<br>0.101  | 0.022          | 18/18<br>15.276  | 6/10<br>50.120   | 1/19<br>1.626  | 24/ 7<br>51.669   | 1/ 7<br>141.757   | 1/20<br>0.550  | 24/ /              |
| PEAK PCT                | 7.8              | 0.5            | 18.8              | 22.0              | 0.0             | 0.022          | 3.0              | 9.8              | 0.3            | 10.1              | 27.7              | 0.330          |                    |
|                         |                  |                |                   |                   |                 |                |                  |                  |                |                   |                   |                |                    |
| MAY                     |                  |                |                   |                   |                 |                |                  |                  |                |                   |                   |                |                    |
| KWH                     | 28641.           | 1121.          | 64388.            | 12522.            | 9929.           | 45.            | 11419.           | 28710.           | 1480.          | 0.                | 39003.            | 596.           | 197856.            |
| MAX KW                  | 83.301           | 6.028          | 185.872           | 71.571            | 75.484          | 0.375          | 15.464           | 54.276           | 3.329          | 0.000             | 137.555           | 2.932          | 414.819            |
| DAY/HR                  | 1/8              | 1/8            | 1/21              | 10/8              | 15/16           | 16/15          | 18/18            | 16/10            | 1/19           | 24/ 7             | 1/ 7              | 1/22           | 15/20              |
| PEAK ENDUSE<br>PEAK PCT | 52.340<br>12.6   | 2.411          | 167.502<br>40.4   | 4.987<br>1.2      | 62.989<br>15.2  | 0.207          | 15.442<br>3.7    | 52.423<br>12.6   | 2.710<br>0.7   | 0.000             | 53.810<br>13.0    | 0.000          |                    |
| FEAR FCI                | 12.0             | 0.0            | 10.1              | 1.2               | 13.2            | 0.0            | 3.7              | 12.0             | 0.7            | 0.0               | 13.0              | 0.0            |                    |
| JUN                     |                  |                |                   |                   |                 |                |                  |                  |                |                   |                   |                |                    |
| KWH                     | 27610.           | 1085.          | 62258.            | 6455.             | 14452.          | 67.            | 11079.           | 27778.           | 1435.          | 0.                | 35922.            | 577.           | 188719.            |
| MAX KW                  | 83.301           | 6.028          | 185.872           | 36.507            | 86.804          | 0.453          | 15.466           | 54.337           | 3.329          | 0.000             | 133.352           | 2.932          | 431.280            |
| DAY/HR                  | 3/8              | 1/8            | 3/21              | 8/9               | 20/16           | 20/14          | 21/16            | 20/10            | 3/19           | 24/ 7             | 1/ 7              | 1/22           | 20/20              |
| PEAK ENDUSE<br>PEAK PCT | 52.340<br>12.1   | 2.411          | 167.502<br>38.8   | 3.408             | 80.444<br>18.7  | 0.351          | 15.424<br>3.6    | 52.945<br>12.3   | 2.710          | 0.000             | 53.747<br>12.5    | 0.000          |                    |
| PEAR PCI                | 12.1             | 0.0            | 30.0              | 0.0               | 10.7            | 0.1            | 3.0              | 12.3             | 0.0            | 0.0               | 12.5              | 0.0            |                    |
| JUL                     |                  |                |                   |                   |                 |                |                  |                  |                |                   |                   |                |                    |
| KWH                     | 28640.           | 1121.          | 64388.            | 2375.             | 28852.          | 137.           | 11472.           | 28988.           | 1480.          | 0.                | 35868.            | 596.           | 203918.            |
| MAX KW                  | 83.301           | 6.028          | 185.872           | 19.821            | 141.562         | 0.453          | 15.466           | 55.134           | 3.329          | 0.000             | 130.551           | 2.932          | 489.982            |
| DAY/HR                  | 1/ 8             | 1/ 8           | 1/21              | 5/8               | 23/20           | 9/16           | 24/10            | 22/10            | 1/19           | 24/ 7             | 1/ 7              | 1/22           | 23/20              |
| PEAK ENDUSE             | 52.340           | 2.411          | 167.502           | 0.224             | 141.562         | 0.453          | 15.462           | 53.626           | 2.710          | 0.000             | 53.693            | 0.000          |                    |
| PEAK PCT                | 10.7             | 0.5            | 34.2              | 0.0               | 28.9            | 0.1            | 3.2              | 10.9             | 0.6            | 0.0               | 11.0              | 0.0            |                    |
| AUG                     |                  |                |                   |                   |                 |                |                  |                  |                |                   |                   |                |                    |
| KWH                     | 28592.           | 1121.          | 64390.            | 2188.             | 26313.          | 144.           | 11476.           | 28876.           | 1481.          | 0.                | 35245.            | 1068.          | 200893.            |
| MAX KW                  | 83.301           | 6.028          | 185.872           | 18.727            | 132.582         | 0.453          | 15.466           | 54.918           | 3.329          | 0.000             | 129.150           | 3.299          | 456.095            |
| DAY/HR                  | 1/ 8             | 1/ 8           | 1/21              | 17/ 9             | 10/16           | 2/12           | 2/10             | 10/10            | 1/19           | 24/ 7             | 1/ 7              | 1/19           | 9/20               |
| PEAK ENDUSE             | 52.340           | 2.411          | 167.502           | 0.733             | 104.443         | 0.453          | 15.398           | 53.128           | 2.710          | 0.000             | 53.679            | 3.299          |                    |
| PEAK PCT                | 11.5             | 0.5            | 36.7              | 0.2               | 22.9            | 0.1            | 3.4              | 11.6             | 0.6            | 0.0               | 11.8              | 0.7            |                    |

------(CONTINUED)-----SEP KWH 27660. 1085. 62256. 5395. 16961. 75. 11074. 27792. 1434. 0. 34103. 1034. 188867 DAY/HR 83.301 53.933 104.169 6.028 185.872 0.453 15.466 54.109 3.329 0.000 129.150 3.299 418.637 28/8 19/16 1.817 79.524 3/8 1/8 3/21 13/18 5/15 21/10 3/19 24/ 7 1/ 7 1/19 13/19 76.617 52.290 PEAK ENDIISE 2.411 130.026 0.376 15.393 3.329 0.000 53 555 3.299 18.3 PEAK PCT 0.6 31.1 0.4 19.0 0.1 3.7 12.5 0.8 0.0 12.8 0.8 28640. 1121. 64388. 18592. 3235. 6.028 185.872 97.318 65.408 167. 36502. 48.697 131.951 195199. 474.613 37. 11379. 28590. 1480. 1068. KWH MAX KW 83.301 0.221 15.466 54.184 3.329 3.299 DAY/HR 1/8 1/8 1/21 22/ 8 6/16 7/17 8/16 19/10 1/19 22/ 7 1/ 7 1/19 22/ 7 PEAK ENDUSE 39.954 2.411 96.295 87.251 0.101 0.024 15.276 50.111 1.626 48.697 131.951 0.916 PEAK PCT 8.4 0.5 20.3 18.4 0.0 0.0 3.2 10.6 0.3 10.3 27.8 KWH 27637. 1085. 62215. 36591. 203. 26. 10990. 27773. 1438. 671. 37137. 1237. 207001. MAX KW 6.028 185.872 117.276 0.076 15.276 54.205 50.769 136.154 83.301 6.580 3.329 3.299 508.420 5/7 1/ 7 5/7 DAY/HR 1/21 1/15 11/19 1/ 2 30/10 1/8 1/8 5/8 1/19 1/18 39.954 96.295 112.471 0.101 51.143 PEAK ENDUSE 2.411 0.021 15.276 1.626 50.769 136.154 2.199 PEAK PCT 7.9 18.9 22.1 3.0 0.3 10.0 26.8 0.5 0.0 0.0 10.1 0.4 DEC 28596. 57369. 28876. 1121. 64345. 119. 21. 11363. 1482. 6010. 39983. 1278. 240564. KWH 6.028 185.872 176.384 MAX KW 0.049 15.276 3.329 87.413 140.357 83.301 4.999 54.203 3.299 600.566 1/ 1 1/7 2/8 1/8 2/21 27/9 21/14 17/16 28/10 2/19 27/8 1/18 27/8 DAY/HR 0.101 PEAK ENDUSE 83.301 6.028 100.075 172.940 0.020 15.276 51.144 1.626 87.413 81.543 1.100 PEAK PCT 13.9 1.0 16.7 28.8 0.0 0.0 2.5 8.5 0.3 14.6 13.6 0.2 ------336738. 13200. 757782. 305611. 107787. 83.301 6.028 185.872 320.202 141.562 648. 134267. 338920. 17441. 24006. 454009. 0.453 15.466 55.134 3.329 182.290 145.960 KWH 11587. 2501998. 83.301 MAX KW 0.453 15.466 3.299 808 340 1/ 2 1/ 5 7/23 1/ 1 MON / DV 1/2 6/20 6/21 7/22 1/2 1/5 2/1 1 / 1 52.524 PEAK ENDUSE 6.028 97.192 320.202 0.102 0.014 15.276 51.297 1.239 182.290 81.078 1.100 10.0 6.5 0.1 PEAK PCT 0.7 12.0 39.6 0.0 0.0 1.9 6.3 0.2 22.6

|                       | LIGHTS     | TASK<br>LIGHTS | MISC<br>EQUIP | SPACE<br>HEATING | SPACE<br>COOLING | HEAT<br>REJECT | PUMPS<br>& AUX | VENT<br>FANS | REFRIG<br>DISPLAY | HT PUMP<br>SUPPLEM | DOMEST<br>HOT WTR | EXT<br>USAGE | TOTAL      |
|-----------------------|------------|----------------|---------------|------------------|------------------|----------------|----------------|--------------|-------------------|--------------------|-------------------|--------------|------------|
| JAN                   |            |                |               |                  |                  |                |                |              |                   |                    |                   |              |            |
| MBTU                  | 0.         | 0.             | 16.           | 0.               | 0.               | 0.             | 0.             | 0.           | 0.                | 0.                 | 0.                | 0.           | 16.        |
| MAX MBTU/HR           | 0.0        | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          | 0.0        |
| DAY/HR                | 0/ 0       | 0/ 0           | 1/10          | 0/0              | 0/0              | 0/ 0           | 0/ 0           | 0/ 0         | 0/ 0              | 0/ 0               | 0/ 0              | 0/ 0         | 1/10       |
| PEAK ENDUSE           | 0.0        | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          |            |
| PEAK PCT              | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          |            |
| FEB                   |            |                |               |                  |                  |                |                |              |                   |                    |                   |              |            |
| MBTU                  | 0.         | 0.             | 14.           | 0.               | 0.               | 0.             | 0.             | 0.           | 0.                | 0.                 | 0.                | 0.           | 14.        |
| MAX MBTU/HR           | 0.0        | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          | 0.0        |
| DAY/HR<br>PEAK ENDUSE | 0/0        | 0/0            | 1/10          | 0/0              | 0/0              | 0/0            | 0/ 0<br>0.0    | 0/0          | 0/0               | 0/0                | 0/ 0<br>0.0       | 0/ 0<br>0.0  | 1/10       |
| PEAK PCT              | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          |            |
| MAR                   |            |                |               |                  |                  |                |                |              |                   |                    |                   |              |            |
| MBTU                  | 0.         | 0.             | 16.           | 0.               | 0.               | 0.             | 0.             | 0.           | 0.                | 0.                 | 0.                | 0.           | 16.        |
| MAX MBTU/HR           | 0.0        | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          | 0.0        |
| DAY/HR                | 0/ 0       | 0/ 0           | 1/10          | 0/ 0             | 0/ 0             | 0/ 0           | 0/ 0           | 0/ 0         | 0/ 0              | 0/0                | 0/ 0              | 0/ 0         | 1/10       |
| PEAK ENDUSE           | 0.0        | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          |            |
| PEAK PCT              | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          |            |
| APR                   |            |                |               |                  |                  |                |                |              |                   |                    |                   |              |            |
| MBTU                  | 0.         | 0.             | 15.           | 0.               | 0.               | 0.             | 0.             | 0.           | 0.                | 0.                 | 0.                | 0.           | 15.<br>0.0 |
| MAX MBTU/HR<br>DAY/HR | 0.0<br>0/0 | 0.0<br>0/0     | 0.0<br>1/10   | 0.0              | 0.0<br>0/0       | 0.0            | 0.0<br>0/ 0    | 0.0          | 0.0               | 0.0                | 0.0<br>0/ 0       | 0.0<br>0/0   | 1/10       |
| PEAK ENDUSE           | 0.0        | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          | 1/10       |
| PEAK PCT              | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          |            |
| MAY                   |            |                |               |                  |                  |                |                |              |                   |                    |                   |              |            |
| MBTU                  | 0.         | 0.             | 16.           | 0.               | 0.               | 0.             | 0.             | 0.           | 0.                | 0.                 | 0.                | 0.           | 16.        |
| MAX MBTU/HR           | 0.0        | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          | 0.0        |
| DAY/HR                | 0/ 0       | 0/ 0           | 1/10          | 0/ 0             | 0/ 0             | 0/ 0           | 0/ 0           | 0/ 0         | 0/ 0              | 0/ 0               | 0/ 0              | 0/ 0         | 1/10       |
| PEAK ENDUSE           | 0.0        | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          |            |
| PEAK PCT              | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          |            |
| JUN                   | 0          | 0.             | 15            | 0.               | 0.               | 0.             | 0              | 0.           | 0                 | 0.                 | 0.                | 0.           | 1.5        |
| MBTU<br>MAX MBTU/HR   | 0.<br>0.0  | 0.0            | 15.<br>0.0    | 0.0              | 0.0              | 0.0            | 0.<br>0.0      | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          | 15.<br>0.0 |
| DAY/HR                | 0.0        | 0.0            | 1/10          | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          | 1/10       |
| PEAK ENDUSE           | 0.0        | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          | 2720       |
| PEAK PCT              | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          |            |
| JUL                   |            |                |               |                  |                  |                |                |              |                   |                    |                   |              |            |
| MBTU                  | 0.         | 0.             | 16.           | 0.               | 0.               | 0.             | 0.             | 0.           | 0.                | 0.                 | 0.                | 0.           | 16.        |
| MAX MBTU/HR           | 0.0        | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          | 0.0        |
| DAY/HR                | 0/ 0       | 0/ 0           | 1/10          | 0/ 0             | 0/ 0             | 0/ 0           | 0/ 0           | 0/ 0         | 0/ 0              | 0/ 0               | 0/ 0              | 0/ 0         | 1/10       |
| PEAK ENDUSE           | 0.0        | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          |            |
| PEAK PCT              | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          |            |
| AUG                   | •          | ^              | 1.0           | ^                | ^                | _              | ^              | •            | •                 | •                  | •                 | ^            | 1.0        |
| MBTU<br>MAX MBTU/HR   | 0.<br>0.0  | 0.<br>0.0      | 16.<br>0.0    | 0.<br>0.0        | 0.<br>0.0        | 0.<br>0.0      | 0.<br>0.0      | 0.<br>0.0    | 0.0               | 0.0                | 0.<br>0.0         | 0.<br>0.0    | 16.<br>0.0 |
| MAX MBTU/HR<br>DAY/HR | 0.0        | 0.0            | 1/10          | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          | 1/10       |
| PEAK ENDUSE           | 0.0        | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          | 1/10       |
| PEAK PCT              | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0                | 0.0               | 0.0          |            |

|             |        |        |        |        |        |        |        |        |        | (CONTINUED) |        |        |        |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------------|--------|--------|--------|
|             |        |        |        |        |        |        |        |        |        |             |        |        |        |
| SEP         | _      | _      |        | _      |        | _      | _      | _      | _      |             | _      | _      |        |
| MBTU        | 0.     | 0.     | 15.    | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.          | 0.     | 0.     | 15.    |
| MAX MBTU/HR | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    | 0.0    |
| DAY/HR      | 0/ 0   | 0/ 0   | 1/10   | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0        | 0/ 0   | 0/ 0   | 1/10   |
| PEAK ENDUSE | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    |        |
| PEAK PCT    | 0.0    | 0.0    | 100.0  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    |        |
| OCT         |        |        |        |        |        |        |        |        |        |             |        |        |        |
| MBTU        | 0.     | 0.     | 16.    | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.          | 0.     | 0.     | 16.    |
| MAX MBTU/HR | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    | 0.0    |
| DAY/HR      | 0/ 0   | 0/ 0   | 1/10   | 0/0    | 0/0    | 0/ 0   | 0/0    | 0/ 0   | 0/ 0   | 0/0         | 0/0    | 0/ 0   | 1/10   |
| PEAK ENDUSE | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    | =, = = |
| PEAK PCT    | 0.0    | 0.0    | 100.0  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    |        |
|             |        |        |        |        |        |        |        |        |        |             |        |        |        |
| NOV         |        |        |        |        |        |        |        |        |        |             |        |        |        |
| MBTU        | 0.     | 0.     | 15.    | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.          | 0.     | 0.     | 15.    |
| MAX MBTU/HR | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    | 0.0    |
| DAY/HR      | 0/ 0   | 0/ 0   | 1/10   | 0/0    | 0/0    | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0        | 0/ 0   | 0/ 0   | 1/10   |
| PEAK ENDUSE | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    |        |
| PEAK PCT    | 0.0    | 0.0    | 100.0  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    |        |
| DEC         |        |        |        |        |        |        |        |        |        |             |        |        |        |
| MBTU        | 0.     | 0.     | 16.    | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.          | 0.     | 0.     | 16.    |
| MAX MBTU/HR | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    | 0.0    |
| DAY/HR      | 0.0    | 0.0    | 1/10   | 0.0    | 0.0    | 0.0    | 0/0    | 0.0    | 0.0    | 0/0         | 0.0    | 0.0    | 1/10   |
| PEAK ENDUSE | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    | 1/10   |
| PEAK PCT    | 0.0    | 0.0    | 100.0  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    |        |
| I Druc I CI | ====== | ====== | ====== | ====== | ====== | ====== | ====== | ====== | ====== | ======      | ====== | ====== |        |
|             |        |        |        |        |        |        |        |        |        |             |        |        |        |
| MBTU        | 0.     | 0.     | 188.   | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.          | 0.     | 0.     | 188.   |
| MAX MBTU/HR | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    | 0.0    |
| MON/DY      | 0/ 0   | 0/ 0   | 1/ 1   | 0/0    | 0/0    | 0/ 0   | 0/0    | 0/ 0   | 0/ 0   | 0/0         | 0/0    | 0/ 0   | 1/ 1   |
| PEAK ENDUSE | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    |        |
| PEAK PCT    | 0.0    | 0.0    | 100.0  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    | 0.0    |        |

REPORT- PS-F Energy End-Use Summary for EM1-Residential

|                         | LIGHTS         | TASK<br>LIGHTS | MISC<br>EQUIP   | SPACE<br>HEATING | SPACE<br>COOLING | HEAT<br>REJECT | PUMPS<br>& AUX | VENT<br>FANS    | REFRIG<br>DISPLAY | HT PUMP<br>SUPPLEM | DOMEST<br>HOT WTR | EXT<br>USAGE | TOTAL            |
|-------------------------|----------------|----------------|-----------------|------------------|------------------|----------------|----------------|-----------------|-------------------|--------------------|-------------------|--------------|------------------|
| JAN                     |                |                |                 |                  |                  |                |                |                 |                   |                    |                   |              |                  |
| KWH                     | 8441.          | 0.             | 56771.          | 35787.           | 22.              | 21.            | 582.           | 11573.          | 0.                | 1758.              | 0.                | 0.           | 114955.          |
| MAX KW                  | 48.555         | 0.000          | 177.225         | 127.573          | 4.669            | 0.051          | 0.786          | 17.403          | 0.000             | 60.508             | 0.000             | 0.000        | 311.392          |
| DAY/HR                  | 1/ 8           | 0/ 0           | 1/21            | 5/8              | 19/14            | 29/15          | 1/ 1           | 19/13           | 0/ 0              | 5/8                | 0/ 0              | 0/0          | 5/ 8             |
| PEAK ENDUSE             | 18.208         | 0.000          | 88.613          | 127.573          | 0.000            | 0.014          | 0.786          | 15.691          | 0.000             | 60.508             | 0.000             | 0.000        |                  |
| PEAK PCT                | 5.8            | 0.0            | 28.5            | 41.0             | 0.0              | 0.0            | 0.3            | 5.0             | 0.0               | 19.4               | 0.0               | 0.0          |                  |
| FEB                     |                |                |                 |                  |                  |                |                |                 |                   |                    |                   |              |                  |
| KWH                     | 7589.          | 0.             | 51277.          | 23049.           | 666.             | 19.            | 526.           | 10419.          | 0.                | 267.               | 0.                | 0.           | 93812            |
| MAX KW                  | 48.555         | 0.000          | 177.225         | 95.424           | 23.913           | 0.054          | 0.964          | 17.526          | 0.000             | 17.050             | 0.000             | 0.000        | 263.392          |
| DAY/HR                  | 1/8            | 0/0            | 1/21            | 2/8              | 22/16            | 21/13          | 15/16          | 23/13           | 0/0               | 13/ 8              | 0/ 0              | 0/ 0         | 13/ 8            |
| PEAK ENDUSE<br>PEAK PCT | 48.555<br>18.4 | 0.000          | 88.613<br>33.6  | 92.678<br>35.2   | 0.000            | 0.018          | 0.786<br>0.3   | 15.692<br>6.0   | 0.000             | 17.050<br>6.5      | 0.000             | 0.000        |                  |
| MAR                     |                |                |                 |                  |                  |                |                |                 |                   |                    |                   |              |                  |
| MAR<br>KWH              | 8351.          | 0.             | 56771.          | 16021.           | 1710.            | 27.            | 585.           | 11475.          | 0.                | 50.                | 0.                | 0.           | 94990.           |
| MAX KW                  | 48.555         | 0.000          | 177.225         | 79.548           | 57.953           | 0.210          | 0.969          | 17.423          | 0.000             | 9.399              | 0.000             | 0.000        | 237.537          |
| DAY/HR                  | 1/8            | 0/ 0           | 1/21            | 2/ 5             | 29/16            | 29/16          | 8/13           | 30/11           | 0/ 0              | 2/ 8               | 0/ 0              | 0/ 0         | 29/21            |
| PEAK ENDUSE             | 14.566         | 0.000          | 177.225         | 2.952            | 26.687           | 0.052          | 0.965          | 15.089          | 0.000             | 0.000              | 0.000             | 0.000        |                  |
| PEAK PCT                | 6.1            | 0.0            | 74.6            | 1.2              | 11.2             | 0.0            | 0.4            | 6.4             | 0.0               | 0.0                | 0.0               | 0.0          |                  |
| APR                     |                |                |                 |                  |                  |                |                |                 |                   |                    |                   |              |                  |
| KWH                     | 8157.          | 0.             | 54940.          | 7677.            | 4868.            | 30.            | 590.           | 11107.          | 0.                | 1.                 | 0.                | 0.           | 87370.           |
| MAX KW                  | 48.555         | 0.000          | 177.225         | 60.754           | 46.587           | 0.131          | 0.971          | 18.037          | 0.000             | 1.033              | 0.000             | 0.000        | 237.992          |
| DAY/HR                  | 1/ 8           | 0/ 0           | 1/21            | 24/ 5            | 20/16            | 12/19          | 18/18          | 20/13           | 0/ 0              | 24/ 8              | 0/ 0              | 0/ 0         | 11/21            |
| PEAK ENDUSE             | 14.566         | 0.000          | 177.225         | 3.442            | 26.678           | 0.055          | 0.958          | 15.068          | 0.000             | 0.000              | 0.000             | 0.000        |                  |
| PEAK PCT                | 6.1            | 0.0            | 74.5            | 1.4              | 11.2             | 0.0            | 0.4            | 6.3             | 0.0               | 0.0                | 0.0               | 0.0          |                  |
| MAY                     |                |                |                 | 40.55            |                  |                |                |                 |                   |                    |                   |              |                  |
| KWH                     | 8442.          | 0.             | 56771.          | 4267.            | 9562.            | 45.            | 638.           | 11556.          | 0.                | 0.                 | 0.                | 0.           | 91282            |
| MAX KW<br>DAY/HR        | 48.555<br>1/8  | 0.000          | 177.225<br>1/21 | 36.398<br>10/8   | 69.191<br>15/16  | 0.375<br>16/15 | 0.974<br>18/18 | 18.923<br>16/11 | 0.000             | 0.000              | 0.000             | 0.000        | 261.416<br>15/21 |
| PEAK ENDUSE             | 14.566         | 0.000          | 177.225         | 0.000            | 52.281           | 0.188          | 0.950          | 16.206          | 0.000             | 0.000              | 0.000             | 0.000        | 15/21            |
| PEAK PCT                | 5.6            | 0.00           | 67.8            | 0.0              | 20.0             | 0.1            | 0.950          | 6.2             | 0.0               | 0.0                | 0.0               | 0.00         |                  |
| JUN                     |                |                |                 |                  |                  |                |                |                 |                   |                    |                   |              |                  |
| KWH                     | 8065.          | 0.             | 54940.          | 2170.            | 13728.           | 67.            | 647.           | 11255.          | 0.                | 0.                 | 0.                | 0.           | 90872.           |
| MAX KW                  | 48.555         | 0.000          | 177.225         | 11.670           | 76.452           | 0.453          | 0.976          | 19.427          | 0.000             | 0.000              | 0.000             | 0.000        | 273.128          |
| DAY/HR                  | 3/ 8           | 0/0            | 1/21            | 8/8              | 20/16            | 20/14          | 21/16          | 20/11           | 0/0               | 0/0                | 0/0               | 0/0          | 20/20            |
| PEAK ENDUSE             | 24.277         | 0.000          | 157.533         | 0.000            | 71.911           | 0.351          | 0.934          | 18.122          | 0.000             | 0.000              | 0.000             | 0.000        |                  |
| PEAK PCT                | 8.9            | 0.0            | 57.7            | 0.0              | 26.3             | 0.1            | 0.3            | 6.6             | 0.0               | 0.0                | 0.0               | 0.0          |                  |
| JUL                     |                |                |                 |                  |                  |                |                |                 |                   |                    |                   |              |                  |
| KWH                     | 8441.          | 0.             | 56771.          | 715.             | 26159.           | 137.           | 691.           | 12002.          | 0.                | 0.                 | 0.                | 0.           | 104918.          |
| MAX KW                  | 48.555         | 0.000          | 177.225         | 4.535            | 115.247          | 0.453          | 0.976          | 20.470          | 0.000             | 0.000              | 0.000             | 0.000        | 317.503          |
| DAY/HR                  | 1/ 8           | 0/ 0           | 1/21            | 4/ 8             | 23/20            | 9/16           | 24/10          | 22/11           | 0/ 0              | 0/ 0               | 0/ 0              | 0/ 0         | 23/20            |
| PEAK ENDUSE             | 24.277         | 0.000          | 157.533         | 0.000            | 115.247          | 0.453          | 0.972          | 19.020          | 0.000             | 0.000              | 0.000             | 0.000        |                  |
| PEAK PCT                | 7.6            | 0.0            | 49.6            | 0.0              | 36.3             | 0.1            | 0.3            | 6.0             | 0.0               | 0.0                | 0.0               | 0.0          |                  |
| AUG                     |                |                |                 |                  |                  |                |                |                 |                   |                    |                   |              |                  |
| KWH                     | 8384.          | 0.             | 56771.          | 618.             | 24027.           | 144.           | 695.           | 11894.          | 0.                | 0.                 | 0.                | 0.           | 102533           |
| MAX KW                  | 48.555         | 0.000          | 177.225         | 4.965            | 109.073          | 0.453          | 0.976          | 20.014          | 0.000             | 0.000              | 0.000             | 0.000        | 289.83           |
| DAY/HR                  | 1/ 8           | 0/ 0           | 1/21            | 23/ 8            | 10/16            | 2/12           | 2/10           | 10/12           | 0/ 0              | 0/ 0               | 0/ 0              | 0/ 0         | 9/20             |
| PEAK ENDUSE             | 24.277         | 0.000          | 157.533         | 0.000            | 88.272           | 0.453          | 0.908          | 18.390          | 0.000             | 0.000              | 0.000             | 0.000        |                  |
| PEAK PCT                | 8.4            | 0.0            | 54.4            | 0.0              | 30.5             | 0.2            | 0.3            | 6.3             | 0.0               | 0.0                | 0.0               | 0.0          |                  |

REPORT- PS-F Energy End-Use Summary for EM1-Residential WEATHER FILE- SEATTLE BOEING FI WA

-----(CONTINUED)-----SEP 0. 54940. 1584. 15854. KWH 8123 75. 641. 11328. 0. 0 0 0 92545. MAX KW 48.555 0.000 177.225 22.350 87.337 0.453 0.976 19.016 0.000 0.000 0.000 0.000 259.934 DAY/HR 2/8 0/0 1/21 28/8 19/16 13/18 5/15 13/12 0/0 0/0 0/0 0/0 13/21 15.768 0.000 PEAK ENDUSE 14.566 0.000 177.225 0.000 51.265 0.210 0.899 0.000 0.000 0 000 5.6 68.2 0.0 PEAK PCT 0.0 19.7 0.1 0.3 6.1 0.0 0.0 0.0 0.0 0. 56771. 0.000 177.225 8211. 3022. 58.422 54.644 8441. 37. 599. 11455. 0. 0. 0. KWH 88538. 239.489 88538. 0.000 MAX KW 48.555 0.221 0.976 17.611 0.843 0.000 0.000 DAY/HR 1/8 0/0 1/21 22/ 8 6/16 7/17 8/16 5/13 0/0 22/ 8 0/0 0/0 6/21 PEAK ENDUSE 18.208 0.000 177.225 1.532 26.695 0.062 0.950 14.816 0.000 0.000 0.000 0.000 PEAK PCT 7.6 0.0 74.0 0.6 11.1 0.0 0.4 6.2 0.0 0.0 0.0 KWH 8100. 0. 54940. 20164. 127. 26. 557. 11103. 0. 12. 0. 0. 95029. MAX KW 48.555 0.000 177.225 70.622 6.474 0.076 0.786 17.412 0.000 0.000 0.000 241.103 2.954 DAY/HR 0/0 1/21 1/15 11/19 1/ 2 0/0 0/0 0/0 26/21 1/8 27/ 4 16/12 5/8 14.566 33.584 0.000 PEAK ENDUSE 0.000 177.225 0.026 0.786 14.915 0.000 0.000 0.000 0.000 PEAK PCT 6.0 73.5 13.9 0.0 0.0 0.0 0.0 0.3 6.2 0.0 0.0 0.0 DEC 0. 56771. 32938. 0. 110840. 8406. 21. 583. 11550. 527. 0. KWH 44. 0. 0.000 177.225 0.000 16.855 MAX KW 48.555 4.898 0.049 0.786 0.000 0.000 281.692 97.188 17.399 2/8 0/0 1/ 1 DAY/HR 1/21 27/9 21/14 17/16 21/13 0/0 27/9 0/0 0/0 26/21 14.566 PEAK ENDUSE 0.000 177.225 64.447 0.000 0.020 0.786 14.911 0.000 9.737 0.000 0.000 PEAK PCT 5.2 0.0 62.9 22.9 0.0 0.0 0.3 5.3 0.0 3.5 0.0 0.0 0. 668432. 153202. 99788. 0.000 177.225 127.573 115.247 0. 0. 1167684. KWH 98942 648 7334. 136718. 0 2617 0.000 60.508 48.555 MAX KW 0 453 0 976 20.470 0.00 0.000 317.503 0/0 1/1 1/5 7/23 1/ 5 MON / DV 1 / 1 6/20 6/21 7/22 0/0 0/0 0/0 7/23 PEAK ENDUSE 24.277 0.000 157.533 0.000 115.247 0.453 0.972 19.020 0.000 0.000 0.000 0.000 0.0 7.6 0.0 PEAK PCT 0.0 49.6 0.0 36.3 0.1 0.3 6.0 0.0 0.0

