

Appendix N Noise Modeling

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026
 Case Description: 02 - Phase 1 and 2 - Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact	Device	Usage(%)	Equipment			Estimated Shielding (dBA)
				Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Backhoe	No		40		77.6	200	0
Front End Loader	No		40		79.1	200	0
Front End Loader	No		40		79.1	200	0
Front End Loader	No		40		79.1	200	0
Front End Loader	No		40		79.1	200	0
Front End Loader	No		40		79.1	200	0
Backhoe	No		40		77.6	200	0
Backhoe	No		40		77.6	200	0
Backhoe	No		40		77.6	200	0
Backhoe	No		40		77.6	200	0
Tractor	No		40	84		200	0
Tractor	No		40	84		200	0
Tractor	No		40	84		200	0
Tractor	No		40	84		200	0
Tractor	No		40	84		200	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Backhoe	65.5	61.5
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Tractor	72	68
Tractor	72	68
Tractor	72	68
Tractor	72	68
Tractor	72	68
Total	80.9	76.9

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026

Case Description: 03 - Phase 1 and 2 - Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Grader	No	40	85	85	200	0
Grader	No	40	85	85	200	0
Grader	No	40	85	85	200	0
Grader	No	40	85	85	200	0
Grader	No	40	85	85	200	0
Excavator	No	40	80.7	80.7	200	0
Excavator	No	40	80.7	80.7	200	0
Excavator	No	40	80.7	80.7	200	0
Excavator	No	40	80.7	80.7	200	0
Excavator	No	40	80.7	80.7	200	0
Excavator	No	40	80.7	80.7	200	0
Excavator	No	40	80.7	80.7	200	0
Excavator	No	40	80.7	80.7	200	0
Excavator	No	40	80.7	80.7	200	0
Excavator	No	40	80.7	80.7	200	0
Excavator	No	40	80.7	80.7	200	0
Dozer	No	40	81.7	81.7	200	0
Dozer	No	40	81.7	81.7	200	0
Dozer	No	40	81.7	81.7	200	0
Dozer	No	40	81.7	81.7	200	0
Dozer	No	40	81.7	81.7	200	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Grader	73	69
Grader	73	69
Grader	73	69
Grader	73	69
Grader	73	69
Excavator	68.7	64.7
Excavator	68.7	64.7
Excavator	68.7	64.7
Excavator	68.7	64.7
Excavator	68.7	64.7
Excavator	68.7	64.7
Excavator	68.7	64.7
Excavator	68.7	64.7
Excavator	68.7	64.7
Excavator	68.7	64.7
Excavator	68.7	64.7
Dozer	69.6	65.6
Dozer	69.6	65.6
Dozer	69.6	65.6
Dozer	69.6	65.6
Dozer	69.6	65.6
Total	83.4	79.4

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026
 Case Description: 04 - Phase 1 and 2 - Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	200	0
Scraper	No	40	85		200	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	200	0
Tractor	No	40	84		200	0
Tractor	No	40	84		200	0
Tractor	No	40	84		200	0
Tractor	No	40	84		200	0
Backhoe	No	40		77.6	200	0
Backhoe	No	40		77.6	200	0
Backhoe	No	40		77.6	200	0
Front End Loader	No	40		79.1	200	0
Front End Loader	No	40		79.1	200	0
Front End Loader	No	40		79.1	200	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Scraper	71.5	67.6
Scraper	71.5	67.6
Scraper	71.5	67.6
Scraper	71.5	67.6
Scraper	73	69
Scraper	71.5	67.6
Scraper	71.5	67.6
Scraper	71.5	67.6
Scraper	71.5	67.6
Scraper	71.5	67.6
Tractor	72	68
Tractor	72	68
Tractor	72	68
Tractor	72	68
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Total	83.7	79.8

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026
 Case Description: 05 - Phase 1 and 2 - Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Dump Truck	No	40	76.5
Dump Truck	No	40	76.5	200	0	
Dump Truck	No	40	76.5	200	0	
Dump Truck	No	40	76.5	200	0	
Dump Truck	No	40	76.5	200	0	
Dump Truck	No	40	76.5	200	0	
Dump Truck	No	40	76.5	200	0	
Dump Truck	No	40	76.5	200	0	

Results

Calculated (dBA)

