

Appendix 20
Construction Impacts

Construction
Manpower and Truck Trips
Projections

**CORNELLNYC TECH PHASE 2B
MANPOWER PROJECTIONS**

	2034								2035								2036								2037																								
	May-34	Jun-34	Jul-34	Aug-34	Sep-34	Oct-34	Nov-34	Dec-34	Jan-35	Feb-35	Mar-35	Apr-35	May-35	Jun-35	Jul-35	Aug-35	Sep-35	Oct-35	Nov-35	Dec-35	Jan-36	Feb-36	Mar-36	Apr-36	May-36	Jun-36	Jul-36	Aug-36	Sep-36	Oct-36	Nov-36	Dec-36	Jan-37	Feb-37	Mar-37	Apr-37	May-37	Jun-37	Jul-37	Aug-37	Sep-37	Oct-37	Nov-37	Dec-37					
Site Utilities, Civil & Landscaping																																																	
Supervision																																																	
Utilities	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10					
Landscaping																																																	
Mixed-Use Building (Academic and Residential; Academic Portion)																																																	
General Carpenters & Laborers	4	6	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8					
Excavation & Foundation	8	8	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16				
Superstructure																																																	
Elevators																																																	
Exterior Façade																																																	
Interior Development																																																	
MEP																																																	
Fire Protection																																																	
FF&E																																																	
Mixed-Use Building (Academic and Residential; Residential Portion)																																																	
General Carpenters & Laborers		4	6	6	6	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8				
Excavation & Foundation		8	24	24	24	36	36	36	36	24	24	8																																					
Superstructure																																																	
Elevators																																																	
Exterior Façade																																																	
Interior Development																																																	
MEP																																																	
Fire Protection																																																	
FF&E																																																	
Corporate Co-location																																																	
General Carpenters & Laborers																																																	
Excavation & Foundation																																																	
Superstructure (Steel)																																																	
Elevators																																																	
Exterior Façade																																																	
Interior Development																																																	
MEP																																																	
Fire Protection																																																	
FF&E																																																	
DAILY WORKER AVERAGE:	38	52	80	80	110	124	124	136	124	152	260	298	398	434	322	324	352	344	352	424	481	474	448	448	460	466	470	466	532	526	530	512	466	452	416	456	334	256	210	206	150	118	118						

2034	2034	2034	2035	2035	2035	2035	2036	2036	2036	2036	2037	2037	2037	2037	
2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
38	71	119	137	319	360	349	460	452	467	529	477	402	224	129	

CORNELLYN TECH
PHASE 1 CONSTRUCTION TRUCK TRIP PROJECTIONS

Activity	Months																																																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42												
	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17												
General Site																																																						
Site & Civil																																																						
Organic Material	14	14	14	14	14	14	14																																															
Roof Removal & Interior Demolition	161	161	161	161	161	161	161	161	161																																													
Abatement	44	44	44	44	44	44	44	44	44																																													
Excavation for Proposed Building Foundations						178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178				
Off Site Utilities										61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61				
Allowances										27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27				
Loop Road Construction																																																						
Material Source																																																						
Landscaping																																																						
Material & Equipment Deliveries																																																						
Material & Equipment Deliveries Site Utilities										26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26			
Loop Road										43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43			
Geothermal																																																						
Photovoltaic																																																						
Site Drainage																																																						
Irrigation																																																						
Site Development																																																						
Softscape																																																						
Site Furnishings																																																						
Site Signage																																																						
Central Utility Plant																																																						
Steel																																																						
Concrete																																																						
Spray Fireproofing																																																						
Curtainwall																																																						
Roofing																																																						
MEP																																																						
Misc & FF&E																																																						
Stewwork & Landscaping																																																						
Academic Building																																																						
Steel																																																						
Concrete																																																						
Spray Fireproofing																																																						
Curtainwall																																																						
Roofing																																																						
Elevators																																																						
MEP																																																						
Finishes																																																						
MISC & FF&E																																																						
Stewwork/Landscaping																																																						
Corporate Co-location																																																						
Steel																																																						
Concrete																																																						
Spray Fireproofing																																																						
Curtainwall																																																						
Roofing																																																						
Elevators																																																						

Projected Equipment List

Projected Equipment List		Equipment Type:	Bobcats	Mini Excavator	Air Compressors	Hand Chopping Tools	Compactor	Barrel Fans	Decontamination Chamber	Komatsu PC1250	Hitachi 750 (With Shear)	Catepillar D9	Loader 973	Crushing Wheel Loader	Crushing Cat D-4 Dozer	Cat 550 Wheel Harvester	Cat 450 Backhoe Loader	Roadway Cold Planer	Soil Compactor	Cat AP555E Asphalt Paver	Hydraulic Excavator	Hoist Tower	Tower Crane	Crawler Crane	LULL 944 E	Welding Rigs	Generators	Pumps	Ejector Pumps	Dewatering Pumps	Concrete Pumps	Setting Rig (mini floor crane)	Swing Rig		
Engine Type		Diesel	Diesel	Diesel	Manual	Diesel	Electric	Electric	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Electric	Diesel	Diesel	Diesel	Diesel	Electric	Gasoline	Gasoline	Gasoline	Gasoline	Diesel	Diesel	Diesel	
Horespower		60	60	100	--	150	--	--	600	400	400	150	150	300	150	150	150	150	200	100	125	--	350	350	50	--	20	20	20	20	350	50	400		
Trade/Activity:																																			
Interior Demolition		8	4	4	8																														
Abatement						1	6	6																											
Structural Demolition						1			2	2	2	1	1	1																					
Civil/Site Work																1	4	1	2	1	2														
Utility Work																	4																		
General Construction																						3	2	2	1										
Excavation																			4		6					8	Mult*			Mult*					
Steel																										40	Mult*								
Concrete																											Mult*				4				
SOFP																												8							
Curtain Wall																										8						4	4		
Elevators																										4									
MEP																										40		Mult*							
Iron (Misc.)																										20									
Metal (Ornamental)																										20									
Equipment Total:		8	4	4	8	2	6	6	2	2	2	1	1	1	1	8	1	6	1	8	3	2	2	1	140	--	8	--	--	4	4	4			

*Mult = Multiple (where needed)

Construction Traffic

Table 1

Construction Phase 1 (Weekday)-Level 1 Screening

Vehicle PCE Trips (Auto + Truck)		Construction Phase 1 (Weekday)-Level 1 Screening																	
		Time	In / Out	2014				2015				2016				2017			
				1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
06:00 AM	- 07:00 AM	Total	65	86	96	103	134	186	342	397	374	370	369	380	365	283	86	0	
07:00 AM	- 08:00 AM	Total	17	26	28	29	40	50	96	111	104	101	100	102	95	76	21	0	
08:00 AM	- 09:00 AM	Total	4	4	8	8	12	12	28	28	28	24	20	16	12	12	0	0	
09:00 AM	- 10:00 AM	Total	4	4	8	8	12	12	28	28	28	24	20	16	12	12	0	0	
10:00 AM	- 11:00 AM	Total	4	4	8	8	12	12	28	28	28	24	20	16	12	12	0	0	
11:00 AM	- 12:00 PM	Total	4	4	8	4	8	12	24	24	24	24	20	12	12	12	0	0	
12:00 PM	- 01:00 PM	Total	4	4	4	8	8	12	28	24	28	24	20	16	12	12	0	0	
01:00 PM	- 02:00 PM	Total	0	4	0	4	4	12	12	12	8	8	12	4	4	8	0	0	
02:00 PM	- 03:00 PM	Total	3	9	5	9	11	17	29	33	31	31	28	30	29	20	5	0	
03:00 PM	- 04:00 PM	Total	57	78	80	87	114	158	286	345	318	322	329	352	341	259	86	0	
04:00 PM	- 05:00 PM	Total	10	13	15	16	21	29	51	62	57	58	60	64	62	48	16	0	
05:00 PM	- 06:00 PM	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Daily Total			172	236	260	284	376	512	952	1092	1028	1010	998	1008	956	754	214	0	

Construction Phase 1 (Weekday)-Auto only

Vehicle PCE Trips (Auto only)		Construction Phase 1 (Weekday)-Auto only																	
		Time	In / Out	2014				2015				2016				2017			
				1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
06:00 AM	- 07:00 AM	In	53	74	80	83	110	150	274	333	306	310	321	344	333	255	86	0	
		Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	53	74	80	83	110	150	274	333	306	310	321	344	333	255	86	0	
07:00 AM	- 08:00 AM	In	13	18	20	21	28	38	68	83	76	77	80	86	83	64	21	0	
		Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	13	18	20	21	28	38	68	83	76	77	80	86	83	64	21	0	
08:00 AM	- 09:00 AM	In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
09:00 AM	- 10:00 AM	In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:00 AM	- 11:00 AM	In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:00 AM	- 12:00 PM	In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:00 PM	- 01:00 PM	In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:00 PM	- 02:00 PM	In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:00 PM	- 03:00 PM	In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Out	3	5	5	5	7	9	17	21	19	19	20	22	21	16	5	0	
		Total	3	5	5	5	7	9	17	21	19	19	20	22	21	16	5	0	
03:00 PM	- 04:00 PM	In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Out	53	74	80	83	110	150	274	333	306	310	321	344	333	255	86	0	
		Total	53	74	80	83	110	150	274	333	306	310	321	344	333	255	86	0	
04:00 PM	- 05:00 PM	In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Out	10	13	15	16	21	29	51	62	57	58	60	64	62	48	16	0	
		Total	10	13	15	16	21	29	51	62	57	58	60	64	62	48	16	0	
05:00 PM	- 06:00 PM	In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
In			66	92	100	104	138	188	342	416	382	387	401	430	416	319	107	0	
Out			66	92	100	104	138	188	342	416	382	387	401	430	416	319	107	0	
Total			132	184	200	208	276	376	684	832	764	774	802	860	832	638	214	0	

Construction Phase 1 (Weekday)-Truck only

Vehicle PCE Trips (Truck only)		Construction Phase 1 (Weekday)-Truck only																	
		Time	In / Out	2014				2015				2016				2017			
				1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
06:00 AM	- 07:00 AM	In	6	6	8	10	12	18	34	32	34	30	24	18	16	14	0	0	
		Out	6	6	8	10	12	18	34	32	34	30	24	18	16	14	0	0	
		Total	12	12	16	20	24	36	68	64	68	60	48	36	32	28	0	0	
07:00 AM	- 08:00 AM	In	2	4	4	4	6	6	14	14	14	12	10	8	6	6	0	0	
		Out	2	4	4	4	6	6	14	14	14	12	10	8	6	6	0	0	
		Total	4	8	8	8	12	12	28	28	28	24	20	16	12	12	0	0	
08:00 AM	- 09:00 AM	In	2	2	4	4	6	6	14	14	14	12	10	8	6	6	0	0	
		Out	2	2	4	4	6	6	14	14	14	12	10	8	6	6	0	0	
		Total	4	4	8	8	12	12	28	28	28	24	20	16	12	12	0	0	
09:00 AM	- 10:00 AM	In	2	2	4	4	6	6	14	14	14	12	10	8	6	6	0	0	
		Out	2	2	4	4	6	6	14	14	14	12	10	8	6	6	0	0	
		Total	4	4	8	8	12	12	28	28	28	24	20	16	12	12	0	0	
10:00 AM	- 11:00 AM	In	2	2	4	4	6	6	14	14	14	12	10	8	6	6	0	0	
		Out	2	2	4	4	6	6	14	14	14	12	10	8	6	6	0	0	
		Total	4	4	8	8	12	12	28	28	28	24	20	16	12	12	0	0	
11:00 AM	- 12:00 PM	In	2	2	4	2	4	6	12	12	12	12	10	6	6	6	0	0	
		Out	2	2	4	2	4	6	12	12	12	12	10	6	6	6	0	0	
		Total	4	4	8	4	8	12	24	24	24	24	20	12	12	12	0	0	
12:00 PM	- 01:00 PM	In	2	2	2	4	4	6	14	12	14	12	10	8	6	6	0	0	
		Out	2	2	2	4	4	6	14	12	14	12	10	8	6	6	0	0	
		Total	4	4	4	8	8	12	28	24	28	24	20	16	12	12	0	0	
01:00 PM	- 02:00 PM	In	0	2	0	2	2	6	6	6	4	4	6	2	2	4	0	0	
		Out	0	2	0	2	2	6	6	6	4	4	6	2	2	4	0	0	
		Total																	

Phase 1: Weekday Auto Trips

Auto 58.0%
Auto Occupancy 1.17

Table 3

Construction Phase 1 -Weekday Hourly Total Auto Trip Projection

Auto Trips		Regular Shift																	
		Regular Shift		2014				2015				2016				2017			
Time	Temporal	Workers		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
		Ph-1 Worker Projection-->		133	186	201	209	279	379	689	839	770	781	808	867	840	644	215	0
06:00 AM - 07:00 AM	80%	In	100%	53	74	80	83	110	150	274	333	306	310	321	344	333	255	86	0
		Out	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total		53	74	80	83	110	150	274	333	306	310	321	344	333	255	86	0
07:00 AM - 08:00 AM	20%	In	100%	13	18	20	21	28	38	68	83	76	77	80	86	83	64	21	0
		Out	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	100%	13	18	20	21	28	38	68	83	76	77	80	86	83	64	21	0
08:00 AM - 09:00 AM	0%	In	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Out	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 AM - 10:00 AM	0%	In	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Out	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM - 11:00 AM	0%	In	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Out	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM - 12:00 PM	0%	In	50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Out	50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 01:00 PM	0%	In	50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Out	50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM - 02:00 PM	0%	In	50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Out	50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM - 03:00 PM	5%	In	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Out	100%	3	5	5	5	7	9	17	21	19	19	20	22	21	16	5	0
		Total	100%	3	5	5	5	7	9	17	21	19	19	20	22	21	16	5	0
03:00 PM - 04:00 PM	80%	In	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Out	100%	53	74	80	83	110	150	274	333	306	310	321	344	333	255	86	0
		Total	100%	53	74	80	83	110	150	274	333	306	310	321	344	333	255	86	0
04:00 PM - 05:00 PM	15%	In	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Out	100%	10	13	15	16	21	29	51	62	57	58	60	64	62	48	16	0
		Total	100%	10	13	15	16	21	29	51	62	57	58	60	64	62	48	16	0
05:00 PM - 06:00 PM	0%	In	0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Out	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		In		66	92	100	104	138	188	342	416	382	387	401	430	416	319	107	0
		Out		66	92	100	104	138	188	342	416	382	387	401	430	416	319	107	0
		Total		132	184	200	208	276	376	684	832	764	774	802	860	832	638	214	0

Phase 1: Weekday Truck Trips

Table 4

Construction Phase 1 -Weekday Hourly Truck Trip Projection

Truck Trips			Regular Shift															
Time	Regular Shift Trucks		2014				2015				2016				2017			
	Temporal	Ph-1 Truck Projection-->	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
			10	13	15	19	25	34	67	65	66	59	49	37	31	29	0	0
06:00 AM - 07:00 AM	25%	In 100% Out 100%	3	3	4	5	6	9	17	16	17	15	12	9	8	7	0	0
07:00 AM - 08:00 AM	10%	In 100% Out 100%	1	2	2	2	3	3	7	7	7	6	5	4	3	3	0	0
08:00 AM - 09:00 AM	10%	In 100% Out 100%	1	1	2	2	3	3	7	7	7	6	5	4	3	3	0	0
09:00 AM - 10:00 AM	10%	In 100% Out 100%	1	1	2	2	3	3	7	7	7	6	5	4	3	3	0	0
10:00 AM - 11:00 AM	10%	In 100% Out 100%	1	1	2	2	3	3	7	7	7	6	5	4	3	3	0	0
11:00 AM - 12:00 PM	10%	In 100% Out 100%	1	1	2	1	2	3	6	6	6	6	5	3	3	3	0	0
12:00 PM - 01:00 PM	10%	In 100% Out 100%	1	1	1	2	2	3	7	6	7	6	5	4	3	3	0	0
01:00 PM - 02:00 PM	5%	In 100% Out 100%	0	1	0	1	1	3	3	3	2	2	3	1	1	2	0	0
02:00 PM - 03:00 PM	5%	In 100% Out 100%	0	1	0	1	1	2	3	3	3	3	2	2	2	1	0	0
03:00 PM - 04:00 PM	5%	In 100% Out 100%	1	1	0	1	1	2	3	3	3	3	2	2	2	1	0	0
04:00 PM - 05:00 PM	0%	In 100% Out 100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM - 06:00 PM	0%	In 100% Out 100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	100%	In	10	13	15	19	25	34	67	65	66	59	49	37	31	29	0	0
		Out	10	13	15	19	25	34	67	65	66	59	49	37	31	29	0	0
		Total	20	26	30	38	50	68	134	130	132	118	98	74	62	58	0	0

Table 4A

Construction Phase 1 -Weekday Hourly Truck Trip Projection (PCE)