YEARLY TRANSFORMER LOSSES = 0.0 KWH

REPORT- PS-F Energy End-Use Summary for EM2-Non-Residential WEATHER FILE- SEATTLE BOEING FI WA

|             |        | TASK   | MISC  | SPACE   | SPACE   | HEAT   | PUMPS  | VENT   | REFRIG  | HT PUMP | DOMEST  | EXT   |         |
|-------------|--------|--------|-------|---------|---------|--------|--------|--------|---------|---------|---------|-------|---------|
|             | LIGHTS | LIGHTS | EQUIP | HEATING | COOLING | REJECT | & AUX  | FANS   | DISPLAY | SUPPLEM | HOT WTR | USAGE | TOTAL   |
| JAN         |        |        |       |         |         |        |        |        |         |         |         |       |         |
| KWH         | 18910. | 1121.  | 2887. | 12630.  | 75.     | 0.     | 10781. | 7427.  | 1482.   | 0.      | 40210.  | 1278. | 96801.  |
| MAX KW      | 34.725 | 6.028  | 6.961 | 168.707 | 0.102   | 0.000  | 14.490 | 23.463 | 3.329   | 0.000   | 143.731 | 3.299 | 354.503 |
| DAY/HR      | 2/18   | 1/ 8   | 2/10  | 5/ 8    | 5/ 8    | 0/ 0   | 1/ 1   | 5/10   | 2/19    | 0/ 0    | 1/7     | 1/18  | 5/ 7    |
| PEAK ENDUSE | 24.189 | 2.411  | 2.479 | 141.189 | 0.102   | 0.000  | 14.490 | 22.166 | 1.548   | 0.000   | 143.731 | 2.199 | -, .    |
| PEAK PCT    | 6.8    | 0.7    | 0.7   | 39.8    | 0.0     | 0.0    | 4.1    | 6.3    | 0.4     | 0.0     | 40.5    | 0.6   |         |
| FEB         |        |        |       |         |         |        |        |        |         |         |         |       |         |
| KWH         | 17081. | 1013.  | 2610. | 8978.   | 69.     | 0.     | 9737.  | 6677.  | 1338.   | 0.      | 36861.  | 898.  | 85262.  |
| MAX KW      | 34.725 | 6.028  | 6.961 | 82.685  | 0.567   | 0.000  | 14.490 | 23.445 | 3.329   | 0.000   | 145.132 | 3.299 | 297.052 |
| DAY/HR      | 1/18   | 1/ 8   | 1/10  | 27/ 7   | 15/16   | 0/ 0   | 1/ 1   | 2/10   | 1/19    | 0/ 0    | 1/ 7    | 1/20  | 27/ 7   |
| PEAK ENDUSE | 24.189 | 2.411  | 3.823 | 82.685  | 0.102   | 0.000  | 14.490 | 22.045 | 1.626   | 0.000   | 145.132 | 0.550 |         |
| PEAK PCT    | 8.1    | 0.8    | 1.3   | 27.8    | 0.0     | 0.0    | 4.9    | 7.4    | 0.5     | 0.0     | 48.9    | 0.2   |         |
| MAR         |        |        |       |         |         |        |        |        |         |         |         |       |         |
| KWH         | 18911. | 1121.  | 2889. | 6750.   | 118.    | 0.     | 10781. | 7331.  | 1482.   | 0.      | 40236.  | 994.  | 90613.  |
| MAX KW      | 34.725 | 6.028  | 6.961 | 53.935  | 2.975   | 0.000  | 14.490 | 23.444 | 3.329   | 0.000   | 143.731 | 3.299 | 265.522 |
| DAY/HR      | 1/18   | 1/8    | 1/10  | 2/ 7    | 29/16   | 0/ 0   | 1/ 1   | 2/10   | 1/19    | 0/ 0    | 1/ 7    | 1/20  | 2/ 7    |
| PEAK ENDUSE | 24.189 | 2.411  | 2.479 | 53.935  | 0.101   | 0.000  | 14.490 | 22.088 | 1.548   | 0.000   | 143.731 | 0.550 |         |
| PEAK PCT    | 9.1    | 0.9    | 0.9   | 20.3    | 0.0     | 0.0    | 5.5    | 8.3    | 0.6     | 0.0     | 54.1    | 0.2   |         |
| APR         |        |        |       |         |         |        |        |        |         |         |         |       |         |
| KWH         | 18298. | 1085.  | 2867. | 4484.   | 160.    | 0.     | 10433. | 7039.  | 1431.   | 0.      | 37739.  | 962.  | 84498.  |
| MAX KW      | 34.725 | 6.028  | 6.961 | 40.403  | 1.563   | 0.000  | 14.490 | 23.442 | 3.329   | 0.000   | 140.929 | 3.299 | 250.364 |
| DAY/HR      | 1/18   | 1/ 8   | 1/10  | 24/ 7   | 20/18   | 0/ 0   | 1/ 2   | 6/10   | 1/19    | 0/ 0    | 1/ 7    | 1/20  | 24/ 7   |
| PEAK ENDUSE | 24.189 | 2.411  | 3.823 | 40.403  | 0.101   | 0.000  | 14.490 | 21.843 | 1.626   | 0.000   | 140.929 | 0.550 | ,       |
| PEAK PCT    | 9.7    | 1.0    | 1.5   | 16.1    | 0.0     | 0.0    | 5.8    | 8.7    | 0.6     | 0.0     | 56.3    | 0.2   |         |
| MAY         |        |        |       |         |         |        |        |        |         |         |         |       |         |
| KWH         | 18909. | 1121.  | 2930. | 2672.   | 312.    | 0.     | 10781. | 7211.  | 1480.   | 0.      | 37700.  | 596.  | 83713.  |
| MAX KW      | 34.725 | 6.028  | 6.961 | 18.234  | 3.227   | 0.000  | 14.490 | 23.434 | 3.329   | 0.000   | 136.727 | 2.932 | 220.054 |
| DAY/HR      | 1/18   | 1/8    | 1/10  | 11/ 9   | 15/19   | 0/ 0   | 1/ 2   | 11/10  | 1/19    | 0/ 0    | 1/ 7    | 1/22  | 6/ 7    |
| PEAK ENDUSE | 24.189 | 2.411  | 3.823 | 14.846  | 0.101   | 0.000  | 14.490 | 21.843 | 1.626   | 0.000   | 136.727 | 0.000 |         |
| PEAK PCT    | 11.0   | 1.1    | 1.7   | 6.7     | 0.0     | 0.0    | 6.6    | 9.9    | 0.7     | 0.0     | 62.1    | 0.0   |         |
| JUN         |        |        |       |         |         |        |        |        |         |         |         |       |         |
| KWH         | 18302. | 1085.  | 2782. | 1404.   | 535.    | 0.     | 10433. | 6901.  | 1435.   | 0.      | 34690.  | 577.  | 78144.  |
| MAX KW      | 34.725 | 6.028  | 6.961 | 14.242  | 3.792   | 0.000  | 14.490 | 23.306 | 3.329   | 0.000   | 132.524 | 2.932 | 207.470 |
| DAY/HR      | 3/18   | 1/ 8   | 3/10  | 8/ 9    | 20/18   | 0/ 0   | 1/ 2   | 1/10   | 3/19    | 0/ 0    | 1/ 7    | 1/22  | 3/ 7    |
| PEAK ENDUSE | 24.189 | 2.411  | 3.823 | 6.599   | 0.100   | 0.000  | 14.490 | 21.709 | 1.626   | 0.000   | 132.524 | 0.000 |         |
| PEAK PCT    | 11.7   | 1.2    | 1.8   | 3.2     | 0.0     | 0.0    | 7.0    | 10.5   | 0.8     | 0.0     | 63.9    | 0.0   |         |
| JUL         |        |        |       |         |         |        |        |        |         |         |         |       |         |
| KWH         | 18909. | 1121.  | 2930. | 628.    | 1246.   | 0.     | 10781. | 7043.  | 1480.   | 0.      | 34611.  | 596.  | 79344.  |
| MAX KW      | 34.725 | 6.028  | 6.961 | 7.061   | 5.260   | 0.000  | 14.490 | 23.044 | 3.329   | 0.000   | 129.723 | 2.932 | 201.345 |
| DAY/HR      | 1/18   | 1/ 8   | 1/10  | 27/ 9   | 23/18   | 0/ 0   | 1/ 2   | 27/10  | 1/19    | 0/ 0    | 1/ 7    | 1/22  | 5/ 7    |
| PEAK ENDUSE | 24.189 | 2.411  | 3.823 | 3.437   | 0.099   | 0.000  | 14.490 | 21.547 | 1.626   | 0.000   | 129.723 | 0.000 | -, ,    |
| PEAK PCT    | 12.0   | 1.2    | 1.9   | 1.7     | 0.0     | 0.0    | 7.2    | 10.7   | 0.8     | 0.0     | 64.4    | 0.0   |         |
| AUG         |        |        |       |         |         |        |        |        |         |         |         |       |         |
| KWH         | 18910. | 1121.  | 2932. | 565.    | 1207.   | 0.     | 10781. | 7039.  | 1481.   | 0.      | 33993.  | 1068. | 79097.  |
| MAX KW      | 34.725 | 6.028  | 6.961 | 7.171   | 5.026   | 0.000  | 14.490 | 23.093 | 3.329   | 0.000   | 128.322 | 3.299 | 199.509 |
| DAY/HR      | 1/18   | 1/ 8   | 1/10  | 17/ 9   | 10/16   | 0/ 0   | 1/ 2   | 17/10  | 1/19    | 0/ 0    | 1/ 7    | 1/19  | 6/ 7    |
| PEAK ENDUSE | 24.189 | 2.411  | 3.823 | 0.871   | 1.611   | 0.000  | 14.490 | 21.250 | 1.626   | 0.000   | 128.322 | 0.916 | -, ,    |
| PEAK PCT    | 12.1   | 1.2    | 1.9   | 0.4     | 0.8     | 0.0    | 7.3    | 10.7   | 0.8     | 0.0     | 64.3    | 0.5   |         |
|             |        |        |       |         |         |        |        |        |         |         |         |       |         |

0.000 145.132

0/0 2/1

0.000 143.731

40.5

0.0

3.299

1 / 1

2.199

0.6

354 503

1/5

WEATHER FILE- SEATTLE BOEING FI WA -----(CONTINUED)-----SEP KWH 18301. 1085. 2781 826. 626. 0. 10433. 6841. 1434. 0. 32897. 1034. 76257 MAX KW 34.725 6.028 6.961 13.700 4.184 0.000 14.490 23.253 3.329 0.000 128.322 3.299 203.414 27/ 7 DAY/HR 3/18 1/8 3/10 28/ 9 19/16 0/0 1/ 2 28/10 3/19 0/0 1/ 7 1/19 PEAK ENDUSE 24.189 2.411 3.823 5.826 0.101 0.000 14.490 21.711 1.626 0.000 128.322 0 916 11.9 PEAK PCT 1.2 1.9 2.9 0.0 0.0 7.1 10.7 0.8 0.0 63.1 0.5 18909. 0. 35230. 0.000 131.123 1121. 2930. 2649. 168. 0. 10781. 7192. 1480. 1068. KWH 81527. 212.992 81527. MAX KW 34.725 6.028 6.961 18.240 3.086 0.000 14.490 23.408 3.329 3.299 DAY/HR 1/18 1/8 1/10 19/ 9 7/17 0/ 0 1/ 2 19/10 1/19 0/0 1/7 1/19 PEAK ENDUSE 24.189 2.411 3.823 12.498 0.101 0.000 14.490 21.816 1.626 0.000 131.123 0.916 PEAK PCT 11.4 1.1 1.8 5.9 0.0 0.0 6.8 10.2 0.8 0.0 61.6 0.4 KWH 18303. 1085. 2739. 5030. 75. 0. 10433. 7048. 1438. 0. 35887. 1237. 83275. 23.442 MAX KW 34.725 0.000 14.490 0.000 135.326 6.028 6.961 25.572 0.458 3.329 3.299 231.821 5/7 1/ 7 DAY/HR 6/15 1/ 2 0/0 1/18 5/7 1/18 1/8 1/10 0/0 23/10 1/19 PEAK ENDUSE 24.189 2.411 3.823 25.572 0.101 0.000 14.490 22.084 1.626 0.000 135.326 2.199 PEAK PCT 6.3 9.5 58.4 10.4 1.0 1.6 11.0 0.0 0.0 0.7 0.0 0.9 DEC 18910. 75. 10781. 7384. 1121. 2887. 8850. 0. 1482. 0. 38663. 1278. 91430. KWH 0.000 14.490 MAX KW 6.961 57.916 0.101 0.000 139.529 34.725 6.028 23.447 3.329 3.299 262.107 1/7 2/18 1/8 2/10 26/20 24/22 0/0 1/1 27/10 2/19 0/0 1/18 27/7 DAY/HR PEAK ENDUSE 24.189 2.411 3.823 51.651 0.101 0.000 14.490 22.089 1.626 0.000 139.529 2.199 PEAK PCT 9.2 0.9 1.5 19.7 0.0 0.0 5.5 8.4 0.6 0.0 53.2 0.8 34166. 55465. 6.961 168.707 85133. 17441. 23.463 3.329 KWH 222655 13200 34166. 4666 0. 126934. 0. 438719. 11587. 1009963.

0.000 14.490

0.0 4.1

1/ 1

14.490

1/5

22.166

1/2

1.548

6.3 0.4

0/0

0.000

5 260

7/23

0.102

0.0

1/2 1/5

2.479 141.189

39.8

0.7

YEARLY TRANSFORMER LOSSES = 0.0 KWH

6 028

1 / 1

2.411

0.7

34.725

24.189

6.8

1/2

MAX KW

MON / DV

PEAK PCT

PEAK ENDUSE

REPORT- PS-F Energy End-Use Summary for Garage Exhaust Fans WEATHER FILE- SEATTLE BOEING FI WA

|                       | LIGHTS      | TASK<br>LIGHTS | MISC<br>EQUIP | SPACE<br>HEATING | SPACE<br>COOLING | HEAT<br>REJECT | PUMPS<br>& AUX | VENT<br>FANS    | REFRIG<br>DISPLAY | HT PUMP<br>SUPPLEM | DOMEST<br>HOT WTR | EXT<br>USAGE  | TOTAL           |
|-----------------------|-------------|----------------|---------------|------------------|------------------|----------------|----------------|-----------------|-------------------|--------------------|-------------------|---------------|-----------------|
|                       |             |                |               |                  |                  |                |                |                 |                   |                    |                   |               |                 |
| JAN                   |             | 0              | •             | 0                |                  |                | 0              | 4000            |                   |                    |                   | 0             | 4000            |
| KWH<br>MAX KW         | 0.<br>0.000 | 0.<br>0.000    | 0.000         | 0.<br>0.000      | 0.<br>0.000      | 0.<br>0.000    | 0.<br>0.000    | 4820.<br>18.510 | 0.000             | 0.<br>0.000        | 0.<br>0.000       | 0.<br>0.000   | 4820.<br>18.510 |
| DAY/HR                | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 16.510          | 0.000             | 0.000              | 0.000             | 0.000         | 16.510          |
| PEAK ENDUSE           | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 18.510          | 0.000             | 0.000              | 0.000             | 0.000         | 1/ /            |
| PEAK PCT              | 0.0         | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 100.0           | 0.0               | 0.0                | 0.0               | 0.0           |                 |
| FEB                   |             |                |               |                  |                  |                |                |                 |                   |                    |                   |               |                 |
| KWH                   | 0.          | 0.             | 0.            | 0.               | 0.               | 0.             | 0.             | 4354.           | 0.                | 0.                 | 0.                | 0.            | 4354.           |
| MAX KW                | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 18.510          | 0.000             | 0.000              | 0.000             | 0.000         | 18.510          |
| DAY/HR                | 0/ 0        | 0/ 0           | 0/ 0          | 0/0              | 0/ 0             | 0/ 0           | 0/ 0           | 1/ 7            | 0/ 0              | 0/ 0               | 0/ 0              | 0/ 0          | 1/ 7            |
| PEAK ENDUSE           | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 18.510          | 0.000             | 0.000              | 0.000             | 0.000         |                 |
| PEAK PCT              | 0.0         | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 100.0           | 0.0               | 0.0                | 0.0               | 0.0           |                 |
| MAR<br>KWH            | 0.          | 0.             | 0.            | 0.               | 0.               | 0.             | 0.             | 4820.           | 0.                | 0.                 | 0.                | 0.            | 4820.           |
| MAX KW                | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 18.510          | 0.000             | 0.000              | 0.000             | 0.000         | 18.510          |
| DAY/HR                | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 1/ 7            | 0.000             | 0.000              | 0.000             | 0.000         | 17 7            |
| PEAK ENDUSE           | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 18.510          | 0.000             | 0.000              | 0.000             | 0.000         | 1/ /            |
| PEAK PCT              | 0.0         | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 100.0           | 0.0               | 0.0                | 0.0               | 0.0           |                 |
| APR                   |             |                |               |                  |                  |                |                |                 |                   |                    |                   |               |                 |
| KWH                   | 0.          | 0.             | 0.            | 0.               | 0.               | 0.             | 0.             | 4665.           | 0.                | 0.                 | 0.                | 0.            | 4665.           |
| MAX KW                | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 18.510          | 0.000             | 0.000              | 0.000             | 0.000         | 18.510          |
| DAY/HR                | 0/ 0        | 0/ 0           | 0/ 0          | 0/0              | 0/ 0             | 0/ 0           | 0/ 0           | 1/ 7            | 0/ 0              | 0/ 0               | 0/ 0              | 0/ 0          | 1/ 7            |
| PEAK ENDUSE           | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 18.510          | 0.000             | 0.000              | 0.000             | 0.000         |                 |
| PEAK PCT              | 0.0         | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 100.0           | 0.0               | 0.0                | 0.0               | 0.0           |                 |
| MAY                   | 0           | 0              | 0             | 0                | 2                |                |                | 4000            | 0                 | 0                  | 0                 | 0             | 4000            |
| KWH                   | 0.<br>0.000 | 0.             | 0.            | 0.               | 0.               | 0.             | 0.             | 4820.           | 0.                | 0.                 | 0.                | 0.            | 4820.           |
| MAX KW                | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 18.510<br>1/7   | 0.000             | 0.000              | 0.000             | 0.000         | 18.510<br>1/ 7  |
| DAY/HR<br>PEAK ENDUSE | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 18.510          | 0.000             | 0.000              | 0.000             | 0.000         | 1/ /            |
| PEAK PCT              | 0.00        | 0.0            | 0.00          | 0.00             | 0.00             | 0.0            | 0.0            | 100.0           | 0.0               | 0.0                | 0.00              | 0.0           |                 |
| JUN                   |             |                |               |                  |                  |                |                |                 |                   |                    |                   |               |                 |
| KWH                   | 0.          | 0.             | 0.            | 0.               | 0.               | 0.             | 0.             | 4665.           | 0.                | 0.                 | 0.                | 0.            | 4665.           |
| MAX KW                | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 18.510          | 0.000             | 0.000              | 0.000             | 0.000         | 18.510          |
| DAY/HR                | 0/ 0        | 0/ 0           | 0/ 0          | 0/0              | 0/ 0             | 0/ 0           | 0/ 0           | 1/ 7            | 0/ 0              | 0/ 0               | 0/ 0              | 0/ 0          | 1/ 7            |
| PEAK ENDUSE           | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 18.510          | 0.000             | 0.000              | 0.000             | 0.000         |                 |
| PEAK PCT              | 0.0         | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 100.0           | 0.0               | 0.0                | 0.0               | 0.0           |                 |
| JUL                   | 0           | 0              | 0             | 0                | •                | 0              | 0              | 4000            |                   | 0                  | 0                 | 0             | 4000            |
| KWH                   | 0.          | 0.             | 0.            | 0.               | 0.               | 0.             | 0.             | 4820.           | 0.                | 0.                 | 0.                | 0.            | 4820.           |
| MAX KW                | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 18.510          | 0.000             | 0.000              | 0.000             | 0.000         | 18.510<br>1/7   |
| DAY/HR<br>PEAK ENDUSE | 0.000       | 0/ 0<br>0.000  | 0.000         | 0/ 0<br>0.000    | 0.000            | 0/ 0<br>0.000  | 0.000          | 1/ 7<br>18.510  | 0.000             | 0.000              | 0/ 0<br>0.000     | 0/ 0<br>0.000 | 1/ /            |
| PEAK PCT              | 0.00        | 0.00           | 0.0           | 0.00             | 0.00             | 0.00           | 0.00           | 100.0           | 0.00              | 0.0                | 0.00              | 0.00          |                 |
| AUG                   |             |                |               |                  |                  |                |                |                 |                   |                    |                   |               |                 |
| KWH                   | 0.          | 0.             | 0.            | 0.               | 0.               | 0.             | 0.             | 4820.           | 0.                | 0.                 | 0.                | 0.            | 4820.           |
| MAX KW                | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 18.510          | 0.000             | 0.000              | 0.000             | 0.000         | 18.510          |
| DAY/HR                | 0/ 0        | 0/ 0           | 0/ 0          | 0/0              | 0/ 0             | 0/ 0           | 0/ 0           | 1/ 7            | 0/ 0              | 0/ 0               | 0/ 0              | 0/ 0          | 1/ 7            |
| PEAK ENDUSE           | 0.000       | 0.000          | 0.000         | 0.000            | 0.000            | 0.000          | 0.000          | 18.510          | 0.000             | 0.000              | 0.000             | 0.000         |                 |
| PEAK PCT              | 0.0         | 0.0            | 0.0           | 0.0              | 0.0              | 0.0            | 0.0            | 100.0           | 0.0               | 0.0                | 0.0               | 0.0           |                 |

REPORT- PS-F Energy End-Use Summary for Garage Exhaust Fans WEATHER FILE- SEATTLE BOEING FI WA

|             |        |        |        |        |        | . rans |        |        |        |        | 00 0.000 0.000<br>0 0/0 0/0<br>00 0.000 0.000<br>0 0.00 0.000<br>0 0.0 0.0<br>0 0.0 0.000<br>0 0/0 0/0<br>0 0.000 0.000<br>0 0.0 0.000 |        |        |  |  |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|--------|--------|--|--|
| SEP         |        |        |        |        |        |        |        |        |        |        |  |        |        |  |  |
| KWH         | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 4665.  | 0.     | 0.     | 0.   |        | 4665.  |  |  |
| MAX KW      | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 18.510 | 0.000  | 0.000  |  |        | 18.510 |  |  |
| DAY/HR      | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 1/ 7   | 0/ 0   | 0/ 0   |  |        | 1/ 7   |  |  |
| PEAK ENDUSE | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 18.510 | 0.000  | 0.000  |  |        |        |  |  |
| PEAK PCT    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 100.0  | 0.0    | 0.0    | 0.0  | 0.0    |        |  |  |
| OCT         |        |        |        |        |        |        |        |        |        |        |  |        |        |  |  |
| KWH         | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 4820.  | 0.     | 0.     | 0.   | 0.     | 4820.  |  |  |
| MAX KW      | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 18.510 | 0.000  | 0.000  | 0.000  |        | 18.510 |  |  |
| DAY/HR      | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 1/ 7   | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 1/ 7   |  |  |
| PEAK ENDUSE | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 18.510 | 0.000  | 0.000  | 0.000  | 0.000  |        |  |  |
| PEAK PCT    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 100.0  | 0.0    | 0.0    | 0.0  | 0.0    |        |  |  |
| NOV         |        |        |        |        |        |        |        |        |        |        |  |        |        |  |  |
| KWH         | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 4665.  | 0.     | 0.     | 0.   | 0.     | 4665.  |  |  |
| MAX KW      | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 18.510 | 0.000  | 0.000  | 0.000  | 0.000  | 18.510 |  |  |
| DAY/HR      | 0/ 0   | 0/ 0   | 0/ 0   | 0/0    | 0/ 0   | 0/ 0   | 0/ 0   | 1/ 7   | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 1/ 7   |  |  |
| PEAK ENDUSE | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 18.510 | 0.000  | 0.000  | 0.000  | 0.000  |        |  |  |
| PEAK PCT    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 100.0  | 0.0    | 0.0    | 0.0  | 0.0    |        |  |  |
| DEC         |        |        |        |        |        |        |        |        |        |        |  |        |        |  |  |
| KWH         | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 4820.  | 0.     | 0.     | 0.   | 0.     | 4820.  |  |  |
| MAX KW      | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 18.510 | 0.000  | 0.000  | 0.000  | 0.000  | 18.510 |  |  |
| DAY/HR      | 0/ 0   | 0/ 0   | 0/ 0   | 0/0    | 0/0    | 0/ 0   | 0/ 0   | 1/ 7   | 0/0    | 0/0    | 0/ 0   | 0/ 0   | 1/ 7   |  |  |
| PEAK ENDUSE | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 18.510 | 0.000  | 0.000  | 0.000  | 0.000  |        |  |  |
| PEAK PCT    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 100.0  | 0.0    | 0.0    | 0.0  | 0.0    |        |  |  |
|             | ====== | ====== | ====== | ====== | ====== | ====== | ====== | ====== | ====== | ====== | ======   | ====== | ====== |  |  |
| KWH         | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 56752. | 0.     | 0.     | 0.   | 0.     | 56752. |  |  |
| MAX KW      | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 18.510 | 0.000  | 0.000  | 0.000  | 0.000  | 18.510 |  |  |
| MON/DY      | 0/ 0   | 0/ 0   | 0/ 0   | 0/0    | 0/0    | 0/ 0   | 0/ 0   | 1/ 1   | 0/ 0   | 0/ 0   | 0/0  | 0/0    | 1/ 1   |  |  |
| PEAK ENDUSE | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 0.000  | 18.510 | 0.000  | 0.000  | 0.000  | 0.000  |        |  |  |
| PEAK PCT    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 100.0  | 0.0    | 0.0    | 0.0  | 0.0    |        |  |  |
|             |        |        |        |        |        |        |        |        |        |        |  |        |        |  |  |

YEARLY TRANSFORMER LOSSES = 0.0 KWH

REPORT- PS-F Energy End-Use Summary for EM3-Retail Non-Res WEATHER FILE- SEATTLE BOEING FI WA

|             | LIGHTS | TASK<br>LIGHTS | MISC<br>EQUIP | SPACE<br>HEATING | SPACE<br>COOLING | HEAT<br>REJECT | PUMPS<br>& AUX | VENT<br>FANS | REFRIG<br>DISPLAY | HT PUMP<br>SUPPLEM | DOMEST<br>HOT WTR | EXT<br>USAGE | TOTAL   |
|-------------|--------|----------------|---------------|------------------|------------------|----------------|----------------|--------------|-------------------|--------------------|-------------------|--------------|---------|
|             |        |                |               |                  |                  |                |                |              |                   |                    |                   |              |         |
| JAN         |        |                |               |                  |                  |                |                |              |                   |                    |                   |              |         |
| KWH         | 1280.  | 0.             | 4687.         | 15400.           | 0.               | 0.             | 0.             | 9943.        | 0.                | 10867.             | 1345.             | 0.           | 43521.  |
| MAX KW      | 2.697  | 0.000          | 9.650         | 27.896           | 0.000            | 0.000          | 0.000          | 13.364       | 0.000             | 121.782            | 2.617             | 0.000        | 166.585 |
| DAY/HR      | 2/11   | 0/ 0           | 1/10          | 8/ 7             | 0/ 0             | 0/ 0           | 0/ 0           | 1/ 1         | 0/ 0              | 5/ 7               | 2/ 8              | 0/ 0         | 5/ 8    |
| PEAK ENDUSE | 0.899  | 0.000          | 5.790         | 23.922           | 0.000            | 0.000          | 0.000          | 13.364       | 0.000             | 121.782            | 0.828             | 0.000        |         |
| PEAK PCT    | 0.5    | 0.0            | 3.5           | 14.4             | 0.0              | 0.0            | 0.0            | 8.0          | 0.0               | 73.1               | 0.5               | 0.0          |         |
| FEB         |        |                |               |                  |                  |                |                |              |                   |                    |                   |              |         |
| KWH         | 1159.  | 0.             | 4233.         | 13696.           | 0.               | 0.             | 0.             | 8981.        | 0.                | 3411.              | 1222.             | 0.           | 32702.  |
| MAX KW      | 2.697  | 0.000          | 9.650         | 27.950           | 0.000            | 0.000          | 0.000          | 13.364       | 0.000             | 91.478             | 2.617             | 0.000        | 137.273 |
| DAY/HR      | 1/11   | 0/ 0           | 1/10          | 25/10            | 0/0              | 0/ 0           | 0/ 0           | 1/ 1         | 0/ 0              | 27/ 7              | 1/ 8              | 0/ 0         | 27/ 7   |
| PEAK ENDUSE | 1.199  | 0.000          | 3.860         | 26.545           | 0.000            | 0.000          | 0.000          | 13.364       | 0.000             | 91.478             | 0.828             | 0.000        |         |
| PEAK PCT    | 0.9    | 0.0            | 2.8           | 19.3             | 0.0              | 0.0            | 0.0            | 9.7          | 0.0               | 66.6               | 0.6               | 0.0          |         |
| MAR         |        |                |               |                  |                  |                |                |              |                   |                    |                   |              |         |
| KWH         | 1287.  | 0.             | 4687.         | 11342.           | 37.              | 0.             | 0.             | 9943.        | 0.                | 608.               | 1344.             | 0.           | 29247.  |
| MAX KW      | 2.697  | 0.000          | 9.650         | 27.895           | 8.488            | 0.000          | 0.000          | 13.364       | 0.000             | 62.304             | 2.617             | 0.000        | 108.569 |
| DAY/HR      | 1/11   | 0/0            | 1/10          | 20/8             | 29/16            | 0/0            | 0/0            | 1/ 1         | 0/0               | 2/ 7               | 1/8               | 0/0          | 2/ 7    |
| PEAK ENDUSE | 0.899  | 0.000          | 3.860         | 27.313           | 0.000            | 0.000          | 0.000          | 13.364       | 0.000             | 62.304             | 0.828             | 0.000        |         |
| PEAK PCT    | 0.8    | 0.0            | 3.6           | 25.2             | 0.0              | 0.0            | 0.0            | 12.3         | 0.0               | 57.4               | 0.8               | 0.0          |         |
| APR         |        |                |               |                  |                  |                |                |              |                   |                    |                   |              |         |
| KWH         | 1256.  | 0.             | 4536.         | 8311.            | 0.               | 0.             | 0.             | 9622.        | 0.                | 196.               | 1289.             | 0.           | 25210.  |
| MAX KW      | 2.697  | 0.000          | 9.650         | 27.834           | 0.000            | 0.000          | 0.000          | 13.364       | 0.000             | 51.608             | 2.617             | 0.000        | 98.383  |
| DAY/HR      | 1/11   | 0/ 0           | 1/10          | 7/7              | 0/0              | 0/ 0           | 0/ 0           | 1/ 2         | 0/ 0              | 24/ 7              | 2/ 8              | 0/ 0         | 24/ 7   |
| PEAK ENDUSE | 1.199  | 0.000          | 3.860         | 27.524           | 0.000            | 0.000          | 0.000          | 13.364       | 0.000             | 51.608             | 0.828             | 0.000        | 21/ /   |
| PEAK PCT    | 1.2    | 0.0            | 3.9           | 28.0             | 0.0              | 0.0            | 0.0            | 13.304       | 0.0               | 52.5               | 0.8               | 0.0          |         |
| MAY         |        |                |               |                  |                  |                |                |              |                   |                    |                   |              |         |
| KWH         | 1290.  | 0.             | 4687.         | 5583.            | 55.              | 0.             | 0.             | 9943.        | 0.                | 0.                 | 1302.             | 0.           | 22860.  |
| MAX KW      | 2.697  | 0.000          | 9.650         | 26.137           | 6.243            | 0.000          | 0.000          | 13.364       | 0.000             | 0.000              | 2.557             | 0.000        | 48.229  |
| DAY/HR      | 1/11   | 0/0            | 1/10          | 6/ 7             | 15/19            | 0.000          | 0.000          | 1/ 2         | 0/0               | 0/0                | 10/8              | 0/0          | 9/11    |
| PEAK ENDUSE | 2.697  | 0.000          | 9.650         | 20.509           | 0.000            | 0.000          | 0.000          | 13.364       | 0.000             | 0.000              | 2.008             | 0.000        | 9/11    |
| PEAK PCT    | 5.6    | 0.0            | 20.0          | 42.5             | 0.0              | 0.0            | 0.0            | 27.7         | 0.0               | 0.0                | 4.2               | 0.0          |         |
|             |        |                |               |                  |                  |                |                |              |                   |                    |                   |              |         |
| JUN         | 1040   |                | 4526          | 0001             | 100              |                |                | 0.000        |                   |                    | 1000              |              | 10500   |
| KWH         | 1243.  | 0.             | 4536.         | 2881.            | 189.             | 0.             | 0.             | 9622.        | 0.                | 0.                 | 1232.             | 0.           | 19703.  |
| MAX KW      | 2.697  | 0.000          | 9.650         | 17.403           | 8.592            | 0.000          | 0.000          | 13.364       | 0.000             | 0.000              | 2.490             | 0.000        | 41.086  |
| DAY/HR      | 1/18   | 0/0            | 1/10          | 12/ 7            | 20/17            | 0/ 0           | 0/ 0           | 1/ 2         | 0/0               | 0/ 0               | 12/ 8             | 0/ 0         | 6/10    |
| PEAK ENDUSE | 1.798  | 0.000          | 9.650         | 14.180           | 0.000            | 0.000          | 0.000          | 13.364       | 0.000             | 0.000              | 2.094             | 0.000        |         |
| PEAK PCT    | 4.4    | 0.0            | 23.5          | 34.5             | 0.0              | 0.0            | 0.0            | 32.5         | 0.0               | 0.0                | 5.1               | 0.0          |         |
| JUL         |        |                |               |                  |                  |                |                |              |                   |                    |                   |              |         |
| KWH         | 1290.  | 0.             | 4687.         | 1032.            | 1447.            | 0.             | 0.             | 9943.        | 0.                | 0.                 | 1257.             | 0.           | 19656.  |
| MAX KW      | 2.697  | 0.000          | 9.650         | 13.276           | 21.871           | 0.000          | 0.000          | 13.364       | 0.000             | 0.000              | 2.448             | 0.000        | 49.484  |
| DAY/HR      | 1/11   | 0/ 0           | 1/10          | 5/7              | 23/18            | 0/ 0           | 0/ 0           | 1/ 2         | 0/ 0              | 0/ 0               | 5/8               | 0/ 0         | 23/18   |
| PEAK ENDUSE | 2.697  | 0.000          | 9.650         | 0.000            | 21.871           | 0.000          | 0.000          | 13.364       | 0.000             | 0.000              | 1.901             | 0.000        |         |
| PEAK PCT    | 5.5    | 0.0            | 19.5          | 0.0              | 44.2             | 0.0            | 0.0            | 27.0         | 0.0               | 0.0                | 3.8               | 0.0          |         |
| AUG         |        |                |               |                  |                  |                |                |              |                   |                    |                   |              |         |
| KWH         | 1298.  | 0.             | 4687.         | 1005.            | 1079.            | 0.             | 0.             | 9943.        | 0.                | 0.                 | 1252.             | 0.           | 19263.  |
| MAX KW      | 2.697  | 0.000          | 9.650         | 12.992           | 21.219           | 0.000          | 0.000          | 13.364       | 0.000             | 0.000              | 2.427             | 0.000        | 48.818  |
| DAY/HR      | 1/11   | 0/ 0           | 1/10          | 1/ 7             | 10/18            | 0/ 0           | 0/ 0           | 1/ 2         | 0/ 0              | 0/ 0               | 1/ 8              | 0/ 0         | 10/18   |
| PEAK ENDUSE | 2.697  | 0.000          | 9.650         | 0.000            | 21.219           | 0.000          | 0.000          | 13.364       | 0.000             | 0.000              | 1.888             | 0.000        |         |
| PEAK PCT    | 5.5    | 0.0            | 19.8          | 0.0              | 43.5             | 0.0            | 0.0            | 27.4         | 0.0               | 0.0                | 3.9               | 0.0          |         |

