

California High-Speed Rail Authority

Fresno to Bakersfield *Section*

**Draft Supplemental
Environmental Impact
Report/Environmental
Impact Statement**

**Appendix 3.4-B
Noise and Vibration Measurements**

November 2017



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APPENDIX 3.4-B: NOISE AND VIBRATION MEASUREMENTS

Table 3.4-B-1 Summary of Long-Term (24-Hour) Noise Level Measurements

Site	Start Date	Address/Location	City/County	Land Use Type	Noise Sources	Measured L _{dn}
LT-1	10/5/15	745 Mayer Lane	Shafter	Residential	Traffic on SR 43 and train passbys.	67.4
LT-2	10/5/15	112 Redwood Drive	Shafter	Residential	Traffic on Fresno Avenue and SR 43. Train noise from passbys and horn.	58.3
LT-3	10/5/15	204 Voth Lane	Shafter	Residential	Traffic on SR 43. Train noise from passbys and horn.	73.8
LT-4	10/6/15	Between 300 and 301 Chris Avenue	Shafter	Residential	Ambient neighborhood noise.	54.5
LT-5	10/6/15	580 Willow Street	Shafter	Residential	Ambient neighborhood noise.	52.7
LT-6	10/7/15	615 Kern Street	Shafter	Residential	Ambient neighborhood noise and train passbys.	60.9
LT-7	10/7/15	300 Pine Street	Shafter	Residential	Ambient neighborhood noise.	53.7
LT-8	10/8/15	455 E Ash Avenue	Shafter	Residential	Ambient neighborhood noise, skate park, and train passbys.	56.5
LT-9	10/8/15	1100 E Los Angeles Street	Shafter	Residential	Traffic on Santa Fe Highway and Los Angeles Street, and trains.	66.8
LT-10	10/8/15	Near the intersection of Zerker Road/Renfro Road	Shafter	Agricultural	Ambient agricultural noise.	51.1
LT-11	10/7/15	33786 Burbank Street	Kern County	Agricultural	Traffic on SR 99 and train noise.	72.4
LT-12	10/6/15	34342 Dewar Avenue	Kern County	Residential	Ambient neighborhood noise.	61.0
LT-13	10/6/15	8818 Spectrum Parkway	Bakersfield	Hotel	Traffic on SR 65 and ambient neighborhood noise.	63.8
LT-14	10/6/15	6601 Audene Way	Kern County	Residential	Faint traffic on SR 99 and ambient neighborhood noise.	58.9
LT-15	10/6/15	5920 Wright Avenue	Kern County	Residential	Traffic on Wright Avenue and faint traffic on SR 99. Ambient neighborhood noise.	62.6
LT-16	10/7/15	5451 Norris Road	Kern County	Residential	Traffic on SR 99, Victor Street, and Norris Road.	65.3
LT-17	10/5/15	700 Rutherford Court	Kern County	Residential	Traffic on Roberts Lane and Olive Drive. Ambient neighborhood noise and train noise.	59.9
LT-18	10/5/15	1223 Wilson Avenue	Kern County	Residential	Ambient neighborhood noise.	55.3
LT-19	8/24/16	Across the street from 5108 Pierce Place	Kern County	Residential	Traffic from State Road and train noise.	63.1
LT-20	10/5/15	900 Roberts Lane	Kern County	Residential	Traffic on Roberts Lane, Teakwood Drive, and Airport Drive. Train noise.	68.9
LT-21	10/5/15	231 Hickerson Drive	Kern County	Residential	Traffic on Willow Drive and Hickerson Drive. Train noise.	64.3
LT-22	10/6/15	100 S Regal Street	Kern County	Residential	Ambient neighborhood noise.	57.9
LT-23	10/6/15	3263 Rio Mirada Drive	Bakersfield	Hotel	Traffic on Rio Mirada Drive and Buck Owens Boulevard.	68.8

Site	Start Date	Address/Location	City/County	Land Use Type	Noise Sources	Measured L _{dn}
LT-24	10/7/15	1821 Golden State Avenue	Bakersfield	Residential	Traffic on Golden State Avenue and Golden State Avenue S Frontage.	68.3
LT-25	10/7/15	912 Espee Street	Bakersfield	Residential	Traffic on Espee Street and surrounding roadways.	62.4
LT-26	10/8/15	Across the street from 719 24th Street to represent residential land uses located at 2300 R Street	Bakersfield	Residential	Traffic on 24th Street, Q Street, SR 178, and surrounding roadways.	64.5
LT-27	10/5/15	At 215 E 21st Street to represent residential land uses located at 310 E 21st Street	Bakersfield	Residential	Traffic on 21st Street and surrounding roadways, train passbys, and industrial equipment.	64.5
LT-28	10/6/15	512 Niles Street	Bakersfield	Residential	Traffic on SR 178 and surrounding roadways.	56.0
LT-29	10/7/15	1115 Robinson Street	Bakersfield	Residential	Local roadway traffic.	57.1
LT-30	10/7/15	931 E 21st Street	Bakersfield	Residential	Ambient neighborhood noise and train noise.	62.3
LT-31	10/8/15	1121 Eureka Street	Bakersfield	Residential	Ambient neighborhood noise.	56.3
LT-32	10/8/15	1005 Bates Avenue	Kern County	Residential	Ambient neighborhood noise.	56.7
LT-33	10/8/15	2030 Lake Street	Kern County	Residential	Ambient neighborhood noise.	59.1
LT-34	10/7/15	2534 Edison Highway	Kern County	Residential	Traffic on Edison Highway.	68.0
LT-35	10/6/15	At 2600 Trust Avenue to represent residential land uses located at 2606 Trust Avenue	Kern County	Residential	Traffic on Trust Avenue and train noise.	66.0
LT-36	10/5/15	At 2618 Niles Street to represent residential land uses located at 2608 Niles Street	Kern County	Residential	Traffic on Niles Street.	69.7
LT-37	10/7/15	2933 Potomac Avenue	Kern County	Residential	Ambient neighborhood noise.	61.4

L_{dn} = day-night average noise level
 LT = long-term
 SR = State Route

Table 3.4-B-2 Summary of Short-Term Noise Level Measurements

Site	Date	Time	Address	City/County	Land Use Type	Noise Sources	Measured L _{eq}	Long-Term ¹	Estimated L _{dn}	Estimated L _{eq}
ST-1	8/24/16	9:21 AM	1280 Poplar Avenue	Shafter	Residential	Traffic on SR 43	51.7	LT-01	58.7	56.3
ST-2	10/5/15	8:10 AM	1055 Park Lane	Shafter	Residential	Traffic on SR 43, faint train noise, birds, dog barks	54.9	LT-01	59.9	57.5
ST-3	8/24/16	9:50 AM	17635 Poplar Avenue	Shafter	Residential	Ambient neighborhood noise, bird noise, faint aircraft noise	46.8	LT-01	53.8	51.4
ST-4	10/5/15	8:46 AM	Between 581 and 586 Sunny Lane	Shafter	Residential	Traffic on SR 43, birds, faint dog barks	57.8	LT-01	62.8	60.4
ST-5	10/5/15	11:20 AM	Near 30369 Fresno Avenue	Shafter	Residential	Traffic on Fresno Avenue, faint traffic on SR 43	64.6	LT-02	70.7	69.8
ST-6	10/5/15	9:15 AM	312 Venable Lane	Shafter	Residential	Traffic on SR 43, train, birds, dog barks	68.8	LT-03	68.6 ³	68.8 ³
ST-7	10/5/15	9:45 AM	382 Mesa Verde Avenue	Shafter	Residential	Train passby, dog barks	53.5	LT-03	55.0	53.5
ST-8	10/5/15	10:25 AM	157 Poso Avenue	Shafter	Residential	Traffic on SR 43 and Poso Avenue, train passby, children playing	59.2	LT-03	60.7 ³	61.6 ³
ST-9	8/24/16	8:50 AM	Between 496 and 497 Emily Way	Shafter	Residential	Ambient neighborhood noise, landscaping activity in the background faint train noise and horn, and faint aircraft noise	47.3	LT-03	50.2	48.7
ST-10	10/6/15	9:52 AM	525 Martha Avenue	Shafter	Residential	Ambient neighborhood noise, faint dog barks	49.2	LT-04	59.7	56.4
ST-11	10/6/15	10:49 AM	Between 315 and 321 Mark Avenue	Shafter	Residential	Traffic on Mark Avenue and N Valley Street, dog barks	53.5	LT-04	64.0	60.7
ST-12	10/6/15	11:17 AM	269 Poso Avenue (Shafter Aquatic Center)	Shafter	Recreational	Traffic on N Valley Street, faint train passby, birds, children playing/swimming at aquatic center	59.0	LT-04	67.8	64.5

Site	Date	Time	Address	City/County	Land Use Type	Noise Sources	Measured L _{eq}	Long-Term ¹	Estimated L _{dn}	Estimated L _{eq}
ST-13	10/6/15	12:56 PM	525 Willow Street	Shafter	Residential	Traffic on Willow Street and Tulare Avenue, birds	53.7	LT-05	57.7	53.8
ST-14	10/6/15	12:30 PM	340 E Tulare Avenue	Shafter	Residential	Traffic on Tulare Avenue, faint train passby, birds	57.9	LT-05	61.6	59.7
ST-15	10/7/15	2:46 PM	Near 314 Kern Street	Shafter	Residential	Traffic on Kern Street, ambient neighborhood noise, faint dog barks	53.3	LT-06	56.8	55.2
ST-16	10/7/15	2:14 PM	Near 615 Kern Street	Shafter	Residential	Traffic on Kern Street, ambient neighborhood noise, faint dog barks	53.6	LT-06	57.1	55.5
ST-17	10/7/15	12:40 PM	208 Mannel Avenue	Shafter	Residential	Traffic on Mannel Avenue and Minter Avenue	60.0	LT-06	63.6	62.0
ST-18	10/8/15	9:16 AM	480 Mannel Avenue	Shafter	Residential	Traffic on Mannel Avenue, ambient neighborhood noise, birds	56.9	LT-07	59.3	57.0
ST-19	10/8/15	10:00 AM	402 Cross Street	Shafter	Residential	Traffic on Cross Street and Blake Avenue, ambient neighborhood noise, birds	48.8	LT-07	52.1	49.8
ST-20	10/7/15	11:54 AM	241 Walnut Street	Shafter	Residential	Traffic on Walnut Street, ambient neighborhood noise, faint train passby, birds	53.1	LT-07	56.1	53.8
ST-21	10/7/15	11:22 AM	271 Oak Court	Shafter	Residential	Ambient neighborhood noise, faint dog barks, birds	44.4	LT-07	47.7	45.4
ST-22	10/8/15	3:17 PM	256 California Avenue	Shafter	Residential	Traffic on James Street and California Avenue, faint train passby	57.2 ⁴	LT-08	63.4	62.5
ST-23	8/24/16	10:30 AM	342 Pacific Avenue	Shafter	Office	Traffic on Pacific Avenue and SR 43, welding shop activity	53.1	LT-08	61.4	60.5
ST-24	10/9/15	10:23 AM	349 E Marengo Avenue	Shafter	Residential	Ambient neighborhood noise. Traffic on Marengo Avenue. Faint construction equipment noise and dog barks. Bird noise	52.1	LT-08	60.4	59.5