PCE 2.00

Truck PCE Trips			Regular Shift															
Time	Regular Shift Trucks		2014				2015				2016				2017			
	Temporal	In / Out	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
06:00 AM - 07:00 AM	25%	In 100% Out 100%	6	6	8	10	12	18	34	32	34	30	24	18	16	14	0	0
07:00 AM - 08:00 AM	10%	In 100% Out 100%	2	4	4	4	6	6	14	14	14	12	10	8	6	6	0	0
08:00 AM - 09:00 AM	10%	In 100% Out 100%	2	2	4	4	6	6	14	14	14	12	10	8	6	6	0	0
09:00 AM - 10:00 AM	10%	In 100% Out 100%	2	2	4	4	6	6	14	14	14	12	10	8	6	6	0	0
10:00 AM - 11:00 AM	10%	In 100% Out 100%	2	2	4	4	6	6	14	14	14	12	10	8	6	6	0	0
11:00 AM - 12:00 PM	10%	In 100% Out 100%	2	2	4	2	4	6	12	12	12	12	10	6	6	6	0	0
12:00 PM - 01:00 PM	10%	In 100% Out 100%	2	2	2	4	4	6	14	12	14	12	10	8	6	6	0	0
01:00 PM - 02:00 PM	5%	In 100% Out 100%	0	2	0	2	2	6	6	6	4	4	6	2	2	4	0	0
02:00 PM - 03:00 PM	5%	In 100% Out 100%	0	2	0	2	2	4	6	6	6	6	4	4	4	2	0	0
03:00 PM - 04:00 PM	5%	In 100% Out 100%	2	2	0	2	2	4	6	6	6	6	4	4	4	2	0	0
04:00 PM - 05:00 PM	0%	In 100% Out 100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM - 06:00 PM	0%	In 100% Out 100%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		In	20	26	30	38	50	68	134	130	132	118	98	74	62	58	0	0
		Out	20	26	30	38	50	68	134	130	132	118	98	74	62	58	0	0
		Total	40	52	60	76	100	136	268	260	264	236	196	148	124	116	0	0

Construction Phase 2 (Weekday)-Level 1 Screening

Vehicle PCE Trips (Auto + Truck)																																									
		2024				2025				2026				2027				2028				2034				2035				2036				2037							
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Time	In / Out																																								
06:00 AM - 07:00 AM	Total	0	45	72	82	102	163	209	213	224	226	210	233	213	174	94	71	54	0	0	0	0	31	48	67	78	154	170	162	202	195	206	234	213	179	101	59				
07:00 AM - 08:00 AM	Total	0	15	21	27	33	47	59	57	61	62	56	63	58	45	25	19	14	0	0	0	0	12	15	20	22	44	48	43	54	53	54	60	55	48	26	17				
08:00 AM - 09:00 AM	Total	0	8	8	8	8	8	16	12	12	12	8	12	12	8	4	4	4	0	0	0	0	8	8	8	8	12	12	8	8	8	8	8	8	8	8	4				
09:00 AM - 10:00 AM	Total	0	8	8	8	8	8	16	12	12	12	8	12	12	8	4	4	4	0	0	0	0	8	8	8	8	12	12	8	8	8	8	8	8	8	8	4				
10:00 AM - 11:00 AM	Total	0	8	8	8	8	8	16	12	12	12	8	12	12	8	4	4	4	0	0	0	0	8	8	8	8	12	12	8	8	8	8	8	8	8	8	4				
11:00 AM - 12:00 PM	Total	0	4	8	8	8	8	12	12	12	12	8	12	12	8	4	4	4	0	0	0	0	4	8	8	8	12	8	8	8	8	8	8	8	8	8	4				
12:00 PM - 01:00 PM	Total	0	4	8	8	8	8	12	12	12	12	8	12	12	8	4	4	4	0	0	0	0	4	8	8	8	12	8	8	8	4	8	12	12	8	8	4				
01:00 PM - 02:00 PM	Total	0	0	4	4	4	4	4	4	4	4	0	4	8	8	4	4	0	0	0	0	0	0	4	4	8	8	4	8	8	0	0	8	8	8	8	4				
02:00 PM - 03:00 PM	Total	0	2	7	8	9	13	15	15	12	13	12	17	16	13	5	4	3	0	0	0	0	1	6	7	11	12	13	13	15	11	12	21	20	14	10	3				
03:00 PM - 04:00 PM	Total	0	33	56	62	86	143	181	189	200	206	194	209	189	154	86	63	46	0	0	0	0	19	32	51	58	130	146	142	186	183	190	214	193	163	93	51				
04:00 PM - 05:00 PM	Total	0	5	10	11	16	26	32	34	37	37	36	38	34	28	16	11	7	0	0	0	0	3	5	9	11	24	27	26	35	34	34	39	35	30	16	10				
05:00 PM - 06:00 PM	Total	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	0	0	0	0	0	0	0	0	0	0				
Daily Total		0	132	210	234	290	436	572	572	598	604	548	624	578	462	250	192	144	0	0	0	0	98	150	198	228	432	460	434	540	512	536	620	568	482	274	164				

Construction Phase 2 (Weekday)-Auto only

Vehicle PCE Trips (Auto only)																																									
		2024				2025				2026				2027				2028				2034				2035				2036				2037							
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Time	In / Out																																								
06:00 AM - 07:00 AM	In	0	29	52	58	82	139	173	181	196	202	190	205	185	150	82	59	42	0	0	0	0	15	28	47	54	126	142	138	182	179	186	210	189	159	89	51				
	Out	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	0	0	0	0	0	0	0	0	0	0				
	Total	0	29	52	58	82	139	173	181	196	202	190	205	185	150	82	59	42	0	0	0	0	15	28	47	54	126	142	138	182	179	186	210	189	159	89	51				
07:00 AM - 08:00 AM	In	0	7	13	15	21	35	43	45	49	50	48	51	46	37	21	15	10	0	0	0	0	4	7	12	14	32	36	35	46	45	46	52	47	40	22	13				
	Out	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	0	0	0	0	0	0	0	0	0	0				
	Total	0	7	13	15	21	35	43	45	49	50	48	51	46	37	21	15	10	0	0	0	0	4	7	12	14	32	36	35	46	45	46	52	47	40	22	13				
08:00 AM - 09:00 AM	In	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	0	0	0	0	0	0	0	0	0	0				
	Out	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	0	0	0	0	0	0	0	0	0	0				
	Total	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	0	0	0	0	0	0	0	0	0	0				
09:00 AM - 10:00 AM	In	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	0	0	0	0	0	0	0	0	0	0				
	Out	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	0	0	0	0	0	0	0	0	0	0				
	Total	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	0	0	0	0	0	0	0	0	0	0				
10:00 AM - 11:00 AM	In	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	0	0	0	0	0	0	0	0	0	0				
	Out	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	0	0	0	0	0	0	0	0	0	0				
	Total	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	0	0	0	0	0	0	0	0	0	0				
11:00 AM - 12:00 PM	In	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	0	0	0	0	0	0	0	0	0	0				
	Out	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	0	0	0	0	0	0	0	0	0	0				
	Total	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	0	0	0	0	0	0	0	0	0	0				
12:00 PM - 01:00 PM	In	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	0	0	0	0	0	0	0	0	0	0				
	Out	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	0	0	0	0	0	0	0	0	0	0				
	Total	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	0	0	0	0	0	0	0	0	0	0				
01:00 PM - 02:00 PM	In	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	0	0	0	0	0	0	0	0	0	0				
	Out	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	0	0	0	0	0	0	0	0	0	0				
	Total	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	0	0	0	0	0	0	0	0	0	0				
02:00 PM - 03:00 PM	In	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	0	0	0	0	0	0	0	0	0	0				
	Out	0	2	3	4	5	9	11	11	12	13	12	13	12	9	5	4	3	0	0	0	1	2	3	3	8	9	9	11	11	12	13	12	10	6	3					
	Total	0	2	3	4	5	9	11	11	12	13	12	13	12	9	5	4	3	0	0	0	1	2	3	3	8	9	9	11	11	12	13	12	10	6	3					
03:00 PM - 04:00 PM	In	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	0	0	0	0	0	0	0	0	0	0				
	Out	0	29	52	58	82	139	173	181	196	202	190	205	185	150	82	59	42	0	0	0	0	15	28	47	54	126	142	138	182	179	186	210	189	159	89	51				
	Total	0	29	52	58	82	139	173	181	196	202	190	205	185	150	82	59	42	0	0	0	0	15	28																	