|             |        | 2.697       0.000       9.650       25.864       12.648       0.000       0.000       13.364       0.000       0.000       2.435       0.000       4         3/11       0/0       1/10       28/7       19/16       0/0       0/0       1/2       0/0       0/0       27/8       0/0       0         0.899       0.000       5.790       25.213       0.000       0.000       0.000       13.364       0.000       0.000       0.828       0.000         2.0       0.0       12.6       54.7       0.0       0.0       29.0       0.0       0.0       1.8       0.0         1290.       0.       4687.       7732.       45.       0.       0.       9943.       0.       165.       1272.       0.       2         2.697       0.000       9.650       27.845       8.198       0.000       0.000       13.364       0.000       48.697       2.482       0.000         1/11       0/0       1/10       22/6       6/16       0/0       0/0       1/2       0/0       22/7       22/8       0/0 |        |        |        |        |        |         |        |         |        |        |         |
|-------------|--------|--|--------|--------|--------|--------|--------|---------|--------|---------|--------|--------|---------|
| SEP         |        |  |        |        |        |        |        |         |        |         |        |        |         |
| KWH         | 1236.  | 0.   | 4536.  | 2984.  | 481.   | 0.     | 0.     | 9622.   | 0.     | 0.      | 1206.  | 0.     | 20064.  |
| MAX KW      | 2.697  | 0.000  | 9.650  | 25.864 | 12.648 | 0.000  | 0.000  | 13.364  | 0.000  | 0.000   | 2.435  | 0.000  | 46.094  |
| DAY/HR      | 3/11   | 0/ 0   | 1/10   | 28/ 7  | 19/16  | 0/0    | 0/ 0   | 1/ 2    | 0/ 0   | 0/ 0    | 27/ 8  | 0/ 0   | 28/ 8   |
| PEAK ENDUSE | 0.899  | 0.000  | 5.790  | 25.213 | 0.000  | 0.000  | 0.000  | 13.364  | 0.000  | 0.000   | 0.828  | 0.000  |         |
| PEAK PCT    | 2.0    | 0.0  | 12.6   | 54.7   | 0.0    | 0.0    | 0.0    | 29.0    | 0.0    | 0.0     | 1.8    | 0.0    |         |
| OCT         |        |  |        |        |        |        |        |         |        |         |        |        |         |
| KWH         | 1290.  | 0.   | 4687.  | 7732.  | 45.    | 0.     | 0.     | 9943.   | 0.     | 165.    | 1272.  | 0.     | 25134.  |
| MAX KW      | 2.697  | 0.000  | 9.650  | 27.845 | 8.198  | 0.000  | 0.000  | 13.364  | 0.000  | 48.697  | 2.482  | 0.000  | 95.553  |
| DAY/HR      | 1/11   | 0/ 0   | 1/10   | 22/ 6  | 6/16   | 0/ 0   | 0/ 0   | 1/ 2    | 0/ 0   | 22/ 7   | 22/ 8  | 0/ 0   | 22/ 7   |
| PEAK ENDUSE | 1.199  | 0.000  | 3.860  | 27.605 | 0.000  | 0.000  | 0.000  | 13.364  | 0.000  | 48.697  | 0.828  | 0.000  |         |
| PEAK PCT    | 1.3    | 0.0  | 4.0    | 28.9   | 0.0    | 0.0    | 0.0    | 14.0    | 0.0    | 51.0    | 0.9    | 0.0    |         |
| NOV         |        |  |        |        |        |        |        |         |        |         |        |        |         |
| KWH         | 1234.  | 0.   | 4536.  | 11397. | 0.     | 0.     | 0.     | 9622.   | 0.     | 659.    | 1250.  | 0.     | 28697.  |
| MAX KW      | 2.697  | 0.000  | 9.650  | 27.918 | 0.000  | 0.000  | 0.000  | 13.364  | 0.000  | 50.769  | 2.544  | 0.000  | 97.556  |
| DAY/HR      | 1/11   | 0/ 0   | 1/10   | 27/ 8  | 0/0    | 0/0    | 0/ 0   | 1/ 2    | 0/ 0   | 5/ 7    | 5/8    | 0/ 0   | 5/ 7    |
| PEAK ENDUSE | 1.199  | 0.000  | 3.860  | 27.537 | 0.000  | 0.000  | 0.000  | 13.364  | 0.000  | 50.769  | 0.828  | 0.000  |         |
| PEAK PCT    | 1.2    | 0.0  | 4.0    | 28.2   | 0.0    | 0.0    | 0.0    | 13.7    | 0.0    | 52.0    | 0.8    | 0.0    |         |
| DEC         |        |  |        |        |        |        |        |         |        |         |        |        |         |
| KWH         | 1280.  | 0.   | 4687.  | 15581. | 0.     | 0.     | 0.     | 9943.   | 0.     | 5482.   | 1320.  | 0.     | 38293.  |
| MAX KW      | 2.697  | 0.000  | 9.650  | 27.849 | 0.000  | 0.000  | 0.000  | 13.364  | 0.000  | 73.407  | 2.609  | 0.000  | 122.626 |
| DAY/HR      | 2/11   | 0/ 0   | 1/10   | 13/ 3  | 0/0    | 0/0    | 0/ 0   | 1/ 1    | 0/ 0   | 27/ 7   | 26/20  | 0/ 0   | 27/ 9   |
| PEAK ENDUSE | 1.798  | 0.000  | 7.720  | 27.098 | 0.000  | 0.000  | 0.000  | 13.364  | 0.000  | 70.176  | 2.469  | 0.000  |         |
| PEAK PCT    | 1.5    | 0.0  | 6.3    | 22.1   | 0.0    | 0.0    | 0.0    | 10.9    | 0.0    | 57.2    | 2.0    | 0.0    |         |
|             | ====== | ======   | ====== | ====== | ====== | ====== | ====== | ======  | ====== | ======  | ====== | ====== | ======  |
| KWH         | 15142. | 0.   | 55183. | 96944. | 3333.  | 0.     | 0.     | 117070. | 0.     | 21388.  | 15291. | 0.     | 324351. |
| MAX KW      | 2.697  | 0.000  | 9.650  | 27.950 | 21.871 | 0.000  | 0.000  | 13.364  | 0.000  | 121.782 | 2.617  | 0.000  | 166.585 |
| MON/DY      | 1/ 2   | 0/0  | 1/ 1   | 2/25   | 7/23   | 0/ 0   | 0/ 0   | 1/ 1    | 0/ 0   | 1/ 5    | 1/ 2   | 0/0    | 1/ 5    |
| PEAK ENDUSE | 0.899  | 0.000  | 5.790  | 23.922 | 0.000  | 0.000  | 0.000  | 13.364  | 0.000  | 121.782 | 0.828  | 0.000  |         |
| PEAK PCT    | 0.5    | 0.0  | 3.5    | 14.4   | 0.0    | 0.0    | 0.0    | 8.0     | 0.0    | 73.1    | 0.5    | 0.0    |         |
|             |        |  |        |        |        |        |        |         |        |         |        |        |         |

YEARLY TRANSFORMER LOSSES = 0.0 KWH

REPORT- PS-F Energy End-Use Summary for FM1

|                         | LIGHTS     | TASK<br>LIGHTS | MISC<br>EQUIP | SPACE<br>HEATING | SPACE<br>COOLING | HEAT<br>REJECT | PUMPS<br>& AUX | VENT<br>FANS | REFRIG<br>DISPLAY | HT PUMP | DOMEST<br>HOT WTR | EXT<br>USAGE | TOTAL       |
|-------------------------|------------|----------------|---------------|------------------|------------------|----------------|----------------|--------------|-------------------|---------|-------------------|--------------|-------------|
| JAN                     |            |                |               |                  |                  |                |                |              |                   |         |                   |              |             |
| THERM                   | 0.         | 0.             | 160.          | 0.               | 0.               | 0.             | 0.             | 0.           | 0.                | 0.      | 0.                | 0.           | 160.        |
| MAX THERM/HR            | 0.0        | 0.0            | 0.3           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          | 0.3         |
| DAY/HR                  | 0/0        | 0/0            | 1/10          | 0/0              | 0/0              | 0/0            | 0/ 0           | 0/ 0         | 0/ 0              | 0/ 0    | 0/ 0              | 0/ 0         | 1/10        |
| PEAK ENDUSE             | 0.0        | 0.0            | 0.3           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          |             |
| PEAK PCT                | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          |             |
| FEB                     |            |                |               |                  |                  |                |                |              |                   |         |                   |              |             |
| THERM                   | 0.         | 0.             | 144.          | 0.               | 0.               | 0.             | 0.             | 0.           | 0.                | 0.      | 0.                | 0.           | 144.        |
| MAX THERM/HR            | 0.0        | 0.0            | 0.3           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          | 0.3         |
| DAY/HR                  | 0/ 0       | 0/ 0           | 1/10          | 0/ 0             | 0/ 0             | 0/ 0           | 0/ 0           | 0/ 0         | 0/ 0              | 0/ 0    | 0/ 0              | 0/ 0         | 1/10        |
| PEAK ENDUSE             | 0.0        | 0.0            | 0.3           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          |             |
| PEAK PCT                | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          |             |
| MAR                     |            |                |               |                  |                  |                |                |              |                   |         |                   |              |             |
| THERM                   | 0.         | 0.             | 160.          | 0.               | 0.               | 0.             | 0.             | 0.           | 0.                | 0.      | 0.                | 0.           | 160.        |
| MAX THERM/HR<br>DAY/HR  | 0.0<br>0/0 | 0.0<br>0/0     | 0.3<br>1/10   | 0.0              | 0.0              | 0.0<br>0/0     | 0.0<br>0/0     | 0.0          | 0.0               | 0.0     | 0.0<br>0/0        | 0.0<br>0/0   | 0.3<br>1/10 |
| PEAK ENDUSE             | 0.0        | 0.0            | 0.3           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          | 1/10        |
| PEAK PCT                | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          |             |
| APR                     |            |                |               |                  |                  |                |                |              |                   |         |                   |              |             |
| THERM                   | 0.         | 0.             | 155.          | 0.               | 0.               | 0.             | 0.             | 0.           | 0.                | 0.      | 0.                | 0.           | 155.        |
| MAX THERM/HR            | 0.0        | 0.0            | 0.3           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          | 0.3         |
| DAY/HR                  | 0/ 0       | 0/0            | 1/10          | 0/0              | 0/0              | 0/0            | 0/ 0           | 0/ 0         | 0/ 0              | 0/0     | 0/ 0              | 0/0          | 1/10        |
| PEAK ENDUSE             | 0.0        | 0.0            | 0.3           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          |             |
| PEAK PCT                | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          |             |
| MAY                     |            |                |               |                  |                  |                |                |              |                   |         |                   |              |             |
| THERM                   | 0.         | 0.             | 160.          | 0.               | 0.               | 0.             | 0.             | 0.           | 0.                | 0.      | 0.                | 0.           | 160.        |
| MAX THERM/HR            | 0.0        | 0.0            | 0.3           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          | 0.3         |
| DAY/HR                  | 0/0        | 0/0            | 1/10          | 0/0              | 0/0              | 0/0            | 0/0            | 0/0          | 0/0               | 0/0     | 0/0               | 0/0          | 1/10        |
| PEAK ENDUSE             | 0.0        | 0.0            | 0.3           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          |             |
| PEAK PCT                | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          |             |
| JUN                     | 0          | 0              | 155           | 0                | 0                | 0              | 0              | 0            | 0                 | 0       | 0.                | 0            | 155         |
| THERM<br>MAX THERM/HR   | 0.<br>0.0  | 0.<br>0.0      | 155.<br>0.3   | 0.0              | 0.<br>0.0        | 0.<br>0.0      | 0.<br>0.0      | 0.<br>0.0    | 0.<br>0.0         | 0.0     | 0.0               | 0.<br>0.0    | 155.<br>0.3 |
| DAY/HR                  | 0.0        | 0.0            | 1/10          | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          | 1/10        |
| PEAK ENDUSE             | 0.0        | 0.0            | 0.3           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          | 1/10        |
| PEAK PCT                | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          |             |
| JUL                     |            |                |               |                  |                  |                |                |              |                   |         |                   |              |             |
| THERM                   | 0.         | 0.             | 160.          | 0.               | 0.               | 0.             | 0.             | 0.           | 0.                | 0.      | 0.                | 0.           | 160.        |
| MAX THERM/HR            | 0.0        | 0.0            | 0.3           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          | 0.3         |
| DAY/HR                  | 0/ 0       | 0/ 0           | 1/10          | 0/ 0             | 0/ 0             | 0/ 0           | 0/ 0           | 0/ 0         | 0/ 0              | 0/ 0    | 0/ 0              | 0/ 0         | 1/10        |
| PEAK ENDUSE             | 0.0        | 0.0            | 0.3           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          |             |
| PEAK PCT                | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          |             |
| AUG                     |            |                |               |                  |                  |                |                |              |                   |         |                   |              |             |
| THERM                   | 0.         | 0.             | 160.          | 0.               | 0.               | 0.             | 0.             | 0.           | 0.                | 0.      | 0.                | 0.           | 160.        |
| MAX THERM/HR            | 0.0        | 0.0            | 0.3           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          | 0.3         |
| DAY/HR                  | 0/ 0       | 0/0            | 1/10          | 0/0              | 0/0              | 0/ 0           | 0/0            | 0/ 0         | 0/ 0              | 0/0     | 0/ 0              | 0/0          | 1/10        |
| PEAK ENDUSE<br>PEAK PCT | 0.0        | 0.0            | 0.3           | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          |             |
| PEAR PUT                | 0.0        | 0.0            | 100.0         | 0.0              | 0.0              | 0.0            | 0.0            | 0.0          | 0.0               | 0.0     | 0.0               | 0.0          |             |

REPORT- PS-F Energy End-Use Summary for FM1

|              |      |        |        |        |        |        |        |        |        | (CONTINUED) |      |        |        |  |
|--------------|------|--------|--------|--------|--------|--------|--------|--------|--------|-------------|------|--------|--------|--|
| SEP          |      |        |        |        |        |        |        |        |        |             |      |        |        |  |
| THERM        | 0.   | 0.     | 155.   | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.          | 0.   | 0.     | 155.   |  |
| MAX THERM/HR | 0.0  | 0.0    | 0.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    | 0.3    |  |
| DAY/HR       | 0/0  | 0/0    | 1/10   | 0/0    | 0/0    | 0/0    | 0/0    | 0/0    | 0/0    | 0/0         | 0/0  | 0/0    | 1/10   |  |
| PEAK ENDUSE  | 0.0  | 0.0    | 0.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    | 1/10   |  |
| PEAK PCT     | 0.0  | 0.0    | 100.0  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    |        |  |
| OCT          |      |        |        |        |        |        |        |        |        |             |      |        |        |  |
| THERM        | 0.   | 0.     | 160.   | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.          | 0.   | 0.     | 160.   |  |
| MAX THERM/HR | 0.0  | 0.0    | 0.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    | 0.3    |  |
| DAY/HR       | 0.0  | 0.0    | 1/10   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    | 1/10   |  |
| PEAK ENDUSE  | 0.0  | 0.0    | 0.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    | 1/10   |  |
| PEAK PCT     | 0.0  | 0.0    | 100.0  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    |        |  |
|              |      |        |        |        |        |        |        |        |        |             |      |        |        |  |
| NOV          |      |        |        |        |        |        |        |        |        |             |      |        |        |  |
| THERM        | 0.   | 0.     | 155.   | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.          | 0.   | 0.     | 155.   |  |
| MAX THERM/HR | 0.0  | 0.0    | 0.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    | 0.3    |  |
| DAY/HR       | 0/ 0 | 0/ 0   | 1/10   | 0/0    | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 0/ 0   | 0/0         | 0/ 0 | 0/ 0   | 1/10   |  |
| PEAK ENDUSE  | 0.0  | 0.0    | 0.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    |        |  |
| PEAK PCT     | 0.0  | 0.0    | 100.0  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    |        |  |
| DEC          |      |        |        |        |        |        |        |        |        |             |      |        |        |  |
| THERM        | 0.   | 0.     | 160.   | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.          | 0.   | 0.     | 160.   |  |
| MAX THERM/HR | 0.0  | 0.0    | 0.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    | 0.3    |  |
| DAY/HR       | 0/ 0 | 0/ 0   | 1/10   | 0/0    | 0/0    | 0/0    | 0/ 0   | 0/ 0   | 0/ 0   | 0/0         | 0/ 0 | 0/ 0   | 1/10   |  |
| PEAK ENDUSE  | 0.0  | 0.0    | 0.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    |        |  |
| PEAK PCT     | 0.0  | 0.0    | 100.0  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    |        |  |
|              |      | ====== | ====== | ====== | ====== | ====== | ====== | ====== | ====== | ======      |      | ====== | ====== |  |
| THERM        | 0.   | 0.     | 1883.  | 0.     | 0.     | 0.     | 0.     | 0.     | 0.     | 0.          | 0.   | 0.     | 1883.  |  |
| MAX THERM/HR | 0.0  | 0.0    | 0.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    | 0.3    |  |
| MON/DY       | 0.0  | 0.0    | 1/ 1   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    | 1/ 1   |  |
| PEAK ENDUSE  | 0.0  | 0.0    | 0.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    | т/ т   |  |
| PEAK PCT     | 0.0  | 0.0    | 100.0  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    |        |  |
|              | 0.0  | 0.0    | 100.0  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0  | 0.0    |        |  |

| *** CIRCULATION                                | LOOPS ***          |               |        |                  |         |                                    |         |                                    |                                      |
|--|--------------------|---------------|--------|------------------|---------|------------------------------------|---------|------------------------------------|--------------------------------------|
| HEATING<br>DEMAND<br>(MBTU/HR)                 | DEMAND             |               | HEAD   | UA PRODUCT       | LOSS DT | RETURN<br>UA PRODUCT<br>(BTU/HR-F) | LOSS DT | VOLUME                             | FLUID HEAT<br>CAPACITY<br>(BTU/LB-F) |
| DHW Plant 1 Res                                | -                  | 13.8          | 23.4   | 0.0              | 0.00    | 0.0                                | 0.00    | 20.7                               | 1.00                                 |
| Restaurant DHW 1                               | _                  | 0.1           | 23.4   | 0.0              | 0.00    | 0.0                                | 0.00    | 0.2                                | 1.00                                 |
| DEFAULT-CHW 0.000                              | 0.095              | 17.1          | 36.6   | 0.0              | 0.00    | 0.0                                | 0.00    | 25.6                               | 1.00                                 |
| DEFAULT-CW<br>0.000                            | 0.116              | 22.3          | 56.9   | 0.0              | 0.00    | 0.0                                | 0.00    | 0.0                                | 1.00                                 |
| *** PUMPS ***                                  | TACHED TO          |               | FLOW   |                  |         | CAPACITY<br>CONTROL                |         | MECHANICAL<br>EFFICIENCY<br>(FRAC) |                                      |
|  |                    |               |        |                  |         |                                    |         |                                    |                                      |
| DEFAULT-CHW-PUM<br>DEFAULT-CHW<br>PRIMARY LOOP |                    | 1 PUME        |        | 62.5             | 0.0     | ONE-SPEED                          | 0.399   | 0.770                              | 0.720                                |
| DEFAULT-CW-PUMP<br>DEFAULT-CW<br>PRIMARY LOOP  |                    | 1 PUME        |        | 55.9             | 0.0     | ONE-SPEED                          | 0.465   | 0.770                              | 0.720                                |
| Primary CHW Pum<br>Chiller 1<br>EVAPORATOR     | -                  | 1 PUME        |        | 16.5             | 0.0     | ONE-SPEED                          | 0.126   | 0.770                              | 0.600                                |
| *** PRIMARY EOU                                | TDMENT ***         |               |        |                  |         |                                    |         |                                    |                                      |
| EQUIPMENT TY                                   |                    | ATTACHED      |        | CAPACI<br>(MBTU/ |         |                                    | )       |                                    |                                      |
| Chiller 1<br>ELEC-SCREW                        | DEFAULT<br>DEFAULT |               |        |                  |         | 17.8 1<br>22.3 1                   |         |                                    |                                      |
| CT-1<br>OPEN-TWR                               | DEFAULT            | r-cw          |        | 0.               | 113     | 22.3 2                             | 0.0     |                                    |                                      |
| RCC-1<br>ELEC DW-HEATE                         | R DHW Pla          | ant 1 Res Loc | pp (1) | -0.              | 175     | 5.6                                |         |                                    |                                      |
| RCC-2<br>ELEC DW-HEATE                         | R DHW Pla          | ant 1 Res Loc | p (1)  | -0.              | 175     | 5.6                                |         |                                    |                                      |
| RCC-3<br>ELEC DW-HEATE                         | R DHW Pla          | ant 1 Res Loc | op (1) | -0.              | 175     | 5.6                                |         |                                    |                                      |

eQUEST 3.65 Residential Multi Family Tem

DOE-2.3-50h 1/13/2023 10:20:00 BDL RUN 7

REPORT- PV-A Plant Design Parameters

WEATHER FILE- SEATTLE BOEING FI WA -----(CONTINUED)------

RST DHW Heater

ELEC DW-HEATER Restaurant DHW Loop -0.006 0.1 REPORT- SV-A System Design Parameters for P1B (B.N11) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        | -        |           |        |         |                                     |        |        |             |          |           |           |
|--------|----------|-----------|--------|---------|-------------------------------------|--------|--------|-------------|----------|-----------|-----------|
|        |          | FLOOR     |        | OUTSI   | DE COOLI                            | NG     |        | HEATING     | COOLING  | HEATING   | HEAT PUMP |
| SYSTEM | ALTITUDE | AREA      | MAX    | X A     | IR CAPACI                           | TY SE  | NSIBLE | CAPACITY    | EIR      | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SOFT )   | PEOPLE | RAT     | IO (KBTU/H                          | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU) | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |                                     |        |        |             |          |           |           |
| PVVT   | 1.001    | 464.0     | 1.     | 0.1     | 02 9.1                              | 26     | 0.742  | -8.214      | 0.266    | 0.271     | -9.960    |
|        |          |           |        |         |                                     |        |        |             |          | ***       |           |
|        |          |           |        |         |                                     |        |        |             |          |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC                              | TOTAL  | MECH   | I           |          | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE                            | EFF    | EFF    | FAN         | I FAN    | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)                          | (FRAC) | (FRAC) | PLACEMENT   | CONTROL  | (FRAC)    | (FRAC)    |
|        | ( ,      | (/        | (,     | (- )    | ( , , , , , , , , , , , , , , , , , | (/     | (/     |             |          | (,        | (,        |
| SUPPLY | 304.     | 1.00      | 0.091  | 0.93    | 0.9                                 | 0.34   | 0.62   | DRAW-THRU   | CONSTANT | 1.00      | 0.30      |
| DOFFEI | 304.     | 1.00      | 0.001  | 0.55    | 0.5                                 | 0.51   | 0.02   | DIGHW IIIC  | COMBINI  | 1.00      | 0.50      |

\*\*\* THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| P1B North Perim Zn (B.N11P | 304.   | 0.      | 0.000 | 0.740   | 31.      | 0.00      | 0.00     | 5.02       | 0.00      | -8.59     | 1.   |

| REPORT- SV | A System | Design | Parameters | for | P1B | (R N13) | дрт4 | PTHP |
|------------|----------|--------|------------|-----|-----|---------|------|------|

|     | WEATHER | FILE-  | SEA | ATTLE | BOEING | FI | WA |  |
|-----|---------|--------|-----|-------|--------|----|----|--|
| COC | DLING   | HEATIN | 1G  | HEAT  | PUMP   |    |    |  |
|     | TTD.    | Tr T   | гъ  | CIIDD | בעבאת  |    |    |  |

| REPORT- SV-A System Design Parameters for PIB (B.N13) APT4 |          |           |        |         |            |        |        |            | WEATHE     | ER FILE- SE | ATTLE BOEIN | 3 FI WA |
|--|----------|-----------|--------|---------|------------|--------|--------|------------|------------|-------------|-------------|---------|
|  |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING    | COOLING    | HEATING     | HEAT PUMP   |         |
| SYSTEM   | ALTITUDE | AREA      | MAX    | A.      | IR CAPACI  | TY SE  | NSIBLE | CAPACITY   | EIR        | EIR         | SUPP-HEAT   |         |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR)  | (BTU/BTU)  | (BTU/BTU)   | (KBTU/HR)   |         |
| PVVT   | 1.001    | 2465.0    | 3.     | 0.10    | 07 45.9    | 50     | 0.742  | -41.355    | 0.266      | 0.271       | -50.151     |         |
|  |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I          |            | MAX FAN     | MIN FAN     |         |
| FAN  | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FA:        | N FAN      | N RATIO     | RATIO       |         |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN   | T CONTROI  | L (FRAC)    | (FRAC)      |         |
| SUPPLY   | 1533.    | 1.00      | 0.460  | 0.93    | 1.2        | 0.48   | 0.62   | P DRAW-THR | U CONSTANT | г 1.00      | 0.30        |         |

\*\*\* THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| PlB North Perim Zn (B.N13P | 1533.  | 0.      | 0.000 | 0.732   | 165.     | 0.00      | 0.00     | 28.66     | 0.00      | -42.81    | 1.   |

REPORT- SV-A System Design Parameters for P1B (B.NE14) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SQFT )      | MAX<br>PEOPLE           |                       | IR CAPACI                        | TY SEI                 | NSIBLE                | HEATING<br>CAPACITY<br>(KBTU/HR) ( | COOLING<br>EIR<br>BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP SUPP-HEAT (KBTU/HR) |
|----------------|--------------------|-------------------------------|-------------------------|-----------------------|----------------------------------|------------------------|-----------------------|------------------------------------|----------------------------|-----------------------------|-------------------------------|
| PVVT           | 1.001              | 705.0                         | 1.                      | 0.1                   | 02 13.8                          | 47                     | 0.742                 | -12.462                            | 0.266                      | 0.271                       | -15.113                       |
| FAN<br>TYPE    | CAPACITY<br>(CFM ) | DIVERSITY<br>FACTOR<br>(FRAC) | POWER<br>DEMAND<br>(KW) | FAN<br>DELTA-T<br>(F) | STATIC<br>PRESSURE<br>(IN-WATER) | TOTAL<br>EFF<br>(FRAC) | MECH<br>EFF<br>(FRAC) |                                    |                            |                             |                               |
| SUPPLY         | 462.               | 1.00                          | 0.138                   | 0.93                  | 1.0                              | 0.40                   | 0.62                  | DRAW-THRU                          | CONSTANT                   | 1.00                        | 0.30                          |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| P1B NE Perim Zn (B.NE14) 1 | 462.   | 0.      | 0.000 | 0.740   | 47.      | 0.00      | 0.00     | 6.57      | 0.00      | -13.04    | 1.   |

REPORT- SV-A System Design Parameters for L1A (G.E19) APT2 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING     | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-------------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    |         | IR CAPACI   | TY SE  | NSIBLE | CAPACITY    | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | CIO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU)   | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |             |            |           |           |
| PVVT   | 1.001    | 1033.8    | 1.     | 0.1     | .28 16.1    | 41     | 0.742  | -14.527     | 0.266      | 0.271     | -17.616   |
|        |          |           |        |         |             |        |        |             |            |           |           |
|        |          |           |        |         |             |        |        |             |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   |             |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | FAN         | I FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMENT   | CONTROL    | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |             |        |        |             |            |           |           |
| SUPPLY | 538.     | 1.00      | 0.161  | 0.93    | 1.0         | 0.40   | 0.62   | DRAW-THRU   | J CONSTANT | г 1.00    | 0.30      |

\*\*\* THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| LlA East Perim Zn (G.E19)T | 538.   | 0.      | 0.000 | 0.703   | 69.      | 0.00      | 0.00     | 10.22      | 0.00      | -14.42    | 1.   |

REPORT- SV-A System Design Parameters for L1A (G.NNE24) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

| FLOOR OUTSIDE COOLING HEATING COOLING HEATING SYSTEM ALTITUDE AREA MAX AIR CAPACITY SENSIBLE CAPACITY EIR EIF |           |
|---|-----------|
| CVCTEM ALTITUTE ADEA MAY ATD CATACATE CONCIDER CATACATER TO DEE   | SUPP-HEAT |
| SISIEM ALIIIUDE AREA MAA AIR CAPACIII SENSIBLE CAPACIII EIR EIR   |           |
| TYPE FACTOR (SQFT) PEOPLE RATIO (KBTU/HR) (SHR) (KBTU/HR) (BTU/BTU) (BTU/BTU)                                 | (KBTU/HR) |
|   |           |
| PVVT 1.001 749.2 1. 0.158 9.484 0.742 -8.536 0.266 0.273  | -10.351   |
|   |           |
|   |           |
| DIVERSITY POWER FAN STATIC TOTAL MECH MAX FA  | N MIN FAN |
| FAN CAPACITY FACTOR DEMAND DELTA-T PRESSURE EFF EFF FAN FAN RATI  | O RATIO   |
| TYPE (CFM ) (FRAC) (KW) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL (FRAC                                  | ) (FRAC)  |
|   |           |
| SUPPLY 316. 1.00 0.095 0.93 0.9 0.34 0.62 DRAW-THRU CONSTANT 1.0  | 0 0.30    |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L1A NNE Perim Zn (G.NNE24P | 316.   | 0.      | 0.000 | 0.662   | 50.      | 0.00      | 0.00     | 8.30      | 0.00      | -7.98     | 1.   |

SYSTEM ALTITUDE AREA
TYPE FACTOR (SQFT)

PVVT

REPORT- SV-A System Design Parameters for L1A (G.WNW27) APT1 PTHP

| RT- S | W-A System 1 | Design Parame | eters for | L1A (G.WN | W27) APT1 P | THP      |           | WEATH:    | ER FILE- SE | ATTLE BOEING | ; FI WA |
|-------|--------------|---------------|-----------|-----------|-------------|----------|-----------|-----------|-------------|--------------|---------|
|       |              | FLOOR         |           | OUTSIDE   | COOLING     |          | HEATING   | COOLING   | HEATING     | HEAT PUMP    |         |
| STEM  | ALTITUDE     | AREA          | MAX       | AIR       | CAPACITY    | SENSIBLE | CAPACITY  | EIR       | EIR         | SUPP-HEAT    |         |
| TYPE  | FACTOR       | (SQFT )       | PEOPLE    | RATIO     | (KBTU/HR)   | (SHR)    | (KBTU/HR) | (BTU/BTU) | (BTU/BTU)   | (KBTU/HR)    |         |
|       | 1.001        | 493.5         | 1.        | 0.121     | 8.136       | 0.742    | -7.322    | 0.266     | 0.271       | -6.803       |         |

|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   |           |          | MAX FAN | MIN FAN |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|----------|---------|---------|
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAN       | FAN      | RATIO   | RATIO   |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT | CONTROL  | (FRAC)  | (FRAC)  |
| SUPPLY | 271.     | 1.00      | 0.081  | 0.94    | 0.9        | 0.34   | 0.62   | DRAW-THRU | CONSTANT | 1.00    | 0.30    |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L1A WNW Perim Zn (G.WNW27P | 271.   | 0.      | 0.000 | 0.506   | 33.      | 0.00      | 0.00     | 8.25      | 0.00      | -5.22     | 1.   |

1.001 1326.0

SYSTEM ALTITUDE AREA
TYPE FACTOR (SQFT)

PVVT

| REPORT- | SV-A | System | Design | Parameters | for | L1A | (G.N28) | APT3 | PTHP |      |
|---------|------|--------|--------|------------|-----|-----|---------|------|------|------|
|         |      |        |        |            |     |     |         |      |      | <br> |

| Design Parame            | eters for     | LIA (G.N2               | 8) APT3 PTH                      |                |                                  | WEATH                       | ER FILE- SE | ATTLE BOEING                        | 3 FI WA |
|--------------------------|---------------|-------------------------|----------------------------------|----------------|----------------------------------|-----------------------------|-------------|-------------------------------------|---------|
| FLOOR<br>AREA<br>(SQFT ) | MAX<br>PEOPLE | OUTSIDE<br>AIR<br>RATIO | COOLING<br>CAPACITY<br>(KBTU/HR) | SENSIBLE (SHR) | HEATING<br>CAPACITY<br>(KBTU/HR) | COOLING<br>EIR<br>(BTU/BTU) | EIR         | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |         |
| 1326.0                   | 2.            | 0.134                   | 19.829                           | 0.742          | -17.846                          | 0.266                       | 0.271       | -14.704                             |         |

|          |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   |             |          | MAX FAN | MIN FAN |
|----------|----------|-----------|--------|---------|------------|--------|--------|-------------|----------|---------|---------|
| FAN      | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAN         | FAN      | RATIO   | RATIO   |
| TYPE     | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL  | (FRAC)  | (FRAC)  |
|          |          |           |        |         |            |        |        |             |          |         |         |
| V.TODIIS | 661      | 1 00      | 0 100  | 0 04    | 1 0        | 0.41   | 0.62   | ווסטיי-שגסו | CONGTANT | 1 00    | 0.30    |

SUPPLY 661. 1.00 0.198 0.94 1.0 0.41 0.62 DRAW-THRU CONSTANT 1.00 0.30

\*\*\* THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L1A North Perim Zn (G.N28P | 661.   | 0.      | 0.000 | 0.414   | 89.      | 0.00      | 0.00     | 20.11     | 0.00      | -10.39    | 1.   |

