

## Maximum Construction Generated Vibration - Phase 1

### Vibration Annoyance

Receptor: Maximum Vibration Level - Conexant buildings to west Closest Distance (feet): 180

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	77
Large bulldozer	87	70
Small bulldozer	58	41
Jackhammer	79	62
Loaded trucks	86	69
	Criteria	84

Receptor: Maximum Vibration Levels - Office buildings to the northwest Closest Distance (feet): 205

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	76
Large bulldozer	87	69
Small bulldozer	58	40
Jackhammer	79	61
Loaded trucks	86	68
	Criteria	84

Receptor: Maximum Vibration Level - Office buildings to southwest Closest Distance (feet): 200

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	76
Large bulldozer	87	69
Small bulldozer	58	40
Jackhammer	79	61
Loaded trucks	86	68
	Criteria	84

Receptor: Maximum Vibration Level - UCI Child Development Center Closest Distance (feet): 275

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	73
Large bulldozer	87	66
Small bulldozer	58	37
Jackhammer	79	58
Loaded trucks	86	65
	Criteria	84

Receptor: Maximum Vibration Level - Offices to the east (off Birch) Closest Distance (feet): 825

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	64
Large bulldozer	87	57
Small bulldozer	58	28
Jackhammer	79	49
Loaded trucks	86	56
	Criteria	84

## Maximum Construction Generated Vibration - Phase 1

Receptor: Maximum Vibration Level - Jazz Semiconductor building Closest Distance (feet): 50

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	88
Large bulldozer	87	81
Small bulldozer	58	52
Jackhammer	79	73
Loaded trucks	86	80
	Criteria	65

Notes: RMS velocity calculated from vibration level (VdB) using the reference of one microinch/second.

Source: Based on methodology from the United States Department of Transportation Federal Transit Administration, *Transit Noise and Vibration Impact Assessment* (2006).

## Maximum Construction Generated Vibration - Phase 2

### Vibration Annoyance

Receptor: Maximum Vibration Level - Conexant buildings to west Closest Distance (feet): 220

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	75
Large bulldozer	87	68
Small bulldozer	58	39
Jackhammer	79	60
Loaded trucks	86	67
	Criteria	84

Receptor: Maximum Vibration Levels - Office buildings to the northwest Closest Distance (feet): 100

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	82
Large bulldozer	87	75
Small bulldozer	58	46
Jackhammer	79	67
Loaded trucks	86	74
	Criteria	84

Receptor: Maximum Vibration Level - Office buildings to southwest Closest Distance (feet): 700

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	65
Large bulldozer	87	58
Small bulldozer	58	29
Jackhammer	79	50
Loaded trucks	86	57
	Criteria	84

Receptor: Maximum Vibration Level - UCI Child Development Center Closest Distance (feet): 400

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	70
Large bulldozer	87	63
Small bulldozer	58	34
Jackhammer	79	55
Loaded trucks	86	62
	Criteria	84

Receptor: Maximum Vibration Level - Offices to the east (off Birch) Closest Distance (feet): 65

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	86
Large bulldozer	87	79
Small bulldozer	58	50
Jackhammer	79	71
Loaded trucks	86	78
	Criteria	84

## Maximum Construction Generated Vibration - Phase 2

Receptor: Maximum Vibration Level - Phase 1 buildings Closest Distance (feet): 25

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	94
Large bulldozer	87	87
Small bulldozer	58	58
Jackhammer	79	79
Loaded trucks	86	86
	Criteria	78

Notes: RMS velocity calculated from vibration level (VdB) using the reference of one microinch/second.

Source: Based on methodology from the United States Department of Transportation Federal Transit Administration, *Transit Noise and Vibration Impact Assessment* (2006).