Site	Date	Time	Address	City/County	Land Use Type	Noise Sources	Measured L _{eq}	Long-Term ¹	Estimated L _{dn}	Estimated L _{eq}
ST-25	10/9/15	11:42 AM	455 E Ash Avenue	Shafter	Residential	Traffic on Ashe Avenue, ambient neighborhood noise, faint train passby	53.0	LT-08	62.6	61.7
ST-26	10/9/15	12:26 PM	655 and 659 Central Valley Highway	Shafter	Medical Office	Traffic on Central Valley Highway, train passby	67.8 ⁴	LT-08	71.5 ³	73.5
ST-27	8/24/16	11:51 AM	179 Golden West Avenue	Shafter	Residential	Traffic on N Wall Street	50.3	LT-08	56.9	56.0
ST-28	10/8/15	2:02 PM	235 Fuller Street	Shafter	Residential	Traffic on Fuller Street, ambient neighborhood noise, faint aircraft noise	51.5	LT-08	57.0	56.1
ST-29	8/24/16	11:07 AM	298 E Euclid Avenue	Shafter	Residential	Traffic on Euclid Avenue, ambient neighborhood noise, and bird noise	42.8	LT-08	52.4	51.5
ST-30	10/8/15	11:45 AM	31363 E Orange Avenue	Shafter	Residential	Traffic on Santa Fe Way, engine running, faint dogs barking	45.8	LT-09	55.3	54.6
ST-31	10/9/15	12:03 PM	31396 Burbank Street	Shafter	Cemetery	Traffic on Santa Fe Way, mariachi band playing in cemetery (far away)	52.3	LT-09	58.6	57.9
ST-32	10/5/15	1:10 PM	19431 Raymond Street	Bakersfield	Residential	Traffic on 7th Standard Road	54.8	LT-12	62.1	57.5
ST-33	10/6/15	1:50 PM	7307 Creemore Street	Kern County	Residential	Traffic on Creemore Street, ambient neighborhood noise	53.7	LT-14	64.6	68.9
ST-34	10/6/15	1:46 PM	7001 Creemore Street	Kern County	Residential	Traffic on Creemore Street, ambient neighborhood noise	54.8	LT-14	65.7	70.0
ST-35	10/6/15	2:15 PM	6604 Cherrywood Avenue	Kern County	Residential	Ambient neighborhood noise	56.6	LT-14	61.6	65.9
ST-36	10/6/15	2:20 PM	6204 Rodgers Street	Kern County	Residential	Traffic on SR 99	49.2	LT-15	57.0 ³	56.5
ST-37	10/6/15	1:31 PM	6620 Byrd Street	Kern County	Residential	Traffic on SR 99, Norris Road, and Byrd Avenue	50.4	LT-15	63.1	60.4

Site	Date	Time	Address	City/County	Land Use Type	Noise Sources	Measured L _{eq}	Long-Term ¹	Estimated L _{dn}	Estimated L _{eq}
ST-38	8/24/16	1:56 PM	6431 Stanley Street	Kern County	Residential	Traffic on Norris Road, aircraft noise, and ambient neighborhood noise	47.1	LT-15	57.1	54.4
ST-39	10/6/15	1:03 PM	6319 Stanley Street	Kern County	Residential	Traffic on SR 99 and birds	44.2	LT-15	56.9	54.2
ST-40	10/7/15	3:35 PM	5700 Norris Road	Kern County	Residential	Traffic on SR 99 and Norris Road	50.0	LT-16	54.8	54.2
ST-41	8/25/16	7:12 AM	6516 Mohawk Street	Kern County	Residential	Traffic on Norris Road, faint traffic on SR 99, and bird noise	51.5	LT-16	52.1	51.5
ST-42	10/7/15	4:11 PM	6317 Mohawk Street	Kern County	Residential	Traffic on SR 99	46.9	LT-16	51.3	50.7
ST-43	10/6/15	11:37 AM	6257 Knudsen Drive	Kern County	Hotel	Traffic on SR 99 and Knudsen Drive	63.7	LT-16	69.0	68.4
ST-44	10/6/15	12:06 PM	6100 Knudsen Drive	Kern County	Hotel	Traffic on Victor Street and SR 99	62.0	LT-16	67.3	66.7
ST-45	8/24/16	2:26 PM	5948 Victor Street	Kern County	Residential	Ambient noise and HVAC noise in the background	52.2	LT-16	57.9	57.3
ST-46	10/5/15	8:41 AM	1611 Adrian Street	Kern County	Residential	Traffic on Roberts Lane and SR 99	52.2	LT-17	57.1	57.4
ST-47	10/5/15	9:48 AM	1409 Castaic Avenue	Kern County	Residential	Traffic on Castaic Avenue, Roberts Lane, and SR 99	55.8	LT-17	61.1	61.4
ST-48	10/5/15	7:02 AM	1320 Arthur Avenue	Kern County	Residential	Traffic on SR 99, birds	51.8	LT-17	55.8	56.1
ST-49	10/5/15	11:06 AM	1513 Melody Lane	Kern County	Residential	Traffic on Norris Road and SR 99	55.6	LT-18	56.0	55.9
ST-50	8/25/16	1:16 PM	1302 Woodrow Avenue	Kern County	Residential	Neighborhood activity, distant traffic noise and machine grinding	51.5	LT-18	56.4	56.3
ST-51	8/25/16	11:00 AM	1315 Castaic Avenue	Kern County	Residential	Traffic on Norris Road and neighborhood activity	47.4	LT-18	47.8	47.7
ST-52	10/5/15	7:35 AM	817 Arthur Court	Kern County	Residential	Traffic on SR 99 and Polk Street, faint dog barks, birds	57.6	LT-18	63.2	63.1

Site	Date	Time	Address	City/County	Land Use Type	Noise Sources	Measured L _{eq}	Long-Term ¹	Estimated L _{dn}	Estimated L _{eq}
ST-53	10/5/15	8:06 AM	1000 Olive Drive	Kern County	Residential	Traffic on Olive Drive and SR 99	51.3	LT-18	57.8	57.7
ST-54	10/5/15	10:15 AM	1001 Roberts Lane	Kern County	School	Traffic on Roberts Lane and Airport Road	65.9	LT-20	69.3	70.9
ST-55	8/25/16	12:33 PM	1012 Redwood Drive	Kern County	Residential	Distant traffic on Roberts Lane and HVAC noise in the background.	46.3	LT-20	50.6	52.2
ST-56	8/25/16	9:29 AM	117 Harris Drive	Kern County	Residential	Faint HVAC noise from the home and neighboring residences	44.2	LT-21	50.4	50.6
ST-57	8/24/16	8:24 AM	229 Hickerson Drive	Kern County	Residential	HVAC noise from nearby homes and bird noise.	42.6	LT-21	48.6	48.8
ST-58	8/24/16	2:03 PM	555 Willow Drive	Kern County	Residential	Distant traffic to the west and distant hum.	46.8	LT-21	51.1	51.3
ST-59	10/5/15	2:25 PM	449 S Oildale Drive	Kern County	Residential	Traffic on Oildale Drive and Willow Drive, ambient neighborhood noise	50.1	LT-21	54.4	54.6
ST-60	10/6/15	11:20 AM	811 Roberts Lane	Kern County	Residential	Traffic on Roberts Lane, airport traffic	71.1 ⁴	LT-20	79.9	81.5
ST-61	10/6/15	12:00 PM	627 Edwin Drive	Kern County	Residential	Ambient neighborhood noise	55.8	LT-22	58.2	59.9
ST-62	10/6/15	12:30 PM	404 Crystal Court	Kern County	Residential	Traffic on Crystal Street, ambient neighborhood noise	53.5	LT-22	55.9	57.6
ST-63	10/6/15	1:00 PM	3219 Gulf Street	Bakersfield	Residential	Traffic on Gulf Street, faint industrial noise	59.8	LT-23	63.1	65.2
ST-64	10/7/15	9:15 AM	3333 El Encanto Court	Bakersfield	Residential	Ambient neighborhood noise	54.9	LT-24	58.0	56.3
ST-65	10/7/15	9:55 AM	3026 Spruce Street	Bakersfield	Residential	Traffic on Spruce Street, ambient neighborhood noise	57.1	LT-24	60.3	58.6
ST-66	10/7/15	10:50 AM	3036 Jacaranda Drive	Bakersfield	Residential	Traffic on Jacaranda Drive, ambient neighborhood noise	56.1	LT-24	59.3	57.6
ST-67	10/7/15	1:00 PM	2720 30th Street	Bakersfield	Residential	Traffic on 30th Street, ambient neighborhood noise	63.3	LT-24	65.5	63.8

Site	Date	Time	Address	City/County	Land Use Type	Noise Sources	Measured L _{eq}	Long-Term ¹	Estimated L _{dn}	Estimated L _{eq}
ST-68	8/24/16	1:19 PM	3805 Chester Avenue	Bakersfield	Park	Traffic on Highway 204, hammer noise from a distance, and vehicle back-up noise	48.2	LT-25	49.8	48.2
ST-69	8/24/16	3:07 PM	3501 Chester Avenue	Bakersfield	School	Traffic on Chester Avenue, some aircraft noise and parking lot activity	53.6	LT-25	56.9	55.3
ST-70	10/9/15	1:50 PM	1224 33rd Street	Bakersfield	Residential	Traffic on 33rd Street, ambient neighborhood noise, birds	59.4	LT-25	61.0	59.4
ST-71	10/7/15	2:30 PM	1011 31st Street	Bakersfield	Residential	Traffic on 31st Street, ambient neighborhood noise	55.4	LT-25	60.8	59.2
ST-72	10/7/15	3:00 PM	716 Espee Street	Bakersfield	Residential	Traffic on 28th Street, ambient neighborhood noise	59.5	LT-25	62.8	61.2
ST-73	10/7/15	4:00 PM	705 30th Street	Bakersfield	Residential	Traffic on 30th Street, ambient neighborhood noise	61.2	LT-25	64.6	63.0
ST-74	10/5/15	8:33 AM	2711 L Street	Bakersfield	Residential	Traffic on L Street	61.8	LT-26	64.1	63.2
ST-75	10/5/15	7:58 AM	900 25th Street	Bakersfield	Residential	Traffic on 25th Street	60.9	LT-26	63.2	62.3
ST-76	10/5/15	10:17 AM	2300 R Street	Bakersfield	Residential	Traffic on R Street, ambient neighborhood noise	65.4	LT-26	66.3	65.4
ST-77	10/5/15	10:53 AM	2172 V Street	Bakersfield	Church	Traffic on 22nd Street, birds	54.6	LT-26	56.3	55.3
ST-78	10/5/15	9:13 AM	Near 2508 K Street	Bakersfield	Residential	Traffic on 25th Street, faint activity in nearby auto shop, faint landscaping	60.0	LT-26	62.7	61.8
ST-79	10/5/15	9:47 AM	2210 N Street	Bakersfield	Residential	Traffic on N Street, faint activity in nearby auto shop, faint dog barks	58.4	LT-26	61.1	60.2
ST-80	10/5/15	12:18 PM	2020 R Street	Bakersfield	Recreational	Traffic on R Street, ambient neighborhood noise, faint fountain in the park	54.7	LT-26	56.1	55.2

Site	Date	Time	Address	City/County	Land Use Type	Noise Sources	Measured L _{eq}	Long-Term ¹	Estimated L _{dn}	Estimated L _{eq}
ST-81	8/25/16	11:32 AM	425 18th Street	Bakersfield	Residential	Traffic on 18th Street, people talking, HVAC noise, aircraft noise	52.9	LT-26	54.5	53.6
ST-82	10/6/15	8:37 AM	1622 Union Avenue	Bakersfield	Hotel	Traffic on E Truxtun Avenue, birds	57.9	LT-27	62.5	58.3
ST-83	10/6/15	9:19 AM	519 E 21st Street	Bakersfield	Residential	Traffic on 21st Street, faint nearby tire shop activity, faint dog barks	62.0	LT-27	61.8	57.6
ST-84	10/7/15	11:00 AM	112 Lake Street	Bakersfield	Residential	Traffic on SR 178 and Stockton Street, faint motor running in nearby industrial building	57.1	LT-28	59.6	59.6
ST-85	10/7/15	1:25 PM	319 Monterey Street	Bakersfield	Residential	Traffic on SR 178, faint dog barks	50.4	LT-28	55.7	55.8
ST-86	10/7/15	1:54 PM	517 Monterey Street	Bakersfield	Residential	Traffic on Montgomery Street, birds	45.1	LT-28	49.6	49.6
ST-87	8/25/16	10:07 AM	808 Monterey Street	Bakersfield	Recreation	Traffic on Monterey Street and HVAC noise	50.3	LT-28	53.2	53.2
ST-88	10/7/15	2:22 PM	724 Niles Street	Bakersfield	Church	Traffic on Baker Street and Montgomery Street, birds	50.7	LT-28	55.2	55.2
ST-89	8/25/16	9:26 AM	1006 Monterey Street	Bakersfield	Residential	Traffic on Monterey Street, neighborhood noise, train horn in the background, aircraft noise	50.0	LT-28	55.7	55.7
ST-90	10/6/15	11:07 AM	1228 Monterey Street	Bakersfield	Church	Traffic on Niles Street and Monterey Street, faint dog barks	57.6	LT-28	60.1	60.1
ST-91	8/24/16	3:57 PM	1611 Oregon Street	Bakersfield	Residential	Traffic on Oregon Street, neighborhood activity, faint dog barks, faint hum of HVAC noise	52.4	LT-28	56.5	56.5
ST-92	10/7/15	3:07 PM	515 Kentucky Street	Bakersfield	Residential	Ambient neighborhood noise	48.4	LT-29	51.6	51.7

Site	Date	Time	Address	City/County	Land Use Type	Noise Sources	Measured L _{eq}	Long-Term ¹	Estimated L _{dn}	Estimated L _{eq}
ST-93	8/25/16	8:48 AM	730 Jackson Street	Bakersfield	Residential	Traffic on Kentucky Street and Beagle Avenue, aircraft noise, and tractor in the background	57.4	LT-29	61.7	61.8
ST-94	10/7/15	4:05 PM	1310 Kentucky Street	Bakersfield	Residential	Ambient neighborhood noise, faint train passby	51.6	LT-29	53.5	53.6
ST-95	8/25/16	1:36 PM	1526 Kentucky Street	Bakersfield	Residential	Traffic on Kentucky Street and Williams Street, neighborhood activity	50.2	LT-29	54.5	54.6
ST-96	10/8/15	9:42 AM	806 E 19th Street	Bakersfield	Residential	Traffic on Beagle Avenue, ambient neighborhood noise, birds	52.6	LT-30	58.4	55.3
ST-97	8/25/16	10:44 AM	1021 Sumner Street	Bakersfield	Residential	Traffic on Sumner Street and faint traffic on Beale Avenue, neighborhood activity, aircraft noise	53.0	LT-30	59.5	56.4
ST-98	10/7/15	2:11 PM	1223 19th Street	Bakersfield	Residential	Traffic on Truxtun Avenue, faint dog barks	63.9	LT-30	67.2	64.0
ST-99	10/7/15	1:38 PM	1402 E 19th Street	Bakersfield	Residential	Traffic on Truxtun Avenue	70.7 ⁴	LT-30	80.9	77.8
ST-100	10/8/15	11:07 AM	1018 Dolores Street	Bakersfield	Residential	Traffic on Dolores Street, bird noise	52.5	LT-31	60.6	57.2
ST-101	10/8/15	11:43 AM	1327 Eureka Street	Bakersfield	Residential	Traffic on Haley Street, birds, dog barks	55.7	LT-31	63.8	60.4
ST-102	10/8/15	1:20 PM	1120–1166 Washington Street	Bakersfield	Residential	Traffic on Washington Street, aircraft noise	54.5 ⁴	LT-32	62.7	61.7
ST-103	10/8/15	2:24 PM	906 Richmond Street	Bakersfield	Residential	Traffic on Richmond Street, ambient neighborhood noise, faint dog barks	54.9	LT-32	61.7	60.7
ST-104	10/8/15	2:54 PM	2124 Larcus Avenue	Bakersfield	Residential	Traffic on Larcus Avenue, faint train passby, faint aircraft noise	55.8	LT-32	61.2	60.2
ST-105	10/8/15	3:31 PM	1914 Oregon Street	Bakersfield	Residential	Traffic on Oregon Street, ambient neighborhood noise	55.1	LT-33	61.8	57.3

Site	Date	Time	Address	City/County	Land Use Type	Noise Sources	Measured L _{eq}	Long-Term ¹	Estimated L _{dn}	Estimated L _{eq}
ST-106	10/9/15	9:37 AM	2028 Monterey Street	Bakersfield	Residential	Traffic on Monterey Street, faint dog barks	50.8	LT-33	59.5	55.0
ST-107	10/5/15	10:07 AM	2412 Monterey Street	Bakersfield	Residential	Traffic on Monterey Street, dog barks	55.2	LT-33	63.1	58.5
ST-108	8/25/16	12:49 PM	2126 Steele Avenue	Bakersfield	Residential	Traffic on Vernon Avenue and aircraft noise	55.4	LT-34	61.4	60.2
ST-109	10/5/15	7:53 AM	2412 Steele Avenue	Bakersfield	Residential	Traffic on Steele Avenue, dog barks, ambient neighborhood noise	58.4	LT-34	64.5	63.3
ST-110	10/5/15	8:34 AM	2417 Larcus Avenue	Bakersfield	Residential	Traffic on Larcus Avenue, faint dog barks, ambient neighborhood noise	54.0	LT-34	60.1	58.9
ST-111	10/5/15	9:07 AM	2812 Citrus Drive	Bakersfield	Residential	Traffic on Citrus Drive, faint dog barks, ambient neighborhood noise	59.9	LT-34	64.4	63.2
ST-112	10/6/15	9:51 AM	2117 Kentucky Street	Bakersfield	Residential	Traffic on Kentucky Street, ambient neighborhood noise	61.8	LT-35	68.9	67.5
ST-113	8/24/16	12:57 PM	2331 Center Street	Bakersfield	Residential	HVAC noise, bird noise	47.0	LT-35	54.1	52.7
ST-114	10/6/15	7:57 AM	2621 Trust Avenue	Bakersfield	Residential	Traffic on Trust Avenue, faint dog barks, birds, ambient neighborhood noise	52.0	LT-35	57.1	55.8
ST-115	8/25/16	9:41 AM	2729 Trust Avenue	Bakersfield	Residential	Traffic on Edison Highway	48.4	LT-35	55.6	54.2
ST-116	10/6/15	12:13 PM	606 Rembrandt Street	Bakersfield	Residential	Traffic on Rembrandt Street, faint activity at nearby school, faint train passby, faint aircraft	54.6	LT-35	61.8	60.4
ST-117	10/5/15	11:09 AM	2534 Kentucky Street	Bakersfield	Residential	Traffic on Kentucky Street, faint dog barks, birds, faint aircraft	52.3	LT-36	54.1	53.4
ST-118	8/25/16	8:31 AM	2814 Center Street	Bakersfield	Residential	Ambient neighborhood noise	51.0	LT-36	52.1	51.4
ST-119	10/5/15	12:54 PM	2720 Lake Street	Bakersfield	Residential	Ambient neighborhood noise, dog barks, birds, aircraft	48.9	LT-36	51.2	50.6

Site	Date	Time	Address	City/County	Land Use Type	Noise Sources	Measured L _{eq}	Long-Term ¹	Estimated L _{dn}	Estimated L _{eq}
ST-120	10/7/15	9:51 AM	600 Hazel Street	Bakersfield	Residential	Ambient neighborhood noise, dog barks, aircraft	60.4 ⁴	LT-32	64.6	63.6
ST-121	8/24/16	2:18 PM	718 Dorrance Street	Bakersfield	Residential	HVAC noise	48.3	LT-37	51.9	50.9
ST-122	10/7/15	11:23 AM	519 McClean Avenue	Bakersfield	Residential	Ambient neighborhood noise	57.5	LT-37	64.0	62.9
ST-123	10/7/15	11:53 AM	516 Layne Street	Bakersfield	Residential	Ambient neighborhood noise, birds	54.6	LT-37	61.5	60.5
ST-124	10/8/15	11:00 AM	2901 Center Street	Bakersfield	School	Traffic on Center Street, faint activity at nearby school, ambient neighborhood noise	63.2	LT-36	65.0	64.3
ST-125	8/24/16	3:51 PM	2901 Center Street	Bakersfield	School	Traffic on Edison Highway and activity at the school playground	46.0	LT-35	51.8	50.4
ST-126	10/8/15	12:04 PM	3000 Center Street	Bakersfield	Residential	Traffic on Center Street	66.7 ⁴	LT-36	68.2	68.2

¹ The long-term noise level measurement that was used to estimate the L_{dn} level for each short-term noise level measurement location.

² The estimated L_{eq} represents the noisiest hour.

³ The corresponding 20 minutes from the long-term measurement was used to estimate the L_{dn} and L_{eq} level.

⁴ Due to high intermittent noise levels at this location, the L₅₀ was used.

HVAC = heating, ventilation, and air conditioning

L_{dn} = day-night average noise level

L_{eq} = equivalent continuous sound level

SR = State Route

ST = short-term

Table 3.4-B-3 Measured Vibration Levels

Site	Date	Address	City	Start Time	Event Description	Distance to Tracks (feet)	Measured Maximum Vibration Velocity (VdB)
V-1	11/11/15	510 State Avenue	Shafter	10:23 a.m.	Amtrak Northbound 1/5	251	72.3
				10:59 a.m.	BNSF Southbound 3/77		81.2
				11:13 a.m.	BNSF Southbound 4/77		77.1
				11:16 a.m.	Ambient		66.4
				11:32 a.m.	Amtrak Southbound 1/5		76.1
				11:48 a.m.	BNSF Northbound 3/101		77.7
V-2	11/11/15	280 Beech Avenue	Shafter	12:55 p.m.	BNSF Southbound 4/71/2	242	71.3
				12:57 p.m.	Ambient		73.6 ¹
				1:33 p.m.	Amtrak Southbound 1/6/1		62.6
				1:45 p.m.	Amtrak Northbound 1/5		64.3
				3:33 p.m.	BNSF Southbound 2/64		66.7
V-3	11/13/15	34722 7th Standard Road	Bakersfield	9:14 a.m.	Ambient	193	65.4
				11:47 a.m.	UPRR Southbound 2/80/1		71.6
V-4	11/12/15	5800 Snow Road	Bakersfield	4:52 p.m.	UPRR Northbound 2/101	200	69.7
				4:55 p.m.	Ambient		63.5
				5:12 p.m.	UPRR Northbound 2/26		71.4
V-5	11/13/15	1222 30th Street	Bakersfield	12:45 p.m.	Ambient	108	71.6
				1:57 p.m.	UPRR Southbound 2/75		84.1
V-6	11/12/15	1125 Sumner Street	Bakersfield	1:58 p.m.	BNSF Southbound 5/70	215	69.7
				2:01 p.m.	Ambient		75.3 ²
				2:21 p.m.	BNSF Southbound 3/65/2		72.8

Site	Date	Address	City	Start Time	Event Description	Distance to Tracks (feet)	Measured Maximum Vibration Velocity (VdB)
V-7	11/12/15	1999 Edison Highway	Bakersfield	11:46 a.m.	Ambient	140	66.5
				12:49 p.m.	UPRR Southbound 3/62/3/55		75.2
V-8	11/12/15	721 Oswell Street	Bakersfield	9:56 a.m.	Ambient	70	62.7
				11:25 a.m.	BNSF Northbound 4/90		83.4

¹ The ambient vibration level was higher than vibration levels generated by trains due to cargo trucks traveling on Beech Avenue near the vibration sensor.

² The ambient vibration level was higher than vibration levels generated by trains due to cargo trucks traveling on Sumner Street near the vibration sensor.