Weekday Phase 2 Vehicle Trips

Table 6
Construction Phase 2 - Weekday Hourly Total Vehicle Trip Projection

Vehicle Trips (Auto + Truck)				2024																												2025				2026				2027				2028				2034				2035				2036				2037			
				1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q																								
Time																																																															
06:00 AM	-	07:00 AM	In	0	33	57	64	87	145	182	189	203	208	195	212	192	156	85	62	45	0	0	0	0	0	19	33	52	60	133	149	144	187	183	191	216	195	164	92	53																							
			Out	0	4	5	6	5	6	9	8	7	6	5	7	6	3	3	3	0	0	0	0	0	0	4	5	5	6	7	7	6	5	4	6	6	6	6	5	3	2																						
			Total	0	37	62	70	92	151	191	197	210	214	200	219	199	162	88	65	48	0	0	0	0	0	23	38	57	66	140	156	150	192	187	196	222	201	169	95	55																							
07:00 AM	-	08:00 AM	In	0	9	15	18	24	38	47	48	52	53	50	54	49	39	22	16	11	0	0	0	0	0	6	9	14	16	35	39	37	48	47	48	54	49	42	23	14																							
			Out	0	2	2	3	3	3	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	2	1	1																						
			Total	0	11	17	21	27	41	51	51	55	56	52	57	52	41	23	17	12	0	0	0	0	0	8	11	16	18	38	42	39	50	49	50	56	51	44	24	15																							
08:00 AM	-	09:00 AM	In	0	2	2	2	2	2	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	1	1																							
			Out	0	2	2	2	2	2	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	2	1	1																						
			Total	0	4	4	4	4	4	8	6	6	6	4	6	6	4	2	2	2	0	0	0	0	0	4	4	4	4	6	6	4	4	4	4	4	4	4	4	4	2	2																					
09:00 AM	-	10:00 AM	In	0	2	2	2	2	2	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	2	1	1																						
			Out	0	2	2	2	2	2	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	2	1	1																						
			Total	0	4	4	4	4	4	8	6	6	6	4	6	6	4	2	2	2	0	0	0	0	0	4	4	4	4	6	6	4	4	4	4	4	4	4	4	4	2	2																					
10:00 AM	-	11:00 AM	In	0	2	2	2	2	2	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	2	1	1																						
			Out	0	2	2	2	2	2	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	2	1	1																						
			Total	0	4	4	4	4	4	8	6	6	6	4	6	6	4	2	2	2	0	0	0	0	0	4	4	4	4	6	6	4	4	4	4	4	4	4	4	4	2	2																					
11:00 AM	-	12:00 PM	In	0	1	2	2	2	2	3	3	3	3	2	3	3	2	1	1	1	0	0	0	0	0	1	2	2	2	3	2	2	2	2	2	2	2	2	2	1	1																						
			Out	0	1	2	2	2	2	3	3	3	3	2	3	3	2	1	1	1	0	0	0	0	0	1	2	2	2	3	2	2	2	2	2	2	2	2	2	2	1	1																					
			Total	0	2	4	4	4	4	6	6	6	6	4	6	6	4	2	2	2	0	0	0	0	0	2	4	4	4	6	4	4	4	4	4	4	4	4	4	4	2	2																					
12:00 PM	-	01:00 PM	In	0	1	2	2	2	2	3	3	3	3	2	3	3	2	1	1	1	0	0	0	0	0	1	2	2	2	3	2	2	2	2	2	2	2	2	2	1	1																						
			Out	0	1	2	2	2	2	3	3	3	3	2	3	3	2	1	1	1	0	0	0	0	0	1	2	2	2	3	2	2	2	2	2	2	2	2	2	2	1	1																					
			Total	0	2	4	4	4	4	6	6	6	6	4	6	6	4	2	2	2	0	0	0	0	0	2	4	4	4	6	4	4	4	4	4	4	4	4	4	4	2	2																					
01:00 PM	-	02:00 PM	In	0	0	1	1	1	1	1	1	1	0	0	1	2	2	1	1	0	0	0	0	0	0	0	1	1	1	2	2	1	2	2	0	0	2	2	1	1																							
			Out	0	0	1	1	1	1	1	1	1	0	0	1	2	2	1	1	0	0	0	0	0	0	0	1	1	1	2	2	1	2	2	0	0	2	2	1	1																							
			Total	0	0	2	2	2	2	2	2	2	0	0	2	4	4	2	2	0	0	0	0	0	0	0	1	2	2	3	3	2	4	4	0	0	4	4	2	2																							
02:00 PM	-	03:00 PM	In	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	2	1	1	1	0	0	2	2	1	0																								
			Out	0	2	4	5	6	10	12	12	12	13	12	14	13	10	5	4	3	0	0	0	0	0	1	3	4	5	9	10	10	12	11	12	15	14	11	7	3																							
			Total	0	2	5	6	7	11	13	13	12	13	12	15	14	11	5	4	3	0	0	0	0	0	1	4	5	7	10	11	13	11	12	17	16	12	8	3																								
03:00 PM	-	04:00 PM	In	0	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0																							
			Out	0	30	53	59	83	140	175	183	197	203	191	206	186	151	83	60	43	0	0	0	0	0	16	29	48	55	127	143	139	183	180	187	211	190	160	90	51																							
			Total	0	31	54	60	84	141	177	185	198	204	192	207	187	152	84	61	44	0	0	0	0	0	17	30	49	56	128	144	140	184	181	188	212	191	161	91	51																							
04:00 PM	-	05:00 PM	In	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	0	0	0	0	0	0	0	0	0	0																								
			Out	0	5	10	11	16	26	32	34	37	37	36	38	34	28	16	11	7	0	0	0	0	0	3	5	9	11	24	27	26	35	34	39	35	30	16	10																								
			Total	0	5	10	11	16	26	32	34	37	37	36	38	34	28	16	11	7	0	0	0	0	0	3	5	9	11	24	27	26	35	34	39	35	30	16	10																								
05:00 PM	-	06:00 PM	In	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	0	0	0	0	0	0	0	0	0	0																								
			Out	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	0	0	0	0	0	0	0	0	0	0	0																							
			Total	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	0	0	0	0	0	0	0	0	0	0	0																							
			In	0	51	85	95	124	196	251	256	272	277	256	284	260	209	114	85	62	0	0	0	0	0	34	55	79	91	187	204	195	249	240	250	286	260	220	124	73																							
			Out	0	51	85	95	124	196	251	256	272	277	256	284	260	209	114	85	62	0	0	0	0	0	34	55	79	91	187	204	195	249	240	250	286	260	220	124	73																							
			Total	0	102	170	190	248	392	502	512	544	554	512	568	520	418	228	170	124	0	0	0	0	0	68	110	158	182	374	408	390	498	480	500	572	520	440	248	146																							

Vehicle PCE Trips (Auto + Truck in PCEs)				2014																												2015				2016				2017				2018				2034				2035				2036				2037			
				1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q																								
Time																																																															
06:00 AM	-	07:00 AM	In	0	37	62	70	92	151	191	197	210	214	200	219	199	162	88	65	48	0	0	0	0	0	23	38	57	66	140	156	150	192	187	196	222	201	169	95	55																							
			Out	0	8	10	12	10	12	18	16	14	12	10	14	12	6	6	6	0	0	0	0	0	0	8	10	10	12	14	14	12	10	12	10	12	10	12	6	4																							
			Total	0	45	72	82	102	163	209	213	224	226	210	233																																																