REPORT- SV-A System Design Parameters for L1B (G.N5) APT4 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSII  | DE COOLI   | NG     |        | HEATING     | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-------------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A:    | IR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU)   | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |             |            |           |           |
| PVVT   | 1.001    | 2580.0    | 3.     | 0.14    | 40 36.8    | 72     | 0.742  | -33.185     | 0.266      | 0.271     | -21.043   |
|        |          |           |        |         |            |        |        |             |            |           |           |
|        |          |           |        |         |            |        |        |             |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | ]           |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAN       | I FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL    | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |             |            |           |           |
| SUPPLY | 1230.    | 1.00      | 0.369  | 0.94    | 1.2        | 0.47   | 0.62   | DRAW-THRU   | J CONSTANT | Γ 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| LlB North Perim Zn (G.N5)T | 1230.  | 0.      | 0.000 | 0.269   | 172.     | 0.00      | 0.00     | 37.36      | 0.00      | -12.53    | 1.   |

| PFDOPT_ | C17_7 | Cretam | Decian | Parameters | for | T.1 D | (C F6) | 7 DT1 | DTUD |
|---------|-------|--------|--------|------------|-----|-------|--------|-------|------|
|         |       |        |        |            |     |       |        |       |      |

| REPORT- SV | 7-A System | Design Para | meters for | L1B (G  | .E6) APT1 P | THP    |        |            | WEATH     | ER FILE- SE | ATTLE BOEIN | G FI WA |
|------------|------------|-------------|------------|---------|-------------|--------|--------|------------|-----------|-------------|-------------|---------|
|            |            | FLOOR       |            | OUTSI   | DE COOLI    | NG     |        | HEATING    | COOLING   | HEATING     | HEAT PUMP   |         |
| SYSTEM     | ALTITUDE   | AREA        | MAX        | A       | IR CAPACI   | TY SE  | NSIBLE | CAPACITY   | EIR       | EIR         | SUPP-HEAT   |         |
| TYPE       | FACTOR     | (SQFT )     | PEOPLE     | RAT     | IO (KBTU/H  | R)     | (SHR)  | (KBTU/HR)  | (BTU/BTU) | (BTU/BTU)   | (KBTU/HR)   |         |
| PVVT       | 1.001      | 668.0       | 1.         | 0.1     | 46 9.1      | 43     | 0.742  | -8.229     | 0.266     | 0.271       | -8.537      |         |
|            |            | DIVERSITY   | POWER      | FAN     | STATIC      | TOTAL  | MECH   | I          |           | MAX FAN     | MIN FAN     |         |
| FAN        | CAPACITY   | FACTOR      | DEMAND     | DELTA-T | PRESSURE    | EFF    | EFF    | F FA       | N FAI     | N RATIO     | RATIO       |         |
| TYPE       | (CFM )     | (FRAC)      | (KW)       | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | ) PLACEMEN | T CONTRO  | L (FRAC)    | (FRAC)      |         |
| SUPPLY     | 305.       | 1.00        | 0.091      | 0.94    | 0.9         | 0.34   | 0.62   | 2 DRAW-THE | U CONSTAN | r 1.00      | 0.30        |         |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION    |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-------------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE 2      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) N | TLUN |
|                            |        |         |       |         |          |           |          |            |           |             |      |
| L1B East Perim Zn (G.E6) 1 | 305.   | 0.      | 0.000 | 0.551   | 45.      | 0.00      | 0.00     | 9.54       | 0.00      | -6.39       | 1.   |

REPORT- SV-A System Design Parameters for L1B (G.W7) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|             | FLOOR                 |  |  |  |  |  | HEATING   | COOLING   | HEATING  | HEAT PUMP   |   |
|-------------|-----------------------|--|--|--|--|--|---|---|--|---|---|
| ALTITUDE    | AREA                  | MAX  | L A  | IR CAPACI  | TY SE  | NSIBLE   | CAPACITY  | EIR   | EIR  | SUPP-HEAT   |   |
| FACTOR      | (SQFT )               | PEOPLE   | RAT  | 'IO (KBTU/H  | R)   | (SHR)  | (KBTU/HR) (   | BTU/BTU)  | (BTU/BTU)  | (KBTU/HR)   |   |
|             |                       |  |  |  |  |  |   |   |  |   |   |
| 1.001       | 765.0                 | 1.   | 0.1  | 18 12.9  | 79   | 0.742  | -11.681   | 0.266   | 0.271  | -14.165   |   |
|             |                       |  |  |  |  |  |   |   |  |   |   |
|             |                       |  |  |  |  |  |   |   |  |   |   |
|             | DIVERSITY             | POWER  | FAN  | STATIC   | TOTAL  | MECH   |   |   | MAX FAN  | MIN FAN   |   |
| CA DA CITUM |                       |  |  |  |  |  |   | E27.N   |  |   |   |
| CAPACITY    | FACTOR                | DEMAND   | DELTA-T  | PRESSURE   | EFF  | EFF  | FAN   | FAN   | RATIO  | RATIO   |   |
| (CFM )      | (FRAC)                | (KW)   | (F)  | (IN-WATER)   | (FRAC)   | (FRAC)   | PLACEMENT   | CONTROL   | (FRAC)   | (FRAC)  |   |
|             |                       |  |  |  |  |  |   |   |  |   |   |
| 433.        | 1 00                  | 0 120  | 0 02   | 1 0  | 0 40   | 0 60   | DD314 MIDII   | CONTORNATO  | 1 00   | 0 20  |   |
|             | 1.001 CAPACITY (CFM ) | ALTITUDE AREA (SQFT)  1.001 765.0  DIVERSITY FACTOR (CFM) (FRAC) | ALTITUDE AREA MAY FACTOR (SQFT) PEOPLE  1.001 765.0 1.  DIVERSITY POWER CAPACITY FACTOR DEMAND (CFM) (FRAC) (KW) | ALTITUDE AREA MAX A FACTOR (SQFT ) PEOPLE RAT  1.001 765.0 1. 0.1  DIVERSITY POWER FAN CAPACITY FACTOR DEMAND DELTA-T (CFM ) (FRAC) (KW) (F) | ALTITUDE AREA MAX AIR CAPACI FACTOR (SQFT ) PEOPLE RATIO (KBTU/H 1.001 765.0 1. 0.118 12.9  DIVERSITY POWER FAN STATIC CAPACITY FACTOR DEMAND DELTA-T PRESSURE (CFM ) (FRAC) (KW) (F) (IN-WATER) | ALTITUDE AREA MAX AIR CAPACITY SET FACTOR (SQFT ) PEOPLE RATIO (KBTU/HR)  1.001 765.0 1. 0.118 12.979  DIVERSITY POWER FAN STATIC TOTAL CAPACITY FACTOR DEMAND DELTA-T PRESSURE EFF (CFM ) (FRAC) (KW) (F) (IN-WATER) (FRAC) | ALTITUDE AREA MAX AIR CAPACITY SENSIBLE FACTOR (SQFT ) PEOPLE RATIO (KBTU/HR) (SHR)  1.001 765.0 1. 0.118 12.979 0.742  DIVERSITY POWER FAN STATIC TOTAL MECH CAPACITY FACTOR DEMAND DELTA-T PRESSURE EFF EFF (CFM ) (FRAC) (KW) (F) (IN-WATER) (FRAC) (FRAC) | ALTITUDE AREA MAX AIR CAPACITY SENSIBLE CAPACITY FACTOR (SQFT) PEOPLE RATIO (KBTU/HR) (SHR) (KBTU/HR) (S  1.001 765.0 1. 0.118 12.979 0.742 -11.681  DIVERSITY POWER FAN STATIC TOTAL MECH CAPACITY FACTOR DEMAND DELTA-T PRESSURE EFF EFF FAN (CFM) (FRAC) (KW) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT | ALTITUDE AREA MAX AIR CAPACITY SENSIBLE CAPACITY EIR FACTOR (SQFT) PEOPLE RATIO (KBTU/HR) (SHR) (KBTU/HR) (BTU/BTU)  1.001 765.0 1. 0.118 12.979 0.742 -11.681 0.266  DIVERSITY POWER FAN STATIC TOTAL MECH CAPACITY FACTOR DEMAND DELTA-T PRESSURE EFF EFF FAN FAN (CFM) (FRAC) (KW) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL | ALTITUDE AREA MAX AIR CAPACITY SENSIBLE CAPACITY EIR EIR FACTOR (SQFT ) PEOPLE RATIO (KBTU/HR) (SHR) (KBTU/HR) (BTU/BTU) (BTU/BTU)  1.001 765.0 1. 0.118 12.979 0.742 -11.681 0.266 0.271  DIVERSITY POWER FAN STATIC TOTAL MECH MAX FAN CAPACITY FACTOR DEMAND DELTA-T PRESSURE EFF EFF FAN FAN RATIO (CFM ) (FRAC) (KW) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL (FRAC) | ALTITUDE AREA MAX AIR CAPACITY SENSIBLE CAPACITY EIR EIR SUPP-HEAT FACTOR (SQFT) PEOPLE RATIO (KBTU/HR) (SHR) (KBTU/HR) (BTU/BTU) (BTU/BTU) (KBTU/HR)  1.001 765.0 1. 0.118 12.979 0.742 -11.681 0.266 0.271 -14.165  DIVERSITY POWER FAN STATIC TOTAL MECH MAX FAN MIN FAN CAPACITY FACTOR DEMAND DELTA-T PRESSURE EFF EFF FAN FAN RATIO RATIO (CFM ) (FRAC) (KW) (F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL (FRAC) (FRAC) |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L1B West Perim Zn (G.W7) 1 | 433.   | 0.      | 0.000 | 0.717   | 51.      | 0.00      | 0.00     | 10.25     | 0.00      | -11.81    | 1.   |

REPORT- SV-A System Design Parameters for L1B (G.W8) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |           |            |           |           |
| PVVT   | 1.001    | 654.5     | 1.     | 0.1     | 06 12.3    | 84     | 0.742  | -11.146   | 0.266      | 0.271     | -13.516   |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | ]         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAI     | I FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT | CONTROI    | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |           |            |           |           |
| SUPPLY | 413.     | 1.00      | 0.124  | 0.93    | 1.0        | 0.37   | 0.62   | DRAW-THRU | J CONSTANT | Γ 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L1B West Perim Zn (G.W8) 1 | 413.   | 0.      | 0.000 | 0.734   | 44.      | 0.00      | 0.00     | 6.65      | 0.00      | -11.54    | 1.   |

| REPORT- | SV-A | System | Design | Parameters | for | L1B | (G.E9) | APT1 | PTHP |      |
|---------|------|--------|--------|------------|-----|-----|--------|------|------|------|
|         |      |        |        |            |     |     |        |      |      | <br> |

| REPORT- S      | V-A System D       | esign Parame             | eters for     | L1B (G.E9               | ) APT1 PTHP                      |                |                                  | WEATH                       | ER FILE- SE                 | EATTLE BOEIN                        | G FI WA |
|----------------|--------------------|--------------------------|---------------|-------------------------|----------------------------------|----------------|----------------------------------|-----------------------------|-----------------------------|-------------------------------------|---------|
| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SQFT ) | MAX<br>PEOPLE | OUTSIDE<br>AIR<br>RATIO | COOLING<br>CAPACITY<br>(KBTU/HR) | SENSIBLE (SHR) | HEATING<br>CAPACITY<br>(KBTU/HR) | COOLING<br>EIR<br>(BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |         |
| PVVT           | 1.001              | 713.5                    | 1.            | 0.112                   | 12.781                           | 0.742          | -11.503                          | 0.266                       | 0.271                       | -13.949                             |         |

|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   |           |          | MAX FAN | MIN FAN |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|----------|---------|---------|
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAN       | FAN      | RATIO   | RATIO   |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT | CONTROL  | (FRAC)  | (FRAC)  |
|        |          |           |        |         |            |        |        |           |          |         |         |
| SUPPLY | 426.     | 1.00      | 0.128  | 0.93    | 1.0        | 0.40   | 0.62   | DRAW-THRU | CONSTANT | 1.00    | 0.30    |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L1B East Perim Zn (G.E9) 1 | 426.   | 0.      | 0.000 | 0.726   | 48.      | 0.00      | 0.00     | 7.54       | 0.00      | -11.78    | 1.   |

REPORT- SV-A System Design Parameters for L1B (G.E10) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    |         | IR CAPACI   | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | CIO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |           |            |           |           |
| PVVT   | 1.001    | 519.0     | 1.     | 0.0     | 12.7        | 25     | 0.742  | -11.452   | 0.266      | 0.271     | -13.888   |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | [         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | ' FAI     | N FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMENT | r controi  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |             |        |        |           |            |           |           |
| SUPPLY | 424.     | 1.00      | 0.127  | 0.93    | 1.0         | 0.37   | 0.62   | DRAW-THRU | J CONSTANT | г 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L1B East Perim Zn (G.E10)T | 424.   | 0.      | 0.000 | 0.766   | 35.      | 0.00      | 0.00     | 11.61      | 0.00      | -12.38    | 1.   |

REPORT- SV-A System Design Parameters for L1B (G.S11) APT5 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING     | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-------------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU)   | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |             |            |           |           |
| PVVT   | 1.001    | 1978.0    | 3.     | 0.1     | 01 39.3    | 62     | 0.742  | -35.426     | 0.266      | 0.271     | -42.961   |
|        |          |           |        |         |            |        |        |             |            |           |           |
|        |          |           |        |         |            |        |        |             |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | [           |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAI       | I FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL    | (FRAC)    | (FRAC)    |
|        |          |           |        |         |            |        |        |             |            |           |           |
| SUPPLY | 1313.    | 1.00      | 0.394  | 0.93    | 1.2        | 0.48   | 0.62   | DRAW-THRU   | J CONSTANT | 1.00      | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L1B South Perim Zn (G.S11P | 1313.  | 0.      | 0.000 | 0.741   | 132.     | 0.00      | 0.00     | 36.41     | 0.00      | -36.95    | 1.   |

| REPORT- SV-A S | System Design | Darameters | for | T.1 R | (G.E29) | <b>∆</b> DT1 | DTHD |
|----------------|---------------|------------|-----|-------|---------|--------------|------|

| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SQFT ) | MAX<br>PEOPLE   |                | IR CAPACI          | TY S  | ENSIBLE (SHR) | HEATING<br>CAPACITY<br>(KBTU/HR) | COOLING<br>EIR<br>(BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |
|----------------|--------------------|--------------------------|-----------------|----------------|--------------------|-------|---------------|----------------------------------|-----------------------------|-----------------------------|-------------------------------------|
| PVVT           | 1.001              | 429.5                    | 1.              | 0.1            | 05 8.1             | 62    | 0.742         | -7.346                           | 0.266                       | 0.271                       | -6.717                              |
| FAN            | CAPACITY           | DIVERSITY<br>FACTOR      | POWER<br>DEMAND | FAN<br>DELTA-T | STATIC<br>PRESSURE | TOTA: | F EFF         | FAI                              |                             |                             | RATIO                               |
| TYPE<br>SUPPLY | (CFM )<br>272.     | (FRAC)<br>1.00           | (KW)            | (F)<br>0.94    | (IN-WATER)         | (FRAC |               |                                  |                             | , -,                        | (FRAC)<br>0.30                      |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| LlB East Perim Zn (G.E29)T | 272.   | 0.      | 0.000 | 0.518   | 29.      | 0.00      | 0.00     | 7.72       | 0.00      | -5.36     | 1.   |

REPORT- SV-A System Design Parameters for L2A (G.E14) APT3 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | X A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           | _      |         |            |        |        |           |            |           |           |
| PVVT   | 1.001    | 1947.8    | 2.     | 0.2     | 25 17.3    | 37     | 0.742  | -15.604   | 0.266      | 0.271     | -14.425   |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAI     | N FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN' | r controi  | (FRAC)    | (FRAC)    |
|        |          |           |        |         |            |        |        |           |            |           |           |
| SUPPLY | 578.     | 1.00      | 0.173  | 0.94    | 1.0        | 0.40   | 0.62   | DRAW-THR  | U CONSTANT | г 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION    |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-------------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE        | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) I | MULT |
|                            |        |         |       |         |          |           |          |            |           |             |      |
| L2A East Perim Zn (G.E14)T | 578.   | 0.      | 0.000 | 0.364   | 130.     | 0.00      | 0.00     | 16.00      | 0.00      | -8.00       | 1.   |

REPORT- SV-A System Design Parameters for L2A (G.WNW18) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | A       | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |           |            |           |           |
| PVVT   | 1.001    | 1270.5    | 2.     | 0.1     | .42 17.8   | 81     | 0.742  | -16.093   | 0.266      | 0.271     | -14.235   |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | [         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAI     | I FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT | CONTROI    | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |           |            |           |           |
| SUPPLY | 596.     | 1.00      | 0.179  | 0.94    | 1.0        | 0.40   | 0.62   | DRAW-THRU | J CONSTANT | г 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L2A WNW Perim Zn (G.WNW18P | 596.   | 0.      | 0.000 | 0.446   | 85.      | 0.00      | 0.00     | 17.56     | 0.00      | -10.11    | 1.   |

REPORT- SV-A System Design Parameters for L2A (G.N19) APT2 PTHP

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |  |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|--|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |  |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |  |
|        |          |           |        |         |            |        |        |           |            |           |           |  |
| PVVT   | 1.001    | 1039.0    | 1.     | 0.1     | .48 14.0   | 59     | 0.742  | -12.653   | 0.266      | 0.271     | -8.854    |  |
|        |          |           |        |         |            |        |        |           |            |           |           |  |
|        |          |           |        |         |            |        |        | _         |            |           |           |  |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | 1         |            | MAX FAN   | MIN FAN   |  |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAI     | N FAI      | N RATIO   | RATIO     |  |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN' | r controi  | L (FRAC)  | (FRAC)    |  |
|        |          |           |        |         |            |        |        |           |            |           |           |  |
| SUPPLY | 469.     | 1.00      | 0.141  | 0.94    | 1.0        | 0.40   | 0.62   | DRAW-THRU | U CONSTANT | Γ 1.00    | 0.30      |  |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L2A North Perim Zn (G.N19P | 469.   | 0.      | 0.000 | 0.305   | 69.      | 0.00      | 0.00     | 13.84      | 0.00      | -5.43     | 1.   |

REPORT- SV-A System Design Parameters for L2B (G.N4) APT4 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

| SYSTEM      | ALTITUDE           | FLOOR<br>AREA    | MAX            |                | IR CAPACI              | TY SE         | NSIBLE        | HEATING<br>CAPACITY    | COOLING<br>EIR | HEATING<br>EIR     | HEAT PUMP<br>SUPP-HEAT |
|-------------|--------------------|------------------|----------------|----------------|------------------------|---------------|---------------|------------------------|----------------|--------------------|------------------------|
| TYPE        | FACTOR             | (SQFT )          | PEOPLE 4.      |                |                        | ,             | (SHR)         | (KBTU/HR) (<br>-33.923 | 0.266          | (BTU/BTU)<br>0.271 | (KBTU/HR)<br>-21.957   |
|             |                    | DIVERSITY        | POWER          | FAN            | STATIC                 | TOTAL         |               |                        |                | MAX FAN            |                        |
| FAN<br>TYPE | CAPACITY<br>(CFM ) | FACTOR<br>(FRAC) | DEMAND<br>(KW) | DELTA-T<br>(F) | PRESSURE<br>(IN-WATER) | EFF<br>(FRAC) | EFF<br>(FRAC) | FAN<br>PLACEMENT       |                |                    | RATIO<br>(FRAC)        |
| SUPPLY      | 1257.              | 1.00             | 0.377          | 0.94           | 1.2                    | 0.47          | 0.62          | DRAW-THRU              | CONSTANT       | 1.00               | 0.30                   |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE | COOLING   | म        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|---------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    |         | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )  | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |         |           |          |           |           |           |      |
| L2B North Perim Zn (G.N4)T | 1257.  | 0.      | 0.000 | 0.257   | 195.    | 0.00      | 0.00     | 36.87     | 0.00      | -12.26    | 1.   |

REPORT- SV-A System Design Parameters for L2B (G.E5) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING     | COOLING  | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-------------|----------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR      | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU) | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |             |          |           |           |
| PVVT   | 1.001    | 984.0     | 1.     | 0.1     | 18 16.6    | 56     | 0.742  | -14.990     | 0.266    | 0.271     | -12.151   |
|        |          |           |        |         |            |        |        |             |          |           |           |
|        |          |           |        |         |            |        |        |             |          |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   |             |          | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAN         | I FAN    | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL  | (FRAC)    | (FRAC)    |
|        |          |           |        |         |            |        |        |             |          |           |           |
| SUPPLY | 556.     | 1.00      | 0.167  | 0.94    | 1.0        | 0.40   | 0.62   | DRAW-THRU   | CONSTANT | 1.00      | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L2B East Perim Zn (G.E5) 1 | 556.   | 0.      | 0.000 | 0.425   | 66.      | 0.00      | 0.00     | 15.81     | 0.00      | -8.97     | 1.   |

| REPORT- SV-A System Design Parameters for L2B ( | .W6) APT1 PTHP |
|---|----------------|

| WEATHER | FILE- | SEATTLE | BOEING | FT | WA |
|---------|-------|---------|--------|----|----|

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING       | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|---------------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY      | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR)     | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |               |            |           |           |
| PVVT   | 1.001    | 765.0     | 1.     | 0.1     | .80 8.5    | 25     | 0.742  | -7.672        | 0.266      | 0.271     | -8.002    |
|        |          |           |        |         |            |        |        |               |            |           |           |
|        |          |           |        |         |            |        |        |               |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I             |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAI           | I FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT     | CONTROL    | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |               |            |           |           |
| SUPPLY | 284.     | 1.00      | 0.085  | 0.94    | 0.9        | 0.34   | 0.62   | DRAW-THRU     | J CONSTANT | г 1.00    | 0.30      |
| SOFFEI | 201.     | 1.00      | 0.005  | 0.54    | 0.5        | 0.54   | 0.02   | . DICAW IIICC | CONSIAN.   | 1.00      | 0.50      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L2B West Perim Zn (G.W6) 1 | 284.   | 0.      | 0.000 | 0.510   | 51.      | 0.00      | 0.00     | 8.13       | 0.00      | -5.51     | 1.   |

REPORT- SV-A System Design Parameters for L2B (G.W7) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |           |            |           |           |
| PVVT   | 1.001    | 654.5     | 1.     | 0.2     | 34 5.5     | 86     | 0.742  | -5.028    | 0.266      | 0.271     | -3.124    |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAI       | N FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN' | T CONTROL  | (FRAC)    | (FRAC)    |
|        |          |           |        |         |            |        |        |           |            |           |           |
| SUPPLY | 186.     | 1.00      | 0.056  | 0.94    | 0.8        | 0.30   | 0.62   | DRAW-THR  | U CONSTANT | 1.00      | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L2B West Perim Zn (G.W7) 1 | 186.   | 0.      | 0.000 | 0.234   | 44.      | 0.00      | 0.00     | 4.52      | 0.00      | -0.95     | 1.   |

| DEDODT- | C1727 | Circtom | Decian | Parameters | for | T.2D | (G.E8) | 7 DT1 | DTHD |
|---------|-------|---------|--------|------------|-----|------|--------|-------|------|
|         |       |         |        |            |     |      |        |       |      |

| WEATHER | FILE- | SEATTLE | BOEING | FТ | WΑ |
|---------|-------|---------|--------|----|----|
|         |       |         |        |    |    |

| TUDE ORGE DV | , 11 5/5550 | Debign rara |        | 222 (0  | ,           |        |        |            | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | DIC 1 1 DD |           |  |
|--------------|-------------|-------------|--------|---------|-------------|--------|--------|------------|---|------------|-----------|--|
|              |             | FLOOR       |        | OUTSI   | DE COOLI    | NG     |        | HEATING    | COOLING                                 | HEATING    | HEAT PUMP |  |
| SYSTEM       | ALTITUDE    | AREA        | MAX    | . A     | AIR CAPACI  | TY SE  | NSIBLE | CAPACITY   | EIR                                     | EIR        | SUPP-HEAT |  |
| TYPE         | FACTOR      | (SQFT )     | PEOPLE | RAT     | CIO (KBTU/H | IR)    | (SHR)  | (KBTU/HR)  | (BTU/BTU)                               | (BTU/BTU)  | (KBTU/HR) |  |
| PVVT         | 1.001       | 628.5       | 1.     | 0.2     | 206 6.1     | .14    | 0.742  | -5.503     | 0.266                                   | 0.271      | -3.367    |  |
|              |             | DIVERSITY   | POWER  | FAN     | STATIC      | TOTAL  | MECH   | I.         |   | MAX FAN    | I MIN FAN |  |
| FAN          | CAPACITY    | FACTOR      | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | F FA       | N FAI                                   | N RATIO    | RATIO     |  |
| TYPE         | (CFM )      | (FRAC)      | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | ) PLACEMEN | T CONTRO                                | L (FRAC)   | (FRAC)    |  |
| SUPPLY       | 204.        | 1.00        | 0.061  | 0.94    | 0.8         | 0.30   | 0.62   | 2 DRAW-THR | U CONSTAN                               | T 1.00     | 0.30      |  |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L2B East Perim Zn (G.E8) 1 | 204.   | 0.      | 0.000 | 0.206   | 42.      | 0.00      | 0.00     | 5.62       | 0.00      | -1.28     | 1.   |

REPORT- SV-A System Design Parameters for L2B (G.E9) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SQFT ) | MAX<br>PEOPLE   |                | IR CAPACI          | TY SE        | NSIBLE<br>(SHR) | HEATING<br>CAPACITY<br>(KBTU/HR) ( | COOLING<br>EIR<br>BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |
|----------------|--------------------|--------------------------|-----------------|----------------|--------------------|--------------|-----------------|------------------------------------|----------------------------|-----------------------------|-------------------------------------|
| PVVT           | 1.001              | 558.0                    | 1.              | 0.10           | 10.8               | 15           | 0.742           | -9.733                             | 0.266                      | 0.271                       | -8.071                              |
| FAN            | CAPACITY           | DIVERSITY<br>FACTOR      | POWER<br>DEMAND | FAN<br>DELTA-T | STATIC<br>PRESSURE | TOTAL<br>EFF | MECH<br>EFF     |                                    | I FAN                      | MAX FAN<br>N RATIO          |                                     |
| TYPE           | (CFM )             | (FRAC)                   | (KW)            |                | (IN-WATER)         | (FRAC)       | (FRAC)          |                                    |                            |                             | (FRAC)                              |
| SUPPLY         | 361.               | 1.00                     | 0.108           | 0.94           | 1.0                | 0.37         | 0.62            | DRAW-THRU                          | CONSTANT                   | τ 1.00                      | 0.30                                |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L2B East Perim Zn (G.E9) 1 | 361.   | 0.      | 0.000 | 0.459   | 37.      | 0.00      | 0.00     | 10.46      | 0.00      | -6.29     | 1.   |

REPORT- SV-A System Design Parameters for L2B (G.S10) APT6 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|         |          | FLOOR     |        | OUTSII  | DE COOLI   | NG     |        | HEATING     | COOLING  | HEATING   | HEAT PUMP |  |
|---------|----------|-----------|--------|---------|------------|--------|--------|-------------|----------|-----------|-----------|--|
| SYSTEM  | ALTITUDE | AREA      | MAX    | . A.    | IR CAPACI  | TY SEI | NSIBLE | CAPACITY    | EIR      | EIR       | SUPP-HEAT |  |
| TYPE    | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU) | (BTU/BTU) | (KBTU/HR) |  |
| PVVT    | 1.001    | 2721.0    | 3.     | 0.12    | 24 43.9    | 41     | 0.742  | -39.547     | 0.266    | 0.271     | -21.589   |  |
|         |          |           |        |         |            |        |        |             |          |           |           |  |
|         |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   |             |          | MAX FAN   | MIN FAN   |  |
| FAN     | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAN         | FAN      | RATIO     | RATIO     |  |
| TYPE    | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL  | (FRAC)    | (FRAC)    |  |
| CHDDI V | 1466.    | 1.00      | 0.439  | 0.94    | 1 0        | 0.48   | 0.62   | DDAM MIDII  | CONCEANG | 1 100     | 0.30      |  |
| SUPPLY  | 1400.    | 1.00      | 0.439  | 0.94    | 1.2        | 0.48   | 0.62   | DRAW-THRU   | CONSTANT | 1.00      | 0.30      |  |

|                            | SUPPLY | EXHAUST |        | MINIMUM | OUTSIDE | COOLING   | EXTRACTION |           | N HEATING ADDITI |           |      |
|----------------------------|--------|---------|--------|---------|---------|-----------|------------|-----------|------------------|-----------|------|
| ZONE                       |        |         | T 7 17 |         |         |           |            |           |                  |           | COMP |
| ZONE                       | FLOW   | FLOW    | FAN    | FLOW    |         | CAPACITY  | SENSIBLE   | RATE      | CAPACITY         | RATE      |      |
| NAME                       | (CFM ) | (CFM )  | (KW)   | (FRAC)  | (CFM )  | (KBTU/HR) | (FRAC)     | (KBTU/HR) | (KBTU/HR)        | (KBTU/HR) | MULT |
|                            |        |         |        |         |         |           |            |           |                  |           |      |
| L2B South Perim Zn (G.S10P | 1466.  | 0.      | 0.000  | 0.227   | 182.    | 0.00      | 0.00       | 44.30     | 0.00             | -12.60    | 1.   |

REPORT- SV-A System Design Parameters for L2B (G.E23) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    |         | IR CAPACI   | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | CIO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |           |            |           |           |
| PVVT   | 1.001    | 714.0     | 1.     | 0.1     | .07 13.3    | 47     | 0.742  | -12.013   | 0.266      | 0.271     | -10.504   |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | I         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | ' FAI     | I FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMENT | CONTROI    | (FRAC)    | (FRAC)    |
|        |          |           |        |         |             |        |        |           |            |           |           |
| SUPPLY | 445.     | 1.00      | 0.133  | 0.94    | 1.0         | 0.40   | 0.62   | DRAW-THRU | J CONSTANT | 1.00      | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L2B East Perim Zn (G.E23)T | 445.   | 0.      | 0.000 | 0.486   | 48.      | 0.00      | 0.00     | 13.08      | 0.00      | -8.23     | 1.   |

REPORT- SV-A System Design Parameters for L3A (G.E13) APT4 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | P       | AIR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | CIO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |           |            |           |           |
| PVVT   | 1.001    | 2229.8    | 3.     | 0.2     | 206 21.6    | 80     | 0.742  | -19.447   | 0.266      | 0.271     | -12.684   |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | ]         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | FA:       | n FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMEN  | T CONTROI  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |             |        |        |           |            |           |           |
| SUPPLY | 721.     | 1.00      | 0.216  | 0.94    | 1.0         | 0.41   | 0.62   | DRAW-THR  | U CONSTANT | Γ 1.00    | 0.30      |

|   |                           | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|---|---------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
|   | ZONE                      | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
|   | NAME                      | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
|   |                           |        |         |       |         |          |           |          |           |           |           |      |
| Ι | 3A East Perim Zn (G.E13)T | 721.   | 0.      | 0.000 | 0.206   | 149.     | 0.00      | 0.00     | 18.53     | 0.00      | -5.26     | 1.   |

| REPORT- SV-A System Design Parameters for L3A (G.NW17) AP | ידו סידודים |
|---|-------------|

| WEATHER | FILE- | SEATTLE | BOEING | FI | WA |
|---------|-------|---------|--------|----|----|
|         |       |         |        |    |    |

| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SQFT )      | MAX<br>PEOPLE           |                | IR CAPACI          | TY SE                  | NSIBLE<br>(SHR) | HEATING<br>CAPACITY<br>(KBTU/HR) | COOLING<br>EIR<br>(BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |
|----------------|--------------------|-------------------------------|-------------------------|----------------|--------------------|------------------------|-----------------|----------------------------------|-----------------------------|-----------------------------|-------------------------------------|
| PVVT           | 1.001              | 915.5                         | 1.                      | 0.1            | .56 11.7           | 13                     | 0.742           | -10.542                          | 0.266                       | 0.271                       | -8.513                              |
| FAN<br>TYPE    | CAPACITY<br>(CFM ) | DIVERSITY<br>FACTOR<br>(FRAC) | POWER<br>DEMAND<br>(KW) | FAN<br>DELTA-T | STATIC<br>PRESSURE | TOTAL<br>EFF<br>(FRAC) |                 | FAI                              |                             |                             |                                     |
| SUPPLY         | 391.               | 1.00                          | 0.117                   | 0.94           | 1.0                | 0.37                   |                 |                                  |                             | , -,                        |                                     |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | I        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L3A NW Perim Zn (G.NW17) 1 | 391.   | 0.      | 0.000 | 0.372   | 61.      | 0.00      | 0.00     | 11.16      | 0.00      | -5.51     | 1.   |

| REPORT- SV-A System | n Design | Darameters | for | T. 3 A | (G N18) | VDT3 | DTHD |
|---------------------|----------|------------|-----|--------|---------|------|------|

| WEATHER | FILE- | SEATTLE | BOEING | FI | WA |
|---------|-------|---------|--------|----|----|
|         |       |         |        |    |    |

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI   | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | 'IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |           |            |           |           |
| PVVT   | 1.001    | 1566.5    | 2.     | 0.1     | 58 19.8     | 03     | 0.742  | -17.823   | 0.266      | 0.271     | -11.521   |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | [         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | ' FAI     | N FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMEN' | r control  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |             |        |        |           |            |           |           |
| SUPPLY | 661.     | 1.00      | 0.198  | 0.94    | 1.0         | 0.41   | 0.62   | DRAW-THRU | J CONSTANT | г 1.00    | 0.30      |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | I        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L3A North Perim Zn (G.N18P | 661.   | 0.      | 0.000 | 0.253   | 105.     | 0.00      | 0.00     | 18.95      | 0.00      | -6.33     | 1.   |