BNSF = BNSF Railway

UPRR = Union Pacific Railroad

VdB = vibration velocity decibels

Table 3.4-B-4 High-Speed Rail Corridor Construction Equipment List by Phase

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Mobilization – Site 1					
Off-Highway Trucks – 0175	175	Diesel	4	5	60
Off-Highway Trucks – 0250	210	Diesel	1	5	60
Off-Highway Trucks – 0500	500	Diesel	10	5	60
Off-Highway Trucks – 0500	300	Diesel	4	5	60
Off-Highway Trucks – 0250	210	Diesel	4	5	60
Other General Industrial Equipment – 0050	10	Diesel	5	5	60
Off-Highway Trucks – 0250	200	Diesel	4	5	60
Off-Highway Trucks – 0500	330	Diesel	4	5	60
Tractors/Loaders/Backhoes – 0120	87	Diesel	2	5	60
Excavators – 0500	300	Diesel	1	5	60
Crawler Tractors – 0175	125	Diesel	2	5	60
Construction Equipment Total			41		
Mobilization – Site 2					
Off-Highway Trucks – 0175	175	Diesel	3	5	60
Off-Highway Trucks – 0250	210	Diesel	1	5	60
Off-Highway Trucks – 0500	500	Diesel	10	5	60
Off-Highway Trucks – 0500	300	Diesel	4	5	60
Off-Highway Trucks – 0250	210	Diesel	4	5	60
Other General Industrial Equipment – 0050	10	Diesel	5	5	60
Off-Highway Trucks – 0250	200	Diesel	4	5	60
Off-Highway Trucks – 0500	330	Diesel	4	5	60
Tractors/Loaders/Backhoes – 0120	87	Diesel	2	5	60
Excavators – 0500	300	Diesel	1	5	60
Crawler Tractors – 0175	125	Diesel	2	5	60
Construction Equipment Total			40		
Mobilization – Site 3					
Off-Highway Trucks – 0175	175	Diesel	3	5	60
Off-Highway Trucks – 0250	210	Diesel	1	5	60
Off-Highway Trucks – 0500	500	Diesel	10	5	60
Off-Highway Trucks – 0500	300	Diesel	4	5	60
Off-Highway Trucks – 0250	210	Diesel	4	5	60
Other General Industrial Equipment – 0050	10	Diesel	5	5	60
Off-Highway Trucks – 0250	200	Diesel	4	5	60
Off-Highway Trucks – 0500	330	Diesel	4	5	60
Tractors/Loaders/Backhoes – 0120	87	Diesel	2	5	60

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Excavators – 0500	300	Diesel	1	5	60
Crawler Tractors – 0175	125	Diesel	2	5	60
Construction Equipment Total			40		
Mobilization – Site 4					
Off-Highway Trucks – 0175	175	Diesel	3	5	60
Off-Highway Trucks – 0250	210	Diesel	1	5	60
Off-Highway Trucks – 0500	500	Diesel	10	5	60
Off-Highway Trucks – 0500	300	Diesel	4	5	60
Off-Highway Trucks – 0250	210	Diesel	4	5	60
Other General Industrial Equipment – 0050	10	Diesel	5	5	60
Off-Highway Trucks – 0250	200	Diesel	4	5	60
Off-Highway Trucks – 0500	330	Diesel	4	5	60
Tractors/Loaders/Backhoes – 0120	87	Diesel	2	5	60
Excavators – 0500	300	Diesel	1	5	60
Crawler Tractors – 0175	125	Diesel	2	5	60
Construction Equipment Total			40		
Demolition – Site 1					
Other General Industrial Equipment – 0050	10	Diesel	1	8	180
Rough-Terrain Forklifts – 0500	357	Diesel	1	8	180
Tractors/Loaders/Backhoes – -0120	108	Diesel	2	8	180
Construction Equipment Total			4		
Demolition – Site 2					
Other General Industrial Equipment – 0050	10	Diesel	1	8	180
Rough-Terrain Forklifts – 0500	357	Diesel	1	8	180
Tractors/Loaders/Backhoes – 0120	108	Diesel	2	8	180
Construction Equipment Total			4		
Demolition – Site 3					
Other General Industrial Equipment – 0050	10	Diesel	1	8	180
Rough-Terrain Forklifts – 0500	357	Diesel	1	8	180
Tractors/Loaders/Backhoes – 0120	108	Diesel	2	8	180
Construction Equipment Total			4		
Demolition – Site 4					
Other General Industrial Equipment – 0050	10	Diesel	1	8	180
Rough-Terrain Forklifts – 0500	357	Diesel	1	8	180
Tractors/Loaders/Backhoes – 0120	108	Diesel	2	8	180
Construction Equipment Total			4		

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Land Clearing – Site 1					
Tractors/Loaders/Backhoes – 0120	87	Diesel	2	2	35
Tractors/Loaders/Backhoes – 0120	97	Diesel	2	2	35
Crawler Tractors – 0500	310–410	Diesel	4	2	35
Excavators – 0500	300–450	Diesel	4	2	35
Rubber-Tired Loaders – 0175	197	Diesel	2	2	35
Rubber-Tired Dozers – 0500	262	Diesel	2	2	35
Off-Highway Trucks – 0175	175	Diesel	4	2	35
Off-Highway Trucks – 0250	210	Diesel	2	2	35
Off-Highway Trucks – 0250	210	Diesel	2	2	35
Off-Highway Trucks – 0500	300	Diesel	4	2	35
Scrapers – 0500	335	Diesel	3	2	35
Construction Equipment Total			31		
Land Clearing – Site 2					
Tractors/Loaders/Backhoes – 0120	87	Diesel	2	2	35
Tractors/Loaders/Backhoes – 0120	97	Diesel	2	2	35
Crawler Tractors – 0500	310–410	Diesel	4	2	35
Excavators – 0500	300–450	Diesel	4	2	35
Rubber-Tired Loaders – 0175	197	Diesel	2	2	35
Rubber-Tired Dozers – 0500	262	Diesel	2	2	35
Off-Highway Trucks – 0175	175	Diesel	4	2	35
Off-Highway Trucks – 0250	210	Diesel	2	2	35
Off-Highway Trucks – 0250	210	Diesel	2	2	35
Off-Highway Trucks – 0500	300	Diesel	4	2	35
Scrapers – 0500	335	Diesel	3	2	35
Construction Equipment Total			31		
Land Clearing – Site 3					
Tractors/Loaders/Backhoes – 0120	87	Diesel	2	2	35
Tractors/Loaders/Backhoes – 0120	97	Diesel	2	2	35
Crawler Tractors – 0500	310–410	Diesel	4	2	35
Excavators – 0500	300–450	Diesel	4	2	35
Rubber-Tired Loaders – 0175	197	Diesel	2	2	35
Rubber-Tired Dozers – 0500	262	Diesel	2	2	35
Off-Highway Trucks – 0175	175	Diesel	4	2	35
Off-Highway Trucks – 0250	210	Diesel	2	2	35
Off-Highway Trucks – 0250	210	Diesel	2	2	35

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Off-Highway Trucks – 0500	300	Diesel	4	2	35
Scrapers – 0500	335	Diesel	3	2	35
Construction Equipment Total			31		
Land Clearing – Site 4					
Tractors/Loaders/Backhoes – 0120	87	Diesel	2	2	35
Tractors/Loaders/Backhoes – 0120	97	Diesel	2	2	35
Crawler Tractors – 0500	310–410	Diesel	4	2	35
Excavators – 0500	300–450	Diesel	4	2	35
Rubber-Tired Loaders – 0175	197	Diesel	2	2	35
Rubber-Tired Dozers – 0500	262	Diesel	2	2	35
Off-Highway Trucks – 0175	175	Diesel	4	2	35
Off-Highway Trucks – 0250	210	Diesel	2	2	35
Off-Highway Trucks – 0250	210	Diesel	2	2	35
Off-Highway Trucks – 0500	300	Diesel	4	2	35
Scrapers – 0500	335	Diesel	3	2	35
Construction Equipment Total			31		
Earth Moving – Site 1					
Tractors/Loaders/Backhoes – 0120	97	Diesel	1	7	150
Crawler Tractors – 0500	410	Diesel	1	7	150
Excavators – 0500	450	Diesel	1	7	150
Rubber-Tired Loaders – 0500	349	Diesel	1	7	150
Graders – 0250	458	Diesel	1	7	150
Graders – 0500	260	Diesel	1	7	150
Rollers – 0175	156–174	Diesel	2	7	150
Other General Industrial Equipment – 0050	15	Diesel	4	7	150
Scrapers – 0500	335–400	Diesel	2	7	150
Off-Highway Trucks – 0175	175	Diesel	3	7	150
Off-Highway Trucks – 0250	210	Diesel	3	7	150
Off-Highway Trucks – 0175	150	Diesel	2	7	150
Off-Highway Trucks – 0500	300	Diesel	2	7	150
Off-Highway Trucks – 0250	210	Diesel	2	7	150
Other General Industrial Equipment – 0050	10	Diesel	6	7	150
Construction Equipment Total			32		
Earth Moving – Site 2					
Tractors/Loaders/Backhoes – 0120	97	Diesel	1	7	150
Crawler Tractors – 0500	410	Diesel	1	7	150
Excavators – 0500	450	Diesel	1	7	150
Rubber-Tired Loaders – 0500	349	Diesel	1	7	150

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Graders – 0250	458	Diesel	1	7	150
Graders – 0500	260	Diesel	1	7	150
Rollers – 0175	156–174	Diesel	2	7	150
Other General Industrial Equipment – 0050	15	Diesel	4	7	150
Scrapers – 0500	335–400	Diesel	2	7	150
Off-Highway Trucks – 0175	175	Diesel	3	7	150
Off-Highway Trucks – 0250	210	Diesel	3	7	150
Off-Highway Trucks – 0175	150	Diesel	2	7	150
Off-Highway Trucks – 0500	300	Diesel	2	7	150
Off-Highway Trucks – 0250	210	Diesel	2	7	150
Other General Industrial Equipment – 0050	10	Diesel	6	7	150
Construction Equipment Total			32		
Earth Moving – Site 3					
Tractors/Loaders/Backhoes – 0120	97	Diesel	1	7	150
Crawler Tractors – 0500	410	Diesel	1	7	150
Excavators – 0500	450	Diesel	1	7	150
Rubber-Tired Loaders – 0500	349	Diesel	1	7	150
Graders – 0250	458	Diesel	1	7	150
Graders – 0500	260	Diesel	1	7	150
Rollers – 0175	156–174	Diesel	2	7	150
Other General Industrial Equipment – 0050	15	Diesel	4	7	150
Scrapers – 0500	335–400	Diesel	2	7	150
Off-Highway Trucks – 0175	175	Diesel	3	7	150
Off-Highway Trucks – 0250	210	Diesel	3	7	150
Off-Highway Trucks – 0175	150	Diesel	2	7	150
Off-Highway Trucks – 0500	300	Diesel	2	7	150
Off-Highway Trucks – 0250	210	Diesel	2	7	150
Other General Industrial Equipment – 0050	10	Diesel	6	7	150
Construction Equipment Total			32		
Earth Moving – Site 4					
Tractors/Loaders/Backhoes – 0120	97	Diesel	1	7	150
Crawler Tractors – 0500	410	Diesel	1	7	150
Excavators – 0500	450	Diesel	1	7	150
Rubber-Tired Loaders – 0500	349	Diesel	1	7	150
Graders – 0250	458	Diesel	1	7	150
Graders – 0500	260	Diesel	1	7	150
Rollers – 0175	156–174	Diesel	2	7	150
Other General Industrial Equipment – 0050	15	Diesel	4	7	150

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Scrapers – 0500	335–400	Diesel	2	7	150
Off-Highway Trucks – 0175	175	Diesel	3	7	150
Off-Highway Trucks – 0250	210	Diesel	3	7	150
Off-Highway Trucks – 0175	150	Diesel	2	7	150
Off-Highway Trucks – 0500	300	Diesel	2	7	150
Off-Highway Trucks – 0250	210	Diesel	2	7	150
Other General Industrial Equipment – 0050	10	Diesel	6	7	150
Construction Equipment Total			32		
Road and Canal Crossings – Site 1					
Other General Industrial Equipment – 0050	50	Diesel	8	12	261
Other General Industrial Equipment – 0500	450	Diesel	4	12	261
Pavers – 0250	180	Diesel	4	12	261
Other General Industrial Equipment – 0120	60	Diesel	4	12	261
Sweepers/Scrubbers – 0050	25	Diesel	4	12	261
Other General Industrial Equipment – 0050	20	Diesel	4	12	261
Other Construction Equipment – 0120	120	Diesel	2	12	261
Off-Highway Trucks – 0250	200–250	Diesel	6	12	261
Tractors/Loaders/Backhoes – 0120	87	Diesel	4	12	261
Pavers – 0250	30	Diesel	4	12	261
Other Construction Equipment – 0050	15	Diesel	4	12	261
Other General Industrial Equipment – 0050	13	Diesel	4	12	261
Other Construction Equipment – 0120	100	Diesel	4	12	261
Cranes – 0500	420	Diesel	4	12	261
Cranes – 0500	330	Diesel	4	12	261
Cranes – 0500	420–470	Diesel	4	12	261
Cranes – 0175	140	Diesel	2	12	261
Cranes – 0120	75	Diesel	2	12	261
Crawler Tractors – 0175	125	Diesel	1	12	261
Crawler Tractors – 0500	310–410	Diesel	3	12	261
Excavators – 0500	300	Diesel	2	12	261
Excavators – 0500	450	Diesel	2	12	261
Rubber-Tired Loaders – 0175	149	Diesel	4	12	261
Rubber-Tired Loaders – 0250	197	Diesel	4	12	261
Other Construction Equipment – 0050	15	Diesel	2	12	261
Other Construction Equipment – 0050	28	Diesel	2	12	261
Graders – 0175	158	Diesel	2	12	261
Other Construction Equipment – 0120	92	Diesel	2	12	261
Other Construction Equipment – 0250	245	Diesel	2	12	261