Phase 2: Weekday Auto Trips

Auto 58.0%
Auto Occupancy 1.17

Table 7

Construction Phase 2 -Weekday Hourly Total Auto Trip Projection

Auto Trips		Regular Shift																																						
		Regular Shift		2024				2025				2026				2027				2028				2034				2035				2036				2037				
		Workers	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q		
Time	Temporal	Ph-2 Worker Projection-->		72	131	147	207	352	435	455	494	508	481	516	465	377	207	149	104					38	71	119	137	319	360	349	460	452	467	529	477	402	224	129		
06:00 AM - 07:00 AM	80%	In 100%	0	29	52	58	82	139	173	181	196	202	190	205	185	150	82	59	42	0	0	0	0	0	15	28	47	54	126	142	138	182	179	186	210	189	159	89	51	
		Out 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	0	0	0	0	0	0	0	0	0	0	0	0	
		Total 100%	0	29	52	58	82	139	173	181	196	202	190	205	185	150	82	59	42	0	0	0	0	0	15	28	47	54	126	142	138	182	179	186	210	189	159	89	51	
07:00 AM - 08:00 AM	20%	In 100%	0	7	13	15	21	35	43	45	49	50	48	51	46	37	21	15	10	0	0	0	0	0	4	7	12	14	32	36	35	46	45	46	52	47	40	22	13	
		Out 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	0	0	0	0	0	0	0	0	0	0	0	0	
		Total 100%	0	7	13	15	21	35	43	45	49	50	48	51	46	37	21	15	10	0	0	0	0	0	4	7	12	14	32	36	35	46	45	46	52	47	40	22	13	
08:00 AM - 09:00 AM	0%	In 100%	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	0	0	0	0	0	0	0	0	0	0	0	
		Out 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	0	0	0	0	0	0	0	0	0	0	0	0	
		Total 100%	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	0	0	0	0	0	0	0	0	0	0	0	0
09:00 AM - 10:00 AM	0%	In 100%	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	0	0	0	0	0	0	0	0	0	0	0	0
		Out 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	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total 100%	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	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM - 11:00 AM	0%	In 100%	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	0	0	0	0	0	0	0	0	0	0	0	0
		Out 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	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total 100%	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	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM - 12:00 PM	0%	In 50%	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	0	0	0	0	0	0	0	0	0	0	0	0
		Out 50%	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	0	0	0	0	0	0	0	0	0	0	0	0
		Total 100%	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	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 01:00 PM	0%	In 50%	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	0	0	0	0	0	0	0	0	0	0	0	0
		Out 50%	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	0	0	0	0	0	0	0	0	0	0	0	0
		Total 100%	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	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM - 02:00 PM	0%	In 50%	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	0	0	0	0	0	0	0	0	0	0	0	0
		Out 50%	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	0	0	0	0	0	0	0	0	0	0	0	0
		Total 100%	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	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM - 03:00 PM	5%	In 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	0	0	0	0	0	0	0	0	0	0	0	0	0
		Out 100%	0	2	3	4	5	9	11	11	12	13	12	13	12	9	5	4	3	0	0	0	0	0	1	2	3	3	8	9	9	11	11	12	13	12	10	6	3	
		Total 100%	0	2	3	4	5	9	11	11	12	13	12	13	12	9	5	4	3	0	0	0	0	0	1	2	3	3	8	9	9	11	11	12	13	12	10	6	3	
03:00 PM - 04:00 PM	80%	In 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	0	0	0	0	0	0	0	0	0	0	0	0	0
		Out 100%	0	29	52	58	82	139	173	181	196	202	190	205	185	150	82	59	42	0	0	0	0	0	15	28	47	54	126	142	138	182	179	186	210	189	159	89	51	
		Total 100%	0	29	52	58	82	139	173	181	196	202	190	205	185	150	82	59	42	0	0	0	0	0	15	28	47	54	126	142	138	182	179	186	210	189	159	89	51	
04:00 PM - 05:00 PM	15%	In 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	0	0	0	0	0	0	0	0	0	0	0	0	0
		Out 100%	0	5	10	11	16	26	32	34	37	37	36	38	34	28	16	11	7	0	0	0	0	0	3	5	9	11	24	27	26	35	34	34	39	35	30	16	10	
		Total 100%	0	5	10	11	16	26	32	34	37	37	36	38	34	28	16	11	7	0	0	0	0	0	3	5	9	11	24	27	26	35	34	34	39	35	30	16	10	
05:00 PM - 06:00 PM	0%	In 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	0	0	0	0	0	0	0	0	0	0	0	0	0
		Out 100%	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	0	0	0	0	0	0	0	0	0	0	0	0
		Total 100%	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	0	0	0	0	0	0	0	0	0	0	0	0
	200%	In	0	36	65	73	103	174	216	226	245	252	238	256	231	187	103	74	52	0	0	0	0	0	19	35	59	68	158	178	173	228	224	232	262	236	199	111	64	
		Out	0	36	65	73	103	174	216	226	245	252	238	256	231	187	103	74	52	0	0	0	0	0	19	35	59	68	158	178	173	228	224	232	262	236	199	111	64	
		Total	0	72	130	146	206	348	432	452	490	504	476	512	462	374	206	148	104	0	0	0	0	0	38	70	118	136	316	356	346	456	448	464	524	472	398	222	128	

Phase 2: Weekday Truck Trips

Table 8

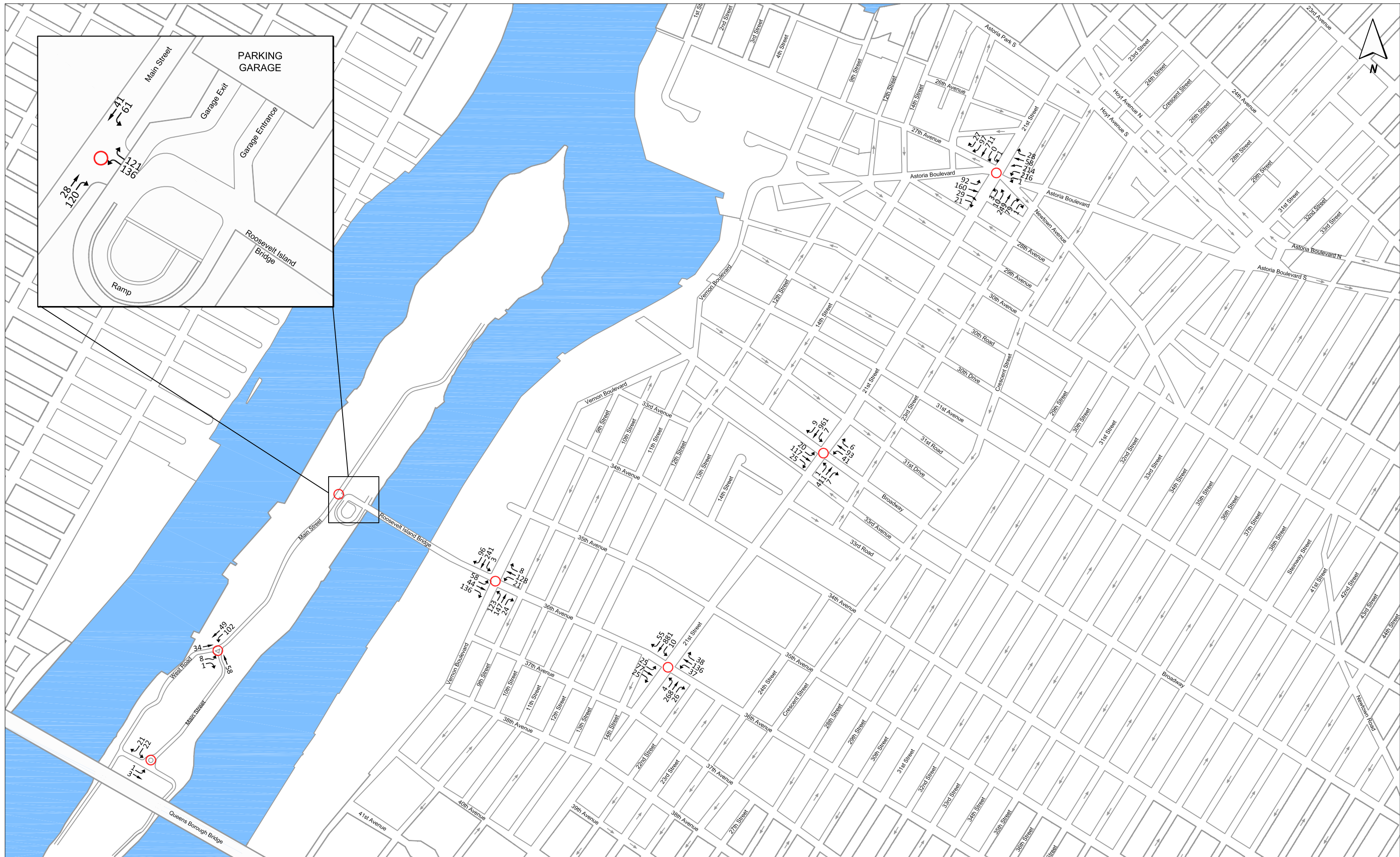
Truck Trips			Regular Shift																																							
Time	Regular Shift Trucks	Ph-2 Truck Projection-->	2024				2025				2026				2027				2028				2034				2035				2036				2037							
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
			15	20	22	22	21	22	35	30	27	25	18	28	29	22	11	11	10				15	20	20	20	23	29	26	22	21	16	18	24	24	21	13	9				
06:00 AM - 07:00 AM	25%	In 100%	0	4	5	6	5	6	9	8	7	6	5	7	7	6	3	3	3	0	0	0	0	4	5	5	6	7	7	6	5	4	5	6	6	5	3	2				
		Out 100%	0	4	5	6	5	6	9	8	7	6	5	7	7	6	3	3	3	0	0	0	0	4	5	5	6	7	7	6	5	4	5	6	6	5	3	2				
		Total	0	8	10	12	10	12	18	16	14	12	10	14	14	12	6	6	6	0	0	0	0	8	10	10	12	14	14	12	10	8	10	12	12	10	6	4				
07:00 AM - 08:00 AM	10%	In 100%	0	2	2	3	3	3	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	1	1				
		Out 100%	0	2	2	3	3	3	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	1	1				
		Total	0	4	4	6	6	6	8	6	6	6	4	6	6	4	2	2	2	0	0	0	0	4	4	4	4	6	6	4	4	4	4	4	4	4	2	2				
08:00 AM - 09:00 AM	10%	In 100%	0	2	2	2	2	2	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	1	1				
		Out 100%	0	2	2	2	2	2	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	1	1				
		Total	0	4	4	4	4	4	8	6	6	6	4	6	6	4	2	2	2	0	0	0	0	4	4	4	4	6	6	4	4	4	4	4	4	4	2	2				
09:00 AM - 10:00 AM	10%	In 100%	0	2	2	2	2	2	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	1	1				
		Out 100%	0	2	2	2	2	2	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	1	1				
		Total	0	4	4	4	4	4	8	6	6	6	4	6	6	4	2	2	2	0	0	0	0	4	4	4	4	6	6	4	4	4	4	4	4	4	2	2				
10:00 AM - 11:00 AM	10%	In 100%	0	2	2	2	2	2	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	1	1				
		Out 100%	0	2	2	2	2	2	4	3	3	3	2	3	3	2	1	1	1	0	0	0	0	2	2	2	2	3	3	2	2	2	2	2	2	2	1	1				
		Total	0	4	4	4	4	4	8	6	6	6	4	6	6	4	2	2	2	0	0	0	0	4	4	4	4	6	6	4	4	4	4	4	4	4	2	2				
11:00 AM - 12:00 PM	10%	In 100%	0	1	2	2	2	2	3	3	3	3	2	3	3	2	1	1	1	0	0	0	0	1	2	2	2	3	2	2	2	2	2	2	2	2	1	1				
		Out 100%	0	1	2	2	2	2	3	3	3	3	2	3	3	2	1	1	1	0	0	0	0	1	2	2	2	3	2	2	2	2	2	2	2	2	1	1				
		Total	0	2	4	4	4	4	6	6	6	6	4	6	6	4	2	2	2	0	0	0	0	2	4	4	4	6	4	4	4	4	4	4	4	4	2	2				
12:00 PM - 01:00 PM	10%	In 100%	0	1	2	2	2	2	3	3	3	3	2	3	3	2	1	1	1	0	0	0	0	1	2	2	2	3	2	2	2	1	2	3	3	2	2	1				
		Out 100%	0	1	2	2	2	2	3	3	3	3	2	3	3	2	1	1	1	0	0	0	0	1	2	2	2	3	2	2	2	1	2	3	3	2	2	1				
		Total	0	2	4	4	4	4	6	6	6	6	4	6	6	4	2	2	2	0	0	0	0	2	4	4	4	6	4	4	4	2	4	6	6	4	4	2				
01:00 PM - 02:00 PM	5%	In 100%	0	0	1	1	1	1	1	1	1	0	0	1	2	2	1	1	0	0	0	0	0	0	1	1	2	2	1	2	2	0	0	2	2	2	1	1				
		Out 100%	0	0	1	1	1	1	1	1	1	0	0	1	2	2	1	1	0	0	0	0	0	0	1	1	2	2	1	2	2	0	0	2	2	2	1	1				
		Total	0	0	2	2	2	2	2	2	2	0	0	2	4	4	2	2	0	0	0	0	0	0	2	2	4	4	2	4	4	0	0	4	4	4	2	2				
02:00 PM - 03:00 PM	5%	In 100%	0	0	1	1	1	1	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	1	1	2	1	1	1	1	0	0	2	2	1	1	0				
		Out 100%	0	0	1	1	1	1	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	1	1	2	1	1	1	1	0	0	2	2	1	1	0				
		Total	0	0	2	2	2	2	2	2	0	0	0	2	2	2	0	0	0	0	0	0	0	0	2	2	4	2	2	2	2	0	0	4	4	2	2	0				
03:00 PM - 04:00 PM	5%	In 100%	0	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0				
		Out 100%	0	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0				
		Total	0	2	2	2	2	2	4	4	2	2	2	2	2	2	2	2	2	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0				
04:00 PM - 05:00 PM	0%	In 100%	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	0	0	0	0	0	0	0	0	0	0				
		Out 100%	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	0	0	0	0	0	0	0	0	0	0				
		Total	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	0	0	0	0	0	0	0	0	0	0				
05:00 PM - 06:00 PM	0%	In 100%	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	0	0	0	0	0	0	0	0	0	0				
		Out 100%	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	0	0	0	0	0	0	0	0	0	0				
		Total	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	0	0	0	0	0	0	0	0	0	0				
Total	100%	In	0	15	20	22	21	22	35	30	27	25	18	28	29	22	11	11	10	0	0	0	0	15	20	20	23	29	26	22	21	16	18	24	24	21	13	9				
		Out	0	15	20	22	21	22	35	30	27	25	18	28	29	22	11	11	10	0	0	0	0	15	20	20	23	29	26	22	21	16	18	24	24	21	13	9				
		Total	0	30	40	44	42	44	70	60	54	50	36	56	58	44	22	22	20	0	0	0	0	30	40	40	46	58	52	44	42	32	36	48	48	42	26	18				