Equipment	Lmax	Leq
Dump Truck	64.4	60.4
Dump Truck	64.4	60.4
Dump Truck	64.4	60.4
Dump Truck	64.4	60.4
Dump Truck	64.4	60.4
Dump Truck	64.4	60.4
Dump Truck	64.4	60.4
Dump Truck	64.4	60.4
Dump Truck	64.4	60.4
Total	73.9	70

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026
 Case Description: 06 - Phase 1 and 2 - Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Gradall	No	40		83.4	200	0
Gradall	No	40		83.4	200	0
Gradall	No	40		83.4	200	0
Gradall	No	40		83.4	200	0
Gradall	No	40		83.4	200	0
Gradall	No	40		83.4	200	0
Gradall	No	40		83.4	200	0
Gradall	No	40		83.4	200	0
Gradall	No	40		83.4	200	0
Gradall	No	40		83.4	200	0
Gradall	No	40		83.4	200	0
Gradall	No	40		83.4	200	0
Gradall	No	40		83.4	200	0
Gradall	No	40		83.4	200	0
Crane	No	16		80.6	200	0
Crane	No	16		80.6	200	0
Crane	No	16		80.6	200	0
Crane	No	16		80.6	200	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Crane	68.5	60.6
Crane	68.5	60.6
Crane	68.5	60.6
Crane	68.5	60.6
Crane	68.5	60.6
Total	83.8	79.4

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026
 Case Description: 07 - Phase 1 and 2 - Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
			Tractor	No		
Tractor	No	40	84	200	0	
Tractor	No	40	84	200	0	
Tractor	No	40	84	200	0	
Tractor	No	40	84	200	0	
Backhoe	No	40		77.6	200	0
Backhoe	No	40		77.6	200	0
Backhoe	No	40		77.6	200	0
Backhoe	No	40		77.6	200	0
Backhoe	No	40		77.6	200	0
Front End Loader	No	40		79.1	200	0
Front End Loader	No	40		79.1	200	0
Front End Loader	No	40		79.1	200	0
Front End Loader	No	40		79.1	200	0
Front End Loader	No	40		79.1	200	0
Generator	No	50		80.6	200	0
Generator	No	50		80.6	200	0
Generator	No	50		80.6	200	0
Generator	No	50		80.6	200	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Tractor	72	68
Tractor	72	68
Tractor	72	68
Tractor	72	68
Tractor	72	68
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Generator	68.6	65.6
Generator	68.6	65.6
Generator	68.6	65.6
Generator	68.6	65.6
Generator	68.6	65.6
Total	82	78.2

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026

Case Description: 08 - Phase 1 and 2 - Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Welder / Torch	No	40	74	74	200	0
Welder / Torch	No	40	74	74	200	0
Welder / Torch	No	40	74	74	200	0
Welder / Torch	No	40	74	74	200	0
Welder / Torch	No	40	74	74	200	0

Results

Equipment	Calculated (dBA)	
	Lmax	Leq
Welder / Torch	62	58
Welder / Torch	62	58
Welder / Torch	62	58
Welder / Torch	62	58
Welder / Torch	62	58
Total	69	65

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026
 Case Description: 10 - Phase 1 and 2 - Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Roller	No	20	80
Roller	No	20	80	200	0	
Roller	No	20	80	200	0	
Roller	No	20	80	200	0	
Roller	No	20	80	200	0	
Roller	No	20	80	200	0	
Roller	No	20	80	200	0	
Roller	No	20	80	200	0	
Roller	No	20	80	200	0	

Results

Calculated (dBA)

Equipment	Lmax	Leq
Roller	68	61
Roller	68	61
Roller	68	61
Roller	68	61
Roller	68	61
Roller	68	61
Roller	68	61
Roller	68	61
Roller	68	61
Roller	68	61
Total	78	71

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/5/2026

Case Description: 11 - Phase 1 and 2 - Architectural Coating

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Compressor (air)	No	40	77.7
Compressor (air)	No	40	77.7	200	0	
Compressor (air)	No	40	77.7	200	0	
Compressor (air)	No	40	77.7	200	0	
Compressor (air)	No	40	77.7	200	0	

Results

Calculated (dBA)

Equipment	Lmax	Leq
Compressor (air)	65.6	61.6
Compressor (air)	65.6	61.6
Compressor (air)	65.6	61.6
Compressor (air)	65.6	61.6
Compressor (air)	65.6	61.6
Total	72.6	68.6