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Other Construction Equipment – 0500	335	Diesel	2	12	261
Other General Industrial Equipment – 0050	4	Diesel	10	12	261
Rollers – 0120	83	Diesel	5	12	261
Rollers – 0175	156–174	Diesel	8	12	261
Other General Industrial Equipment – 0050	15	Diesel	4	12	261
Off-Highway Trucks – 0175	175	Diesel	4	12	261
Off-Highway Trucks – 0250	210	Diesel	4	12	261
Off-Highway Trucks – 0175	150	Diesel	4	12	261
Off-Highway Tractors – 0500	300	Diesel	4	12	261
Off-Highway Trucks – 0250	210	Diesel	4	12	261
Other General Industrial Equipment – 0050	45	Diesel	6	12	261
Other General Industrial Equipment – 0050	20	Diesel	10	12	261
Other General Industrial Equipment – 0175	134	Diesel	5	12	261
Other General Industrial Equipment – 0050	10	Diesel	4	12	261
Off-Highway Trucks – 0500	500	Diesel	4	12	261
Construction Equipment Total			176		
Road and Canal Crossings – Site 2					
Other General Industrial Equipment – 0050	50	Diesel	8	12	261
Other General Industrial Equipment – 0500	450	Diesel	4	12	261
Pavers – 0250	180	Diesel	4	12	261
Other General Industrial Equipment – 0120	60	Diesel	4	12	261
Sweepers/Scrubbers – 0050	25	Diesel	4	12	261
Other General Industrial Equipment – 0050	20	Diesel	4	12	261
Other Construction Equipment – 0120	120	Diesel	2	12	261
Off-Highway Trucks – 0250	200–250	Diesel	6	12	261
Tractors/Loaders/Backhoes – 0120	87	Diesel	4	12	261
Pavers – 0250	30	Diesel	4	12	261
Other Construction Equipment – 0050	15	Diesel	4	12	261
Other General Industrial Equipment – 0050	13	Diesel	4	12	261
Other Construction Equipment – 0120	100	Diesel	4	12	261
Cranes – 0500	420	Diesel	4	12	261
Cranes – 0500	330	Diesel	4	12	261
Cranes – 0500	420–470	Diesel	4	12	261
Cranes – 0175	140	Diesel	2	12	261
Cranes – 0120	75	Diesel	2	12	261
Crawler Tractors – 0175	125	Diesel	1	12	261
Crawler Tractors – 0500	310–410	Diesel	3	12	261
Excavators – 0500	300	Diesel	2	12	261

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Excavators – 0500	450	Diesel	2	12	261
Rubber-Tired Loaders – 0175	149	Diesel	4	12	261
Rubber-Tired Loaders – 0250	197	Diesel	4	12	261
Other Construction Equipment – 0050	15	Diesel	2	12	261
Other Construction Equipment – 0050	28	Diesel	2	12	261
Graders – 0175	158	Diesel	2	12	261
Other Construction Equipment – 0120	92	Diesel	2	12	261
Other Construction Equipment – 0250	245	Diesel	2	12	261
Other Construction Equipment – 0500	335	Diesel	2	12	261
Other General Industrial Equipment – 0050	4	Diesel	10	12	261
Rollers – 0120	83	Diesel	5	12	261
Rollers – 0175	156–174	Diesel	8	12	261
Other General Industrial Equipment – 0050	15	Diesel	4	12	261
Off-Highway Trucks – 0175	175	Diesel	4	12	261
Off-Highway Trucks – 0250	210	Diesel	4	12	261
Off-Highway Trucks – 0175	150	Diesel	4	12	261
Off-Highway Tractors – 0500	300	Diesel	4	12	261
Off-Highway Trucks – 0250	210	Diesel	4	12	261
Other General Industrial Equipment – 0050	45	Diesel	6	12	261
Other General Industrial Equipment – 0050	20	Diesel	10	12	261
Other General Industrial Equipment – 0175	134	Diesel	5	12	261
Other General Industrial Equipment – 0050	10	Diesel	4	12	261
Off-Highway Trucks – 0500	500	Diesel	4	12	261
Construction Equipment Total			176		
Road and Canal Crossings – Site 3					
Other General Industrial Equipment – 0050	50	Diesel	8	12	261
Other General Industrial Equipment – 0500	450	Diesel	4	12	261
Pavers – 0250	180	Diesel	4	12	261
Other General Industrial Equipment – 0120	60	Diesel	4	12	261
Sweepers/Scrubbers – 0050	25	Diesel	4	12	261
Other General Industrial Equipment – 0050	20	Diesel	4	12	261
Other Construction Equipment – 0120	120	Diesel	2	12	261
Off-Highway Trucks – 0250	200–250	Diesel	6	12	261
Tractors/Loaders/Backhoes – 0120	87	Diesel	4	12	261
Pavers – 0250	30	Diesel	4	12	261
Other Construction Equipment – 0050	15	Diesel	4	12	261
Other General Industrial Equipment – 0050	13	Diesel	4	12	261
Other Construction Equipment – 0120	100	Diesel	4	12	261

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Cranes – 0500	420	Diesel	4	12	261
Cranes – 0500	330	Diesel	4	12	261
Cranes – 0500	420–470	Diesel	4	12	261
Cranes – 0175	140	Diesel	2	12	261
Cranes – 0120	75	Diesel	2	12	261
Crawler Tractors – 0175	125	Diesel	1	12	261
Crawler Tractors – 0500	310–410	Diesel	3	12	261
Excavators – 0500	300	Diesel	2	12	261
Excavators – 0500	450	Diesel	2	12	261
Rubber-Tired Loaders – 0175	149	Diesel	4	12	261
Rubber-Tired Loaders – 0250	197	Diesel	4	12	261
Other Construction Equipment – 0050	15	Diesel	2	12	261
Other Construction Equipment – 0050	28	Diesel	2	12	261
Graders – 0175	158	Diesel	2	12	261
Other Construction Equipment – 0120	92	Diesel	2	12	261
Other Construction Equipment – 0250	245	Diesel	2	12	261
Other Construction Equipment – 0500	335	Diesel	2	12	261
Other General Industrial Equipment – 0050	4	Diesel	10	12	261
Rollers – 0120	83	Diesel	5	12	261
Rollers – 0175	156–174	Diesel	8	12	261
Other General Industrial Equipment – 0050	15	Diesel	4	12	261
Off-Highway Trucks – 0175	175	Diesel	4	12	261
Off-Highway Trucks – 0250	210	Diesel	4	12	261
Off-Highway Trucks – 0175	150	Diesel	4	12	261
Off-Highway Tractors – 0500	300	Diesel	4	12	261
Off-Highway Trucks – 0250	210	Diesel	4	12	261
Other General Industrial Equipment – 0050	45	Diesel	6	12	261
Other General Industrial Equipment – 0050	20	Diesel	10	12	261
Other General Industrial Equipment – 0175	134	Diesel	5	12	261
Other General Industrial Equipment – 0050	10	Diesel	4	12	261
Off-Highway Trucks – 0500	500	Diesel	4	12	261
Construction Equipment Total			176		
Road and Canal Crossings – Site 4					
Other General Industrial Equipment – 0050	50	Diesel	8	12	261
Other General Industrial Equipment – 0500	450	Diesel	4	12	261
Pavers – 0250	180	Diesel	4	12	261
Other General Industrial Equipment – 0120	60	Diesel	4	12	261

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Sweepers/Scrubbers – 0050	25	Diesel	4	12	261
Other General Industrial Equipment – 0050	20	Diesel	4	12	261
Other Construction Equipment – 0120	120	Diesel	2	12	261
Off-Highway Trucks – 0250	200–250	Diesel	6	12	261
Tractors/Loaders/Backhoes – 0120	87	Diesel	4	12	261
Pavers – 0250	30	Diesel	4	12	261
Other Construction Equipment – 0050	15	Diesel	4	12	261
Other General Industrial Equipment – 0050	13	Diesel	4	12	261
Other Construction Equipment – 0120	100	Diesel	4	12	261
Cranes – 0500	420	Diesel	4	12	261
Cranes – 0500	330	Diesel	4	12	261
Cranes – 0500	420–470	Diesel	4	12	261
Cranes – 0175	140	Diesel	2	12	261
Cranes – 0120	75	Diesel	2	12	261
Crawler Tractors – 0175	125	Diesel	1	12	261
Crawler Tractors – 0500	310–410	Diesel	3	12	261
Excavators – 0500	300	Diesel	2	12	261
Excavators – 0500	450	Diesel	2	12	261
Rubber-Tired Loaders – 0175	149	Diesel	4	12	261
Rubber-Tired Loaders – 0250	197	Diesel	4	12	261
Other Construction Equipment – 0050	15	Diesel	2	12	261
Other Construction Equipment – 0050	28	Diesel	2	12	261
Graders – 0175	158	Diesel	2	12	261
Other Construction Equipment – 0120	92	Diesel	2	12	261
Other Construction Equipment – 0250	245	Diesel	2	12	261
Other Construction Equipment – 0500	335	Diesel	2	12	261
Other General Industrial Equipment – 0050	4	Diesel	10	12	261
Rollers – 0120	83	Diesel	5	12	261
Rollers – 0175	156–174	Diesel	8	12	261
Other General Industrial Equipment – 0050	15	Diesel	4	12	261
Off-Highway Trucks – 0175	175	Diesel	4	12	261
Off-Highway Trucks – 0250	210	Diesel	4	12	261
Off-Highway Trucks – 0175	150	Diesel	4	12	261
Off-Highway Tractors – 0500	300	Diesel	4	12	261
Off-Highway Trucks – 0250	210	Diesel	4	12	261
Other General Industrial Equipment – 0050	45	Diesel	6	12	261
Other General Industrial Equipment – 0050	20	Diesel	10	12	261
Other General Industrial Equipment – 0175	134	Diesel	5	12	261

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Other General Industrial Equipment – 0050	10	Diesel	4	12	261
Off-Highway Trucks – 0500	500	Diesel	4	12	261
Construction Equipment Total			176		
Lay Track At-Grade					
Other Construction Equipment – 9999	3,000	Diesel	1	2	45
Other Construction Equipment – 0500	350	Diesel	1	2	45
Other Construction Equipment – 0175	125	Diesel	1	2	45
Other Construction Equipment – 0500	300	Diesel	1	2	45
Off-Highway Trucks – 0500	479	Diesel	1	2	45
Off-Highway Trucks – 0250	189	Diesel	1	2	45
Other General Industrial Equipment – 0050	45	Diesel	1	2	45
Other Construction Equipment – 0500	500	Diesel	1	2	45
Other Construction Equipment – 0500	400	Diesel	1	2	45
Surfacing Equipment – 0500	400	Diesel	1	2	45
Construction Equipment Total			10		
Lay Track Elevated + Retained Fill					
Aerial Lifts – 0120	60	Diesel	1	6	132
Other Construction Equipment – 9999	3,000	Diesel	1	6	132
Other Construction Equipment – 0500	350	Diesel	1	6	132
Other Construction Equipment – 0175	125	Diesel	1	6	132
Other Construction Equipment – 0500	300	Diesel	1	6	132
Off-Highway Trucks – 0500	479	Diesel	1	6	132
Off-Highway Trucks – 0250	189	Diesel	1	6	132
Other General Industrial Equipment – 0050	45	Diesel	1	6	132
Other Construction Equipment – 0500	500	Diesel	1	6	132
Other Construction Equipment – 0500	400	Diesel	1	6	132
Surfacing Equipment – 0500	400	Diesel	1	6	132
Other General Industrial Equipment – 0050	10	Diesel	1	6	132
Other General Industrial Equipment – 0050	10	Diesel	1	6	132
Cranes – 0500	399	Diesel	1	6	132
Crawler Tractors – 0175	147	Diesel	1	6	132
Other Construction Equipment – 0500	16	Diesel	1	6	132
Rough-Terrain Forklifts – 0175	145	Diesel	1	6	132
Other General Industrial Equipment – 0750	549	Diesel	1	6	132
Off-Highway Trucks – 0500	479	Diesel	1	6	132
Other General Industrial Equipment – 0050	45	Diesel	1	6	132
Other Construction Equipment – 0500	500	Diesel	1	6	132
Other Construction Equipment – 0500	400	Diesel	1	6	132