REPORT- SV-A System Design Parameters for L3A (G.W21) APT4 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING     | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-------------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU)   | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |             |            |           |           |
| PVVT   | 1.001    | 2478.2    | 3.     | 0.2     | 17 22.8    | 92     | 0.742  | -20.603     | 0.266      | 0.271     | -16.572   |
|        |          |           |        |         |            |        |        |             |            |           |           |
|        |          |           |        |         |            |        |        |             |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I           |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAN       | I FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL    | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |             |            |           |           |
| SUPPLY | 764.     | 1.00      | 0.229  | 0.94    | 1.0        | 0.41   | 0.62   | DRAW-THRU   | J CONSTANT | Γ 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L3A West Perim Zn (G.W21)T | 764.   | 0.      | 0.000 | 0.288   | 165.     | 0.00      | 0.00     | 19.03     | 0.00      | -8.35     | 1.   |

| REPORT- SV-A SV | zetem Design | Darameters | for | T. 3 A | (C SW22) | <b>∆</b> DT1 | DTHD |
|-----------------|--------------|------------|-----|--------|----------|--------------|------|

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING     | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-------------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | A       | IR CAPACI   | TY SE  | NSIBLE | CAPACITY    | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | 'IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |             |            |           |           |
| PVVT   | 1.001    | 944.2     | 1.     | 0.1     | 21 15.6     | 65     | 0.742  | -14.098     | 0.266      | 0.271     | -8.250    |
|        |          |           |        |         |             |        |        |             |            |           |           |
|        |          |           |        |         |             |        |        |             |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | 1           |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | ' FAI       | I FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMENT   | CONTROI    | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |             |        |        |             |            |           |           |
| SUPPLY | 523.     | 1.00      | 0.157  | 0.94    | 1.0         | 0.40   | 0.62   | DRAW-THRU   | J CONSTANT | г 1.00    | 0.30      |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L3A SW Perim Zn (G.SW22) 1 | 523.   | 0.      | 0.000 | 0.259   | 63.      | 0.00      | 0.00     | 15.22      | 0.00      | -5.14     | 1.   |

| em Design Parameters for L3A (G.S24) APT | 3 DTH |
|--|-------|

| V | VEAT | HER | FI: | LE- | SE | AT: | ГLЕ | В | OE: | ENG | 3 E | PΙ | W | Α |
|---|------|-----|-----|-----|----|-----|-----|---|-----|-----|-----|----|---|---|
|   |      |     |     |     |    |     |     |   |     |     |     |    |   |   |

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |           |            |           |           |
| PVVT   | 1.001    | 1832.5    | 2.     | 0.1     | 21 30.3    | 24     | 0.742  | -27.292   | 0.266      | 0.271     | -13.646   |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | Į.        |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FA        | N FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN' | T CONTROI  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |           |            |           |           |
| SUPPLY | 1012.    | 1.00      | 0.303  | 0.94    | 1.2        | 0.47   | 0.62   | DRAW-THR  | U CONSTANT | г 1.00    | 0.30      |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L3A South Perim Zn (G.S24P | 1012.  | 0.      | 0.000 | 0.187   | 122.     | 0.00      | 0.00     | 29.29      | 0.00      | -7.16     | 1.   |

| REPORT- SV-A | System | Design | Darameters | for | T.3B | (G.N4) | ∆DT4 | DTHD |
|--------------|--------|--------|------------|-----|------|--------|------|------|

| REPORT- SV | -A System | Design Para | meters for | L3B (G  | .N4) APT4 P | THP<br> |        |           | WEATH     | ER FILE- SE | ATTLE BOEIN | G FI WA |
|------------|-----------|-------------|------------|---------|-------------|---------|--------|-----------|-----------|-------------|-------------|---------|
|            |           | FLOOR       |            | OUTSI   | DE COOLI    | NG      |        | HEATING   | COOLING   | HEATING     | HEAT PUMP   |         |
| SYSTEM     | ALTITUDE  | AREA        | MAX        | A       | IR CAPACI   | TY SEN  | NSIBLE | CAPACITY  | EIR       | EIR         | SUPP-HEAT   |         |
| TYPE       | FACTOR    | (SQFT )     | PEOPLE     | RAT     | IO (KBTU/H  | R)      | (SHR)  | (KBTU/HR) | (BTU/BTU) | (BTU/BTU)   | (KBTU/HR)   |         |
|            |           |             |            |         |             |         |        |           |           |             |             |         |
| PVVT       | 1.001     | 2928.0      | 4.         | 0.1     | 64 35.8     | 27      | 0.742  | -32.244   | 0.266     | 0.271       | -20.391     |         |
|            |           |             |            |         |             |         |        |           |           |             |             |         |
|            |           |             |            |         |             |         |        |           |           |             |             |         |
|            |           | DIVERSITY   | POWER      | FAN     | STATIC      | TOTAL   | MECH   | I         |           | MAX FAN     | MIN FAN     |         |
| FAN        | CAPACITY  | FACTOR      | DEMAND     | DELTA-T | PRESSURE    | EFF     | EFF    | r FA      | N FAI     | N RATIO     | RATIO       |         |
| TYPE       | (CFM )    | (FRAC)      | (KW)       | (F)     | (IN-WATER)  | (FRAC)  | (FRAC) | PLACEMEN  | T CONTRO  | L (FRAC)    | (FRAC)      |         |
|            |           |             |            |         |             |         |        |           |           |             |             |         |
| SUPPLY     | 1195.     | 1.00        | 0.358      | 0.94    | 1.2         | 0.47    | 0.62   | DRAW-THR  | U CONSTAN | r 1.00      | 0.30        |         |
|            |           |             |            |         |             |         |        |           |           |             |             |         |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE | COOLING   | ъ        | XTRACTION | HEATING  | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|---------|-----------|----------|-----------|----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    |         | CAPACITY  | SENSIBLE | RATE      | CAPACITY | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  |         | (KBTU/HR) |          |           |          | (KBTU/HR) |      |
|                            |        |         |       |         |         |           |          |           |          |           |      |
| L3B North Perim Zn (G.N4)T | 1195.  | 0.      | 0.000 | 0.236   | 195.    | 0.00      | 0.00     | 34.11     | 0.00     | -10.68    | 1.   |

| REPORT- SV- | A System | Design | Darameters | for | T.3R | (G.E5) | <b>∆</b> DT1 | DTHD |
|-------------|----------|--------|------------|-----|------|--------|--------------|------|

| <br> |       |       |     |      |      | _   |    |    |  |
|------|-------|-------|-----|------|------|-----|----|----|--|
| <br> |       |       |     |      |      |     |    |    |  |
|      |       |       |     |      |      |     |    |    |  |
| WE   | ATHER | FILE- | SEA | TTLE | BOE: | ING | FI | WA |  |

|        |          | FLOOR     |        | OUTSI   |            |        |        | HEATING     | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-------------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SEI | NSIBLE | CAPACITY    | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU)   | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |             |            |           |           |
| PVVT   | 1.001    | 984.0     | 1.     | 0.1     | .25 15.7   | 95     | 0.742  | -14.215     | 0.266      | 0.271     | -10.515   |
|        |          |           |        |         |            |        |        |             |            | **        |           |
|        |          |           |        |         |            |        |        |             |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | r           |            | MAX FAN   | MIN FAN   |
|        |          |           |        |         |            |        |        |             |            |           |           |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAI       | I FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL    | (FRAC)    | (FRAC)    |
|        |          |           |        |         |            |        |        |             |            |           |           |
| SUPPLY | 527.     | 1.00      | 0.158  | 0.94    | 1.0        | 0.40   | 0.62   | DRAW-THRU   | J CONSTANT | г 1.00    | 0.30      |
| SUPPLI | 527.     | 1.00      | 0.156  | 0.94    | 1.0        | 0.40   | 0.62   | DKAM-IHK    | CONSTAN    | 1.00      | 0.30      |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L3B East Perim Zn (G.E5) 1 | 527.   | 0.      | 0.000 | 0.365   | 66.      | 0.00      | 0.00     | 14.78      | 0.00      | -7.30     | 1.   |

| REPORT- | SV-A | System | Design | Parameters | for | L3B | (G.W6) | APT1 | PTHP |
|---------|------|--------|--------|------------|-----|-----|--------|------|------|
|         |      |        |        |            |     |     |        |      |      |

| REPORT- S | V-A System D | esign Paramo | eters for | L3B (G.W6 | ) APTI PTHP |          |           | EK FILE- SE | FILE- SEATTLE BOEING FI WA |           |  |
|-----------|--------------|--------------|-----------|-----------|-------------|----------|-----------|-------------|----------------------------|-----------|--|
|           |              | FLOOR        |           | OUTSIDE   | COOLING     |          | HEATING   | COOLING     | HEATING                    | HEAT PUMP |  |
| SYSTEM    | ALTITUDE     | AREA         | MAX       | AIR       | CAPACITY    | SENSIBLE | CAPACITY  | EIR         | EIR                        | SUPP-HEAT |  |
| TYPE      | FACTOR       | (SQFT )      | PEOPLE    | RATIO     | (KBTU/HR)   | (SHR)    | (KBTU/HR) | (BTU/BTU)   | (BTU/BTU)                  | (KBTU/HR) |  |
| PVVT      | 1.001        | 765.0        | 1.        | 0.186     | 8.228       | 0.742    | -7.405    | 0.266       | 0.271                      | -7.187    |  |
|           |              |              |           |           |             |          |           |             |                            |           |  |

|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   |           |          | MAX FAN | MIN FAN |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|----------|---------|---------|
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAN       | FAN      | RATIO   | RATIO   |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT | CONTROL  | (FRAC)  | (FRAC)  |
|        |          |           |        |         |            |        |        |           |          |         |         |
| SUPPLY | 274.     | 1.00      | 0.082  | 0.94    | 0.9        | 0.34   | 0.62   | DRAW-THRU | CONSTANT | 1.00    | 0.30    |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |           |           |           |      |
| L3B West Perim Zn (G.W6) 1 | 274.   | 0.      | 0.000 | 0.449   | 51.      | 0.00      | 0.00     | 7.68      | 0.00      | -4.68     | 1.   |

1.001 654.5

SUPPLY 188. 1.00 0.056

FAN CAPACITY FACTOR

TYPE (CFM )

SYSTEM ALTITUDE AREA
TYPE FACTOR (SQFT)

PVVT

| REPORT- | SV-A | System | Design | Parameters | for | L3B | (G.W7) | APT1 | PTHP |      |
|---------|------|--------|--------|------------|-----|-----|--------|------|------|------|
|         |      |        |        |            |     |     |        |      |      | <br> |

MAX

MAX PEOPLE

(KW)

POWER FAN STATIC TOTAL DEMAND DELTA-T PRESSURE EFF

0.94

FLOOR AREA

DIVERSITY

(FRAC)

| L3B (G.W7               | ) APT1 PTHP                      |                |                     | WEATH                       | ER FILE- SE    | EATTLE BOEING | FI WA |
|-------------------------|----------------------------------|----------------|---------------------|-----------------------------|----------------|---------------|-------|
| OUTSIDE<br>AIR<br>RATIO | COOLING<br>CAPACITY<br>(KBTU/HR) | SENSIBLE (SHR) | HEATING<br>CAPACITY | COOLING<br>EIR<br>(BTU/BTU) | HEATING<br>EIR |               |       |
| 0.233                   | 5.621                            | 0.742          | -5.059              | 0.266                       | 0.271          | , ,           |       |
| FAN                     | STATIC TO                        | OTAL MEC       | H                   |                             | MAX FAN        | N MIN FAN     |       |

RATIO

RATIO

(FRAC)

FAN FAN

0.8 0.30 0.62 DRAW-THRU CONSTANT 1.00 0.30

\*\*\* THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |           |           |           |      |
| L3B West Perim Zn (G.W7) 1 | 188.   | 0.      | 0.000 | 0.233   | 44.      | 0.00      | 0.00     | 4.43      | 0.00      | -1.33     | 1.   |

MECH EFF

(F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL

REPORT- SV-A System Design Parameters for L3B (G.E8) APT1 PTHP

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |           |            |           |           |
| PVVT   | 1.001    | 628.5     | 1.     | 0.2     | 06 6.1     | 09     | 0.742  | -5.498    | 0.266      | 0.271     | -3.612    |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAI       | N FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN' | r controi  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |           |            |           |           |
| SUPPLY | 204.     | 1.00      | 0.061  | 0.94    | 0.8        | 0.30   | 0.62   | DRAW-THR  | U CONSTANT | Γ 1.00    | 0.30      |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L3B East Perim Zn (G.E8) 1 | 204.   | 0.      | 0.000 | 0.206   | 42.      | 0.00      | 0.00     | 5.45      | 0.00      | -1.52     | 1.   |

| REPORT- SV- | A System | Design | Parameters | for | T.3B | (G.E9) | APT1 | PTHP |
|-------------|----------|--------|------------|-----|------|--------|------|------|

| WEATHER | FILE- | SEATTLE | BOEING | FT | WA |
|---------|-------|---------|--------|----|----|

|        |          |           |        | (-      | ,          |        |        |           |            |           |           |  |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|--|
|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |  |
| SYSTEM | ALTITUDE | AREA      | MAX    |         | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |  |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |  |
|        |          |           |        |         |            |        |        |           |            |           |           |  |
| PVVT   | 1.001    | 789.0     | 1.     | 0.1     | .11 14.2   | 21     | 0.742  | -12.799   | 0.266      | 0.271     | -9.505    |  |
|        |          |           |        |         |            |        |        |           |            |           |           |  |
|        |          |           |        |         |            |        |        |           |            |           |           |  |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I         |            | MAX FAN   | MIN FAN   |  |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FA:       | n fai      | N RATIO   | RATIO     |  |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN  | T CONTROL  | L (FRAC)  | (FRAC)    |  |
|        |          |           |        |         |            |        |        |           |            |           |           |  |
| SUPPLY | 474.     | 1.00      | 0.142  | 0.94    | 1.0        | 0.40   | 0.62   | DRAW-THR  | U CONSTANT | г 1.00    | 0.30      |  |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L3B East Perim Zn (G.E9) 1 | 474.   | 0.      | 0.000 | 0.386   | 53.      | 0.00      | 0.00     | 12.93      | 0.00      | -6.95     | 1.   |

REPORT- SV-A System Design Parameters for L3B (G.S10) APT7 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING     | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-------------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    |         | AIR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | CIO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |             |            |           |           |
| PVVT   | 1.001    | 3981.5    | 5.     | 0.1     | .33 59.6    | 79     | 0.742  | -53.711     | 0.266      | 0.271     | -28.118   |
|        |          |           |        |         |             |        |        |             |            |           |           |
|        |          |           |        |         |             |        |        |             |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | [           |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | ' FAI       | I FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMENT   | CONTROI    | (FRAC)    | (FRAC)    |
|        |          |           |        |         |             |        |        |             |            |           |           |
| SUPPLY | 1991.    | 1.00      | 0.597  | 0.94    | 1.3         | 0.51   | 0.62   | DRAW-THRU   | J CONSTANT | 1.00      | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L3B South Perim Zn (G.S10P | 1991.  | 0.      | 0.000 | 0.198   | 266.     | 0.00      | 0.00     | 56.58      | 0.00      | -14.91    | 1.   |

REPORT- SV-A System Design Parameters for L3B (G.E19) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SQFT ) | MAX<br>PEOPLE  |                  | R CAPACI              | TY SE         | NSIBLE<br>(SHR) | HEATING<br>CAPACITY<br>(KBTU/HR) ( | COOLING<br>EIR<br>BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |
|----------------|--------------------|--------------------------|----------------|------------------|-----------------------|---------------|-----------------|------------------------------------|----------------------------|-----------------------------|-------------------------------------|
| PVVT           | 1.001              | 714.0                    | 1.             | 0.11             | .2 12.8               | 10            | 0.742           | -11.529                            | 0.266                      | 0.271                       | -8.987                              |
|                |                    | DIVERSITY                | POWER          | FAN              | STATIC                | TOTAL         |                 |                                    |                            | MAX FAN                     |                                     |
| FAN<br>TYPE    | CAPACITY<br>(CFM ) | FACTOR<br>(FRAC)         | DEMAND<br>(KW) | DELTA-T<br>(F) ( | PRESSURE<br>IN-WATER) | EFF<br>(FRAC) | EFF<br>(FRAC)   | FAN<br>PLACEMENT                   |                            |                             | RATIO<br>(FRAC)                     |
| SUPPLY         | 427.               | 1.00                     | 0.128          | 0.94             | 1.0                   | 0.40          | 0.62            | DRAW-THRU                          | CONSTANT                   | 1.00                        | 0.30                                |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L3B East Perim Zn (G.E19)T | 427.   | 0.      | 0.000 | 0.412   | 48.      | 0.00      | 0.00     | 11.62      | 0.00      | -6.68     | 1.   |

REPORT- SV-A System Design Parameters for L4A (G.E13) APT4 PTHP

| SYSTEM | ALTITUDE | FLOOR<br>AREA | MAX    | OUTSI   | DE COOLI<br>IR CAPACI |        | NSIBLE | HEATING<br>CAPACITY | COOLING<br>EIR | HEATING<br>EIR | HEAT PUMP<br>SUPP-HEAT |
|--------|----------|---------------|--------|---------|-----------------------|--------|--------|---------------------|----------------|----------------|------------------------|
| TYPE   | FACTOR   | (SQFT )       | PEOPLE |         |                       |        | (SHR)  |                     | BTU/BTU)       | (BTU/BTU)      | (KBTU/HR)              |
|        |          |               |        |         |                       |        |        |                     |                |                |                        |
| PVVT   | 1.001    | 2229.8        | 3.     | 0.2     | 04 21.9               | 16     | 0.742  | -19.725             | 0.266          | 0.271          | -12.310                |
|        |          |               |        |         |                       |        |        |                     |                |                |                        |
|        |          | DIVERSITY     | POWER  | FAN     | STATIC                | TOTAL  | MECH   | I                   |                | MAX FAN        | MIN FAN                |
| FAN    | CAPACITY | FACTOR        | DEMAND | DELTA-T | PRESSURE              | EFF    | EFF    | ' FAI               | I FAN          | N RATIO        | RATIO                  |
| TYPE   | (CFM )   | (FRAC)        | (KW)   | (F)     | (IN-WATER)            | (FRAC) | (FRAC) | PLACEMENT           | CONTROL        | (FRAC)         | (FRAC)                 |
| SUPPLY | 731.     | 1.00          | 0.219  | 0.94    | 1.0                   | 0.41   | 0.62   | DRAW-THRU           | J CONSTANT     | Γ 1.00         | 0.30                   |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L4A East Perim Zn (G.E13)T | 731.   | 0.      | 0.000 | 0.204   | 149.     | 0.00      | 0.00     | 18.87     | 0.00      | -4.89     | 1.   |

REPORT- SV-A System Design Parameters for L4A (G.NW17) APT1 PTHP

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING     | COOLING  | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-------------|----------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR      | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU) | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |             |          |           |           |
| PVVT   | 1.001    | 915.5     | 1.     | 0.1     | 57 11.6    | 82     | 0.742  | -10.513     | 0.266    | 0.271     | -7.916    |
|        |          |           |        |         |            |        |        |             |          |           |           |
|        |          |           |        |         |            |        |        |             |          |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   |             |          | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAN         | FAI FAI  | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |             |          |           |           |
| SUPPLY | 390.     | 1.00      | 0.117  | 0.94    | 1.0        | 0.37   | 0.62   | DRAW-THRU   | CONSTANT | Γ 1.00    | 0.30      |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L4A NW Perim Zn (G.NW17) 1 | 390.   | 0.      | 0.000 | 0.332   | 61.      | 0.00      | 0.00     | 11.44     | 0.00      | -4.90     | 1.   |

REPORT- SV-A System Design Parameters for L4A (G.N18) APT3 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|                |                    | FLOOR           |               | OUTSID  | E COOLI   | NG     |                 | HEATING              | COOLING         | HEATING          | HEAT PUMP              |
|----------------|--------------------|-----------------|---------------|---------|-----------|--------|-----------------|----------------------|-----------------|------------------|------------------------|
| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | AREA<br>(SQFT ) | MAX<br>PEOPLE |         |           |        | NSIBLE<br>(SHR) | CAPACITY (KBTU/HR) ( | EIR<br>BTU/BTU) | EIR<br>(BTU/BTU) | SUPP-HEAT<br>(KBTU/HR) |
| PVVT           | 1.001              | 1566.5          | 2.            | 0.15    | 7 19.9    | 47     | 0.742           | -17.953              | 0.266           | 0.271            | -11.115                |
|                |                    | DIVERSITY       | POWER         | FAN     | STATIC    | TOTAL  | MECH            |                      |                 | MAX FAN          | MIN FAN                |
| FAN            | CAPACITY           | FACTOR          | DEMAND        | DELTA-T | PRESSURE  | EFF    | EFF             |                      | FAN             |                  | RATIO                  |
| TYPE           | (CFM )             | (FRAC)          | (KW)          | (F) (   | IN-WATER) | (FRAC) | (FRAC)          | PLACEMENT            | CONTROL         | (FRAC)           | (FRAC)                 |
| SUPPLY         | 665.               | 1.00            | 0.199         | 0.94    | 1.0       | 0.41   | 0.62            | DRAW-THRU            | CONSTANT        | τ 1.00           | 0.30                   |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L4A North Perim Zn (G.N18P | 665.   | 0.      | 0.000 | 0.235   | 105.     | 0.00      | 0.00     | 19.12     | 0.00      | -5.92     | 1.   |

REPORT- SV-A System Design Parameters for L4A (G.W21) APT4 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING     | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-------------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI   | TY SE  | NSIBLE | CAPACITY    | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | CIO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU)   | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |             |            |           |           |
| PVVT   | 1.001    | 2478.2    | 3.     | 0.2     | 22.8        | 24     | 0.742  | -20.541     | 0.266      | 0.271     | -14.614   |
|        |          |           |        |         |             |        |        |             |            |           |           |
|        |          |           | n.on   |         | ama m. r. a |        | umar   |             |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   |             |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | ' FAI       | I FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMENT   | CONTROL    | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |             |        |        |             |            |           |           |
| SUPPLY | 761.     | 1.00      | 0.228  | 0.94    | 1.0         | 0.41   | 0.62   | DRAW-THRU   | J CONSTANT | г 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L4A West Perim Zn (G.W21)T | 761.   | 0.      | 0.000 | 0.220   | 165.     | 0.00      | 0.00     | 18.82      | 0.00      | -6.36     | 1.   |

REPORT- SV-A System Design Parameters for L4A (G.SW22) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   |             |        |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI   | TY SEI | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | 'IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |           |            |           |           |
| PVVT   | 1.001    | 944.2     | 1.     | 0.1     | 20 15.7     | 55     | 0.742  | -14.179   | 0.266      | 0.271     | -7.841    |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | [         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | ' FAI     | N FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMENT | r controi  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |             |        |        |           |            |           |           |
| SUPPLY | 526.     | 1.00      | 0.158  | 0.94    | 1.0         | 0.40   | 0.62   | DRAW-THRU | J CONSTANT | Γ 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L4A SW Perim Zn (G.SW22) 1 | 526.   | 0.      | 0.000 | 0.237   | 63.      | 0.00      | 0.00     | 15.35     | 0.00      | -4.72     | 1.   |

| REPORT- | SW-A | System | Design | Parameters | for | T.4A | (G S24) | APT3 | PTHP |
|---------|------|--------|--------|------------|-----|------|---------|------|------|

| WEATHER | FILE- | SEATTLE | BOEING | FΙ | WA |
|---------|-------|---------|--------|----|----|
|         |       |         |        |    |    |

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI   | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | 'IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |           |            |           |           |
| PVVT   | 1.001    | 1832.5    | 2.     | 0.1     | 23 29.7     | 11     | 0.742  | -26.740   | 0.266      | 0.271     | -13.370   |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | I         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | FAI       | N FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMENT | r controi  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |             |        |        |           |            |           |           |
| SUPPLY | 991.     | 1.00      | 0.297  | 0.94    | 1.2         | 0.47   | 0.62   | DRAW-THRU | J CONSTANT | Γ 1.00    | 0.30      |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

| S                          | UPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|-------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW  | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME (                     | CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |       |         |       |         |          |           |          |           |           |           |      |
| L4A South Perim Zn (G.S24P | 991.  | 0.      | 0.000 | 0.155   | 122.     | 0.00      | 0.00     | 28.76     | 0.00      | -5.80     | 1.   |

REPORT- SV-A System Design Parameters for L4B (G.N4) APT4 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

| SYSTEM TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SOFT )      | MAX<br>PEOPLE           |                         | IR CAPACI                        | TY SE                  | NSIBLE | HEATING CAPACITY (KBTU/HR) ( | COOLING<br>EIR<br>BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP SUPP-HEAT (KBTU/HR) |
|-------------|--------------------|-------------------------------|-------------------------|-------------------------|----------------------------------|------------------------|--------|------------------------------|----------------------------|-----------------------------|-------------------------------|
| PVVT        | 1.001              | 2928.0                        | 4.                      | 0.16                    |                                  |                        | 0.742  | -32.495                      | 0.266                      | 0.271                       | -19.727                       |
| FAN<br>TYPE | CAPACITY<br>(CFM ) | DIVERSITY<br>FACTOR<br>(FRAC) | POWER<br>DEMAND<br>(KW) | FAN<br>DELTA-T<br>(F) ( | STATIC<br>PRESSURE<br>(IN-WATER) | TOTAL<br>EFF<br>(FRAC) |        | FAN                          |                            |                             |                               |
| SUPPLY      | 1204.              | 1.00                          | 0.361                   | 0.94                    | 1.2                              | 0.47                   | 0.62   | DRAW-THRU                    | CONSTANT                   | 1.00                        | 0.30                          |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L4B North Perim Zn (G.N4)T | 1204.  | 0.      | 0.000 | 0.219   | 195.     | 0.00      | 0.00     | 34.43      | 0.00      | -10.00    | 1.   |

| REPORT- SV-A | System Des | zian Daramete | ere for | T.4R ( | G E5) | <b>∆</b> DT1 | DTHD |
|--------------|------------|---------------|---------|--------|-------|--------------|------|

|  |  | WEATHER | FILE- | SEATTLE | BOEING | FI | WA |
|--|--|---------|-------|---------|--------|----|----|
|--|--|---------|-------|---------|--------|----|----|

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
| PVVT   | 1.001    | 984.0     | 1.     | 0.1     | 23 16.0    | 18     | 0.742  | -14.416   | 0.266      | 0.271     | -10.100   |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | [         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAI     | N FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN' | r controi  | (FRAC)    | (FRAC)    |
|        |          |           |        |         |            |        |        |           |            |           |           |
| SUPPLY | 534.     | 1.00      | 0.160  | 0.94    | 1.0        | 0.40   | 0.62   | DRAW-THR  | J CONSTANT | 1.00      | 0.30      |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L4B East Perim Zn (G.E5) 1 | 534.   | 0.      | 0.000 | 0.340   | 66.      | 0.00      | 0.00     | 15.05     | 0.00      | -6.88     | 1.   |

REPORT- SV-A System Design Parameters for L4B (G.W6) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

| SYSTEM | ALTITUDE | FLOOR<br>AREA | MAX    | OUTSII  | DE COOLI   |        | NSIBLE | HEATING<br>CAPACITY | COOLING<br>EIR | HEATING<br>EIR | HEAT PUMP |  |
|--------|----------|---------------|--------|---------|------------|--------|--------|---------------------|----------------|----------------|-----------|--|
| TYPE   | FACTOR   | (SQFT )       | PEOPLE |         |            |        | (SHR)  |                     | BTU/BTU)       | (BTU/BTU)      | (KBTU/HR) |  |
| PVVT   | 1.001    | 765.0         | 1.     | 0.18    | 83 8.3     | 51     | 0.742  | -7.516              | 0.266          | 0.271          | -6.831    |  |
|        |          |               |        |         |            |        |        |                     |                |                |           |  |
|        |          | DIVERSITY     | POWER  | FAN     | STATIC     | TOTAL  | MECH   | [                   |                | MAX FAN        | MIN FAN   |  |
| FAN    | CAPACITY | FACTOR        | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAN                 | FA1            | N RATIO        | RATIO     |  |
| TYPE   | (CFM )   | (FRAC)        | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT           | CONTROL        | L (FRAC)       | (FRAC)    |  |
|        |          |               |        |         |            |        |        |                     |                |                |           |  |
| SUPPLY | 279.     | 1.00          | 0.084  | 0.94    | 0.9        | 0.34   | 0.62   | DRAW-THRU           | CONSTANT       | г 1.00         | 0.30      |  |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L4B West Perim Zn (G.W6) 1 | 279.   | 0.      | 0.000 | 0.408   | 51.      | 0.00      | 0.00     | 7.83      | 0.00      | -4.32     | 1.   |

| REPORT- SV- | -A System | Design | Parameters | for | T.4B | (G.W7) | APT1 | PTHP |
|-------------|-----------|--------|------------|-----|------|--------|------|------|

| WEATHER | FILE- | SEATTLE | BOEING | FT | WΑ |
|---------|-------|---------|--------|----|----|

| REPORT - SV-A System Design Parameters for |          |           |        | L4B (0  | W// APII P  | 1111   |        |            | WEAIH      | ER FILE- SE | AIILE BOEIN | Ј Г1 W.<br> |
|--|----------|-----------|--------|---------|-------------|--------|--------|------------|------------|-------------|-------------|-------------|
|  |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING    | COOLING    | HEATING     | HEAT PUMP   |             |
| SYSTEM                                     | ALTITUDE | AREA      | MAX    | . A     | AIR CAPACI  | TY SE  | NSIBLE | CAPACITY   | EIR        | EIR         | SUPP-HEAT   |             |
| TYPE                                       | FACTOR   | (SQFT )   | PEOPLE | RAT     | CIO (KBTU/H | IR)    | (SHR)  | (KBTU/HR)  | (BTU/BTU)  | (BTU/BTU)   | (KBTU/HR)   |             |
|  |          |           |        |         |             |        |        |            |            |             |             |             |
| PVVT                                       | 1.001    | 654.5     | 1.     | 0.2     | 232 5.6     | 56     | 0.742  | -5.091     | 0.266      | 0.271       | -3.396      |             |
|  |          |           |        |         |             |        |        |            |            |             |             |             |
|  |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | I          |            | MAX FAN     | MIN FAN     |             |
| FAN  | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | F FA       | n FAI      | N RATIO     | RATIO       |             |
| TYPE                                       | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | ) PLACEMEN | T CONTROL  | L (FRAC)    | (FRAC)      |             |
|  | 100      | 1 00      | 0.055  | 0.04    | 0.0         | 0.20   | 0.66   |            |            | . 1 00      | 0.20        |             |
| SUPPLY                                     | 189.     | 1.00      | 0.057  | 0.94    | 0.8         | 0.30   | 0.62   | DRAW-THR   | U CONSTANT | г 1.00      | 0.30        |             |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L4B West Perim Zn (G.W7) 1 | 189.   | 0.      | 0.000 | 0.232   | 44.      | 0.00      | 0.00     | 4.45      | 0.00      | -1.22     | 1.   |

SUPPLY

| REPORT- SV-A | System Design | Parameters fo | r L4B | (G E8) | APT1 PTHP |
|--------------|---------------|---------------|-------|--------|-----------|

| REPORT- SV-A System Design Parameters for |                    |                               | L4B (G.E8         | 3) APT1 PT | HP                             |                        |                       | WEATH     | ER FILE- SE          | ATTLE BOEIN | G FI WA   |  |
|---|--------------------|-------------------------------|-------------------|------------|--------------------------------|------------------------|-----------------------|-----------|----------------------|-------------|-----------|--|
|   |                    | FLOOR                         |                   | OUTSIDE    | COOLIN                         | G                      |                       | HEATING   | COOLING              | HEATING     | HEAT PUMP |  |
| SYSTEM                                    | ALTITUDE           | AREA                          | MAX               | AIR        | CAPACIT                        | Y SEI                  | NSIBLE                | CAPACITY  | EIR                  | EIR         | SUPP-HEAT |  |
| TYPE                                      | FACTOR             | (SQFT )                       | PEOPLE            | RATIO      | (KBTU/HR                       | )                      | (SHR)                 | (KBTU/HR) | (BTU/BTU)            | (BTU/BTU)   | (KBTU/HR) |  |
| PVVT                                      | 1.001              | 628.5                         | 1.                | 0.202      | 6.22                           | 5                      | 0.742                 | -5.603    | 0.266                | 0.271       | -3.499    |  |
| FAN<br>TYPE                               | CAPACITY<br>(CFM ) | DIVERSITY<br>FACTOR<br>(FRAC) | POWER DEMAND (KW) |            | STATIC<br>PRESSURE<br>N-WATER) | TOTAL<br>EFF<br>(FRAC) | MECH<br>EFF<br>(FRAC) | F         | AN FAI<br>NT CONTROI |             |           |  |

\*\*\* THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L4B East Perim Zn (G.E8) 1 | 208.   | 0.      | 0.000 | 0.202   | 42.      | 0.00      | 0.00     | 5.57       | 0.00      | -1.41     | 1.   |