Table 8A

PCE 2.00

Construction Phase 2 -Weekday Hourly Truck Trip Projection (PCE)

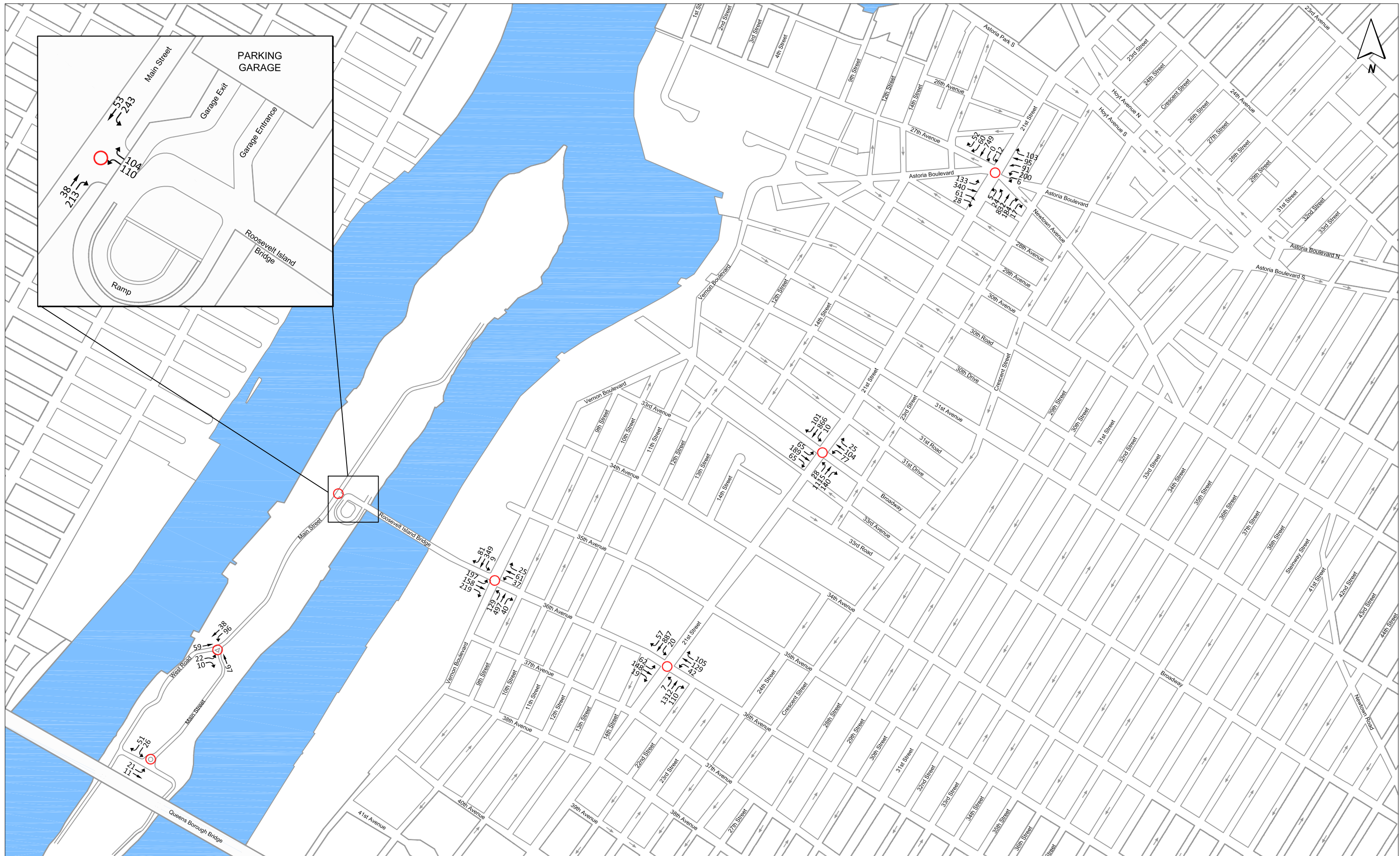
Truck PCE Trips			Regular Shift																																							
Time	Regular Shift Trucks	In / Out	2024				2025				2026				2027				2028				2034				2035				2036				2037							
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q								
			8	10	12	12	10	12	18	16	14	12	10	14	14	12	6	6	6	0	0	0	0	8	10	10	12	14	14	12	10	8	10	12	12	10	6	4				
06:00 AM - 07:00 AM	25%	In 100%	0	8	10	12	10	12	18	16	14	12	10	14	14	12	6	6	6	0	0	0	0	8	10	10	12	14	14	12	10	8	10	12	12	10	6	4				
		Out 100%	0	8	10	12	10	12	18	16	14	12	10	14	14	12	6	6	6	0	0	0	0	8	10	10	12	14	14	12	10	8	10	12	12	10	6	4				
		Total	0	16	20	24	20	24	36	32	28	24	20	28	28	24	12	12	12	0	0	0	0																			