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Surfacing Equipment – 0500	400	Diesel	1	6	132
Other Construction Equipment – 0750	600	Diesel	1	6	132
Construction Equipment Total			24		
Elevated Structures – Site 1					
Aerial Lifts – 0120	60	Diesel	2	15	331
Other Construction Equipment – 0120	106	Diesel	3	15	331
Bore/Drill Rigs – 0500	291	Diesel	6	15	331
Excavators – 0500	300	Diesel	3	15	331
Cranes – 0500	420	Diesel	3	15	331
Off-Highway Trucks – 0250	210	Diesel	5	15	331
Cranes – 0500	420	Diesel	2	15	331
Other General Industrial Equipment – 0050	10	Diesel	3	15	331
Other General Industrial Equipment – 0050	10	Diesel	3	15	331
Crawler Tractors – 0500	310	Diesel	1	15	331
Rubber-Tired Loaders – 0500	262	Diesel	1	15	331
Graders – 0175	158	Diesel	1	15	331
Paving Equipment – 0175	156–174	Diesel	1	15	331
Off-Highway Trucks – 0250	210	Diesel	1	15	331
Other General Industrial Equipment – 0050	45	Diesel	3	15	331
Other Construction Equipment – 0750	600	Diesel	3	15	331
Construction Equipment Total			41		
Elevated Structures – Site 2					
Aerial Lifts – 0120	60	Diesel	2	15	331
Other Construction Equipment – 0120	106	Diesel	3	15	331
Bore/Drill Rigs – 0500	291	Diesel	6	15	331
Excavators – 0500	300	Diesel	3	15	331
Cranes – 0500	420	Diesel	3	15	331
Off-Highway Trucks – 0250	210	Diesel	5	15	331
Cranes – 0500	420	Diesel	2	15	331
Other General Industrial Equipment – 0050	10	Diesel	3	15	331
Other General Industrial Equipment – 0050	10	Diesel	3	15	331
Crawler Tractors – 0500	310	Diesel	1	15	331
Rubber-Tired Loaders – 0500	262	Diesel	1	15	331
Graders – 0175	158	Diesel	1	15	331
Paving Equipment – 0175	156–174	Diesel	1	15	331
Off-Highway Trucks – 0250	210	Diesel	1	15	331

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Other General Industrial Equipment – 0050	45	Diesel	3	15	331
Other Construction Equipment – 0750	600	Diesel	3	15	331
Construction Equipment Total			41		
Elevated Structures – Site 3					
Aerial Lifts – 0120	60	Diesel	2	15	331
Other Construction Equipment – 0120	106	Diesel	3	15	331
Bore/Drill Rigs – 0500	291	Diesel	6	15	331
Excavators – 0500	300	Diesel	3	15	331
Cranes – 0500	420	Diesel	3	15	331
Off-Highway Trucks – 0250	210	Diesel	5	15	331
Cranes – 0500	420	Diesel	2	15	331
Other General Industrial Equipment – 0050	10	Diesel	3	15	331
Other General Industrial Equipment – 0050	10	Diesel	3	15	331
Crawler Tractors – 0500	310	Diesel	1	15	331
Rubber-Tired Loaders – 0500	262	Diesel	1	15	331
Graders – 0175	158	Diesel	1	15	331
Paving Equipment – 0175	156–174	Diesel	1	15	331
Off-Highway Trucks – 0250	210	Diesel	1	15	331
Other General Industrial Equipment – 0050	45	Diesel	3	15	331
Other Construction Equipment – 0750	600	Diesel	3	15	331
Construction Equipment Total			41		
Elevated Structures – Site 4					
Aerial Lifts – 0120	60	Diesel	2	15	331
Other Construction Equipment – 0120	106	Diesel	3	15	331
Bore/Drill Rigs – 0500	291	Diesel	6	15	331
Excavators – 0500	300	Diesel	3	15	331
Cranes – 0500	420	Diesel	3	15	331
Off-Highway Trucks – 0250	210	Diesel	5	15	331
Cranes – 0500	420	Diesel	2	15	331
Other General Industrial Equipment – 0050	10	Diesel	3	15	331
Other General Industrial Equipment – 0050	10	Diesel	3	15	331
Crawler Tractors – 0500	310	Diesel	1	15	331
Rubber-Tired Loaders – 0500	262	Diesel	1	15	331
Graders – 0175	158	Diesel	1	15	331
Paving Equipment – 0175	156–174	Diesel	1	15	331
Off-Highway Trucks – 0250	210	Diesel	1	15	331

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Other General Industrial Equipment – 0050	45	Diesel	3	15	331
Other Construction Equipment – 0750	600	Diesel	3	15	331
Construction Equipment Total			41		
Elevated Structures – Bakersfield					
Aerial Lifts – 0120	60	Diesel	3	15	331
Other Construction Equipment – 0120	106	Diesel	4	15	331
Bore/Drill Rigs – 0500	291	Diesel	7	15	331
Excavators – 0500	300	Diesel	4	15	331
Cranes – 0500	420	Diesel	4	15	331
Off-Highway Trucks – 0250	210	Diesel	6	15	331
Cranes – 0500	420	Diesel	3	15	331
Other General Industrial Equipment – 0050	10	Diesel	4	15	331
Other General Industrial Equipment – 0050	10	Diesel	4	15	331
Crawler Tractors – 0500	310	Diesel	1	15	331
Rubber-Tired Loaders – 0500	262	Diesel	1	15	331
Graders – 0175	158	Diesel	1	15	331
Paving Equipment – 0175	156–174	Diesel	1	15	331
Off-Highway Trucks – 0250	210	Diesel	1	15	331
Other General Industrial Equipment – 0050	45	Diesel	4	15	331
Other Construction Equipment – 0750	600	Diesel	4	15	331
Construction Equipment Total			52		
Demobilization – Site 1					
Off-Highway Trucks – 0175	175	Diesel	2	2	30
Off-Highway Trucks – 0250	210	Diesel	1	2	30
Off-Highway Trucks – 0500	300–500	Diesel	5	2	30
Off-Highway Trucks – 0500	300	Diesel	2	2	30
Off-Highway Trucks – 0250	210	Diesel	1	2	30
Other General Industrial Equipment – 0050	10	Diesel	3	2	30
Off-Highway Trucks – 0250	200	Diesel	2	2	30
Off-Highway Trucks – 0500	330	Diesel	1	2	30
Tractors/Loaders/Backhoes – 0120	87	Diesel	1	2	30
Excavators – 0500	300	Diesel	1	2	30
Crawler Tractors – 0175	125	Diesel	1	2	30
Construction Equipment Total			20		
Demobilization – Site 2					
Off-Highway Trucks – 0175	175	Diesel	2	2	30
Off-Highway Trucks – 0250	210	Diesel	1	2	30
Off-Highway Trucks – 0500	300–500	Diesel	5	2	30

Construction Equipment	Actual Equipment Rated Horsepower (hp/hr)	Type of Fuel	No. of Units	Months of Activity	Days of Activity
Off-Highway Trucks – 0500	300	Diesel	2	2	30
Off-Highway Trucks – 0250	210	Diesel	1	2	30
Other General Industrial Equipment – 0050	10	Diesel	3	2	30
Off-Highway Trucks – 0250	200	Diesel	2	2	30
Off-Highway Trucks – 0500	330	Diesel	1	2	30
Tractors/Loaders/Backhoes – 0120	87	Diesel	1	2	30
Excavators – 0500	300	Diesel	1	2	30
Crawler Tractors – 0175	125	Diesel	1	2	30
Construction Equipment Total			20		
Demobilization – Site 3					
Off-Highway Trucks – 0175	175	Diesel	2	2	30
Off-Highway Trucks – 0250	210	Diesel	1	2	30
Off-Highway Trucks – 0500	300–500	Diesel	5	2	30
Off-Highway Trucks – 0500	300	Diesel	2	2	30
Off-Highway Trucks – 0250	210	Diesel	1	2	30
Other General Industrial Equipment – 0050	10	Diesel	3	2	30
Off-Highway Trucks – 0250	200	Diesel	2	2	30
Off-Highway Trucks – 0500	330	Diesel	1	2	30
Tractors/Loaders/Backhoes – 0120	87	Diesel	1	2	30
Excavators – 0500	300	Diesel	1	2	30
Crawler Tractors – 0175	125	Diesel	1	2	30
Construction Equipment Total			20		
Demobilization – Site 4					
Off-Highway Trucks – 0175	175	Diesel	2	2	30
Off-Highway Trucks – 0250	210	Diesel	1	2	30
Off-Highway Trucks – 0500	300–500	Diesel	5	2	30
Off-Highway Trucks – 0500	300	Diesel	2	2	30
Off-Highway Trucks – 0250	210	Diesel	1	2	30
Other General Industrial Equipment – 0050	10	Diesel	3	2	30
Off-Highway Trucks – 0250	200	Diesel	2	2	30
Off-Highway Trucks – 0500	330	Diesel	1	2	30
Tractors/Loaders/Backhoes – 0120	87	Diesel	1	2	30
Excavators – 0500	300	Diesel	1	2	30
Crawler Tractors – 0175	125	Diesel	1	2	30
Construction Equipment Total			20		

hp/hr = horsepower per hour

Table 3.4-B-5 Operational Noise Levels and Contours

Site Name	Segment Name	Track Elevation (feet)	Receiver Base Elevation (feet) ¹	Nearest Track to Receiver Distance (feet)	Land Use	Land Use Category	Existing Noise Level ²	Project Noise Level ² Unmitigated	Total Noise Level ² Unmitigated	Noise Level Increase (dBA)	FRA Impact – No Mitigation	Moderate Impact Contour Distance (feet) ³	Severe Impact Contour Distance (feet) ³
LT-01	F-B LGA	356	343	438	Residential	2	67	72	73	6	Severe	3,725	1,099
LT-02	F-B LGA	373	349	1,056	Residential	2	58	68	68	10	Severe	13,297	3,579
LT-03	F-B LGA	373	345	313	Residential	2	74	73	77	3	Severe	1,927	412
LT-04	F-B LGA	375	344	1,665	Residential	2	59	61	63	4	Moderate	3,728	1,003
LT-05	F-B LGA	379	347	915	Residential	2	53	63	63	10	Severe	7,607	1,911
LT-06	F-B LGA	382	344	347	Residential	2	61	67	68	7	Severe	3,161	871
LT-07	F-B LGA	382	348	2,359	Residential	2	54	56	58	4	Moderate	3,571	877
LT-08	F-B LGA	382	339	1,273	Residential	2	57	67	67	10	Severe	16,785	4,315
LT-09	F-B LGA	381	342	426	Residential	2	67	72	73	6	Severe	4,356	1,285
LT-10	F-B LGA	414	390	2,284	Agricultural	N/A	47	65	65	18	— ⁴	26,226	6,438
LT-11	F-B LGA	435	404	2,021	Residential	2	72	65	73	1	None	1,975	508
LT-12	F-B LGA	484	411	2,392	Residential	2	61	64	66	5	Severe	8,887	2,505
LT-13	F-B LGA	497	462	2,070	Hotel	2	64	65	68	4	Moderate	6,856	1,977
LT-14	F-B LGA	487	424	1,750	Residential	2	59	61	63	4	Moderate	4,197	1,130
LT-15	F-B LGA	486	429	795	Residential	2	63	69	70	7	Severe	7,953	2,190
LT-16	F-B LGA	486	428	395	Residential	2	65	72	73	8	Severe	5,086	1,467
LT-17	F-B LGA	485	433	1,270	Residential	2	60	67	68	8	Severe	11,855	3,191
LT-18	F-B LGA	486	438	2,569	Residential	2	55	56	59	4	Moderate	2,883	741
LT-19	F-B LGA	476	423	369	Residential	2	63	72	73	10	Severe	6,558	1,891
LT-20	F-B LGA	476	426	1,910	Residential	2	69	65	70	1	Moderate	3,169	957
LT-21	F-B LGA	467	408	983	Residential	2	64	68	69	5	Severe	5,920	1,707
LT-22	F-B LGA	468	408	2,147	Residential	2	58	58	61	3	Moderate	3,326	875
LT-23	F-B LGA	470	400	1,345	Hotel	2	69	67	71	2	Moderate	3,153	952
LT-24	F-B LGA	464	407	488	Residential	2	68	71	73	5	Severe	3,148	951
LT-25	F-B LGA	474	406	375	Residential	2	62	72	72	10	Severe	7,659	2,109
LT-26	F-B LGA	478	405	628	Residential	2	65	70	71	6	Severe	5,865	1,692
LT-27	F-B LGA	480	418	528	Residential	2	65	71	72	7	Severe	5,785	1,668
LT-28	F-B LGA	480	438	2,114	Residential	2	56	57	60	4	Moderate	2,662	684
LT-29	F-B LGA	480	424	1,089	Residential	2	57	63	64	7	Severe	4,645	1,222
LT-30	F-B LGA	480	414	470	Residential	2	62	71	72	10	Severe	7,800	2,148
LT-31	F-B LGA	480	406	1,787	Residential	2	58	60	62	4	Moderate	4,189	1,128
LT-32	F-B LGA	480	403	1,802	Residential	2	61	65	66	5	Severe	10,372	2,857
LT-33	F-B LGA	480	437	1,308	Residential	2	59	60	63	4	Moderate	2,671	719