208. 1.00 0.062 0.94 0.8 0.30 0.62 DRAW-THRU CONSTANT 1.00 0.30

| REPORT- | SV-A | System | Design | Parameters | for | L4B | (G.E9) | APT1 | PTHP |  |
|---------|------|--------|--------|------------|-----|-----|--------|------|------|--|
|         |      |        |        |            |     |     |        |      |      |  |

| REPORT- S      | V-A System D       | esign Paramo             | eters ior<br> | L4B (G.E9               | ) APTI PTHP                      |                |                                  | WEATH                       | ER FILE- SE                 | ATTLE BOEIN                         | э F.1 WA<br> |
|----------------|--------------------|--------------------------|---------------|-------------------------|----------------------------------|----------------|----------------------------------|-----------------------------|-----------------------------|-------------------------------------|--------------|
| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SQFT ) | MAX<br>PEOPLE | OUTSIDE<br>AIR<br>RATIO | COOLING<br>CAPACITY<br>(KBTU/HR) | SENSIBLE (SHR) | HEATING<br>CAPACITY<br>(KBTU/HR) | COOLING<br>EIR<br>(BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |              |
| PVVT           | 1.001              | 789.0                    | 1.            | 0.110                   | 14.291                           | 0.742          | -12.862                          | 0.266                       | 0.271                       | -8.758                              |              |

|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   |           |          | MAX FAN | MIN FAN |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|----------|---------|---------|
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAN       | FAN      | RATIO   | RATIO   |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT | CONTROL  | (FRAC)  | (FRAC)  |
|        |          |           |        |         |            |        |        |           |          |         |         |
| SUPPLY | 477.     | 1.00      | 0.143  | 0.94    | 1.0        | 0.40   | 0.62   | DRAW-THRU | CONSTANT | 1.00    | 0.30    |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |           |           |           |      |
| L4B East Perim Zn (G.E9) 1 | 477.   | 0.      | 0.000 | 0.342   | 53.      | 0.00      | 0.00     | 12.23     | 0.00      | -6.19     | 1.   |

REPORT- SV-A System Design Parameters for L4B (G.S10) APT7 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR      |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |  |
|--------|----------|------------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|--|
| SYSTEM | ALTITUDE | AREA       | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |  |
| TYPE   | FACTOR   | (SQFT )    | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |  |
|        |          |            |        |         |            |        |        |           |            |           |           |  |
| PVVT   | 1.001    | 3981.5     | 5.     | 0.1     | .35 58.8   | 58     | 0.742  | -52.972   | 0.266      | 0.271     | -26.486   |  |
|        |          |            |        |         |            |        |        |           |            |           |           |  |
|        |          | DIVIDDOTEN | DOMED  |         | CM3 MT C   | moma r | MEGN   |           |            | MAN 57337 | MIN DAN   |  |
|        |          | DIVERSITY  | POWER  | FAN     | STATIC     | TOTAL  |        |           |            | MAX FAN   | MIN FAN   |  |
| FAN    | CAPACITY | FACTOR     | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAI       | N FAN      | I RATIO   | RATIO     |  |
| TYPE   | (CFM )   | (FRAC)     | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN' | r controi  | (FRAC)    | (FRAC)    |  |
|        |          |            |        |         |            |        |        |           |            |           |           |  |
| SUPPLY | 1963.    | 1.00       | 0.589  | 0.94    | 1.3        | 0.51   | 0.62   | DRAW-THRU | J CONSTANT | 1.00      | 0.30      |  |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L4B South Perim Zn (G.S10P | 1963.  | 0.      | 0.000 | 0.169   | 266.     | 0.00      | 0.00     | 55.90      | 0.00      | -12.55    | 1.   |

REPORT- SV-A System Design Parameters for L4B (G.E19) APT1 PTHP

|  |  | WEATHER | FILE- | SEATTLE | BOEING | FI | WA |
|--|--|---------|-------|---------|--------|----|----|
|--|--|---------|-------|---------|--------|----|----|

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    |         | AIR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | CIO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |           |            |           |           |
| PVVT   | 1.001    | 714.0     | 1.     | 0.1     | .06 13.4    | 80     | 0.742  | -12.132   | 0.266      | 0.271     | -8.612    |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | [         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | ' FAI     | N FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMEN' | r controi  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |             |        |        |           |            |           |           |
| SUPPLY | 450.     | 1.00      | 0.135  | 0.94    | 1.0         | 0.40   | 0.62   | DRAW-THRU | J CONSTANT | г 1.00    | 0.30      |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION    |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-------------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE        | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) I | MULT |
| L4B East Perim Zn (G.E19)T | 450.   | 0.      | 0.000 | 0.369   | 48.      | 0.00      | 0.00     | 12.05      | 0.00      | -6.30       | 1.   |

REPORT- SV-A System Design Parameters for L5A (G.E13) APT4 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING     | COOLING  | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-------------|----------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR      | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU) | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |             |          |           |           |
| PVVT   | 1.001    | 2229.8    | 3.     | 0.2     | 00 22.3    | 25     | 0.742  | -20.092     | 0.266    | 0.271     | -12.314   |
|        |          |           |        |         |            |        |        |             |          |           |           |
|        |          |           |        |         |            |        |        |             |          |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I           |          | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAN       | FAI FAI  | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |             |          |           |           |
| SUPPLY | 745.     | 1.00      | 0.223  | 0.94    | 1.0        | 0.41   | 0.62   | DRAW-THRU   | CONSTANT | Γ 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L5A East Perim Zn (G.E13)T | 745.   | 0.      | 0.000 | 0.200   | 149.     | 0.00      | 0.00     | 19.31      | 0.00      | -4.89     | 1.   |

REPORT- SV-A System Design Parameters for L5A (G.NW17) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSII  | DE COOLI   | NG     |        | HEATING     | COOLING  | HEATING   | HEAT PUMP |  |
|--------|----------|-----------|--------|---------|------------|--------|--------|-------------|----------|-----------|-----------|--|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A.    | IR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR      | EIR       | SUPP-HEAT |  |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU) | (BTU/BTU) | (KBTU/HR) |  |
| PVVT   | 1.001    | 915.5     | 1.     | 0.1     | 52 12.0    | 44     | 0.742  | -10.839     | 0.266    | 0.271     | -8.298    |  |
|        |          |           |        |         |            |        |        |             |          |           |           |  |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   |             |          | MAX FAN   | MIN FAN   |  |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAN         | FAN      | N RATIO   | RATIO     |  |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL  | (FRAC)    | (FRAC)    |  |
|        | 400      |           |        |         |            |        |        |             |          |           |           |  |
| SUPPLY | 402.     | 1.00      | 0.120  | 0.94    | 1.0        | 0.37   | 0.62   | DRAW-THRU   | CONSTANT | 1.00      | 0.30      |  |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L5A NW Perim Zn (G.NW17) 1 | 402.   | 0.      | 0.000 | 0.347   | 61.      | 0.00      | 0.00     | 12.22     | 0.00      | -5.29     | 1.   |

REPORT- SV-A System Design Parameters for L5A (G.N18) APT3 PTHP

| WEATHER | FILE- | SEATTLE | BOEING | FΙ | WA |   |
|---------|-------|---------|--------|----|----|---|
| <br>    |       |         |        |    |    | - |

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |           |            |           |           |
| PVVT   | 1.001    | 1566.5    | 2.     | 0.1     | 54 20.3    | 51     | 0.742  | -18.316   | 0.266      | 0.271     | -11.467   |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAI     | N FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN' | r control  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |           |            |           |           |
| SUPPLY | 679.     | 1.00      | 0.204  | 0.94    | 1.0        | 0.41   | 0.62   | DRAW-THR  | U CONSTANT | r 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L5A North Perim Zn (G.N18P | 679.   | 0.      | 0.000 | 0.244   | 105.     | 0.00      | 0.00     | 19.95      | 0.00      | -6.28     | 1.   |

REPORT- SV-A System Design Parameters for L5A (G.W21) APT4 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | A       | IR CAPACI   | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | CIO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |           |            |           |           |
| PVVT   | 1.001    | 2478.2    | 3.     | 0.2     | 22.8        | 93     | 0.742  | -20.603   | 0.266      | 0.271     | -14.614   |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          |           |        |         |             |        |        | _         |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | 1         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | ' FAI     | N FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMEN' | r controi  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |             |        |        |           |            |           |           |
| SUPPLY | 764.     | 1.00      | 0.229  | 0.94    | 1.0         | 0.41   | 0.62   | DRAW-THRU | J CONSTANT | Γ 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L5A West Perim Zn (G.W21)T | 764.   | 0.      | 0.000 | 0.220   | 165.     | 0.00      | 0.00     | 18.87     | 0.00      | -6.36     | 1.   |

| REPORT- | SV-A | System | Design | Parameters | for | L5A | (G.SW22) | APT1 | PTHP |
|---------|------|--------|--------|------------|-----|-----|----------|------|------|
|         |      |        |        |            |     |     |          |      |      |

| REPORT- S | V-A System D | esign Param | eters for | L5A (G.SW | 22) APT1 PTI | HP<br>   |           | WEATH     | ER FILE- SE | ATTLE BOEIN | G FI WA |
|-----------|--------------|-------------|-----------|-----------|--------------|----------|-----------|-----------|-------------|-------------|---------|
|           |              | FLOOR       |           | OUTSIDE   | COOLING      |          | HEATING   | COOLING   | HEATING     | HEAT PUMP   |         |
| SYSTEM    | ALTITUDE     | AREA        | MAX       | AIR       | CAPACITY     | SENSIBLE | CAPACITY  | EIR       | EIR         | SUPP-HEAT   |         |
| TYPE      | FACTOR       | (SQFT )     | PEOPLE    | RATIO     | (KBTU/HR)    | (SHR)    | (KBTU/HR) | (BTU/BTU) | (BTU/BTU)   | (KBTU/HR)   |         |
| PVVT      | 1.001        | 944.2       | 1.        | 0.120     | 15.797       | 0.742    | -14.217   | 0.266     | 0.271       | -7.841      |         |
|           |              |             |           |           |              |          |           |           |             |             |         |

|   |        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   |           |          | MAX FAN | MIN FAN |
|---|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|----------|---------|---------|
|   | FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAN       | FAN      | RATIO   | RATIO   |
|   | TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT | CONTROL  | (FRAC)  | (FRAC)  |
|   |        |          |           |        |         |            |        |        |           |          |         |         |
| 5 | SUPPLY | 527.     | 1.00      | 0.158  | 0.94    | 1.0        | 0.40   | 0.62   | DRAW-THRU | CONSTANT | 1.00    | 0.30    |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L5A SW Perim Zn (G.SW22) 1 | 527.   | 0.      | 0.000 | 0.236   | 63.      | 0.00      | 0.00     | 15.39     | 0.00      | -4.72     | 1.   |

| REPORT- | SV-A | System | Design | Parameters | for | L5A | (G.S24) | APT3 | PTHP |
|---------|------|--------|--------|------------|-----|-----|---------|------|------|
|         |      |        |        |            |     |     |         |      |      |

| REPORT- SV | V-A System D | esign Parame | eters for | L5A (G.S2 | 4) APT3 PTHI | ·        |           | WEATHER FILE- SEATTLE BOEING FI WA |           |           |  |
|------------|--------------|--------------|-----------|-----------|--------------|----------|-----------|------------------------------------|-----------|-----------|--|
|            |              | FLOOR        |           | OUTSIDE   | COOLING      |          | HEATING   | COOLING                            | HEATING   | HEAT PUMP |  |
| SYSTEM     | ALTITUDE     | AREA         | MAX       | AIR       | CAPACITY     | SENSIBLE | CAPACITY  | EIR                                | EIR       | SUPP-HEAT |  |
| TYPE       | FACTOR       | (SQFT )      | PEOPLE    | RATIO     | (KBTU/HR)    | (SHR)    | (KBTU/HR) | (BTU/BTU)                          | (BTU/BTU) | (KBTU/HR) |  |
| PVVT       | 1.001        | 1832.5       | 2.        | 0.123     | 29.751       | 0.742    | -26.776   | 0.266                              | 0.271     | -13.388   |  |

|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   |           |          | MAX FAN | MIN FAN |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|----------|---------|---------|
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAN       | FAN      | RATIO   | RATIO   |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT | CONTROL  | (FRAC)  | (FRAC)  |
| SUPPLY | 992.     | 1.00      | 0.298  | 0.94    | 1.2        | 0.47   | 0.62   | DRAW-THRU | CONSTANT | 1.00    | 0.30    |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L5A South Perim Zn (G.S24P | 992.   | 0.      | 0.000 | 0.154   | 122.     | 0.00      | 0.00     | 28.80      | 0.00      | -5.80     | 1.   |

REPORT- SV-A System Design Parameters for L5B (G.N4) APT4 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING     | COOLING  | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-------------|----------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR      | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU) | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |             |          |           |           |
| PVVT   | 1.001    | 2928.0    | 4.     | 0.1     | 62 36.1    | 76     | 0.742  | -32.558     | 0.266    | 0.271     | -19.729   |
|        |          |           |        |         |            |        |        |             |          |           |           |
|        |          |           |        |         |            |        |        |             |          |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I           |          | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAN         | I FAN    | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL  | (FRAC)    | (FRAC)    |
|        |          |           |        |         |            |        |        |             |          |           |           |
| SUPPLY | 1207.    | 1.00      | 0.362  | 0.94    | 1.2        | 0.47   | 0.62   | DRAW-THRU   | CONSTANT | 1.00      | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L5B North Perim Zn (G.N4)T | 1207.  | 0.      | 0.000 | 0.219   | 195.     | 0.00      | 0.00     | 34.50      | 0.00      | -10.00    | 1.   |

| REPORT- SV | 7-A System | Design | Parameters | for | T.5B | (G E5) | APT1 | PTHP |
|------------|------------|--------|------------|-----|------|--------|------|------|

| WEATHER | FILE- | SEATTLE | BOEING | FT | WΑ |
|---------|-------|---------|--------|----|----|

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING   | COOLING   | HEATING   | HEAT PUMP |  |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-----------|-----------|-----------|-----------|--|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | AIR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR       | EIR       | SUPP-HEAT |  |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | CIO (KBTU/H | IR)    | (SHR)  | (KBTU/HR) | (BTU/BTU) | (BTU/BTU) | (KBTU/HR) |  |
| PVVT   | 1.001    | 984.0     | 1.     | 0.1     | .19 16.5    | 15     | 0.742  | -14.863   | 0.266     | 0.271     | -10.101   |  |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | I         |           | MAX FAN   | MIN FAN   |  |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | FA        | N FAI     | N RATIO   | RATIO     |  |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMEN' | T CONTROL | L (FRAC)  | (FRAC)    |  |
| SUPPLY | 551.     | 1.00      | 0.165  | 0.94    | 1.0         | 0.40   | 0.62   | DRAW-THR  | U CONSTAN | г 1.00    | 0.30      |  |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | I        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L5B East Perim Zn (G.E5) 1 | 551.   | 0.      | 0.000 | 0.329   | 66.      | 0.00      | 0.00     | 15.22      | 0.00      | -6.88     | 1.   |

REPORT- SV-A System Design Parameters for L5B (G.W6) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING     | COOLING  | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-------------|----------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR      | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU) | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |             |          |           |           |
| PVVT   | 1.001    | 765.0     | 1.     | 0.1     | 80 8.4     | 98     | 0.742  | -7.648      | 0.266    | 0.271     | -6.835    |
|        |          |           |        |         |            |        |        |             |          |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I           |          | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAN       | FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL  | (FRAC)    | (FRAC)    |
|        |          |           |        |         |            |        |        |             |          |           |           |
| SUPPLY | 283.     | 1.00      | 0.085  | 0.94    | 0.9        | 0.34   | 0.62   | DRAW-THRU   | CONSTANT | Γ 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L5B West Perim Zn (G.W6) 1 | 283.   | 0.      | 0.000 | 0.402   | 51.      | 0.00      | 0.00     | 7.95      | 0.00      | -4.32     | 1.   |

REPORT- SV-A System Design Parameters for L5B (G.W7) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SOFT )      | MAX<br>PEOPLE           |                       | IR CAPACI                        | TY SE                  | NSIBLE | HEATING<br>CAPACITY<br>(KBTU/HR) ( | COOLING<br>EIR<br>BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |
|----------------|--------------------|-------------------------------|-------------------------|-----------------------|----------------------------------|------------------------|--------|------------------------------------|----------------------------|-----------------------------|-------------------------------------|
| PVVT           | 1.001              | 654.5                         | 1.                      | 0.23                  |                                  |                        | 0.742  | -5.124                             | 0.266                      | 0.271                       | -3.396                              |
| FAN<br>TYPE    | CAPACITY<br>(CFM ) | DIVERSITY<br>FACTOR<br>(FRAC) | POWER<br>DEMAND<br>(KW) | FAN<br>DELTA-T<br>(F) | STATIC<br>PRESSURE<br>(IN-WATER) | TOTAL<br>EFF<br>(FRAC) |        | FAN                                |                            |                             |                                     |
| SUPPLY         | 190.               | 1.00                          | 0.057                   | 0.94                  | 0.8                              | 0.30                   | 0.62   | DRAW-THRU                          | J CONSTANT                 | Γ 1.00                      | 0.30                                |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L5B West Perim Zn (G.W7) 1 | 190.   | 0.      | 0.000 | 0.230   | 44.      | 0.00      | 0.00     | 4.48      | 0.00      | -1.22     | 1.   |

| PEDORT- | Z17-Z | System | Design | Parameters | for | T.5B | (G.E8) | <b>∆</b> DT1 | DTHD |
|---------|-------|--------|--------|------------|-----|------|--------|--------------|------|
|         |       |        |        |            |     |      |        |              |      |

| WEATHER | FILE- | SEATTLE | BOEING | FI | WA |
|---------|-------|---------|--------|----|----|
|         |       |         |        |    |    |

|        |            | FLOOR     |         | OUTSI   | DE COOLI    | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|------------|-----------|---------|---------|-------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | 1 ALTITUDE | AREA      | MAX     | . A     | IR CAPACI   | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR     | (SQFT )   | PEOPLE  | RAT     | 'IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |            |           |         |         |             |        |        |           |            |           |           |
| PVVT   | 1.001      | 628.5     | 1.      | 0.1     | 95 6.4      | 60     | 0.742  | -5.814    | 0.266      | 0.271     | -3.499    |
|        |            |           |         |         |             |        |        |           |            |           |           |
|        |            |           | D.011PD |         | G           |        |        |           |            |           |           |
|        |            | DIVERSITY | POWER   | FAN     | STATIC      | TOTAL  | MECH   | 1         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY   | FACTOR    | DEMAND  | DELTA-T | PRESSURE    | EFF    | EFF    | F FAI     | N FAI      | N RATIO   | RATIO     |
| TYP    | E (CFM )   | (FRAC)    | (KW)    | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMEN' | r control  | L (FRAC)  | (FRAC)    |
|        |            |           |         |         |             |        |        |           |            |           |           |
| SUPPLY | 215.       | 1.00      | 0.065   | 0.94    | 0.9         | 0.34   | 0.62   | DRAW-THR  | U CONSTAN' | г 1.00    | 0.30      |
|        |            |           |         |         |             |        |        |           |            |           |           |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L5B East Perim Zn (G.E8) 1 | 215.   | 0.      | 0.000 | 0.195   | 42.      | 0.00      | 0.00     | 5.89      | 0.00      | -1.41     | 1.   |

1.001 789.0

DIVERSITY

FACTOR

(FRAC)

SYSTEM ALTITUDE AREA
TYPE FACTOR (SQFT )

SUPPLY 478. 1.00

FAN CAPACITY

TYPE (CFM )

PVVT

\_\_\_\_\_ FLOOR AREA

| REPORT- SV-A | System Desi | gn Parameters f | or L5B | (G.E9) APT1 PTHP |
|--------------|-------------|-----------------|--------|------------------|
|--------------|-------------|-----------------|--------|------------------|

(KW)

0.143

| ameters for     | L5B (G.I       | E9) APT1 PTHI | P<br>     |           | WEATH     | HER FILE- SE        | ATTLE BOEIN | G FI WA |
|-----------------|----------------|---------------|-----------|-----------|-----------|---------------------|-------------|---------|
|                 | OUTSIDE        |               |           | HEATING   | COOLING   | HEATING             | HEAT PUMP   |         |
| MAX             | AII            | R CAPACITY    | SENSIBLE  | CAPACITY  | EIR       | EIR                 | SUPP-HEAT   |         |
| PEOPLE          | RATIO          | O (KBTU/HR)   | (SHR)     | (KBTU/HR) | (BTU/BTU) | (BTU/BTU)           | (KBTU/HR)   |         |
| 1.              | 0.110          | 14.315        | 0.742     | -12.883   | 0.266     | 0.271               | -8.758      |         |
| POWER<br>DEMAND | FAN<br>DELTA-T | STATIC T      | FOTAL MEC |           | an f      | MAX FAN<br>AN RATIO |             |         |

(FRAC)

(FRAC)

1.0 0.40 0.62 DRAW-THRU CONSTANT 1.00 0.30

\*\*\* THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | I        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L5B East Perim Zn (G.E9) 1 | 478.   | 0.      | 0.000 | 0.342   | 53.      | 0.00      | 0.00     | 12.26      | 0.00      | -6.19     | 1.   |

(F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL

0.94

| REPORT- | SV-A | System | Design | Parameters | for | T <sub>2</sub> 5B | (G.S10) | APT7 PT | ΉP |
|---------|------|--------|--------|------------|-----|-------------------|---------|---------|----|

| WEATHER | FILE- | SEATTLE | BOEING | FI | WA |
|---------|-------|---------|--------|----|----|

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING     | COOLING  | HEATING   | HEAT PUMP |  |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-------------|----------|-----------|-----------|--|
| SYSTEM | ALTITUDE | AREA      | MAX    | P       | AIR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR      | EIR       | SUPP-HEAT |  |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | CIO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU) | (BTU/BTU) | (KBTU/HR) |  |
|        |          |           |        |         |             |        |        |             |          |           |           |  |
| PVVT   | 1.001    | 3981.5    | 5.     | 0.1     | .35 58.9    | 01     | 0.742  | -53.011     | 0.266    | 0.271     | -26.506   |  |
|        |          |           |        |         |             |        |        |             |          |           |           |  |
|        |          |           |        |         |             |        |        |             |          |           |           |  |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | 1           |          | MAX FAN   | MIN FAN   |  |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | FAN         | FAI      | N RATIO   | RATIO     |  |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMENT   | CONTROL  | L (FRAC)  | (FRAC)    |  |
|        |          |           |        |         |             |        |        |             |          |           |           |  |
| SUPPLY | 1965.    | 1.00      | 0.589  | 0.94    | 1.3         | 0.51   | 0.62   | DRAW-THRU   | CONSTANT | r 1.00    | 0.30      |  |
|        |          |           |        |         |             |        |        |             |          |           |           |  |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L5B South Perim Zn (G.S10P | 1965.  | 0.      | 0.000 | 0.169   | 266.     | 0.00      | 0.00     | 55.95      | 0.00      | -12.55    | 1.   |

| REPORT- SV-A Syste | m Degian | Darameters | for | T.5B | (G.E19) | <b>∆</b> DT1 | DTHD |
|--------------------|----------|------------|-----|------|---------|--------------|------|

| WEATHER | FILE- | SEATTLE | BOEING | FI | WA |
|---------|-------|---------|--------|----|----|
|         |       |         |        |    |    |

|        |          |           |        | (-      |             |        |         |           |            |           |           |  |
|--------|----------|-----------|--------|---------|-------------|--------|---------|-----------|------------|-----------|-----------|--|
|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |         | HEATING   | COOLING    | HEATING   | HEAT PUMP |  |
| SYSTEM | ALTITUDE | AREA      | MAX    | X A     | IR CAPACI   | TY SE  | ENSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |  |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | 'IO (KBTU/H | IR)    | (SHR)   | (KBTU/HR) | BTU/BTU)   | (BTU/BTU) | (KBTU/HR) |  |
|        |          |           |        |         |             |        |         |           |            |           |           |  |
| PVVT   | 1.001    | 714.0     | 1.     | 0.1     | 04 13.7     | 75     | 0.742   | -12.397   | 0.266      | 0.271     | -8.734    |  |
|        |          |           |        |         |             |        |         |           |            |           |           |  |
|        |          |           |        |         |             |        |         | _         |            |           |           |  |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | _ MECH  | [         |            | MAX FAN   | MIN FAN   |  |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | eff.    | ' FAI     | I FAN      | N RATIO   | RATIO     |  |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC)  | PLACEMENT | CONTROI    | L (FRAC)  | (FRAC)    |  |
|        |          |           |        |         |             |        |         |           |            |           |           |  |
| SUPPLY | 460.     | 1.00      | 0.138  | 0.94    | 1.0         | 0.40   | 0.62    | DRAW-THRU | J CONSTANT | г 1.00    | 0.30      |  |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L5B East Perim Zn (G.E19)T | 460.   | 0.      | 0.000 | 0.368   | 48.      | 0.00      | 0.00     | 12.02      | 0.00      | -6.42     | 1.   |

| REPORT- SV-A | System Design | Parameters for | L6A | (G.E13) | APT4 PTHP |
|--------------|---------------|----------------|-----|---------|-----------|
|--------------|---------------|----------------|-----|---------|-----------|

| REPORT- SV     | 7-A System         | Design Para                   | meters for              | L6A (G.E                | 13) APT4 P                     | THP                    |                       |                                  | WEATH                       | ER FILE- SE                 | ATTLE BOEIN                         | G FI WA |
|----------------|--------------------|-------------------------------|-------------------------|-------------------------|--------------------------------|------------------------|-----------------------|----------------------------------|-----------------------------|-----------------------------|-------------------------------------|---------|
| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SQFT )      | MAX<br>PEOPLE           | OUTSIDE<br>AIR<br>RATIO | CAPACIT                        | Y SEN                  | ISIBLE<br>(SHR)       | HEATING<br>CAPACITY<br>(KBTU/HR) | COOLING<br>EIR<br>(BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |         |
| PVVT           | 1.001              | 2229.8                        | 3.                      | 0.191                   | 23.36                          | 6                      | 0.742                 | -21.030                          | 0.266                       | 0.271                       | -13.093                             |         |
| FAN<br>TYPE    | CAPACITY<br>(CFM ) | DIVERSITY<br>FACTOR<br>(FRAC) | POWER<br>DEMAND<br>(KW) |                         | STATIC<br>PRESSURE<br>N-WATER) | TOTAL<br>EFF<br>(FRAC) | MECH<br>EFF<br>(FRAC) | F.                               | AN FAI<br>NT CONTROI        |                             |                                     |         |

SUPPLY 779. 1.00 0.234 0.94 1.0 0.41 0.62 DRAW-THRU CONSTANT 1.00 0.30

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L6A East Perim Zn (G.E13)T | 779.   | 0.      | 0.000 | 0.192   | 149.     | 0.00      | 0.00     | 20.34      | 0.00      | -5.66     | 1.   |

REPORT- SV-A System Design Parameters for L6A (G.NW17) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | BTU/BTU)   | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |           |            |           |           |
| PVVT   | 1.001    | 731.2     | 1.     | 0.1     | 39 10.5    | 52     | 0.742  | -9.497    | 0.266      | 0.271     | -7.738    |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAI     | I FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT | CONTROI    | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |           |            |           |           |
| SUPPLY | 352.     | 1.00      | 0.106  | 0.94    | 1.0        | 0.37   | 0.62   | DRAW-THRU | J CONSTANT | Γ 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L6A NW Perim Zn (G.NW17) 1 | 352.   | 0.      | 0.000 | 0.401   | 49.      | 0.00      | 0.00     | 10.99     | 0.00      | -5.35     | 1.   |

REPORT- SV-A System Design Parameters for L6A (G.N18) APT3 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR      |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |  |
|--------|----------|------------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|--|
| SYSTEM | ALTITUDE | AREA       | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |  |
| TYPE   | FACTOR   | (SQFT )    | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |  |
|        |          |            |        |         |            |        |        |           |            |           |           |  |
| PVVT   | 1.001    | 1404.0     | 2.     | 0.1     | .37 20.5   | 21     | 0.742  | -18.469   | 0.266      | 0.271     | -11.768   |  |
|        |          |            |        |         |            |        |        |           |            |           |           |  |
|        |          | DIVIDDOTEN | DOMED  |         | CM3 MT C   | moma r | MEGN   |           |            | MAN 57337 | MIN DAN   |  |
|        |          | DIVERSITY  | POWER  | FAN     | STATIC     | TOTAL  |        |           |            | MAX FAN   |           |  |
| FAN    | CAPACITY | FACTOR     | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAI       | N FAN      | I RATIO   | RATIO     |  |
| TYPE   | (CFM )   | (FRAC)     | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN' | T CONTROI  | (FRAC)    | (FRAC)    |  |
|        |          |            |        |         |            |        |        |           |            |           |           |  |
| SUPPLY | 685.     | 1.00       | 0.205  | 0.94    | 1.0        | 0.41   | 0.62   | DRAW-THR  | U CONSTANT | 1.00      | 0.30      |  |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L6A North Perim Zn (G.N18P | 685.   | 0.      | 0.000 | 0.275   | 94.      | 0.00      | 0.00     | 20.23      | 0.00      | -7.14     | 1.   |

REPORT- SV-A System Design Parameters for L6A (G.W21) APT4 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR         |        | OUTSI   | DE COOLI    | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|---------------|--------|---------|-------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA          | MAX    | . A     | IR CAPACI   | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )       | PEOPLE | RAT     | 'IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
| PVVT   | 1.001    | 2478.2        | 3.     | 0.1     | 92 25.8     | 58     | 0.742  | -23.272   | 0.266      | 0.271     | -16.194   |
|        |          | D TIMED CITED | DOMED  | DAM     | GM2 MT G    | moma r | MEGN   |           |            | MAY DAY   | MIN DAN   |
|        |          | DIVERSITY     | POWER  | FAN     | STATIC      | TOTAL  |        |           |            | MAX FAN   |           |
| FAN    | CAPACITY | FACTOR        | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | ' FAI     | N FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)        | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMENT | r controi  | (FRAC)    | (FRAC)    |
| SUPPLY | 863.     | 1.00          | 0.259  | 0.94    | 1.2         | 0.47   | 0.62   | DRAW-THRU | J CONSTANT | г 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L6A West Perim Zn (G.W21)T | 863.   | 0.      | 0.000 | 0.243   | 165.     | 0.00      | 0.00     | 21.77      | 0.00      | -7.96     | 1.   |

REPORT- SV-A System Design Parameters for L6A (G.SW22) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING     | COOLING  | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-------------|----------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | X A     | IR CAPACI   | TY SE  | NSIBLE | CAPACITY    | EIR      | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | 'IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU) | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |             |          |           |           |
| PVVT   | 1.001    | 944.2     | 1.     | 0.1     | 18 16.0     | 20     | 0.742  | -14.418     | 0.266    | 0.271     | -7.954    |
|        |          |           |        |         |             |        |        |             |          |           |           |
|        |          |           |        |         |             |        |        |             |          |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   |             |          | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | FAN         | I FAN    | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMENT   | CONTROL  | (FRAC)    | (FRAC)    |
|        |          |           |        |         |             |        |        |             |          |           |           |
| SUPPLY | 534.     | 1.00      | 0.160  | 0.94    | 1.0         | 0.40   | 0.62   | DRAW-THRU   | CONSTANT | 1.00      | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L6A SW Perim Zn (G.SW22) 1 | 534.   | 0.      | 0.000 | 0.239   | 63.      | 0.00      | 0.00     | 15.61      | 0.00      | -4.84     | 1.   |

REPORT- SV-A System Design Parameters for L6A (G.S24) APT3 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |           |            |           |           |
| PVVT   | 1.001    | 1832.5    | 2.     | 0.1     | .17 31.2   | 52     | 0.742  | -28.127   | 0.266      | 0.271     | -14.063   |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAI     | N FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN' | r controi  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |           |            |           |           |
| SUPPLY | 1043.    | 1.00      | 0.313  | 0.94    | 1.2        | 0.47   | 0.62   | DRAW-THRU | J CONSTANT | Γ 1.00    | 0.30      |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L6A South Perim Zn (G.S24P | 1043.  | 0       | 0.000 | 0.177   | 122.     | 0.00      | 0.00     | 30.41      | 0.00      | -6.99     | 1    |
| L6A South Perim Zn (G.S24P | 1043.  | 0.      | 0.000 | 0.177   | 122.     | 0.00      | 0.00     | 30.41      | 0.00      | -6.99     | Ι.   |

REPORT- SV-A System Design Parameters for L6B (G.N4) APT4 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |         | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |  |
|--------|----------|-----------|---------|---------|------------|--------|--------|-----------|------------|-----------|-----------|--|
| SYSTEM | ALTITUDE | AREA      | MAX     | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |  |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE  | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |  |
|        |          |           |         |         |            |        |        |           |            |           |           |  |
| PVVT   | 1.001    | 2928.0    | 4.      | 0.1     | .59 36.8   | 97     | 0.742  | -33.207   | 0.266      | 0.271     | -20.295   |  |
|        |          |           |         |         |            |        |        |           |            |           |           |  |
|        |          |           | D.011PD |         | G          |        |        |           |            |           |           |  |
|        |          | DIVERSITY | POWER   | FAN     | STATIC     | TOTAL  | MECH   | ı         |            | MAX FAN   | MIN FAN   |  |
| FAN    | CAPACITY | FACTOR    | DEMAND  | DELTA-T | PRESSURE   | EFF    | EFF    | FAI       | N FAN      | N RATIO   | RATIO     |  |
| TYPE   | (CFM )   | (FRAC)    | (KW)    | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN' | r controi  | L (FRAC)  | (FRAC)    |  |
|        |          |           |         |         |            |        |        |           |            |           |           |  |
| SUPPLY | 1231.    | 1.00      | 0.369   | 0.94    | 1.2        | 0.47   | 0.62   | DRAW-THRU | J CONSTANT | Γ 1.00    | 0.30      |  |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L6B North Perim Zn (G.N4)T | 1231.  | 0.      | 0.000 | 0.227   | 195.     | 0.00      | 0.00     | 35.72      | 0.00      | -10.58    | 1.   |

| REPORT- ! | SV-A | System | Design | Parameters | for | T.6B | (G.E5) | APT1 | PTHP |
|-----------|------|--------|--------|------------|-----|------|--------|------|------|

| tin a mitun | DITT  | OD 3 mm t n | DODING |     | 1.17 |
|-------------|-------|-------------|--------|-----|------|
| WEATHER     | LTTE- | SEATTLE     | BOEING | L.T | WA   |