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026
 Case Description: 12 - Phase 3 - Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	200	0
Dozer	No	40		81.7	200	0
Dozer	No	40		81.7	200	0
Dozer	No	40		81.7	200	0
Dozer	No	40		81.7	200	0
Dozer	No	40		81.7	200	0
Front End Loader	No	40		79.1	200	0
Front End Loader	No	40		79.1	200	0
Front End Loader	No	40		79.1	200	0
Front End Loader	No	40		79.1	200	0
Tractor	No	40	84		200	0
Tractor	No	40	84		200	0
Tractor	No	40	84		200	0
Tractor	No	40	84		200	0
Dozer	No	40		81.7	200	0
Dozer	No	40		81.7	200	0
Dozer	No	40		81.7	200	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Dozer	69.6	65.6
Dozer	69.6	65.6
Dozer	69.6	65.6
Dozer	69.6	65.6
Dozer	69.6	65.6
Dozer	69.6	65.6
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Tractor	72	68
Tractor	72	68
Tractor	72	68
Tractor	72	68
Dozer	69.6	65.6
Dozer	69.6	65.6
Dozer	69.6	65.6
Total	82.2	78.2

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/5/2026
 Case Description: 13 - Phase 3 - Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	200	0
Backhoe	No	40		77.6	200	0
Backhoe	No	40		77.6	200	0
Backhoe	No	40		77.6	200	0

Results

Equipment	Calculated (dBA)	
	Lmax	Leq
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Total	71.5	67.6

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026
 Case Description: 14 - Phase 3 - Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
			Grader	No		
Grader	No	40	85	200	0	
Grader	No	40	85	200	0	
Tractor	No	40	84	200	0	
Tractor	No	40	84	200	0	
Backhoe	No	40		77.6	200	0
Backhoe	No	40		77.6	200	0
Dozer	No	40		81.7	200	0
Dozer	No	40		81.7	200	0
Dozer	No	40		81.7	200	0
Excavator	No	40		80.7	200	0
Excavator	No	40		80.7	200	0
Excavator	No	40		80.7	200	0
Excavator	No	40		80.7	200	0
Excavator	No	40		80.7	200	0
Excavator	No	40	85		200	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Grader	73	69
Grader	73	69
Grader	73	69
Tractor	72	68
Tractor	72	68
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Dozer	69.6	65.6
Dozer	69.6	65.6
Dozer	69.6	65.6
Excavator	68.7	64.7
Excavator	68.7	64.7
Excavator	68.7	64.7
Excavator	68.7	64.7
Excavator	68.7	64.7
Excavator	73	69
Total	82.6	78.6

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026
 Case Description: 15 - Phase 3 - Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	200	0
Front End Loader	No	40		79.1	200	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	200	0
Dump Truck	No	40		76.5	200	0
Dump Truck	No	40		76.5	200	0
Dump Truck	No	40		76.5	200	0
Dump Truck	No	40		76.5	200	0
Dump Truck	No	40		76.5	200	0
Dump Truck	No	40		76.5	200	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Scraper	71.5	67.6
Scraper	71.5	67.6
Scraper	71.5	67.6
Scraper	71.5	67.6
Scraper	71.5	67.6
Scraper	71.5	67.6
Dump Truck	64.4	60.4
Dump Truck	64.4	60.4
Dump Truck	64.4	60.4
Dump Truck	64.4	60.4
Dump Truck	64.4	60.4
Dump Truck	64.4	60.4
Total	80.5	76.5

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026
 Case Description: 16 - Phase 3 - Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact	Device	Usage(%)	Equipment			Receptor Distance (feet)	Estimated Shielding (dBA)
				Spec Lmax (dBA)	Actual Lmax (dBA)			
Gradall	No		40		83.4	200	0	
Gradall	No		40		83.4	200	0	
Gradall	No		40		83.4	200	0	
Gradall	No		40		83.4	200	0	
Gradall	No		40		83.4	200	0	
Gradall	No		40		83.4	200	0	
Gradall	No		40		83.4	200	0	
Gradall	No		40		83.4	200	0	
Gradall	No		40		83.4	200	0	
Crane	No		16		80.6	200	0	
Crane	No		16		80.6	200	0	
Crane	No		16		80.6	200	0	
Tractor	No		40	84		200	0	
Tractor	No		40	84		200	0	
Tractor	No		40	84		200	0	

Results

Calculated (dBA)

Equipment	Lmax	Leq
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Gradall	71.4	67.4
Crane	68.5	60.6
Crane	68.5	60.6
Crane	68.5	60.6
Tractor	72	68
Tractor	72	68
Tractor	72	68
Total	82.9	78.5

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/5/2026
 Case Description: 17 - Phase 3 - Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Backhoe	No	40	77.6
Backhoe	No	40	77.6	200	0	
Backhoe	No	40	77.6	200	0	
Generator	No	50	80.6	200	0	
Generator	No	50	80.6	200	0	
Generator	No	50	80.6	200	0	
Welder / Torch	No	40	74	200	0	
Welder / Torch	No	40	74	200	0	
Welder / Torch	No	40	74	200	0	
Front End Loader	No	40	79.1	200	0	
Front End Loader	No	40	79.1	200	0	
Front End Loader	No	40	79.1	200	0	

Results

Calculated (dBA)

Equipment	Lmax	Leq
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Backhoe	65.5	61.5
Generator	68.6	65.6
Generator	68.6	65.6
Generator	68.6	65.6
Welder / Torch	62	58
Welder / Torch	62	58
Welder / Torch	62	58
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Front End Loader	67.1	63.1
Total	77.2	73.6

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026
 Case Description: 18 - Phase 3 - Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Paver	No	50	77.2
Paver	No	50	77.2	200	0	
Paver	No	50	77.2	200	0	
Paver	No	50	77.2	200	0	
Paver	No	50	77.2	200	0	
Paver	No	50	77.2	200	0	
Roller	No	20	80	200	0	
Roller	No	20	80	200	0	
Roller	No	20	80	200	0	
Roller	No	20	80	200	0	
Roller	No	20	80	200	0	
Roller	No	20	80	200	0	

Results

Calculated (dBA)

Equipment	Lmax	Leq
Paver	65.2	62.2
Paver	65.2	62.2
Paver	65.2	62.2
Paver	65.2	62.2
Paver	65.2	62.2
Paver	65.2	62.2
Roller	68	61
Roller	68	61
Roller	68	61
Roller	68	61
Roller	68	61
Roller	68	61
Total	77.6	72.4

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026
 Case Description: 19 - Phase 3 - Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Paver	No	50	77.2
Paver	No	50	77.2	200	0	
Paver	No	50	77.2	200	0	
Paver	No	50	77.2	200	0	
Paver	No	50	77.2	200	0	
Paver	No	50	77.2	200	0	
Paver	No	50	77.2	200	0	
Paver	No	50	77.2	200	0	
Paver	No	50	77.2	200	0	
Paver	No	50	77.2	200	0	

Results

Calculated (dBA)

Equipment	Lmax	Leq
Paver	65.2	62.2
Paver	65.2	62.2
Paver	65.2	62.2
Paver	65.2	62.2
Paver	65.2	62.2
Paver	65.2	62.2
Paver	65.2	62.2
Paver	65.2	62.2
Paver	65.2	62.2
Paver	65.2	62.2
Total	75.2	72.2

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/5/2026
 Case Description: 20 - Phase 3 - Architectural Coating

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Sensitive Receptor	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	200	0
Compressor (air)	No	40		77.7	200	0
Compressor (air)	No	40		77.7	200	0

Results

Equipment	Calculated (dBA)	
	Lmax	Leq
Compressor (air)	65.6	61.6
Compressor (air)	65.6	61.6
Compressor (air)	65.6	61.6
Total	70.4	66.4

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/6/2026
 Case Description: 21 - Phase 3 to Phases 1 and 2 - Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Phases 1 and 2 Building	Commercial	65	60	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	330	0
Dozer	No	40		81.7	330	0
Dozer	No	40		81.7	330	0
Dozer	No	40		81.7	330	0
Dozer	No	40		81.7	330	0
Dozer	No	40		81.7	330	0
Front End Loader	No	40		79.1	330	0
Front End Loader	No	40		79.1	330	0
Front End Loader	No	40		79.1	330	0
Front End Loader	No	40		79.1	330	0
Tractor	No	40	84		330	0
Tractor	No	40	84		330	0
Tractor	No	40	84		330	0
Tractor	No	40	84		330	0
Dozer	No	40		81.7	330	0
Dozer	No	40		81.7	330	0
Dozer	No	40		81.7	330	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Dozer	65.3	61.3
Dozer	65.3	61.3
Dozer	65.3	61.3
Dozer	65.3	61.3
Dozer	65.3	61.3
Dozer	65.3	61.3
Front End Loader	62.7	58.7
Front End Loader	62.7	58.7
Front End Loader	62.7	58.7
Front End Loader	62.7	58.7
Tractor	67.6	63.6
Tractor	67.6	63.6
Tractor	67.6	63.6
Tractor	67.6	63.6
Dozer	65.3	61.3
Dozer	65.3	61.3
Dozer	65.3	61.3
Total	77.9	73.9