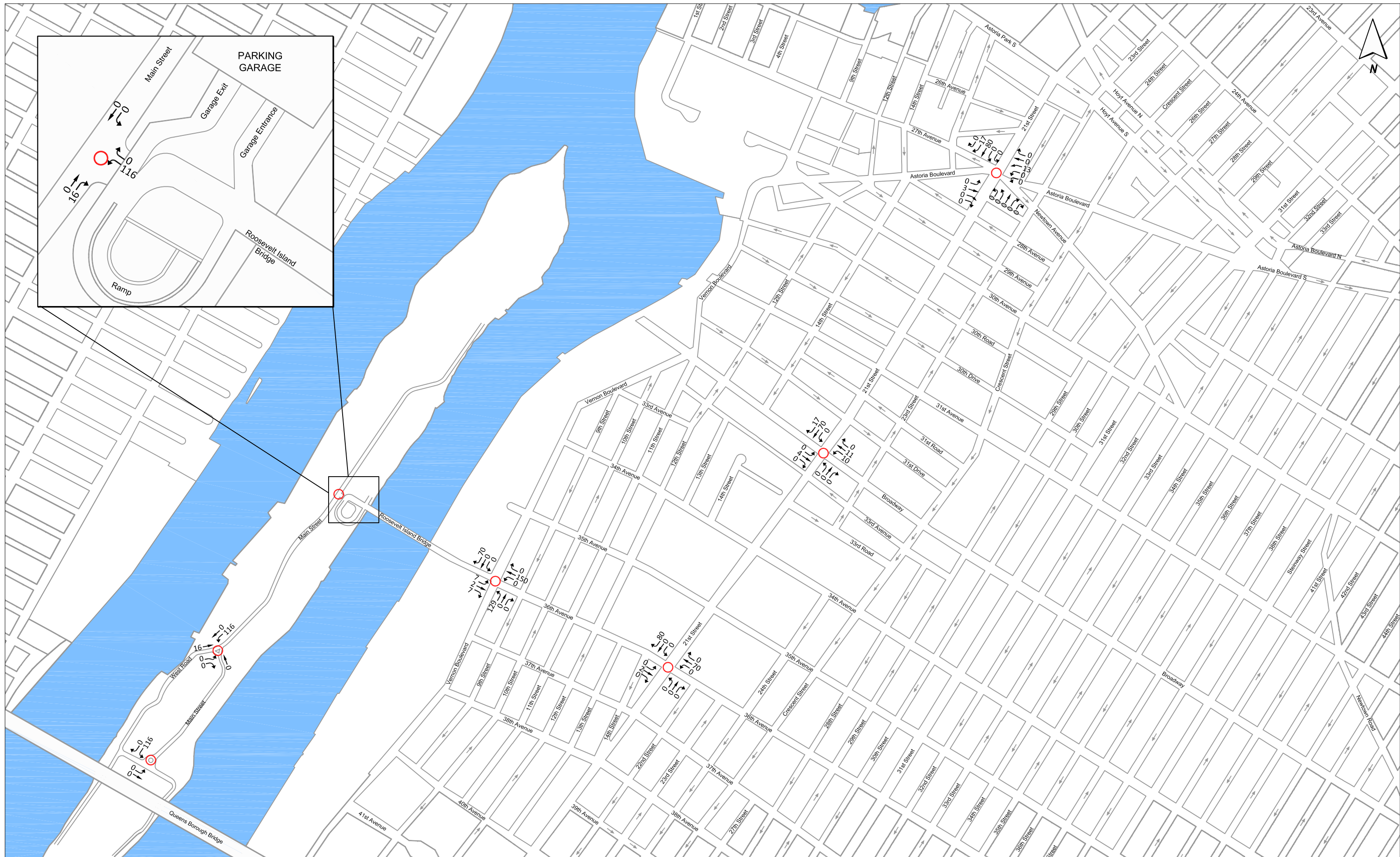
Note: Left turns are prohibited in the northbound and southbound directions at the intersections of Broadway at 21st Street, and 36th Avenue at 21st Street, and in the southbound direction at the intersection of 36th Avenue at 31st Street during the weekday AM peak hour.

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Figure 1: Phase I Construction Future Traffic Volumes Without Construction of the Proposed Project -- 6 - 7 AM Peak Hour



Note: Left turns are prohibited in the northbound and southbound directions at the intersections of Broadway at 21st Street, 36th Avenue at 21st Street, and 36th Avenue at 31st Street during the weekday PM peak hour.



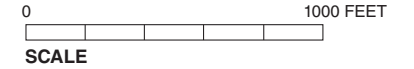
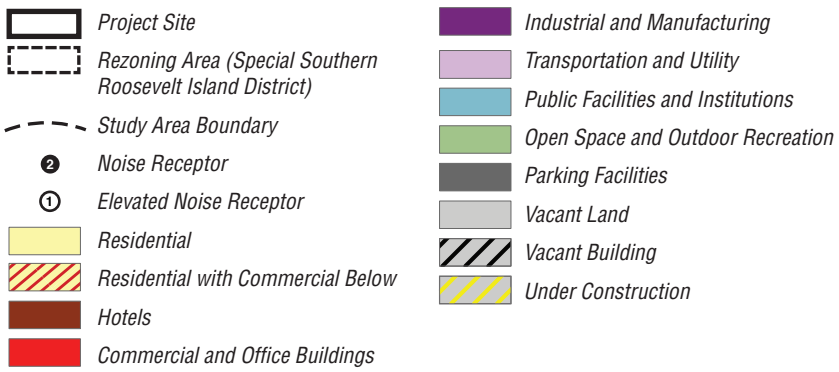
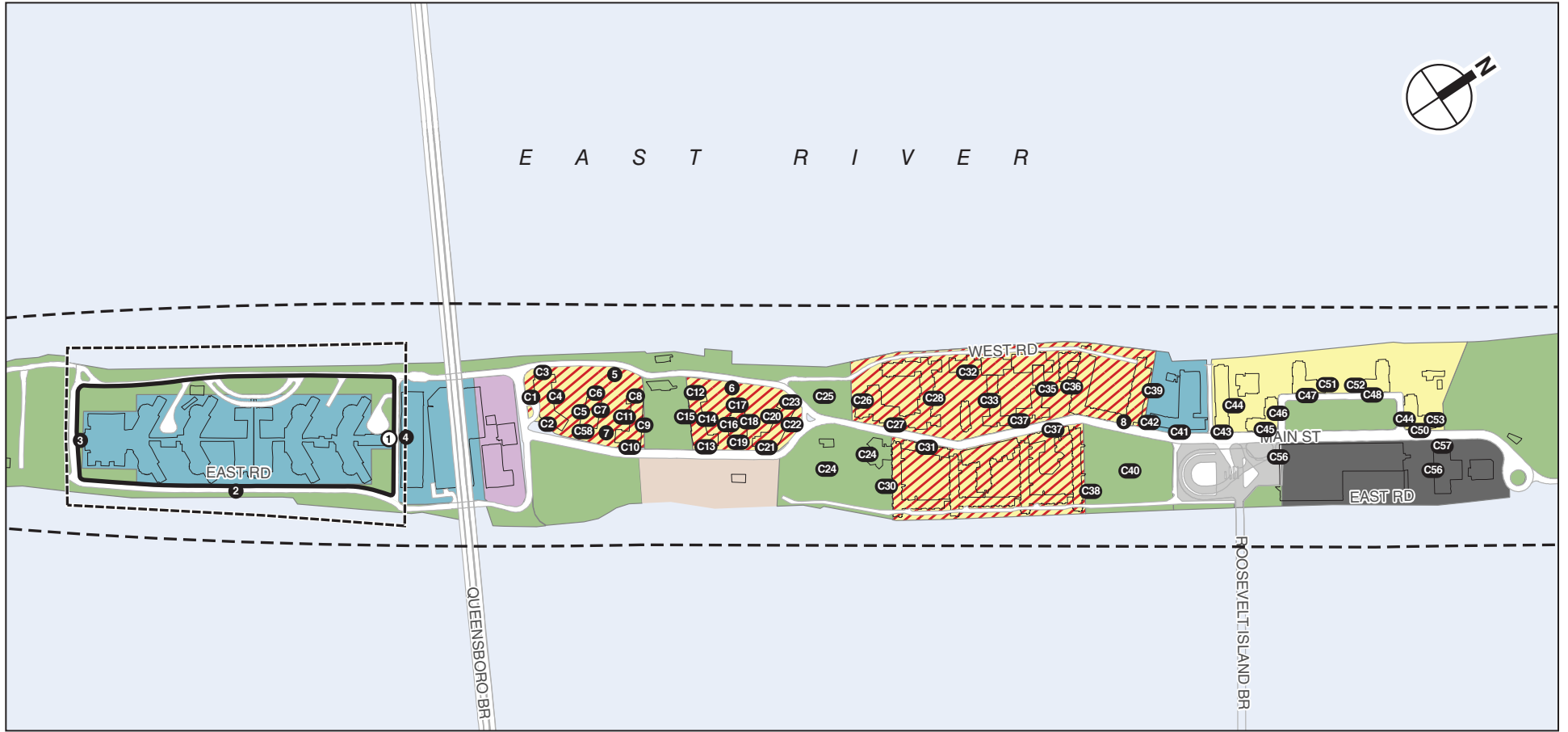
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Figure 3: Phase 1 Construction