Site Name	Segment Name	Track Elevation (feet)	Receiver Base Elevation (feet) ¹	Nearest Track to Receiver Distance (feet)	Land Use	Land Use Category	Existing Noise Level ²	Project Noise Level ² Unmitigated	Total Noise Level ² Unmitigated	Noise Level Increase (dBA)	FRA Impact – No Mitigation	Moderate Impact Contour Distance (feet) ³	Severe Impact Contour Distance (feet) ³
LT-34	F-B LGA	484	420	76	Residential	2	70	78	79	9	Severe	1,966	594
LT-35	F-B LGA	484	425	297	Residential	2	60	73	73	13	Severe	9,850	2,713
LT-36	F-B LGA	484	465	2,345	Residential	2	70	54	70	0	None	269	81
LT-37	F-B LGA	488	412	864	Residential	2	61	69	70	9	Severe	10,154	2,797
ST-001	F-B LGA	356	345	742	Residential	2	59	69	69	10	Severe	13,197	3,552
ST-002	F-B LGA	356	341	1,127	Residential	2	60	67	68	8	Severe	11,804	3,177
ST-003	F-B LGA	356	340	2,201	Residential	2	54	65	65	11	Severe	22,518	5,527
ST-004	F-B LGA	360	343	581	Residential	2	63	70	71	8	Severe	7,841	2,160
ST-005	F-B LGA	364	347	1,077	Residential	2	71	68	73	2	Moderate	2,251	695
ST-006	F-B LGA	369	345	428	Residential	2	69	72	74	5	Severe	3,171	958
ST-007	F-B LGA	369	340	1,263	Residential	2	55	59	60	5	Moderate	2,894	744
ST-008	F-B LGA	379	344	853	Residential	2	61	64	66	5	Severe	3,242	893
ST-009	F-B LGA	367	339	2,282	Residential	2	50	64	64	14	Severe	28,723	6,890
ST-010	F-B LGA	369	339	2,361	Residential	2	59	56	61	2	None	1,875	505
ST-011	F-B LGA	377	342	2,090	Residential	2	59	58	62	3	Moderate	2,632	708
ST-012	F-B LGA	376	341	1,633	Recreational	3	65	66	69	4	Moderate	3,741	1,104
ST-013	F-B LGA	380	346	537	Residential	2	56	66	66	10	Severe	5,750	1,478
ST-014	F-B LGA	382	347	1,174	Residential	2	62	62	65	3	Moderate	2,817	794
ST-015	F-B LGA	382	346	588	Residential	2	57	65	66	9	Severe	5,241	1,347
ST-016	F-B LGA	382	344	503	Residential	2	57	71	71	14	Severe	14,836	3,902
ST-017	F-B LGA	382	343	228	Residential	2	64	74	74	10	Severe	6,574	1,896
ST-018	F-B LGA	382	347	1,712	Residential	2	59	66	67	8	Severe	11,845	3,188
ST-019	F-B LGA	382	347	1,840	Residential	2	52	57	58	6	Moderate	3,844	966
ST-020	F-B LGA	382	345	1,115	Residential	2	56	62	63	7	Severe	5,216	1,341
ST-021	F-B LGA	382	345	1,690	Residential	2	48	59	59	11	Severe	7,905	1,770
ST-022	F-B LGA	382	340	907	Residential	2	63	68	69	6	Severe	6,725	1,940
ST-023	F-B LGA	382	343	574	Office	N/A	61	70	71	10	–	8,897	2,508
ST-024	F-B LGA	382	341	848	Residential	2	60	69	70	10	Severe	10,194	2,808
ST-025	F-B LGA	382	339	1,072	Residential	2	63	68	69	6	Severe	7,947	2,189
ST-026	F-B LGA	381	341	378	Medical Office	N/A	74	72	76	2	–	1,892	585
ST-027	F-B LGA	382	340	2,078	Residential	2	57	57	60	3	Moderate	2,676	688
ST-028	F-B LGA	382	339	2,136	Residential	2	57	58	61	4	Moderate	3,308	870
ST-029	F-B LGA	382	340	1,362	Residential	2	52	62	62	10	Severe	7,660	1,924
ST-030	F-B LGA	372	346	440	Residential	2	55	71	71	16	Severe	17,905	4,602

Site Name	Segment Name	Track Elevation (feet)	Receiver Base Elevation (feet) ¹	Nearest Track to Receiver Distance (feet)	Land Use	Land Use Category	Existing Noise Level ²	Project Noise Level ² Unmitigated	Total Noise Level ² Unmitigated	Noise Level Increase (dBA)	FRA Impact – No Mitigation	Moderate Impact Contour Distance (feet) ³	Severe Impact Contour Distance (feet) ³
ST-031	F-B LGA	368	341	2,504	Cemetery	3	58	64	65	7	Moderate	13,447	3,619
ST-032	F-B LGA	493	417	2,063	Residential	2	62	65	67	5	Severe	8,028	2,211
ST-033	F-B LGA	489	428	1,878	Residential	2	65	65	68	3	Moderate	5,940	1,713
ST-034	F-B LGA	488	419	2,381	Residential	2	70	58	70	0	None	612	185
ST-035	F-B LGA	486	421	2,250	Residential	2	62	58	63	1	None	2,005	565
ST-036	F-B LGA	486	427	1,308	Residential	2	57	67	67	10	Severe	15,019	3,950
ST-037	F-B LGA	486	423	1,744	Residential	2	63	66	68	5	Severe	6,784	1,957
ST-038	F-B LGA	486	423	1,513	Residential	2	57	61	62	5	Moderate	4,676	1,230
ST-039	F-B LGA	486	422	1,897	Residential	2	57	60	62	5	Moderate	5,346	1,374
ST-040	F-B LGA	486	429	551	Residential	2	55	71	71	16	Severe	20,024	5,147
ST-041	F-B LGA	486	426	865	Residential	2	52	69	69	17	Severe	23,810	5,981
ST-042	F-B LGA	486	423	1,347	Residential	2	51	62	62	11	Severe	8,306	2,039
ST-043	F-B LGA	486	429	488	Hotel	2	69	71	73	4	Severe	2,681	810
ST-044	F-B LGA	486	429	595	Hotel	2	67	70	72	5	Severe	3,669	1,083
ST-045	F-B LGA	486	429	1,198	Residential	2	58	62	63	5	Severe	4,659	1,225
ST-046	F-B LGA	486	433	1,112	Residential	2	57	68	68	11	Severe	15,000	3,945
ST-047	F-B LGA	486	434	1,352	Residential	2	61	62	65	4	Moderate	2,824	796
ST-048	F-B LGA	486	432	1,300	Residential	2	56	62	63	7	Severe	5,809	1,493
ST-049	F-B LGA	486	442	2,450	Residential	2	56	59	61	5	Moderate	5,238	1,346
ST-050	F-B LGA	486	436	1,913	Residential	2	56	59	61	5	Moderate	3,730	959
ST-051	F-B LGA	486	438	2,335	Residential	2	48	56	57	9	Moderate	5,602	1,254
ST-052	F-B LGA	485	433	2,105	Residential	2	63	58	64	1	None	1,525	440
ST-053	F-B LGA	483	439	2,117	Residential	2	58	60	62	4	Moderate	4,740	1,247
ST-054	F-B LGA	476	425	1,670	School	3	71	66	72	1	None	2,709	818
ST-055	F-B LGA	479	433	1,971	Residential	2	51	57	58	7	Moderate	4,514	1,083
ST-056	F-B LGA	470	407	1,144	Residential	2	50	62	62	12	Severe	8,882	2,131
ST-057	F-B LGA	468	409	1,058	Residential	2	49	68	68	19	Severe	33,453	7,489
ST-058	F-B LGA	465	408	1,359	Residential	2	51	67	67	16	Severe	26,499	6,505
ST-059	F-B LGA	464	407	1,759	Residential	2	54	66	66	12	Severe	20,197	5,191
ST-060	F-B LGA	472	421	2,599	Residential	2	80	56	80	0	None	312	31
ST-061	F-B LGA	468	409	1,690	Residential	2	58	61	63	5	Moderate	4,150	1,117
ST-062	F-B LGA	465	408	1,913	Residential	2	56	60	61	5	Moderate	5,777	1,485
ST-063	F-B LGA	466	406	2,460	Residential	2	63	64	67	4	Moderate	6,776	1,954
ST-064	F-B LGA	461	403	738	Residential	2	58	64	65	7	Severe	4,150	1,117

Site Name	Segment Name	Track Elevation (feet)	Receiver Base Elevation (feet) ¹	Nearest Track to Receiver Distance (feet)	Land Use	Land Use Category	Existing Noise Level ²	Project Noise Level ² Unmitigated	Total Noise Level ² Unmitigated	Noise Level Increase (dBA)	FRA Impact – No Mitigation	Moderate Impact Contour Distance (feet) ³	Severe Impact Contour Distance (feet) ³
ST-065	F-B LGA	464	405	903	Residential	2	60	63	65	5	Moderate	3,204	882
ST-066	F-B LGA	463	404	1,568	Residential	2	59	61	63	4	Moderate	3,760	1,012
ST-067	F-B LGA	465	401	1,542	Residential	2	66	61	67	1	Moderate	1,614	466
ST-068	F-B LGA	463	408	838	Park	3	48	69	69	21	Severe	31,127	7,131
ST-069	F-B LGA	467	406	793	School	3	55	69	69	14	Severe	16,560	4,257
ST-070	F-B LGA	470	406	866	Residential	2	61	69	70	9	Severe	8,859	2,497
ST-071	F-B LGA	473	406	854	Residential	2	61	64	66	5	Severe	3,246	894
ST-072	F-B LGA	477	405	487	Residential	2	63	66	68	5	Severe	2,498	688
ST-073	F-B LGA	476	406	911	Residential	2	65	63	67	2	Moderate	1,861	537
ST-074	F-B LGA	473	409	615	Residential	2	64	70	71	7	Severe	5,873	1,694
ST-075	F-B LGA	477	403	649	Residential	2	63	70	71	8	Severe	6,646	1,917
ST-076	F-B LGA	479	403	563	Residential	2	66	70	71	5	Severe	4,273	1,261
ST-077	F-B LGA	480	405	548	Church	3	55	71	71	16	Severe	16,546	4,253
ST-078	F-B LGA	474	401	1,537	Residential	2	63	61	65	2	Moderate	2,552	703
ST-079	F-B LGA	477	403	1,714	Residential	2	61	61	64	3	Moderate	2,845	802
ST-080	F-B LGA	479	401	1,561	Recreational	3	55	66	66	11	Moderate	16,731	4,300
ST-081	F-B LGA	480	407	2,156	Residential	2	55	58	60	5	Moderate	4,505	1,158
ST-082	F-B LGA	480	404	1,939	Hotel	2	63	65	67	4	Severe	8,082	2,226
ST-083	F-B LGA	480	416	424	Residential	2	62	72	72	10	Severe	8,656	2,439
ST-084	F-B LGA	480	426	987	Residential	2	60	63	65	5	Severe	3,752	1,010
ST-085	F-B LGA	480	429	1,279	Residential	2	56	62	63	7	Severe	5,848	1,503
ST-086	F-B LGA	480	428	1,317	Residential	2	50	62	62	12	Severe	9,766	2,237
ST-087	F-B LGA	480	433	1,678	Recreation	3	53	66	66	13	Severe	22,631	5,555
ST-088	F-B LGA	480	441	2,122	Church	3	55	57	59	4	None	2,930	753
ST-089	F-B LGA	480	431	1,659	Residential	2	56	59	61	5	Moderate	4,071	1,047
ST-090	F-B LGA	480	430	1,710	Church	3	60	59	63	3	None	2,306	635
ST-091	F-B LGA	480	441	2,294	Residential	2	57	59	61	4	Moderate	5,256	1,351
ST-092	F-B LGA	480	421	521	Residential	2	52	66	66	14	Severe	8,254	2,026
ST-093	F-B LGA	480	419	513	Residential	2	62	71	72	10	Severe	8,910	2,511
ST-094	F-B LGA	480	422	933	Residential	2	54	63	64	10	Severe	7,075	1,737
ST-095	F-B LGA	480	421	919	Residential	2	55	68	68	13	Severe	20,100	5,166
ST-096	F-B LGA	480	414	597	Residential	2	58	70	70	12	Severe	13,051	3,513
ST-097	F-B LGA	480	415	136	Residential	2	60	76	76	16	Severe	10,323	2,779
ST-098	F-B LGA	480	411	827	Residential	2	67	64	69	2	Moderate	1,168	345