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/6/2026
 Case Description: 22 - Phase 3 to Phases 1 and 2 - Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Phases 1 and 2 Building	Commercial	65	60	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40	77.6	77.6	330	0
Backhoe	No	40	77.6	77.6	330	0
Backhoe	No	40	77.6	77.6	330	0
Backhoe	No	40	77.6	77.6	330	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Backhoe	61.2	57.2
Backhoe	61.2	57.2
Backhoe	61.2	57.2
Backhoe	61.2	57.2
Total	67.2	63.2

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/6/2026
 Case Description: 23 - Phase 3 to Phases 1 and 2 - Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Phases 1 and 2 Building	Commercial	65	60	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			No	40	85	330
Grader	No	40	85	330	0	
Grader	No	40	85	330	0	
Tractor	No	40	84	330	0	
Tractor	No	40	84	330	0	
Backhoe	No	40		77.6	330	0
Backhoe	No	40		77.6	330	0
Dozer	No	40		81.7	330	0
Dozer	No	40		81.7	330	0
Dozer	No	40		81.7	330	0
Excavator	No	40		80.7	330	0
Excavator	No	40		80.7	330	0
Excavator	No	40		80.7	330	0
Excavator	No	40		80.7	330	0
Excavator	No	40		80.7	330	0
Excavator	No	40	85		330	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Grader	68.6	64.6
Grader	68.6	64.6
Grader	68.6	64.6
Tractor	67.6	63.6
Tractor	67.6	63.6
Backhoe	61.2	57.2
Backhoe	61.2	57.2
Dozer	65.3	61.3
Dozer	65.3	61.3
Dozer	65.3	61.3
Excavator	64.3	60.3
Excavator	64.3	60.3
Excavator	64.3	60.3
Excavator	64.3	60.3
Excavator	64.3	60.3
Excavator	68.6	64.6
Total	78.2	74.3

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/6/2026
 Case Description: 24 - Phase 3 to Phases 1 and 2 - Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Phases 1 and 2 Building	Commercial	65	60	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	330	0
Front End Loader	No	40		79.1	330	0
Scraper	No	40		83.6	330	0
Scraper	No	40		83.6	330	0
Scraper	No	40		83.6	330	0
Scraper	No	40		83.6	330	0
Scraper	No	40		83.6	330	0
Scraper	No	40		83.6	330	0
Dump Truck	No	40		76.5	330	0
Dump Truck	No	40		76.5	330	0
Dump Truck	No	40		76.5	330	0
Dump Truck	No	40		76.5	330	0
Dump Truck	No	40		76.5	330	0
Dump Truck	No	40		76.5	330	0

Results

Equipment	Calculated (dBA)	
	Lmax	Leq
Front End Loader	62.7	58.7
Front End Loader	62.7	58.7
Scraper	67.2	63.2
Scraper	67.2	63.2
Scraper	67.2	63.2
Scraper	67.2	63.2
Scraper	67.2	63.2
Scraper	67.2	63.2
Dump Truck	60.1	56.1
Dump Truck	60.1	56.1
Dump Truck	60.1	56.1
Dump Truck	60.1	56.1
Dump Truck	60.1	56.1
Dump Truck	60.1	56.1
Total	76.2	72.2

