

ATTACHMENT 4.12-A: CONSTRUCTION NOISE CALCULATIONS

Construction Phase/Equipment Type	Site-Specific Quantity	Site-Specific Operating Time (hours)	Use Factor (percent)	L _{max} at 50 Feet (dB)	Average L _{eq} at 50 Feet (dB)
<i>Staging Yard Setup/Road Refreshing</i>					
Grader	1	5	40	85	77
Loader	1	4	40	79	70
Water Truck	1	4	40	76	67
Mower	1	4	40	79	70
Tractor Trailer Unit	1	0.25	40	74	53
Dump Truck	1	0.25	40	76	55
Backup Alarm	6	0.25	5	83	61
Total					79.1
<i>Micropile Foundation Construction</i>					
Water Truck	1	3	40	76	62
Drilling Rig	1	7	20	84	75
Air Compressor	1	3	40	78	68
Forklift	1	2	40	79	67
Crane	1	3	16	81	67
Tractor Trailer Unit	1	0.25	40	74	53
Crew Truck	1	0.25	40	75	54
Generator	1	3	50	73	64
Concrete Truck	2	0.25	40	79	61
Dump Truck	2	0.25	40	76	58

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Backup Alarm	12	0.25	5	83	63
Total					77.5
<i>Pier Foundation Construction</i>					
Water Truck	1	3	40	76	66
Drilling Rig	1	7	20	84	75
Air Compressor	1	3	40	78	68
Boom Truck	1	3	16	81	67
Forklift	1	3	40	79	69
Generator	1	3	50	73	64
Concrete Truck	2	0.25	40	79	61
Dump Truck	2	0.25	40	76	58
Backup Alarm	10	0.25	5	83	63
Total					77.7
<i>Direct Bury Construction and Pole Installation</i>					
Water Truck	1	4	40	76	67
Drilling Rig	1	7	20	84	75
Air Compressor	1	3	40	78	68
Tractor Trailer Unit	1	0.25	40	74	53
Bucket Truck	1	5	20	75	64
Crane	1	5	16	81	69
Dump Truck	2	0.25	40	76	58

Construction Phase/Equipment Type	Site-Specific Quantity	Site-Specific Operating Time (hours)	Use Factor (percent)	L _{max} at 50 Feet (dB)	Average L _{eq} at 50 Feet (dB)
Backup Alarm	8	0.25	5	83	62
Total					77.4
<i>Trenching for Installation of Underground Cables</i>					
Backhoe	1	7	40	78	72
Dump Truck	1	0.25	40	76	55
Backup Alarm	2	0.25	5	83	56
Total					71.9
<i>Stringing Activities</i>					
Water Truck	1	5	40	76	68
Wire Truck	1	0.25	40	75	54
Pulling Rig	1	6	40	79	72
Pickup	1	0.25	16	75	54
Backup Alarm	4	0.25	5	83	61
Total					76.0
<i>Demobilization/Cleanup</i>					
Grader	1	6	40	85	78
Loader	1	7	40	79	73
Water Truck	1	3	40	76	66
Crew Truck	1	0.25	40	75	54
Pickup	1	0.25	40	75	54
Tractor Trailer Unit	1	0.25	40	74	53
Spray Truck	1	6	40	76	69

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Backup Alarm	7	0.25	5	83	75
Total					81.1