Future With Construction of the Proposed Project -- Total Construction Increments -- 6 - 7 AM Peak Hour

Construction Noise

Noise Receptor Sites (See Appendix Figure 20-1)	Nearest Measurement Location	Time	dBA												
			Existing				Construction								
			Measured Existing Leq	Measured Existing L10	TNM Calculated Existing Leq	TNM Adjustment Factor at Meas Loc	Min Level (avg Measured L90)	Existing Leq	Existing L10	Construction Traffic Leq	Total Leq During Construction	Construction Increment	Total L10		
2	2	7AM - 8:30 AM	63.1	64.5	57.0	6.1									
3	3		63.4	66.2	58.7	4.7									
5	5		64.8	66.3	59.9	4.9									
6	6		64.3	65.4	59.5	4.8									
7	7		64.7	66.3	62.1	2.6									
8	8		70.5	72.9	68.0	2.5	56.4	70.5	72.9	69.5	73.0	2.5	75.4		
C1	5	6AM - 7AM			52.9	4.9	56.4	57.8	59.3	59.2	61.6	3.8	63.1		
C2	7				53.0	2.6	56.4	56.4	58.0	61.5	62.7	6.2	64.3		
C3	5				60.3	4.9	56.4	65.2	66.7	67.6	69.6	4.4	71.1		
C4	5				41.6	4.9	56.4	56.4	57.9	50.5	57.4	1.0	58.9		
C5	5				42.7	4.9	56.4	56.4	57.9	51.9	57.7	1.3	59.2		
C6	5				45.7	4.9	56.4	56.4	57.9	54.0	58.4	2.0	59.9		
C7	5				42.1	4.9	56.4	56.4	57.9	50.0	57.3	0.9	58.8		
C8	5				47.4	4.9	56.4	56.4	57.9	54.9	58.7	2.3	60.2		
C9	5				44.4	4.9	56.4	56.4	57.9	51.6	57.7	1.2	59.2		
C10	7				52.5	2.6	56.4	56.4	58.0	60.4	61.9	5.4	63.5		
C11	5				38.8	4.9	56.4	56.4	57.9	48.2	57.0	0.6	58.5		
C12	6				49.6	4.8	56.4	56.4	57.5	56.8	59.6	3.2	60.7		
C13	7				53.8	2.6	56.4	56.4	58.0	61.2	62.5	6.0	64.1		
C14	6				40.9	4.8	56.4	56.4	57.5	48.4	57.1	0.6	58.2		
C15	6				44.3	4.8	56.4	56.4	57.5	51.7	57.7	1.3	58.8		
C16	6				41.5	4.8	56.4	56.4	57.5	48.8	57.1	0.7	58.2		
C17	6				47.8	4.8	56.4	56.4	57.5	54.5	58.6	2.2	59.7		
C18	6				43.0	4.8	56.4	56.4	57.5	49.9	57.3	0.9	58.4		
C19	7				49.4	2.6	56.4	56.4	58.0	56.2	59.3	2.9	60.9		
C20	6				42.8	4.8	56.4	56.4	57.5	49.9	57.3	0.9	58.4		
C21	7				53.8	2.6	56.4	56.4	58.0	61.4	62.6	6.2	64.2		
C22	6				55.1	4.8	56.4	59.9	61.0	61.8	64.0	4.1	65.1		
C23	6				55.7	4.8	56.4	60.5	61.6	60.2	63.4	2.9	64.5		
C24	7				50.5	2.6	56.4	56.4	58.0	56.4	59.4	3.0	61.0		
C25	6				57.2	4.8	56.4	62.0	63.1	60.2	64.2	2.2	65.3		
C26	6				49.7	4.8	56.4	56.4	57.5	53.7	58.3	1.9	59.4		
C27	8				66.1	2.5	56.4	68.6	71.0	69.1	71.9	3.3	74.3		
C28	8				42.1	2.5	56.4	56.4	58.8	48.2	57.0	0.6	59.4		
C29	8				53.1	2.5	56.4	56.4	58.8	57.1	59.8	3.4	62.2		
C30	8				39.4	2.5	56.4	56.4	58.8	47.4	56.9	0.5	59.3		
C31	8				69.3	2.5	56.4	71.8	74.2	71.8	74.8	3.0	77.2		
C32	8				42.3	2.5	56.4	56.4	58.8	48.5	57.1	0.6	59.5		
C33	8			45.0	2.5	56.4	56.4	58.8	50.7	57.5	1.0	59.9			
C34	8			56.4	2.5	56.4	58.9	61.3	61.1	63.1	4.2	65.5			
C35	8			42.7	2.5	56.4	56.4	58.8	48.5	57.1	0.6	59.5			
C36	8			45.4	2.5	56.4	56.4	58.8	50.9	57.5	1.1	59.9			
C37	8			63.8	2.5	56.4	66.3	68.7	68.5	70.5	4.2	72.9			
C38	8			44.9	2.5	56.4	56.4	58.8	51.7	57.7	1.3	60.1			
C39	8			42.6	2.5	56.4	56.4	58.8	48.3	57.1	0.6	59.5			
C40	8			48.4	2.5	56.4	56.4	58.8	54.6	58.6	2.2	61.0			
C41	8			57.8	2.5	56.4	60.3	62.7	62.5	64.5	4.2	66.9			
C42	8			51.6	2.5	56.4	56.4	58.8	56.2	59.3	2.9	61.7			
C43	8			60.6	2.5	56.4	63.1	65.5	65.6	67.5	4.4	69.9			
C44	8			45.7	2.5	56.4	56.4	58.8	51.3	57.6	1.2	60.0			
C45	8			60.7	2.5	56.4	63.2	65.6	65.5	67.5	4.3	69.9			
C46	8			49.8	2.5	56.4	56.4	58.8	55.5	59.0	2.6	61.4			
C47	8			47.0	2.5	56.4	56.4	58.8	53.3	58.2	1.7	60.6			
C48	8			46.8	2.5	56.4	56.4	58.8	53.1	58.1	1.7	60.5			
C49	8			50.0	2.5	56.4	56.4	58.8	55.7	59.1	2.7	61.5			
C50	8			60.7	2.5	56.4	63.2	65.6	65.5	67.5	4.3	69.9			
C51	8			43.1	2.5	56.4	56.4	58.8	49.7	57.3	0.8	59.7			
C52	8			43.8	2.5	56.4	56.4	58.8	50.3	57.4	0.9	59.8			
C53	8			15.4	2.5	56.4	56.4	58.8	21.0	56.4	0.0	58.8			
C54	8			63.1	2.5	56.4	65.6	68.0	67.7	69.8	4.2	72.2			
C55	8			33.7	2.5	56.4	56.4	58.8	39.8	56.5	0.1	58.9			
C56	8			46.9	2.5	56.4	56.4	58.8	52.7	58.0	1.5	60.4			
C57	8			53.4	2.5	56.4	56.4	58.8	57.9	60.2	3.8	62.6			
C58	8			50.0	2.5	56.4	56.4	58.8	58.4	60.5	4.1	62.9			



Construction Noise Receptor Locations