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING     | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-------------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI   | TY SE  | NSIBLE | CAPACITY    | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | 'IO (KBTU/H | IR)    | (SHR)  | (KBTU/HR) ( | BTU/BTU)   | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |             |            |           |           |
| PVVT   | 1.001    | 984.0     | 1.     | 0.1     | 15 17.0     | 71     | 0.742  | -15.364     | 0.266      | 0.271     | -10.244   |
|        |          |           |        |         |             |        |        |             |            |           |           |
|        |          |           |        |         |             |        |        |             |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | I           |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | ' FAN       | I FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMENT   | CONTROL    | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |             |        |        |             |            |           |           |
| SUPPLY | 569.     | 1.00      | 0.171  | 0.94    | 1.0         | 0.40   | 0.62   | DRAW-THRU   | J CONSTANT | r 1.00    | 0.30      |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L6B East Perim Zn (G.E5) 1 | 569.   | 0.      | 0.000 | 0.325   | 66.      | 0.00      | 0.00     | 15.31      | 0.00      | -7.03     | 1.   |

1.001 765.0

SUPPLY 300. 1.00 0.090

FAN CAPACITY FACTOR

TYPE (CFM )

SYSTEM ALTITUDE AREA
TYPE FACTOR (SQFT)

PVVT

| REPORT- | SV-A | System | Design | Parameters | for | L6B | (G.W6) | APT1 | PTHP |      |  |
|---------|------|--------|--------|------------|-----|-----|--------|------|------|------|--|
|         |      |        |        |            |     |     |        |      |      | <br> |  |

MAX

MAX PEOPLE

(KW)

POWER FAN STATIC TOTAL DEMAND DELTA-T PRESSURE EFF

0.94

FLOOR AREA

DIVERSITY

(FRAC)

| L6B (G.W6               | ) APT1 PTHP                      |                |                                  | WEATH                       | ER FILE- S                  | EATTLE BOEING | FI WA |
|-------------------------|----------------------------------|----------------|----------------------------------|-----------------------------|-----------------------------|---------------|-------|
| OUTSIDE<br>AIR<br>RATIO | COOLING<br>CAPACITY<br>(KBTU/HR) | SENSIBLE (SHR) | HEATING<br>CAPACITY<br>(KBTU/HR) | COOLING<br>EIR<br>(BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | SUPP-HEAT     |       |
| 0.170                   | 8.979                            | 0.742          | -8.081                           | 0.266                       | 0.271                       | -6.844        |       |
| FAN                     | STATIC TO                        | OTAL MEC       | Н                                |                             | MAX FAI                     | N MIN FAN     |       |

RATIO

RATIO

(FRAC)

FAN FAN

0.9 0.34 0.62 DRAW-THRU CONSTANT 1.00 0.30

\*\*\* THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                             | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|-----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                        | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                        | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L6B West Perim Zn (G.W6) 1  | 300.   | 0       | 0.000 | 0.381   | 51.      | 0.00      | 0.00     | 8.34       | 0.00      | -4.33     | 1    |
| LOB West Perill Zn (G.Wo) I | 300.   | 0.      | 0.000 | 0.361   | 51.      | 0.00      | 0.00     | 0.34       | 0.00      | -4.33     | Τ.   |

(F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL

MECH

EFF

REPORT- SV-A System Design Parameters for L6B (G.W7) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SQFT )      | MAX<br>PEOPLE           |                       | IR CAPACI                        | TY SEI                 | NSIBLE<br>(SHR)       | HEATING<br>CAPACITY<br>(KBTU/HR) ( | COOLING<br>EIR<br>BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |
|----------------|--------------------|-------------------------------|-------------------------|-----------------------|----------------------------------|------------------------|-----------------------|------------------------------------|----------------------------|-----------------------------|-------------------------------------|
| PVVT           | 1.001              | 654.5                         | 1.                      | 0.22                  | 27 5.7                           | 81                     | 0.742                 | -5.203                             | 0.266                      | 0.271                       | -3.399                              |
| FAN<br>TYPE    | CAPACITY<br>(CFM ) | DIVERSITY<br>FACTOR<br>(FRAC) | POWER<br>DEMAND<br>(KW) | FAN<br>DELTA-T<br>(F) | STATIC<br>PRESSURE<br>(IN-WATER) | TOTAL<br>EFF<br>(FRAC) | MECH<br>EFF<br>(FRAC) | FAN                                |                            |                             |                                     |
| SUPPLY         | 193.               | 1.00                          | 0.058                   | 0.94                  | 0.8                              | 0.30                   | 0.62                  | DRAW-THRU                          | CONSTANT                   | r 1.00                      | 0.30                                |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L6B West Perim Zn (G.W7) 1 | 193.   | 0.      | 0.000 | 0.227   | 44.      | 0.00      | 0.00     | 4.55      | 0.00      | -1.22     | 1.   |

1.001 628.5

SYSTEM ALTITUDE AREA
TYPE FACTOR (SQFT)

TYPE (CFM )

PVVT

| REPORT- | SV-A | System | Design | Parameters | for | L6B | (G.E8) | APT1 | PTHP |      |
|---------|------|--------|--------|------------|-----|-----|--------|------|------|------|
|         |      |        |        |            |     |     |        |      |      | <br> |

FLOOR AREA

| ameters for | L6B (G.E8 | ) APT1 PTHP |          |           | WEATH     | ER FILE- SE | ATTLE BOEING | FI WA |
|-------------|-----------|-------------|----------|-----------|-----------|-------------|--------------|-------|
|             | OUTSIDE   | COOLING     |          | HEATING   | COOLING   | HEATING     | HEAT PUMP    |       |
| MAX         | AIR       | CAPACITY    | SENSIBLE | CAPACITY  | EIR       | EIR         | SUPP-HEAT    |       |
| PEOPLE      | RATIO     | (KBTU/HR)   | (SHR)    | (KBTU/HR) | (BTU/BTU) | (BTU/BTU)   | (KBTU/HR)    |       |
| 1.          | 0.187     | 6.722       | 0.742    | -6.050    | 0.266     | 0.271       | -3.501       |       |
| POWER       | FAN       | STATIC TO   | TAL MEC  | Н         |           | MAX FAN     | MIN FAN      |       |

RATIO

1.00 0.30

RATIO

| SUPPLY 224 | . 1.00 | 0.067 | 0.94 | 0.9 | 0.34 | 0.62 | DRAW-THRU | CONSTANT |
|------------|--------|-------|------|-----|------|------|-----------|----------|

\*\*\* THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

DIVERSITY POWER FAN STATIC TOTAL FAN CAPACITY FACTOR DEMAND DELTA-T PRESSURE EFF

(KW)

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |           |           |           |      |
| L6B East Perim Zn (G.E8) 1 | 224.   | 0.      | 0.000 | 0.187   | 42.      | 0.00      | 0.00     | 5.73      | 0.00      | -1.41     | 1.   |

MECH EFF

(F) (IN-WATER) (FRAC) (FRAC) PLACEMENT CONTROL

FAN FAN

| PEDORT- 9 | Δ – V | System | Decian | Parameters | for | T.6B | (G.E9) | <b>∆</b> DT1 | DTHD |
|-----------|-------|--------|--------|------------|-----|------|--------|--------------|------|

| WEATHER | FILE- | SEATTLE | BOEING | FI | WA |
|---------|-------|---------|--------|----|----|
|         |       |         |        |    |    |

|    |        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING     | COOLING  | HEATING   | HEAT PUMP |
|----|--------|----------|-----------|--------|---------|-------------|--------|--------|-------------|----------|-----------|-----------|
|    | SYSTEM | ALTITUDE | AREA      | MAX    | A       | IR CAPACI   | TY SE  | NSIBLE | CAPACITY    | EIR      | EIR       | SUPP-HEAT |
|    | TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | 'IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU) | (BTU/BTU) | (KBTU/HR) |
|    |        |          |           |        |         |             |        |        |             |          |           |           |
| PΙ | /VT    | 1.001    | 789.0     | 1.     | 0.1     | 08 14.5     | 69     | 0.742  | -13.112     | 0.266    | 0.271     | -8.760    |
|    |        |          |           |        |         |             |        |        |             |          |           |           |
|    |        |          |           |        |         |             |        |        | _           |          |           |           |
|    |        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | I           |          | MAX FAN   | MIN FAN   |
|    | FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | FAN         | I FAI    | N RATIO   | RATIO     |
|    | TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMENT   | CONTROL  | L (FRAC)  | (FRAC)    |
|    |        |          |           |        |         |             |        |        |             |          |           |           |
|    | SUPPLY | 486.     | 1.00      | 0.146  | 0.94    | 1.0         | 0.40   | 0.62   | DRAW-THRU   | CONSTANT | r 1.00    | 0.30      |
|    |        |          |           |        |         |             |        |        |             |          |           |           |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L6B East Perim Zn (G.E9) 1 | 486.   | 0.      | 0.000 | 0.336   | 53.      | 0.00      | 0.00     | 12.66      | 0.00      | -6.19     | 1.   |

| REPORT- | SV-A | System | Design | Parameters | for | T.6B | (G.S10) | APT7 | PTHP |
|---------|------|--------|--------|------------|-----|------|---------|------|------|

| WEATHER | FILE- | SEATTLE | BOEING | FI | WA |
|---------|-------|---------|--------|----|----|
|         |       |         |        |    |    |

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING   | COOLING   | HEATING   | HEAT PUMP |  |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-----------|-----------|-----------|-----------|--|
| SYSTEM | ALTITUDE | AREA      | MAX    | A       | IR CAPACI   | TY SE  | NSIBLE | CAPACITY  | EIR       | EIR       | SUPP-HEAT |  |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | CIO (KBTU/H | IR)    | (SHR)  | (KBTU/HR) | (BTU/BTU) | (BTU/BTU) | (KBTU/HR) |  |
| PVVT   | 1.001    | 3981.5    | 5.     | 0.1     | .35 58.9    | 81     | 0.742  | -53.083   | 0.266     | 0.271     | -26.542   |  |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | I         |           | MAX FAN   | MIN FAN   |  |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | FA:       | n FAI     | N RATIO   | RATIO     |  |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMEN  | T CONTROL | L (FRAC)  | (FRAC)    |  |
| SUPPLY | 1968.    | 1.00      | 0.590  | 0.94    | 1.3         | 0.51   | 0.62   | PRAW-THR  | U CONSTAN | г 1.00    | 0.30      |  |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L6B South Perim Zn (G.S10P | 1968.  | 0.      | 0.000 | 0.168   | 266.     | 0.00      | 0.00     | 56.03     | 0.00      | -12.55    | 1.   |

REPORT- SV-A System Design Parameters for L6B (G.E19) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

| SYSTEM | ALTITUDE | FLOOR<br>AREA | MAX    | OUTSI   | DE COOLI   |        | NSIBLE | HEATING<br>CAPACITY | COOLING<br>EIR | HEATING<br>EIR | HEAT PUMP<br>SUPP-HEAT |
|--------|----------|---------------|--------|---------|------------|--------|--------|---------------------|----------------|----------------|------------------------|
| TYPE   | FACTOR   | (SOFT )       | PEOPLE |         |            |        | (SHR)  | (KBTU/HR)           | (BTU/BTU)      | (BTU/BTU)      | (KBTU/HR)              |
|        |          |               |        |         | , , , ,    | *      | , - ,  | ,                   | , -, -,        | , , , , ,      | ,                      |
| PVVT   | 1.001    | 659.0         | 1.     | 0.0     | 15.0       | 21     | 0.742  | -13.519             | 0.266          | 0.271          | -9.256                 |
|        |          |               |        |         |            |        |        |                     |                |                |                        |
|        |          | DIVERSITY     | POWER  | FAN     | STATIC     | TOTAL  | MECH   | [                   |                | MAX FAN        | MIN FAN                |
| FAN    | CAPACITY | FACTOR        | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FA                  | n fai          | N RATIO        | RATIO                  |
| TYPE   | (CFM )   | (FRAC)        | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN            | T CONTROL      | L (FRAC)       | (FRAC)                 |
|        |          |               |        |         |            |        |        |                     |                |                |                        |
| SUPPLY | 501.     | 1.00          | 0.150  | 0.94    | 1.0        | 0.40   | 0.62   | DRAW-THR            | U CONSTANT     | г 1.00         | 0.30                   |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L6B East Perim Zn (G.E19)T | 501.   | 0.      | 0.000 | 0.376   | 44.      | 0.00      | 0.00     | 13.92      | 0.00      | -7.14     | 1.   |

REPORT- SV-A System Design Parameters for L7A (G.E13) APT2 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | P       | AIR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | CIO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |           |            |           |           |
| PVVT   | 1.001    | 956.8     | 1.     | 0.1     | .80 10.6    | 41     | 0.742  | -9.577    | 0.266      | 0.271     | -6.167    |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | I         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | FA:       | N FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMEN' | T CONTROI  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |             |        |        |           |            |           |           |
| SUPPLY | 355.     | 1.00      | 0.106  | 0.94    | 1.0         | 0.37   | 0.62   | DRAW-THR  | U CONSTANT | г 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L7A East Perim Zn (G.E13)T | 355.   | 0.      | 0.000 | 0.222   | 64.      | 0.00      | 0.00     | 9.44       | 0.00      | -2.98     | 1.   |

REPORT- SV-A System Design Parameters for L7A (G.W18) APT2 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SQFT )      | MAX<br>PEOPLE           |                         | R CAPACI                        | TY SE                  | NSIBLE                | HEATING<br>CAPACITY<br>(KBTU/HR) ( | COOLING<br>EIR<br>BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |
|----------------|--------------------|-------------------------------|-------------------------|-------------------------|---------------------------------|------------------------|-----------------------|------------------------------------|----------------------------|-----------------------------|-------------------------------------|
| PVVT           | 1.001              | 999.0                         | 1.                      | 0.21                    | .7 9.2                          | 01                     | 0.742                 | -8.281                             | 0.266                      | 0.271                       | -6.581                              |
| FAN<br>TYPE    | CAPACITY<br>(CFM ) | DIVERSITY<br>FACTOR<br>(FRAC) | POWER<br>DEMAND<br>(KW) | FAN<br>DELTA-T<br>(F) ( | STATIC<br>PRESSURE<br>IN-WATER) | TOTAL<br>EFF<br>(FRAC) | MECH<br>EFF<br>(FRAC) | FAN                                |                            |                             | MIN FAN<br>RATIO<br>(FRAC)          |
| SUPPLY         | 307.               | 1.00                          | 0.092                   | 0.94                    | 0.9                             | 0.34                   | 0.62                  | DRAW-THRU                          | CONSTANT                   | 1.00                        | 0.30                                |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L7A West Perim Zn (G.W18)T | 307.   | 0.      | 0.000 | 0.281   | 67.      | 0.00      | 0.00     | 7.73       | 0.00      | -3.26     | 1.   |

REPORT- SV-A System Design Parameters for L7A (G.SW19) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING     | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-------------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI   | TY SE  | NSIBLE | CAPACITY    | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | 'IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU)   | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |             |            |           |           |
| PVVT   | 1.001    | 891.8     | 1.     | 0.1     | 19 14.9     | 33     | 0.742  | -13.440     | 0.266      | 0.271     | -7.668    |
|        |          |           |        |         |             |        |        |             |            |           |           |
|        |          |           |        |         |             |        |        |             |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   |             |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | FAN         | I FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMENT   | CONTROL    | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |             |        |        |             |            |           |           |
| SUPPLY | 498.     | 1.00      | 0.149  | 0.94    | 1.0         | 0.40   | 0.62   | DRAW-THRU   | J CONSTANT | r 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L7A SW Perim Zn (G.SW19) 1 | 498.   | 0.      | 0.000 | 0.250   | 60.      | 0.00      | 0.00     | 14.45     | 0.00      | -4.73     | 1.   |

REPORT- SV-A System Design Parameters for L7A (G.SSE23) APT2 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING     | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-------------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU)   | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |             |            |           |           |
| PVVT   | 1.001    | 1282.5    | 2.     | 0.1     | 11 23.0    | 91     | 0.742  | -20.782     | 0.266      | 0.271     | -10.946   |
|        |          |           |        |         |            |        |        |             |            |           |           |
|        |          |           |        |         |            |        |        |             |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I           |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAN       | I FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL    | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |             |            |           |           |
| SUPPLY | 770.     | 1.00      | 0.231  | 0.94    | 1.0        | 0.41   | 0.62   | DRAW-THRU   | J CONSTANT | r 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |           |           |           |      |
| L7A SSE Perim Zn (G.SSE23P | 770.   | 0.      | 0.000 | 0.230   | 86.      | 0.00      | 0.00     | 22.37     | 0.00      | -6.72     | 1.   |

| REPORT- SV-A System Design Parameters for L7B (G.N4) APT4 | 4 PTHP |  |
|---|--------|--|
|---|--------|--|

| MEATHED | RTIR_ | CEATTLE | PORTNO | E T | TAT 7N |
|---------|-------|---------|--------|-----|--------|

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING     | COOLING  | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-------------|----------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR      | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU) | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |             |          |           |           |
| PVVT   | 1.001    | 2668.0    | 3.     | 0.1     | 39 38.2    | 87     | 0.742  | -34.458     | 0.266    | 0.271     | -22.966   |
|        |          |           |        |         |            |        |        |             |          |           |           |
|        |          |           |        |         |            |        |        |             |          |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I           |          | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | ' EFF  | ' FAN       | FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |             |          |           |           |
| SUPPLY | 1277.    | 1.00      | 0.383  | 0.94    | 1.2        | 0.48   | 0.62   | DRAW-THRU   | CONSTANT | r 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L7B North Perim Zn (G.N4)T | 1277.  | 0.      | 0.000 | 0.293   | 178.     | 0.00      | 0.00     | 38.22      | 0.00      | -14.17    | 1.   |

| PEDORT- | 4 - W | System | Design | Parameters | for | T.7B | (G E5) | <b>∆</b> DT1 | DTHD |
|---------|-------|--------|--------|------------|-----|------|--------|--------------|------|

| REPORT- SV | /-A System | Design Para | meters for | L7B (G  | .E5) APT1 P | THP<br> |        |           | WEATHE     | CR FILE- SE. | ATTLE BOEIN | G FI WA |
|------------|------------|-------------|------------|---------|-------------|---------|--------|-----------|------------|--------------|-------------|---------|
|            |            | FLOOR       |            | OUTSI   | DE COOLI    | NG      |        | HEATING   | COOLING    | HEATING      | HEAT PUMP   |         |
| SYSTEM     | ALTITUDE   | AREA        | MAX        | A       | IR CAPACI   | TY SE   | NSIBLE | CAPACITY  | EIR        | EIR          | SUPP-HEAT   |         |
| TYPE       | FACTOR     | (SQFT )     | PEOPLE     | RAT     | IO (KBTU/H  | R)      | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU)    | (KBTU/HR)   |         |
| PVVT       | 1.001      | 919.0       | 1.         | 0.0     | 96 19.2     | 24      | 0.742  | -17.302   | 0.266      | 0.271        | -11.478     |         |
|            |            | DIVERSITY   | POWER      | FAN     | STATIC      | TOTAL   | MECH   | I         |            | MAX FAN      | MIN FAN     |         |
| FAN        | CAPACITY   | FACTOR      | DEMAND     | DELTA-T | PRESSURE    | EFF     | EFF    | FA:       | n fan      | RATIO        | RATIO       |         |
| TYPE       | (CFM )     | (FRAC)      | (KW)       | (F)     | (IN-WATER)  | (FRAC)  | (FRAC) | PLACEMEN  | T CONTROL  | (FRAC)       | (FRAC)      |         |
| SUPPLY     | 641.       | 1.00        | 0.192      | 0.94    | 1.0         | 0.41    | 0.62   | DRAW-THR  | U CONSTANT | 1.00         | 0.30        |         |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L7B East Perim Zn (G.E5) 1 | 641.   | 0.      | 0.000 | 0.350   | 61.      | 0.00      | 0.00     | 17.62     | 0.00      | -8.50     | 1.   |

| REPORT- S | SV-A System | Design | Parameters | for | L7B | (G.W6) | APT1 | PTHP |
|-----------|-------------|--------|------------|-----|-----|--------|------|------|
|           |             |        |            |     |     |        |      |      |

|   | WEATHE         | R FILE- SE     | ATTLE         | BOEING | FI | WA |  |
|---|----------------|----------------|---------------|--------|----|----|--|
| 3 | COOLING<br>EIR | HEATING<br>EIR | HEAT<br>SUPP- |        |    |    |  |
| 1 | (BTU/BTU)      | (BTU/BTU)      | (KBTU         | J/HR)  |    |    |  |

| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SQFT )      | MAX<br>PEOPLE           | OUTSIDE<br>AIR<br>RATIO | CAPACI'                        | ry sen                 | ISIBLE<br>(SHR)       | HEATING<br>CAPACITY<br>(KBTU/HR) | COOLING<br>EIR<br>(BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |  |
|----------------|--------------------|-------------------------------|-------------------------|-------------------------|--------------------------------|------------------------|-----------------------|----------------------------------|-----------------------------|-----------------------------|-------------------------------------|--|
| PVVT           | 1.001              | 765.0                         | 1.                      | 0.144                   | 10.6                           | 38                     | 0.742                 | -9.574                           | 0.266                       | 0.271                       | -8.703                              |  |
| FAN<br>TYPE    | CAPACITY (CFM )    | DIVERSITY<br>FACTOR<br>(FRAC) | POWER<br>DEMAND<br>(KW) |                         | STATIC<br>PRESSURE<br>N-WATER) | TOTAL<br>EFF<br>(FRAC) | MECH<br>EFF<br>(FRAC) |                                  |                             |                             | MIN FAN<br>RATIO<br>(FRAC)          |  |
| SUPPLY         | 355.               | 1.00                          | 0.106                   | 0.94                    | 1.0                            | 0.37                   | 0.62                  | DRAW-THR                         | U CONSTANT                  | 1.00                        | 0.30                                |  |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L7B West Perim Zn (G.W6) 1 | 355.   | 0.      | 0.000 | 0.462   | 51.      | 0.00      | 0.00     | 11.58     | 0.00      | -6.22     | 1.   |

REPORT- SV-A System Design Parameters for L7B (G.W7) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

| SYSTEM | ALTITUDE | FLOOR<br>AREA | MAX    | OUTSII  | DE COOLI<br>IR CAPACI |        | <br>NSIBLE | HEATING<br>CAPACITY | COOLING<br>EIR | HEATING<br>EIR | HEAT PUMP |
|--------|----------|---------------|--------|---------|-----------------------|--------|------------|---------------------|----------------|----------------|-----------|
| TYPE   | FACTOR   | (SQFT )       | PEOPLE |         |                       |        | (SHR)      |                     | BTU/BTU)       | (BTU/BTU)      | (KBTU/HR) |
| PVVT   | 1.001    | 654.5         | 1.     | 0.16    | 62 8.0                | 63     | 0.742      | -7.256              | 0.266          | 0.271          | -5.606    |
|        |          | DIVERSITY     | POWER  | FAN     | STATIC                | TOTAL  | MECH       | 1                   |                | MAX FAN        | MIN FAN   |
| FAN    | CAPACITY | FACTOR        | DEMAND | DELTA-T | PRESSURE              | EFF    | EFF        | FAN                 | I FAN          | N RATIO        | RATIO     |
| TYPE   | (CFM )   | (FRAC)        | (KW)   | (F)     | (IN-WATER)            | (FRAC) | (FRAC)     | PLACEMENT           | CONTROL        | L (FRAC)       | (FRAC)    |
| SUPPLY | 269.     | 1.00          | 0.081  | 0.94    | 0.9                   | 0.34   | 0.62       | DRAW-THRU           | J CONSTANT     | г 1.00         | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L7B West Perim Zn (G.W7) 1 | 269.   | 0.      | 0.000 | 0.338   | 44.      | 0.00      | 0.00     | 6.92      | 0.00      | -3.45     | 1.   |

| REPORT- | A-V2 | System | Design | Parameters | for | T.7B | (G E8) | APT1 | PTHP |
|---------|------|--------|--------|------------|-----|------|--------|------|------|

|  |    |    |    | _  |    | <br>_ | _  | _ | _ | _ | _ | _  |    | <br> | _ | _ |   |    | _          | _  | _ | _ | _ | _ |   |   |     |  |
|--|----|----|----|----|----|-------|----|---|---|---|---|----|----|------|---|---|---|----|------------|----|---|---|---|---|---|---|-----|--|
|  | WE | ŀΑ | TI | HI | SF | F     | Ι. |   |   | - |   | S. | E, | I"I  |   |   | ŀ | 30 | ) <u>F</u> | ŀΙ | N | G |   | F | Ι | V | I.F |  |

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING     | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-------------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU)   | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |             |            |           |           |
| PVVT   | 1.001    | 628.5     | 1.     | 0.1     | 41 8.9     | 25     | 0.742  | -8.032      | 0.266      | 0.271     | -5.621    |
|        |          |           |        |         |            |        |        |             |            |           |           |
|        |          |           |        |         |            |        |        |             |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | 1           |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAN       | I FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL    | (FRAC)    | (FRAC)    |
|        |          |           |        |         |            |        |        |             |            |           |           |
| SUPPLY | 298.     | 1.00      | 0.089  | 0.94    | 0.9        | 0.34   | 0.62   | DRAW-THRU   | J CONSTANT | г 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L7B East Perim Zn (G.E8) 1 | 298.   | 0.      | 0.000 | 0.315   | 42.      | 0.00      | 0.00     | 8.52       | 0.00      | -3.55     | 1.   |

| REPORT- | SW-A | System | Design | Parameters | for | T.7B | (G E9) | APT1 | PTHP |
|---------|------|--------|--------|------------|-----|------|--------|------|------|

| REPORT- SV | /-A System | Design Para | meters for | L7B (G  | G.E9) APT1 P | THP    | WEATHER FILE- SEATTLE BOEING FI |           |            |           | G FI WA   |  |
|------------|------------|-------------|------------|---------|--------------|--------|---------------------------------|-----------|------------|-----------|-----------|--|
|            |            | FLOOR       |            | OUTSI   | DE COOLI     | NG     |                                 | HEATING   | COOLING    | HEATING   | HEAT PUMP |  |
| SYSTEM     | ALTITUDE   | AREA        | MAX        |         | AIR CAPACI   | TY SE  | NSIBLE                          | CAPACITY  | EIR        | EIR       | SUPP-HEAT |  |
| TYPE       | FACTOR     | (SQFT )     | PEOPLE     | RAT     | CIO (KBTU/H  | R)     | (SHR)                           | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |  |
| PVVT       | 1.001      | 789.0       | 1.         | 0.0     | 17.6         | 26     | 0.742                           | -15.864   | 0.266      | 0.271     | -10.619   |  |
|            |            | DIVERSITY   | POWER      | FAN     | STATIC       | TOTAL  | MECH                            | I         |            | MAX FAN   | MIN FAN   |  |
| FAN        | CAPACITY   | FACTOR      | DEMAND     | DELTA-T | PRESSURE     | EFF    | EFF                             | FA        | N FAI      | N RATIO   | RATIO     |  |
| TYPE       | (CFM )     | (FRAC)      | (KW)       | (F)     | (IN-WATER)   | (FRAC) | (FRAC)                          | PLACEMEN  | T CONTROI  | L (FRAC)  | (FRAC)    |  |
| SUPPLY     | 588.       | 1.00        | 0.176      | 0.94    | 1.0          | 0.40   | 0.62                            | DRAW-THR  | U CONSTANT | г 1.00    | 0.30      |  |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        | _       |       |         |          |           |          |           |           |           |      |
| L7B East Perim Zn (G.E9) 1 | 588.   | 0.      | 0.000 | 0.362   | 53.      | 0.00      | 0.00     | 16.80     | 0.00      | -8.07     | 1.   |

| REPORT- SV-A | System Desig | n Parameters | for | T.7B | (G SSW10) | APT7 PTHP |
|--------------|--------------|--------------|-----|------|-----------|-----------|

| MEATHED | RTIR_ | CEATTLE | PORTNO | E T | TAT 7 |
|---------|-------|---------|--------|-----|-------|

| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SQFT )      | MAX<br>PEOPLE           |                       | IR CAPACI                        | TY SE                  | NSIBLE | HEATING<br>CAPACITY<br>(KBTU/HR) | COOLING<br>EIR<br>(BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |
|----------------|--------------------|-------------------------------|-------------------------|-----------------------|----------------------------------|------------------------|--------|----------------------------------|-----------------------------|-----------------------------|-------------------------------------|
| PVVT           | 1.001              | 3981.5                        | 5.                      | 0.1                   | 10 72.1                          | 58                     | 0.742  | -64.942                          | 0.266                       | 0.271                       | -37.188                             |
| FAN<br>TYPE    | CAPACITY (CFM )    | DIVERSITY<br>FACTOR<br>(FRAC) | POWER<br>DEMAND<br>(KW) | FAN<br>DELTA-T<br>(F) | STATIC<br>PRESSURE<br>(IN-WATER) | TOTAL<br>EFF<br>(FRAC) |        | FAI                              |                             |                             |                                     |
| SUPPLY         | 2407.              | 1.00                          | 0.722                   | 0.94                  | 1.3                              | 0.51                   | 0.62   | DRAW-THRU                        | J CONSTANT                  | 1.00                        | 0.30                                |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | I        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L7B SSW Perim Zn (G.SSW10P | 2407.  | 0.      | 0.000 | 0.264   | 266.     | 0.00      | 0.00     | 70.19      | 0.00      | -24.10    | 1.   |

| REPORT- SV- | A System Design | Parameters f | for L8A | (G.E3) APT2 | PTHP |
|-------------|-----------------|--------------|---------|-------------|------|
|             |                 |              |         |             |      |

PVVT 1.001 956.8 1. 0.147 13.024 0.742 -11.

| REPORT- SV | /-A System D | esign Param | eters for | L8A (G.E3 | ) APTZ PTHP |          | WEATHER FILE- SEATTLE BOEING FI WA |           |           |           |  |
|------------|--------------|-------------|-----------|-----------|-------------|----------|------------------------------------|-----------|-----------|-----------|--|
|            |              | FLOOR       |           | OUTSIDE   | COOLING     |          | HEATING                            | COOLING   | HEATING   | HEAT PUMP |  |
| SYSTEM     | ALTITUDE     | AREA        | MAX       | AIR       | CAPACITY    | SENSIBLE | CAPACITY                           | EIR       | EIR       | SUPP-HEAT |  |
| TYPE       | FACTOR       | (SQFT )     | PEOPLE    | RATIO     | (KBTU/HR)   | (SHR)    | (KBTU/HR)                          | (BTU/BTU) | (BTU/BTU) | (KBTU/HR) |  |
|            |              |             |           |           |             |          |                                    |           |           |           |  |
| PVVT       | 1.001        | 956.8       | 1.        | 0.147     | 13.024      | 0.742    | -11.722                            | 0.266     | 0.271     | -8.177    |  |
|            |              |             |           |           |             |          |                                    |           |           |           |  |

|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   |           |          | MAX FAN | MIN FAN |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|----------|---------|---------|
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FAN       | FAN      | RATIO   | RATIO   |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT | CONTROL  | (FRAC)  | (FRAC)  |
|        |          |           |        |         |            |        |        |           |          |         |         |
| SUPPLY | 434.     | 1.00      | 0.130  | 0.94    | 1.0        | 0.40   | 0.62   | DRAW-THRU | CONSTANT | 1.00    | 0.30    |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L8A East Perim Zn (G.E3) 2 | 434.   | 0.      | 0.000 | 0.305   | 64.      | 0.00      | 0.00     | 11.54     | 0.00      | -5.02     | 1.   |

| REPORT- SV-A System Des | sign Parameters for | L8A (G.W8) APT2 PTHP |
|-------------------------|---------------------|----------------------|
|-------------------------|---------------------|----------------------|

| REPORT- SV | 7-A System | Design Para | meters for | L8A (G  | .W8) APT2 P | THP    |        |           | WEATH      | ER FILE- SE | ATTLE BOEIN | G FI WA |
|------------|------------|-------------|------------|---------|-------------|--------|--------|-----------|------------|-------------|-------------|---------|
|            |            | FLOOR       |            | OUTSI   | DE COOLI    | NG     |        | HEATING   | COOLING    | HEATING     | HEAT PUMP   |         |
| SYSTEM     | ALTITUDE   | AREA        | MAX        | A       | IR CAPACI   | TY SEI | NSIBLE | CAPACITY  | EIR        | EIR         | SUPP-HEAT   |         |
| TYPE       | FACTOR     | (SQFT )     | PEOPLE     | RAT     | 'IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU)   | (KBTU/HR)   |         |
| PVVT       | 1.001      | 891.0       | 1.         | 0.1     | 67 10.6     | 81     | 0.742  | -9.613    | 0.266      | 0.271       | -7.686      |         |
|            |            | DIVERSITY   | POWER      | FAN     | STATIC      | TOTAL  | MECH   | I         |            | MAX FAN     | MIN FAN     |         |
| FAN        | CAPACITY   | FACTOR      | DEMAND     | DELTA-T | PRESSURE    | EFF    | EFF    | FA        | N FAI      | N RATIO     | RATIO       |         |
| TYPE       | (CFM )     | (FRAC)      | (KW)       | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMEN  | T CONTROL  | L (FRAC)    | (FRAC)      |         |
| SUPPLY     | 356.       | 1.00        | 0.107      | 0.94    | 1.0         | 0.37   | 0.62   | DRAW-THR  | U CONSTANT | Γ 1.00      | 0.30        |         |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L8A West Perim Zn (G.W8) 2 | 356.   | 0.      | 0.000 | 0.352   | 59.      | 0.00      | 0.00     | 9.24       | 0.00      | -4.75     | 1.   |

