## Appendix H: Noise Supporting Information



H.1 - Parking Noise Calculations



**Parking Lot Activity** 

Receptor:	Residential	(west of	project site)
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	residential (west or project site)									
		Reference (dBA)								
		50 ft		Usage	Distance to	Ground	Shielding	Calculat	ed (dBA)	
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	parking lot activity	70	3	1	1110	0.5	0	43.1	21.1	129.1929511
2	parking lot activity	70	25	1	1160	0.5	0	42.7	29.8	964.3174961
3	parking lot activity	70	12	1	1205	0.5	0	42.4	26.2	420.8609582
4	parking lot activity									
5										
6										
7										
8										
9										
10										
Notes:	•	•					Lmax[4]	43.0	Leq	32

Notes:
[1] Percentage of time activity occurs each hour
[2] Hard ground terrain between project site and receptor.
[3] Shielding reduction from structures or terrain
[4] Calculated Lmax is the Loudest value.

## **Parking Lot Activity**

Pacantar:	Commercial	(Carl's Ir	couth	of project s	itم۱
Receptor:	Commercial	(Cari S Ir.	SOUTH	or project s	ite)

receptor	Commercial (Carl S Jr. South of project Site)									
		Reference (dBA) 50 ft		Heeme	Distance to	Ground	Chieldine	Calaulati	(-IDA)	
		อบ เเ		Usage	Distance to		Shielding	Calculate	eu (ubA)	
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	parking lot activity	70	5	1	750	0.5	0	46.5	27.6	573.7753105
2	parking lot activity	70	10	1	815	0.5	0	45.8	29.7	932.2469883
3	parking lot activity	70	15	1	850	0.5	0	45.4	31.0	1258.835424
4	parking lot activity	70	10	1	855	0.5	0	45.3	29.2	827.0080254
5										
6										
7										
8										
9										
10										
Notes:							Lmax[4]	46.0	Leq	36

Notes:

[1] Percentage of time activity occurs each hour

[2] Hard ground terrain between project site and receptor.

[3] Shielding reduction from structures or terrain

[4] Calculated Lmax is the Loudest value.



## **H.2 - Mechanical Noise Calculations**

FirstCarbon Solutions



**Mechanical Equipment Operations** 

Receptor	: Residential (west of project site)									
		Reference (dBA)			<b>5</b>					
		50 ft		Usage	Distance to	Ground	Shielding	Calcul	ated (dBA)	
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	self-vacuum unit operations	60	20	1	1160	0.5	0	32.7	18.9	77.1453996
2	self-vacuum unit operations	60	5	1	1160	0.5	0	32.7	12.9	19.2863499
3	self-vacuum unit operations	60	10	1	1220	0.5	0	32.3	15.3	34.0036419
4										
5										
6										
7										
8										
9										
10										
Votes:							Lmax[4]	33.0	Leq	2

Notes:
[1] Percentage of time activity occurs each hour
[2] Hard ground terrain between project site and receptor.
[3] Shielding reduction from structures or terrain
[4] Calculated Lmax is the Loudest value.

## Mechanical Equipment Operations

		10 11 1			ı
eceptor:	Commercial	(Carl's Ir.	south o	of project site	)

Commercial (Carl's Jr. south of project site)									
	Reference (dBA)								
	50 ft		Usage	Distance to	Ground	Shielding	Calculat	ted (dBA)	
Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
self-vacuum unit operations	60	5	1	755	0.5	0	36.4	17.5	56.43228506
self-vacuum unit operations	60	10	1	835	0.5	0	35.5	19.4	87.74226115
self-vacuum unit operations	60	10	1	870	0.5	0	35.2	19.0	79.18207516
self-vacuum unit operations	60	10	1	890	0.5	0	35.0	18.7	74.80833593
						Lmax[4]	36.0	Leq	25
	Equipment Description self-vacuum unit operations self-vacuum unit operations self-vacuum unit operations	Reference (dBA)   50 ft	Reference (dBA)   50 ft	Reference (dBA)   50 ft   Usage	Reference (dBA)   50 ft   Usage   Distance to   Receptor	Reference (dBA)   S0 ft   Usage   Distance to   Ground   Equipment Description   Lmax   Quantity   factor[1]   Receptor   Effect[2]   Self-vacuum unit operations   60   5   1   755   0.5   0	Reference (dBA)   50 ft   Usage   Distance to   Ground   (dBA)[3]	Solitary   Solitary	Reference (dBA)   S0 ft   Usage   Distance to   Ground   Shielding   Calculated (dBA)   Imax   Leq   Self-vacuum unit operations   60   5   1   755   0.5   0   36.4   17.5   1

Notes:
[1] Percentage of time activity occurs each hour
[2] Hard ground terrain between project site and receptor.
[3] Shielding reduction from structures or terrain
[4] Calculated Lmax is the Loudest value.