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/6/2026

Case Description: 25 - Phase 3 to Phases 1 and 2 - Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Phases 1 and 2 Building	Commercial	65	60	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Gradall	No	40		83.4	330	0
Gradall	No	40		83.4	330	0
Gradall	No	40		83.4	330	0
Gradall	No	40		83.4	330	0
Gradall	No	40		83.4	330	0
Gradall	No	40		83.4	330	0
Gradall	No	40		83.4	330	0
Gradall	No	40		83.4	330	0
Gradall	No	40		83.4	330	0
Crane	No	16		80.6	330	0
Crane	No	16		80.6	330	0
Crane	No	16		80.6	330	0
Tractor	No	40	84		330	0
Tractor	No	40	84		330	0
Tractor	No	40	84		330	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Gradall	67	63
Gradall	67	63
Gradall	67	63
Gradall	67	63
Gradall	67	63
Gradall	67	63
Gradall	67	63
Gradall	67	63
Gradall	67	63
Crane	64.2	56.2
Crane	64.2	56.2
Crane	64.2	56.2
Tractor	67.6	63.6
Tractor	67.6	63.6
Tractor	67.6	63.6
Total	78.5	74.2

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/6/2026

Case Description: 26 - Phase 3 to Phases 1 and 2 - Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Phases 1 and 2 Building	Commercial	65	60	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	330	0
Backhoe	No	40		77.6	330	0
Backhoe	No	40		77.6	330	0
Generator	No	50		80.6	330	0
Generator	No	50		80.6	330	0
Generator	No	50		80.6	330	0
Welder / Torch	No	40		74	330	0
Welder / Torch	No	40		74	330	0
Welder / Torch	No	40		74	330	0
Front End Loader	No	40		79.1	330	0
Front End Loader	No	40		79.1	330	0
Front End Loader	No	40		79.1	330	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Backhoe	61.2	57.2
Backhoe	61.2	57.2
Backhoe	61.2	57.2
Generator	64.2	61.2
Generator	64.2	61.2
Generator	64.2	61.2
Welder / Torch	57.6	53.6
Welder / Torch	57.6	53.6
Welder / Torch	57.6	53.6
Front End Loader	62.7	58.7
Front End Loader	62.7	58.7
Front End Loader	62.7	58.7
Total	72.8	69.3

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/6/2026
 Case Description: 27 - Phase 3 to Phases 1 and 2 - Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Phases 1 and 2 Building	Commercial	65	60	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Paver	No	50	77.2
Paver	No	50	77.2	330	0	
Paver	No	50	77.2	330	0	
Paver	No	50	77.2	330	0	
Paver	No	50	77.2	330	0	
Paver	No	50	77.2	330	0	
Roller	No	20	80	330	0	
Roller	No	20	80	330	0	
Roller	No	20	80	330	0	
Roller	No	20	80	330	0	
Roller	No	20	80	330	0	
Roller	No	20	80	330	0	

Results

Calculated (dBA)

Equipment	Lmax	Leq
Paver	60.8	57.8
Paver	60.8	57.8
Paver	60.8	57.8
Paver	60.8	57.8
Paver	60.8	57.8
Paver	60.8	57.8
Roller	63.6	56.6
Roller	63.6	56.6
Roller	63.6	56.6
Roller	63.6	56.6
Roller	63.6	56.6
Roller	63.6	56.6
Total	73.2	68.1

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/6/2026
 Case Description: 28 - Phase 3 to Phases 1 and 2 - Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Phases 1 and 2 Building	Commercial	65	60	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			No	50	77.2	330
Paver	No	50	77.2	330	0	
Paver	No	50	77.2	330	0	
Paver	No	50	77.2	330	0	
Paver	No	50	77.2	330	0	
Paver	No	50	77.2	330	0	
Paver	No	50	77.2	330	0	
Paver	No	50	77.2	330	0	
Paver	No	50	77.2	330	0	
Paver	No	50	77.2	330	0	

Results

Equipment	Calculated (dBA)	
	Lmax	Leq
Paver	60.8	57.8
Paver	60.8	57.8
Paver	60.8	57.8
Paver	60.8	57.8
Paver	60.8	57.8
Paver	60.8	57.8
Paver	60.8	57.8
Paver	60.8	57.8
Paver	60.8	57.8
Paver	60.8	57.8
Total	70.8	67.8

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 1/6/2026

Case Description: 29 - Phase 3 to Phases 1 and 2 - Architectural Coating

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Phases 1 and 2 Building	Commercial	65	60	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	330	0
Compressor (air)	No	40		77.7	330	0
Compressor (air)	No	40		77.7	330	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Compressor (air)	61.3	57.3
Compressor (air)	61.3	57.3
Compressor (air)	61.3	57.3
Total	66.1	62.1