REPORT- SV-A System Design Parameters for L8A (G.SW9) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SQFT ) | MAX<br>PEOPLE           |                       | IR CAPACI                        | TY SE                  | NSIBLE<br>(SHR) | HEATING<br>CAPACITY<br>(KBTU/HR) | COOLING<br>EIR<br>(BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |
|----------------|--------------------|--------------------------|-------------------------|-----------------------|----------------------------------|------------------------|-----------------|----------------------------------|-----------------------------|-----------------------------|-------------------------------------|
| PVVT           | 1.001              | 688.5                    | 1.                      | 0.1                   | .01 13.6                         | 63                     | 0.742           | -12.297                          | 0.266                       | 0.271                       | -7.440                              |
| FAN<br>TYPE    | CAPACITY<br>(CFM ) | DIVERSITY FACTOR (FRAC)  | POWER<br>DEMAND<br>(KW) | FAN<br>DELTA-T<br>(F) | STATIC<br>PRESSURE<br>(IN-WATER) | TOTAL<br>EFF<br>(FRAC) |                 | FA                               |                             |                             |                                     |
| SUPPLY         | 456.               | 1.00                     | 0.137                   | 0.94                  | 1.0                              | 0.40                   | 0.62            | DRAW-THR                         | U CONSTANT                  | 1.00                        | 0.30                                |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                           | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|---------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                      | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                      | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L8A SW Perim Zn (G.SW9) A | 456.   | 0.      | 0.000 | 0.300   | 46.      | 0.00      | 0.00     | 13.39      | 0.00      | -5.19     | 1.   |

| REPORT- | A-V2 | System | Design | Parameters | for | T.8A | (G.NW11) | дрт1 | PTHP |
|---------|------|--------|--------|------------|-----|------|----------|------|------|

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING     | COOLING  | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-------------|----------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY    | EIR      | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) ( | BTU/BTU) | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |             |          |           |           |
| PVVT   | 1.001    | 776.5     | 1.     | 0.1     | 17 13.2    | 41     | 0.742  | -11.917     | 0.266    | 0.271     | -8.957    |
|        |          |           |        |         |            |        |        |             |          |           |           |
|        |          |           |        |         |            |        |        |             |          |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | Į.          |          | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAN       | FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT   | CONTROL  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |             |          |           |           |
| SUPPLY | 442.     | 1.00      | 0.132  | 0.94    | 1.0        | 0.40   | 0.62   | DRAW-THRU   | CONSTANT | r 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |           |           |           |      |
| L8A NW Perim Zn (G.NW11) 1 | 442.   | 0.      | 0.000 | 0.384   | 52.      | 0.00      | 0.00     | 13.10     | 0.00      | -6.43     | 1.   |

REPORT- SV-A System Design Parameters for L8A (G.NE12) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI   | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |           |            |           |           |
| PVVT   | 1.001    | 948.8     | 1.     | 0.1     | 20 15.8    | 09     | 0.742  | -14.228   | 0.266      | 0.271     | -10.080   |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | I         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | ' FAI     | N FAN      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN' | r controi  | (FRAC)    | (FRAC)    |
|        |          |           |        |         |            |        |        |           |            |           |           |
| SUPPLY | 527.     | 1.00      | 0.158  | 0.94    | 1.0        | 0.40   | 0.62   | DRAW-THR  | U CONSTANT | 1.00      | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |           |           |           |      |
| L8A NE Perim Zn (G.NE12) 1 | 527.   | 0.      | 0.000 | 0.349   | 63.      | 0.00      | 0.00     | 17.12     | 0.00      | -6.98     | 1.   |

REPORT- SV-A System Design Parameters for L8A (G.S13) APT1 PTHP

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   |            |        |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | X A     | IR CAPACI  | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |            |        |        |           |            |           |           |
| PVVT   | 1.001    | 540.0     | 1.     | 0.0     | 95 11.3    | 49     | 0.742  | -10.214   | 0.266      | 0.271     | -5.107    |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          |           |        |         |            |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC     | TOTAL  | MECH   | ]         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE   | EFF    | EFF    | FA        | N FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMEN' | T CONTROI  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |            |        |        |           |            |           |           |
| SUPPLY | 379.     | 1.00      | 0.113  | 0.94    | 1.0        | 0.37   | 0.62   | DRAW-THR  | U CONSTANT | r 1.00    | 0.30      |

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM)  | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L8A South Perim Zn (G.S13P | 379.   | 0.      | 0.000 | 0.225   | 36.      | 0.00      | 0.00     | 11.26      | 0.00      | -3.22     | 1.   |

| REPORT- ST | √ – √ | System | Design | Parameters | for | T.8A | (G.SE14) | дрт1 | PTHP |
|------------|-------|--------|--------|------------|-----|------|----------|------|------|

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR     |        | OUTSI   | DE COOLI    | NG     |        | HEATING   | COOLING    | HEATING   | HEAT PUMP |
|--------|----------|-----------|--------|---------|-------------|--------|--------|-----------|------------|-----------|-----------|
| SYSTEM | ALTITUDE | AREA      | MAX    | . A     | IR CAPACI   | TY SE  | NSIBLE | CAPACITY  | EIR        | EIR       | SUPP-HEAT |
| TYPE   | FACTOR   | (SQFT )   | PEOPLE | RAT     | 'IO (KBTU/H | R)     | (SHR)  | (KBTU/HR) | (BTU/BTU)  | (BTU/BTU) | (KBTU/HR) |
|        |          |           |        |         |             |        |        |           |            |           |           |
| PVVT   | 1.001    | 540.0     | 1.     | 0.0     | 85 12.7     | 47     | 0.742  | -11.472   | 0.266      | 0.271     | -6.738    |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          |           |        |         |             |        |        |           |            |           |           |
|        |          | DIVERSITY | POWER  | FAN     | STATIC      | TOTAL  | MECH   | [         |            | MAX FAN   | MIN FAN   |
| FAN    | CAPACITY | FACTOR    | DEMAND | DELTA-T | PRESSURE    | EFF    | EFF    | ' FAI     | N FAI      | N RATIO   | RATIO     |
| TYPE   | (CFM )   | (FRAC)    | (KW)   | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMEN' | r control  | L (FRAC)  | (FRAC)    |
|        |          |           |        |         |             |        |        |           |            |           |           |
| SUPPLY | 425.     | 1.00      | 0.127  | 0.94    | 1.0         | 0.40   | 0.62   | DRAW-THRU | J CONSTANT | r 1.00    | 0.30      |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | XTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|-----------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
| L8A SE Perim Zn (G.SE14) 1 | 425.   | 0.      | 0.000 | 0.309   | 36.      | 0.00      | 0.00     | 12.34     | 0.00      | -4.99     | 1.   |

WEATHER FILE- SEATTLE BOEING FI WA

|        |          | FLOOR   |        | OUTSIDE | COOLING   |          | HEATING   | COOLING   | HEATING   | HEAT PUMP |  |
|--------|----------|---------|--------|---------|-----------|----------|-----------|-----------|-----------|-----------|--|
| SYSTEM | ALTITUDE | AREA    | MAX    | AIR     | CAPACITY  | SENSIBLE | CAPACITY  | EIR       | EIR       | SUPP-HEAT |  |
| TYPE   | FACTOR   | (SQFT ) | PEOPLE | RATIO   | (KBTU/HR) | (SHR)    | (KBTU/HR) | (BTU/BTU) | (BTU/BTU) | (KBTU/HR) |  |
| UHT    | 1.001    | 55590.5 | 0.     | 0.000   | 0.000     | 0.000    | 0.000     | 0.000     | 0.000     | 0.000     |  |

| ZONE                       | SUPPLY<br>FLOW | EXHAUST<br>FLOW | FAN   | MINIMUM<br>FLOW | OUTSIDE<br>AIR FLOW |           | SENSIBLE | EXTRACTION<br>RATE | HEATING<br>CAPACITY | ADDITION RATE ZONE         |
|----------------------------|----------------|-----------------|-------|-----------------|---------------------|-----------|----------|--------------------|---------------------|----------------------------|
| NAME                       | (CFM )         | (CFM )          | (KW)  | (FRAC)          | (CFM )              | (KBTU/HR) | (FRAC)   | (KBTU/HR)          | (KBTU/HR)           | (KBTU/HR) MULT             |
| L2B South Perim Zn (G.S27E | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | 0.00 1.<br>(BASEBOARDS)    |
| L6A Core Zn (G.C1) ELV     | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | 0.00 1.                    |
| P1A West Perim Zn (B.W7) H | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>0.00 1.    |
| L2A Core Zn (G.C16) TRSH   | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>0.00 1.    |
| L3A Core Zn (G.C15) TRSH   | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>0.00 1.    |
| L4A Core Zn (G.C15) TRSH   | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>0.00 1.    |
| L5A Core Zn (G.C15) TRSH   | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | 0.00 1.                    |
| L6A Core Zn (G.C15) TRSH   | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>0.00 1.    |
| L7A Core Zn (G.C15) TRSH   | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>0.00 1.    |
| L8A Core Zn (G.C5) TRSH    | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>0.00 1.    |
| P2A NNW Perim Zn (B.NNW13K | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-15.61 1.  |
| P2B NW Perim Zn (B.NW6) X  | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | -15.61<br>0.00      | (BASEBOARDS)<br>0.00 1.    |
| P2B South Perim Zn (B.S10K | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-161.07 1. |
| P2B NNE Perim Zn (B.NNE12K | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-26.08 1.  |
| P1B South Perim Zn (B.S6)G | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | -26.08<br>0.00      | (BASEBOARDS)<br>-55.54 1.  |
| P1B NNE Perim Zn (B.NNE9)G | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | -55.54<br>0.00      | (BASEBOARDS)<br>-40.45 1.  |
| L1A East Perim Zn (G.E18)H | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | -40.45<br>0.00      | (BASEBOARDS)<br>-0.80 1.   |
| L1A Core Zn (G.C20) TSHF   | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | -0.80<br>0.00       | (BASEBOARDS)<br>-0.43 1.   |
| L2A East Perim Zn (G.E13)H | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | -0.43<br>0.00       | (BASEBOARDS)<br>-0.70 1.   |
| L2A Core Zn (G.C15) TSHF   | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | -0.70<br>0.00       | (BASEBOARDS)<br>-0.16 1.   |
| L3A East Perim Zn (G.E12)H | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-0.76 1.   |
| L3A Core Zn (G.C14) TSHF   | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-0.27 1.   |
| L4A East Perim Zn (G.E12)H | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-0.74 1.   |
| L4A Core Zn (G.C14) TSHF   | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-0.27 1.   |
| L5A East Perim Zn (G.E12)H | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-0.74 1.   |
| L5A Core Zn (G.C14) TSHF   | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-0.27 1.   |
| L6A East Perim Zn (G.E12)H | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-0.74 1.   |
| L6A Core Zn (G.C14) TSHF   | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-0.27 1.   |
| L7A East Perim Zn (G.E12)H | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-0.77 1.   |
| L7A Core Zn (G.C14) TSHF   | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-0.26 1.   |
| L8A East Perim Zn (G.E2) F | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-0.83 1.   |
| L8A Core Zn (G.C4) TSHF    | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>-0.34 1.   |
| P2A Core Zn (B.C1) STR     | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>0.00 1.    |
| P2A Core Zn (B.C2) ELV     | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS) 0.00 1.       |
| P2B Core Zn (B.C4) MECH    | 0.             | 0.              | 0.000 | 0.000           | 0.                  | 0.00      | 0.00     | 0.00               | 0.00                | (BASEBOARDS)<br>0.00 1.    |

|                            |    |    |       |       |    |      |      |      | 0.00 | (BASEBOARDS) |    |
|----------------------------|----|----|-------|-------|----|------|------|------|------|--------------|----|
| P2B Core Zn (B.C5) STR     | 0. | 0. | 0.000 | 0.000 | 0. | 0.00 | 0.00 | 0.00 | 0.00 | 0.00         | 1. |
|                            |    |    |       |       |    |      |      |      | 0.00 | (BASEBOARDS) |    |
| P2B SE Perim Zn (B.SE8) M  | 0. | 0. | 0.000 | 0.000 | 0. | 0.00 | 0.00 | 0.00 | 0.00 | 0.00         | 1. |
|                            |    |    |       |       |    |      |      |      | 0.00 | (BASEBOARDS) |    |
| P1A Core Zn (B.C1) STR     | 0. | 0. | 0.000 | 0.000 | 0. | 0.00 | 0.00 | 0.00 | 0.00 | 0.00         | 1. |
|                            |    |    |       |       |    |      |      |      | 0.00 | (BASEBOARDS) |    |
| P1A Core Zn (B.C2) ELV     | 0. | 0. | 0.000 | 0.000 | 0. | 0.00 | 0.00 | 0.00 | 0.00 | 0.00         | 1. |
| PlA NNW Perim Zn (B.NNW8)C | 0. | 0. | 0.000 | 0.000 | 0. | 0.00 | 0.00 | 0.00 | 0.00 | 0.00         | 1. |
| P1B Core Zn (B.C4) ELV     | 0. | 0. | 0.000 | 0.000 | 0. | 0.00 | 0.00 | 0.00 | 0.00 | 0.00         | 1. |
|                            |    |    |       |       |    |      |      |      | 0.00 | (BASEBOARDS) |    |
| P1B SE Perim Zn (B.SE5) M  | 0. | 0. | 0.000 | 0.000 | 0. | 0.00 | 0.00 | 0.00 | 0.00 | 0.00         | 1. |
|                            |    |    |       |       |    |      |      |      | 0.00 | (BASEBOARDS) |    |
| P1B ENE Perim Zn (B.ENE10E | 0. | 0. | 0.000 | 0.000 | 0. | 0.00 | 0.00 | 0.00 | 0.00 | 0.00         | 1. |
|                            |    |    |       |       |    |      |      |      | 0.00 | (BASEBOARDS) |    |
| L1A Core Zn (G.C1) STR     | 0. | 0. | 0.000 | 0.000 | 0. | 0.00 | 0.00 | 0.00 | 0.00 | 0.00         | 1. |
|                            |    |    |       |       |    |      |      |      | 0.00 | (BASEBOARDS) |    |
| L1A Core Zn (G.C2) ELV     | 0. | 0. | 0.000 | 0.000 | 0. | 0.00 | 0.00 | 0.00 | 0.00 | 0.00         | 1. |
|                            |    |    |       |       |    |      |      |      | 0.00 | (BASEBOARDS) |    |
|                            |    |    |       |       |    |      |      |      |      |              |    |

| REPORT- SV-A System Design Param |    |    | e Protect |       |    |      |      | R FILE- SEA |      |                         |
|----------------------------------|----|----|-----------|-------|----|------|------|-------------|------|-------------------------|
| L1B Core Zn (G.C3) STR           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.<br>(BASEBOARDS) |
| L2A Core Zn (G.C1) ELV           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L2A NNW Perim Zn (G.NNW24T       | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L2B Core Zn (G.C2) STR           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
|                                  |    |    |           |       |    |      |      |             |      |                         |
| L3A Core Zn (G.C1) ELV           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L3A Core Zn (G.C20) STR          | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L3B Core Zn (G.C2) STR           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L4A Core Zn (G.C1) ELV           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L4A Core Zn (G.C20) STR          | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L4B Core Zn (G.C2) STR           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L5A Core Zn (G.C1) ELV           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L5A Core Zn (G.C20) STR          | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L5B Core Zn (G.C2) STR           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L6A Core Zn (G.C20) STR          | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| BON COIC ZII (G.CZO) BIR         | ٠. | ٥. | 0.000     | 0.000 | ٥. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L6B Core Zn (G.C2) STR           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L7A Core Zn (G.C1) ELV           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L7A Core Zn (G.C17) STR          | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L7B Core Zn (G.C2) STR           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L8A Core Zn (G.C1) ELV           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| 102 Gave Fr. (G. GZ.) GED        | 0  | 0  | 0 000     | 0.000 | 0  | 0.00 | 0.00 | 0.00        | 0 00 | 0.00 1                  |
| L8A Core Zn (G.C7) STR           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| P2B NNE Perim Zn (B.NNE11L       | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L1A Core Zn (G.C23) ELEC         | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L1A SW Perim Zn (G.SW26) C       | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| L1B Core Zn (G.C12) ELEC         | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.<br>(BASEBOARDS) |
|                                  |    |    |           |       |    |      |      |             | 0.00 | (BASEBOARDS)            |
| L2A Core Zn (G.C17) ELEC         | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
|                                  |    |    |           |       |    |      |      |             |      | (BASEBOARDS)            |
| L2B Core Zn (G.C11) ELEC         | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
|                                  |    |    |           |       |    |      |      |             |      | (BASEBOARDS)            |
| L3A Core Zn (G.C16) ELEC         | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
|                                  |    |    |           |       |    |      |      |             | 0.00 | (BASEBOARDS)            |
| L3B Core Zn (G.C11) ELEC         | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
|                                  |    |    |           |       |    |      |      |             | 0.00 | (BASEBOARDS)            |
| L4A Core Zn (G.C16) ELEC         | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
|                                  |    |    |           |       |    |      |      |             | 0.00 | (BASEBOARDS)            |
| L4B Core Zn (G.C11) ELEC         | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
|                                  |    |    |           |       |    |      |      |             | 0.00 | (BASEBOARDS)            |
| L5A Core Zn (G.C16) ELEC         | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
|                                  |    |    |           |       |    |      |      |             | 0.00 | (BASEBOARDS)            |
| L5B Core Zn (G.C11) ELEC         | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
|                                  |    |    |           |       |    |      |      |             | 0.00 | (BASEBOARDS)            |
| L6A Core Zn (G.C16) ELEC         | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
|                                  |    |    |           |       |    |      |      |             |      | (BASEBOARDS)            |
| L6B Core Zn (G.C11) ELEC         | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
|                                  |    |    |           |       |    |      |      |             | 0.00 | (BASEBOARDS)            |
| L7A Core Zn (G.C16) ELEC         | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
|                                  | _  | _  |           |       | _  |      |      |             |      | (BASEBOARDS)            |
| L7B Core Zn (G.C11) ELEC         | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| TO 3                             | 0  |    | 0.000     | 0.000 | 0  | 0.00 | 0.00 | 0.00        |      | (BASEBOARDS)            |
| L8A Core Zn (G.C6) ELEC          | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| P2A Core Zn (B.C7) STO           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | (BASEBOARDS)<br>0.00 1. |
| PZA COTE ZII (B.C/) SIO          | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        |      | (BASEBOARDS)            |
| P2B NE Perim Zn (B.NE9) S        | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| 135 NO ICIIM DI (D.ME)/ 0        | ٥. | ٠. | 0.000     | 0.000 | ٥. | 0.00 | 0.00 | 0.00        |      | (BASEBOARDS)            |
| L1A Core Zn (G.C16) RR           | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| 0010 Em (0.010) Inc              | ٠. | ٠. | 0.000     | 0.000 | ٠. | 0.00 | 3.00 | 0.00        |      | (BASEBOARDS)            |
| L1A WNW Perim Zn (G.WNW25T       | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| (0.11111231                      |    |    |           |       | ٠. |      |      |             |      | (BASEBOARDS)            |
| L2A West Perim Zn (G.W25)0       | 0. | 0. | 0.000     | 0.000 | 0. | 0.00 | 0.00 | 0.00        | 0.00 | 0.00 1.                 |
| •                                |    |    |           |       |    |      |      |             |      | (BASEBOARDS)            |
|                                  |    |    |           |       |    |      |      |             |      |                         |

| REPORT- SV-A System Design Parameters for | L2A (G.SW20) RST PSZHP |
|---|------------------------|
|   |                        |

|   | WEATHER | FILE-  | SEA | ATTLE | BOEING | FI | WA |  |
|---|---------|--------|-----|-------|--------|----|----|--|
| 3 | COOLING | HEATIN | 1G  | HEAT  | PUMP   |    |    |  |
| 7 | EIR     | El     | ΙR  | SUPP- | -HEAT  |    |    |  |

| SYSTEM<br>TYPE | ALTITUDE<br>FACTOR | FLOOR<br>AREA<br>(SQFT )      | MAX<br>PEOPLE           | OUTSIDE<br>AIR<br>RATIO | COOLING<br>CAPACITY<br>(KBTU/HR) |                                 | HEATING<br>CAPACITY<br>(KBTU/HR) | COOLING<br>EIR<br>(BTU/BTU) | HEATING<br>EIR<br>(BTU/BTU) | HEAT PUMP<br>SUPP-HEAT<br>(KBTU/HR) |  |
|----------------|--------------------|-------------------------------|-------------------------|-------------------------|----------------------------------|---------------------------------|----------------------------------|-----------------------------|-----------------------------|-------------------------------------|--|
| PSZ            | 1.001              | 2287.5                        | 76.                     | 0.045                   | 380.826                          | 0.742                           | -342.744                         | 0.251                       | 0.274                       | -415.638                            |  |
| FAN<br>TYPE    | CAPACITY<br>(CFM ) | DIVERSITY<br>FACTOR<br>(FRAC) | POWER<br>DEMAND<br>(KW) |                         | RESSURE                          | TOTAL ME<br>EFF E<br>FRAC) (FRA | FF F                             | AN FA                       |                             |                                     |  |

SUPPLY 12704. 1.00 9.635 2.36 3.5 0.55 0.62 DRAW-THRU CONSTANT 1.00 0.30

|                          | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|--------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                     | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                     | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
| L2A SW Perim Zn (G.SW20) | 12704. | 12704.  | 3.725 | 1.000   | 572.     | 0.00      | 0.00     | 74.78      | 0.00      | -31.32    | 1.   |

REPORT- SV-A System Design Parameters for Sys 8 - VAV+PFP L1

| REPORT- SV | V-A System | Design Para | meters for | Sys 8   | - VAV+PFP L | 1      |        |            | WEATHI     | ER FILE- SE | ATTLE BOEIN | G FI WA |
|------------|------------|-------------|------------|---------|-------------|--------|--------|------------|------------|-------------|-------------|---------|
|            |            | FLOOR       |            | OUTSI   | DE COOLI    | NG     |        | HEATING    | COOLING    | HEATING     | HEAT PUMP   |         |
| SYSTEM     | ALTITUDE   | AREA        | MAX        | . A     | IR CAPACI   | TY SEI | NSIBLE | CAPACITY   | EIR        | EIR         | SUPP-HEAT   |         |
| TYPE       | FACTOR     | (SQFT )     | PEOPLE     | RAT     | IO (KBTU/H  | R)     | (SHR)  | (KBTU/HR)  | (BTU/BTU)  | (BTU/BTU)   | (KBTU/HR)   |         |
| PIU        | 1.001      | 2105.5      | 17.        | 0.6     | 02 11.1     | 26     | 0.742  | 0.000      | 0.000      | 0.000       | 0.000       |         |
|            |            | DIVERSITY   | POWER      | FAN     | STATIC      | TOTAL  | MECH   | I          |            | MAX FAN     | MIN FAN     |         |
| FAN        | CAPACITY   | FACTOR      | DEMAND     | DELTA-T | PRESSURE    | EFF    | EFF    | r F        | AN FAI     | N RATIO     | RATIO       |         |
| TYPE       | (CFM )     | (FRAC)      | (KW)       | (F)     | (IN-WATER)  | (FRAC) | (FRAC) | PLACEMEN   | NT CONTROL | L (FRAC)    | (FRAC)      |         |
| SUPPLY     | 287.       | 1.00        | 0.325      | 3.53    | 5.3         | 0.55   | 0.72   | 2 DRAW-THI | RU SPEEI   | 1.10        | 0.30        |         |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | E        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L1B SSW Perim Zn (G.SSW130 | 303.   | 0.      | 0.080 | 0.699   | 73.      | 0.00      | 0.00     | 2.33       | -12.82    | -11.41    | 1.   |
| L1B Core Zn (G.C14) OFF    | 170.   | 0.      | 0.052 | 0.210   | 22.      | 0.00      | 0.00     | 2.39       | -8.27     | -7.82     | 1.   |
| L1A SSW Perim Zn (G.SSW15I | 675.   | 0.      | 0.209 | 1.000   | 78.      | 0.00      | 0.00     | 1.27       | -33.33    | -31.64    | 1.   |

REPORT- SV-A System Design Parameters for Sys 8 - VAV+PFP Corr (L1-L8)

| REPORT- SV | 7-A System | Design Para | meters for | Sys 8   | - VAV+PFP C | orr (L1 | -L8)   |           | WEATHER FILE- SEATTLE BOEING FI WA |           |           |  |  |
|------------|------------|-------------|------------|---------|-------------|---------|--------|-----------|------------------------------------|-----------|-----------|--|--|
|            |            | FLOOR       |            | OUTSI   | DE COOLI    | NG      |        | HEATING   | COOLING                            | HEATING   | HEAT PUMP |  |  |
| SYSTEM     | ALTITUDE   | AREA        | MAX        | X A     | IR CAPACI   | TY SE   | NSIBLE | CAPACITY  | EIR                                | EIR       | SUPP-HEAT |  |  |
| TYPE       | FACTOR     | (SQFT )     | PEOPLE     | RAT     | IO (KBTU/H  | R)      | (SHR)  | (KBTU/HR) | (BTU/BTU)                          | (BTU/BTU) | (KBTU/HR) |  |  |
| PIU        | 1.001      | 20700.8     | 102.       | 0.6     | 68 85.5     | 62      | 0.742  | 0.000     | 0.000                              | 0.000     | 0.000     |  |  |
|            |            | DIVERSITY   | POWER      | FAN     | STATIC      | TOTAL   | MECH   | I         |                                    | MAX FAN   | MIN FAN   |  |  |
| FAN        | CAPACITY   | FACTOR      | DEMAND     | DELTA-T | PRESSURE    | EFF     | EFF    | r F       | AN FAI                             | N RATIO   | RATIO     |  |  |
| TYPE       | (CFM )     | (FRAC)      | (KW)       | (F)     | (IN-WATER)  | (FRAC)  | (FRAC) | PLACEME   | NT CONTROL                         | L (FRAC)  | (FRAC)    |  |  |
| SUPPLY     | 2300.      | 0.97        | 2.599      | 3.53    | 6.0         | 0.62    | 0.72   | DRAW-THI  | RU SPEEI                           | 1.10      | 0.30      |  |  |

<sup>\*\*\*</sup> THE ABOVE CHARACTERISTICS ARE FOR EACH OF: 1 AIR HANDLERS

|                            | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | I        | EXTRACTION | HEATING   | ADDITION  |      |
|----------------------------|--------|---------|-------|---------|----------|-----------|----------|------------|-----------|-----------|------|
| ZONE                       | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE | RATE       | CAPACITY  | RATE      | ZONE |
| NAME                       | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)   | (KBTU/HR)  | (KBTU/HR) | (KBTU/HR) | MULT |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L8A Core Zn (G.C10) COR    | 56.    | 0.      | 0.004 | 1.000   | 45.      | 0.00      | 0.00     | 1.44       | -0.61     | -0.03     | 1.   |
| L1A Core Zn (G.C21) COR    | 5.     | 0.      | 0.001 | 1.000   | 3.       | 0.00      | 0.00     | 0.09       | -0.12     | -0.10     | 1.   |
| P1B Core Zn (B.C12) COR    | 72.    | 0.      | 0.016 | 1.000   | 28.      | 0.00      | 0.00     | 0.55       | -2.49     | -2.60     | 1.   |
| L1A Core Zn (G.C22) COR    | 36.    | 0.      | 0.007 | 1.000   | 15.      | 0.00      | 0.00     | 0.36       | -1.16     | -1.20     | 1.   |
| L1B Core Zn (G.C4) COR     | 65.    | 0.      | 0.005 | 1.000   | 52.      | 0.00      | 0.00     | 1.25       | -0.70     | -0.25     | 1.   |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L2A Core Zn (G.C26) COR    | 77.    | 0.      | 0.005 | 1.000   | 61.      | 0.00      | 0.00     | 1.47       | -0.83     | 0.00      | 1.   |
| L2B Core Zn (G.C3) COR     | 86.    | 0.      | 0.006 | 1.000   | 69.      | 0.00      | 0.00     | 1.77       | -0.93     | 0.00      | 1.   |
| L3A Core Zn (G.C23) COR    | 51.    | 0.      | 0.004 | 1.000   | 41.      | 0.00      | 0.00     | 1.08       | -0.55     | 0.00      | 1.   |
| L3B North Perim Zn (G.N3)R | 131.   | 0.      | 0.009 | 1.000   | 105.     | 0.00      | 0.00     | 2.96       | -1.42     | 0.00      | 1.   |
| L4A Core Zn (G.C23) COR    | 51.    | 0.      | 0.004 | 1.000   | 41.      | 0.00      | 0.00     | 1.08       | -0.55     | 0.00      | 1.   |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L4B North Perim Zn (G.N3)R | 131.   | 0.      | 0.009 | 1.000   | 105.     | 0.00      | 0.00     | 3.00       | -1.42     | 0.00      | 1.   |
| L5A Core Zn (G.C23) COR    | 51.    | 0.      | 0.004 | 1.000   | 41.      | 0.00      | 0.00     | 1.08       | -0.55     | 0.00      | 1.   |
| L5B North Perim Zn (G.N3)R | 131.   | 0.      | 0.009 | 1.000   | 105.     | 0.00      | 0.00     | 3.06       | -1.42     | 0.00      | 1.   |
| L6A Core Zn (G.C23) COR    | 51.    | 0.      | 0.004 | 1.000   | 41.      | 0.00      | 0.00     | 1.11       | -0.55     | 0.00      | 1.   |
| L6B North Perim Zn (G.N3)R | 131.   | 0.      | 0.009 | 1.000   | 105.     | 0.00      | 0.00     | 3.15       | -1.42     | 0.00      | 1.   |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L7A Core Zn (G.C20) COR    | 58.    | 0.      | 0.005 | 0.648   | 37.      | 0.00      | 0.00     | 1.90       | -0.78     | -0.19     | 1.   |
| L7B North Perim Zn (G.N3)R | 178.   | 0.      | 0.016 | 0.590   | 105.     | 0.00      | 0.00     | 5.82       | -2.40     | -1.57     | 1.   |
| P2A Core Zn (B.C3) COR     | 60.    | 0.      | 0.005 | 0.238   | 14.      | 0.00      | 0.00     | 0.77       | -0.81     | -0.81     | 1.   |
| P1A Core Zn (B.C3) COR     | 22.    | 0.      | 0.003 | 1.000   | 14.      | 0.00      | 0.00     | 0.41       | -0.45     | -0.38     | 1.   |
| L1A South Perim Zn (G.S170 | 815.   | 0.      | 0.195 | 1.000   | 257.     | 0.00      | 0.00     | 5.22       | -31.11    | -24.66    | 1.   |
|                            |        |         |       |         |          |           |          |            |           |           |      |
| L2B SSW Perim Zn (G.SSW120 | 866.   | 0.      | 0.106 | 0.292   | 252.     | 0.00      | 0.00     | 20.40      | -16.89    | -11.07    | 1.   |
| L2A Core Zn (G.C21) MAIL   | 64.    | 0.      | 0.006 | 0.010   | 0.       | 0.00      | 0.00     | 1.32       | -0.86     | -0.81     | 1.   |
| L2A Core Zn (G.C22) MAIL   | 13.    | 0.      | 0.002 | 0.010   | 0.       | 0.00      | 0.00     | 0.29       | -0.38     | -0.37     | 1.   |

REPORT- SV-A System Design Parameters for Sys 4 -PSZ-HP Amenities

WEATHER FILE- SEATTLE BOEING FI WA

| SYSTEM | ALTITUDE | FLOOR<br>AREA | MAX      | OUTSI   | DE COOLI   |        | NSIBLE | HEATING<br>CAPACITY | COOLING<br>EIR | HEATING<br>EIR | HEAT PUMP |
|--------|----------|---------------|----------|---------|------------|--------|--------|---------------------|----------------|----------------|-----------|
| TYPE   | FACTOR   | (SQFT )       | PEOPLE   |         |            |        | (SHR)  |                     | (BTU/BTU)      | (BTU/BTU)      | (KBTU/HR) |
| PIU    | 1.001    | 1607.5        | 0.       | 0.0     | 199 29.8   | 15     | 0.742  | -26.834             | 0.360          | 0.370          | -13.417   |
|        |          |               | D 011777 |         | amama a    |        | V-D-GV |                     |                |                |           |
|        |          | DIVERSITY     | POWER    | FAN     | STATIC     | TOTAL  |        |                     |                | MAX FAN        |           |
| FAN    | CAPACITY | FACTOR        | DEMAND   | DELTA-T | PRESSURE   | EFF    | EFF    | FAI FAI             | I FAN          | N RATIO        | RATIO     |
| TYPE   | (CFM )   | (FRAC)        | (KW)     | (F)     | (IN-WATER) | (FRAC) | (FRAC) | PLACEMENT           | r control      | (FRAC)         | (FRAC)    |
| SUPPLY | 972.     | 1.00          | 0.787    | 2.53    | 4.2        | 0.60   | 0.72   | DRAW-THRU           | J CONSTANT     | 1.10           | 0.30      |

|                          | SUPPLY | EXHAUST |       | MINIMUM | OUTSIDE  | COOLING   | EXTRACTION |           | HEATING   | ADDITION  |      |
|--------------------------|--------|---------|-------|---------|----------|-----------|------------|-----------|-----------|-----------|------|
| ZONE                     | FLOW   | FLOW    | FAN   | FLOW    | AIR FLOW | CAPACITY  | SENSIBLE   | RATE      | CAPACITY  | RATE      | ZONE |
| NAME                     | (CFM ) | (CFM )  | (KW)  | (FRAC)  | (CFM )   | (KBTU/HR) | (FRAC)     | (KBTU/HR) | (KBTU/HR) | (KBTU/HR) | MULT |
|                          |        |         |       |         |          |           |            |           |           |           |      |
| L7A NW Perim Zn (G.NW21) | 779.   | 0.      | 0.116 | 1.000   | 47.      | 0.00      | 0.00       | 11.41     | -20.29    | -11.13    | 1.   |
| L7A NE Perim Zn (G.NE22) | 873.   | 0.      | 0.122 | 1.000   | 50.      | 0.00      | 0.00       | 13.13     | -21.73    | -10.99    | 1.   |