

Appendix D

Roadway Construction Noise Model (RCNM) Results

Construction Noise

Distance	Noise Level @ 50 ft	Single Family Residential - F Street	Multi-Family Residential - 2171 S. Lily St.
		40	15
Demolition	84	85.938	94.458
Site Preparation	84	85.938	94.458
Grading	80	81.938	90.458
Infrastructure Installation	81	82.938	91.458
Paving/Site Restoration	81	82.938	91.458

Construction Vibration

Distance	Vibration @ 25 ft	Single Family Res	Multi Family Res	Historic Building
		25	23	15
Vibratory Roller	0.21	0.210	0.238	0.501
Large Bulldozer	0.089	0.089	0.101	0.191
Loaded Trucks	0.076	0.076	0.086	0.164
Static Roller	0.05	0.050	0.057	0.108
Small Bulldozer	0.003	0.003	0.003	0.006

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 05/29/2025
 Case Description: Site Preparation

**** Receptor #1 ****

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Site Preparation	Residential	65.0	55.0	50.0

Description	Impact Device	Usage (%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	50.0	0.0
Auger Drill Rig	No	20		84.4	50.0	0.0
Front End Loader	No	40		79.1	50.0	0.0

Results

Noise Limit Exceedance (dBA) Noise Limits (dBA)

Night	Calculated (dBA)					Noise Limits (dBA)			
	Day	Evening		Day	Night	Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Concrete Saw	N/A	N/A	89.6	82.6	N/A	N/A	N/A	N/A	N/A
Auger Drill Rig	N/A	N/A	84.4	77.4	N/A	N/A	N/A	N/A	N/A
Front End Loader	N/A	N/A	79.1	75.1	N/A	N/A	N/A	N/A	N/A
Total			89.6	84.3	N/A	N/A	N/A	N/A	N/A

