I & 32ND STREET STORM DRAINAGE IMPROVEMENT PROJECT

APPENDIX B NOISE MODELING OUTPUTS

Project-Generated Construction Source Noise Prediction Model

60718723 - I at 32 Storm Drain Project

Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L_{eq} dBA)
Threshold*	707	60
	50	83
Receptor	400	65

Assumptions:	Reference Emission Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Excavator	81	0.4
Backhoe	78	0.4
Front End Loader	79	0.4
Concrete Mixer Truck	79	0.4
Dump Truck	76	0.4
Paver	77	0.5
Roller	80	0.2
		0.5
		0.5
Ground Type	Hard	
Ground Factor	0.00	

Predicted Noise Level [2]	L_{eq} dBA at 50 feet[2]
Excavator	77.0
Backhoe	74.0
Front End Loader	75.0
Concrete Mixer Truck	75.0
Dump Truck	72.0
Paver	74.0
Roller	73.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
83.0

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, Janu

[2] Based on the following from the Federal Transit Noise and Vibration

$L_{eq}(equip) = E.L.+10*\log(U.F.) - 20*\log(D/50) - 10*G*\log(D/50)$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold