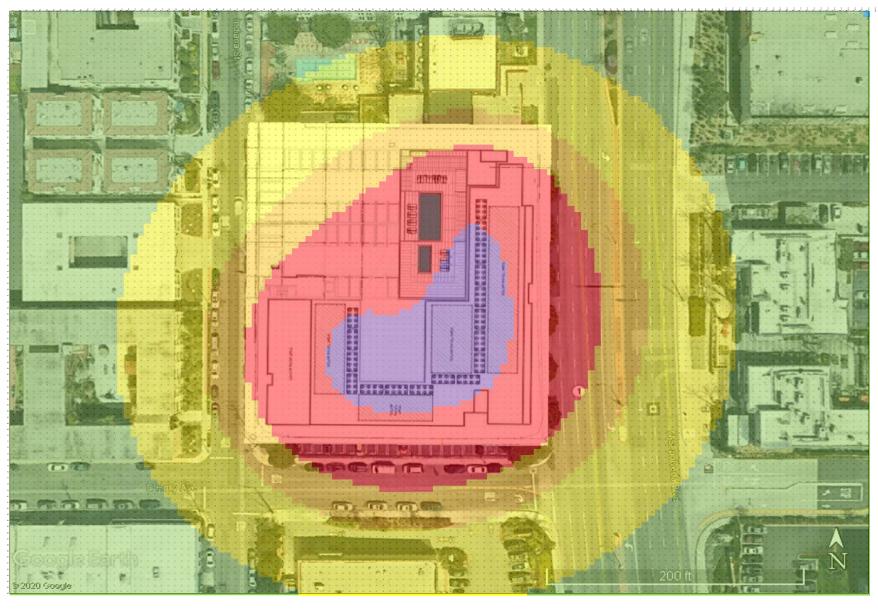
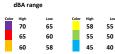
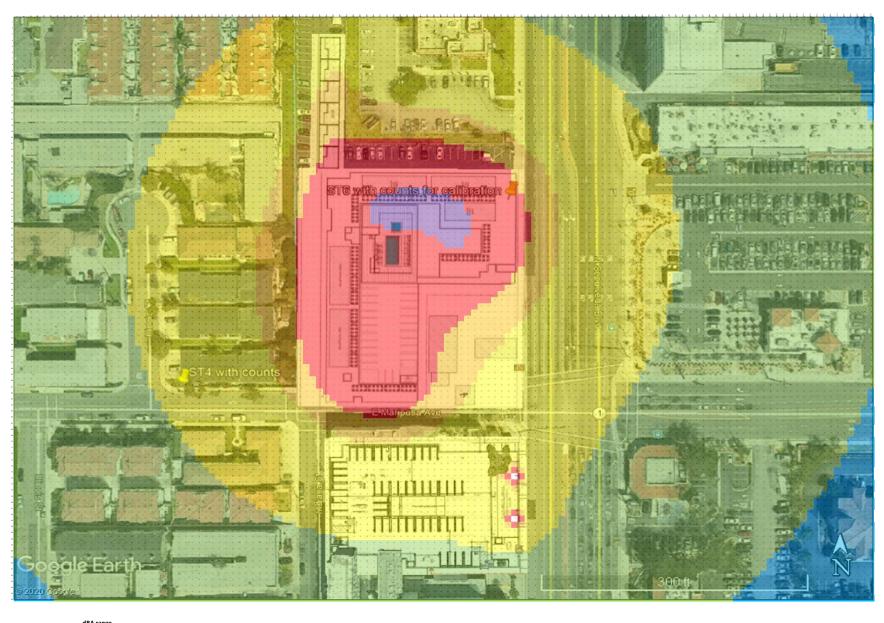
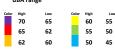
Appendix H-3

Stationary Operations Noise Modeling









Definition of Terms (all are in feet)

hd_{snon-corr} = horizontal distance between noise source and receiver td snon-corr = "true" distance (point-to-point vector) between noise source and receiver h_{nod} = height of building roof above grade

hd_{wall-tour} = horizontal distance between wall (top of barrier) and receiver to bottom of equipment base (sitting on roof)
hd_{stoce-wall} = horizontal distance between source and wall to between source and wall to between wall and receiver to bet

nd_{wall} = effective horizontal width of wall = height of wall, relative to receiver position ground elevation h_{ror} = height of listener above ground surface at receiver position

barrier from Bies & Hansen (2nd ed., p. 328-329)

HVAC	HVAC Unit Tag	Source PWL	hd _{srce-rcvr}	hd _{wall-rcvr}	hd _{srce-wall}	h _{roof}	h _{equip}	h _{srce}	h _{wall}	h _{revr}	hd _{wall} (thickness)	td _{srce-rcvr}	td _{srce-wall}	td _{wall-rcvr}	path length diff (z)	Fresnel Number at 1kHz (assumes line of sight blocked between source and receiver)	Does line of sight (LOS) occur?	Estimated barrier insertion Loss (IL) in dBA	Distance Attenuation (dB)	Resulting SPL (dBA)
Goodman ACC	1	72	108	70	38	66	3	69.0	72	15	0.25	120.7	38	90	7.9	14.0		22	30	12
Goodman ACC	2	72	108	70	38	66	3	69.0	72	15	0.25	120.7	38	90	7.9	14.0		22	30	12
Goodman ACC	3	72	108	70	38	66	3	69.0	72	15	0.25	120.7	38	90	7.9	14.0		22	30	12
Goodman ACC	4	72	108	70	38	66	3	69.0	72	15	0.25	120.7	38	90	7.9	14.0		22	30	12
Goodman ACC	5	72	108	70	38	66	3	69.0	72	15	0.25	120.7	38	90	7.9	14.0		22	30	12
Goodman ACC	6	72	108	70	38	66	3	69.0	72	15	0.25	120.7	38	90	7.9	14.0		22	30	12
Goodman ACC	7	72	108	70	38	66	3	69.0	72	15	0.25	120.7	38	90	7.9	14.0		22	30	12
Goodman ACC	8	72	108	70	38	66	3	69.0	72	15	0.25	120.7	38	90	7.9	14.0		22	30	12
Goodman ACC	9	72	108	70	38	66	3	69.0	72	15	0.25	120.7	38	90	7.9	14.0		22	30	12
Goodman ACC	10	72	108	70	38	66	3	69.0	72	15	0.25	120.7	38	90	7.9	14.0		22	30	12
<u> </u>								='				_				a	ggregate sound pres	sure level (SPL) at th	e receptor:	22