Site Name	Segment Name	Track Elevation (feet)	Receiver Base Elevation (feet) ¹	Nearest Track to Receiver Distance (feet)	Land Use	Land Use Category	Existing Noise Level ²	Project Noise Level ² Unmitigated	Total Noise Level ² Unmitigated	Noise Level Increase (dBA)	FRA Impact – No Mitigation	Moderate Impact Contour Distance (feet) ³	Severe Impact Contour Distance (feet) ³
ST-099	F-B LGA	480	411	423	Residential	2	70	72	74	4	Severe	2,610	788
ST-100	F-B LGA	480	407	1,964	Residential	2	58	60	62	4	Moderate	4,200	1,130
ST-101	F-B LGA	480	406	1,625	Residential	2	64	61	66	2	Moderate	2,143	618
ST-102	F-B LGA	480	402	2,154	Residential	2	61	60	64	3	Moderate	3,261	898
ST-103	F-B LGA	480	401	2,017	Residential	2	61	60	64	3	Moderate	3,271	901
ST-104	F-B LGA	482	404	1,350	Residential	2	61	62	65	4	Moderate	3,237	892
ST-105	F-B LGA	480	455	2,334	Residential	2	62	58	63	1	None	2,033	573
ST-106	F-B LGA	480	441	1,532	Residential	2	60	60	63	3	Moderate	2,662	716
ST-107	F-B LGA	482	444	1,655	Residential	2	56	59	61	5	Moderate	3,705	952
ST-108	F-B LGA	481	415	373	Residential	2	61	72	72	11	Severe	8,733	2,461
ST-109	F-B LGA	483	416	278	Residential	2	70	73	75	5	Severe	2,591	783
ST-110	F-B LGA	483	405	1,228	Residential	2	61	62	65	4	Moderate	3,230	890
ST-111	F-B LGA	486	414	546	Residential	2	64	71	72	8	Severe	5,855	1,689
ST-112	F-B LGA	480	428	680	Residential	2	60	65	66	6	Severe	3,253	896
ST-113	F-B LGA	482	425	473	Residential	2	60	66	67	7	Severe	3,197	881
ST-114	F-B LGA	485	431	417	Residential	2	60	72	72	12	Severe	9,992	2,752
ST-115	F-B LGA	486	434	619	Residential	2	60	65	66	6	Severe	3,248	895
ST-116	F-B LGA	487	428	246	Residential	2	62	74	74	12	Severe	8,523	2,402
ST-117	F-B LGA	484	442	1,316	Residential	2	56	60	61	5	Moderate	3,710	954
ST-118	F-B LGA	486	452	1,445	Residential	2	62	61	65	3	Moderate	2,510	691
ST-119	F-B LGA	485	460	1,886	Residential	2	56	55	59	3	None	1,681	432
ST-120	F-B LGA	484	398	2,354	Residential	2	61	59	63	2	Moderate	3,250	895
ST-121	F-B LGA	487	405	1,362	Residential	2	61	67	68	7	Severe	10,331	2,845
ST-122	F-B LGA	487	399	2,035	Residential	2	61	60	64	3	Moderate	3,225	888
ST-123	F-B LGA	489	405	1,445	Residential	2	61	66	67	6	Severe	10,230	2,818
ST-124	F-B LGA	487	455	1,613	School	3	61	66	67	6	Moderate	8,086	2,227
ST-125	F-B LGA	488	433	965	School	3	50	63	63	13	Severe	8,406	2,063
ST-126	F-B LGA	488	455	1,756	Residential	2	62	66	67	5	Severe	8,025	2,210

¹ Receivers have a height of 5 feet.

² The noise descriptor for category 1 and 3 land uses are L_{eq}, and the noise descriptor for category 2 land uses is L_{dn}.

³ The moderate and severe impact contour distances are based on land use category 2 for generalization purposes.

⁴ This monitoring location was not evaluated for noise impacts. However, noise level measurement conducted at this location was used to determine the existing levels for receivers in the vicinity of this monitoring location.

F-B LGA = Fresno to Bakersfield Locally Generated Alternative

dBA = A-weighted decibels

FRA = Federal Railroad Administration

L_{dn} = day-night average noise level

L_{eq} = equivalent continuous sound level

LT = long-term

ST = short-term

N/A = not applicable

Table 3.4-B-6 Vibration Impacts Analysis

No.	APN	Address	City/County	Land Use	Land Use Category	Rail Profile Type	Distance to Nearest Track	Estimated Vibration Level (VdB)	FTA Annoyance Criteria	FTA Damage Criteria	Exceed FTA Annoyance Criteria?	Exceed FTA Damage Criteria?
1	002-115-01	Q Street	Bakersfield	Park	3	Viaduct/Straddle Bent	47	74.7	75	94	No	No
2	002-300-01	3215 Chester Avenue	Bakersfield	Motel	2	Viaduct/Straddle Bent	43	75.5	72	94	Yes	No
3	002-300-02	3215 Chester Avenue	Bakersfield	Motel	2	Viaduct/Straddle Bent	175	63.4	72	94	No	No
4	016-020-12	219 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	200	62.3	72	94	No	No
5	016-050-12	501 Sumner Street	Bakersfield	Commercial	3	Viaduct/Straddle Bent	126	66.3	75	94	No	No
6	016-060-02	605 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	117	66.9	72	94	No	No
7	016-060-06	623 Sumner Street	Bakersfield	Hotel	2	Viaduct/Straddle Bent	50	74.2	72	94	Yes	No
8	016-060-07	812 Baker Street	Bakersfield	Church	3	Viaduct/Straddle Bent	170	63.7	75	94	No	No
9	017-010-20	800 E 21st Street	Bakersfield	Shelter	2	Viaduct/Straddle Bent	197	62.4	72	94	No	No
10	017-020-05	911 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	50	74.2	72	94	Yes	No
11	017-020-07	921 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	50	74.2	72	94	Yes	No
12	017-020-08	923 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	50	74.2	72	94	Yes	No
13	017-020-09	927 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	49	74.4	72	94	Yes	No
14	017-020-10	931 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	50	74.2	72	94	Yes	No
15	017-030-01	1001 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	50	74.2	72	94	Yes	No
16	017-030-02	1003 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	50	74.2	72	94	Yes	No
17	017-030-03	1005 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	50	74.2	72	94	Yes	No
18	017-030-04	1007 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	50	74.2	72	94	Yes	No
19	017-030-07	1021 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	115	67.0	72	94	No	No
20	017-030-10	1031 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	50	74.2	72	94	Yes	No
21	017-030-18	1025 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	52	73.9	72	94	Yes	No
22	017-040-01	815 Gage Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	165	63.9	72	94	No	No
23	017-040-02	1101 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	90	69.2	72	94	No	No
24	017-040-04	1109 Sumner Street	Bakersfield	Residential	2	Viaduct/Straddle Bent	115	67.0	72	94	No	No
25	017-072-14	1530 E Truxtun Avenue	Bakersfield	Shelter	2	Viaduct/Straddle Bent	16	84.0	72	94	Yes	No
26	027-080-08	519 Sunset Avenue	Shafter	Residential	2	At-grade/Retained	239	70.8	72	94	No	No
27	027-080-14	518 Poso Avenue	Shafter	Residential	2	At-grade/Retained	240	70.7	72	94	No	No
28	027-080-19	505 Sunset Avenue	Shafter	Church	3	At-grade/Retained	164	74.0	75	94	No	No
29	027-120-09	521 California Avenue	Shafter	Residential	2	At-grade/Retained	236	70.9	72	94	No	No
30	027-120-10	511 California Avenue	Shafter	Residential	2	At-grade/Retained	186	72.9	72	94	Yes	No
31	027-120-11	360 Walker Street	Shafter	Residential	2	At-grade/Retained	136	75.6	72	94	Yes	No
32	027-120-12	514 Sunset Avenue	Shafter	Residential	2	At-grade/Retained	162	74.1	72	94	Yes	No
33	027-120-13	520 Sunset Avenue	Shafter	Residential	2	At-grade/Retained	237	70.8	72	94	No	No
34	027-180-11	520 California Avenue	Shafter	Church	3	At-grade/Retained	225	71.3	75	94	No	No
35	027-290-04	524 Pacific Avenue	Shafter	Residential	2	At-grade/Retained	230	71.1	72	94	No	No
36	027-290-05	524 Pacific Avenue	Shafter	Residential	2	At-grade/Retained	229	71.1	72	94	No	No

No.	APN	Address	City/County	Land Use	Land Use Category	Rail Profile Type	Distance to Nearest Track	Estimated Vibration Level (VdB)	FTA Annoyance Criteria	FTA Damage Criteria	Exceed FTA Annoyance Criteria?	Exceed FTA Damage Criteria?
37	027-320-15	522 State Avenue	Shafter	Residential	2	At-grade/Retained	227	71.2	72	94	No	No
38	027-320-16	510 State Avenue	Shafter	Residential	2	At-grade/Retained	152	74.6	72	94	Yes	No
39	027-320-17	523 Jackson Avenue	Shafter	Residential	2	At-grade/Retained	226	71.2	72	94	No	No
40	027-320-18	509 Jackson Avenue	Shafter	Residential	2	At-grade/Retained	151	74.7	72	94	Yes	No
41	137-290-01	550 Pentz Street	Kern County	Residential	2	Viaduct/Straddle Bent	242	60.7	72	94	No	No
42	137-290-02	2731 Prospect Street	Kern County	Residential	2	Viaduct/Straddle Bent	235	60.9	72	94	No	No
43	137-290-03	2729 Prospect Street	Kern County	Residential	2	Viaduct/Straddle Bent	228	61.2	72	94	No	No
44	137-290-04	2727 Prospect Street	Kern County	Residential	2	Viaduct/Straddle Bent	221	61.4	72	94	No	No
45	137-290-05	2725 Prospect Street	Kern County	Residential	2	Viaduct/Straddle Bent	210	61.9	72	94	No	No
46	137-290-06	2723 Prospect Street	Kern County	Residential	2	Viaduct/Straddle Bent	135	65.7	72	94	No	No
47	137-290-07	2703 Prospect Street	Kern County	Residential	2	Viaduct/Straddle Bent	184	63.0	72	94	No	No
48	137-290-08	2701 Prospect Avenue	Kern County	Residential	2	Viaduct/Straddle Bent	172	63.6	72	94	No	No
49	137-301-01	2534 Edison Highway	Kern County	Residential	2	Viaduct/Straddle Bent	56	73.2	72	94	Yes	No
50	137-302-12	2534 E California Avenue	Kern County	Residential	2	Viaduct/Straddle Bent	254	60.2	72	94	No	No
51	137-302-14	2521 Steele Street	Kern County	Residential	2	Viaduct/Straddle Bent	171	63.6	72	94	No	No
52	137-310-13	815 Exchange Street	Kern County	Residential	2	Viaduct/Straddle Bent	173	63.5	72	94	No	No
53	137-310-14	807 Exchange Street	Kern County	Residential	2	Viaduct/Straddle Bent	228	61.2	72	94	No	No
54	137-310-18	2411 Steele Avenue	Kern County	Residential	2	Viaduct/Straddle Bent	181	63.1	72	94	No	No
55	137-310-20	2491 Edison Highway	Kern County	Residential	2	Viaduct/Straddle Bent	100	68.2	72	94	No	No
56	137-330-03	2222 Steele Avenue	Kern County	Residential	2	Viaduct/Straddle Bent	267	59.8	72	94	No	No
57	137-573-01	600 Descanso Street	Kern County	Residential	2	Viaduct/Straddle Bent	245	60.5	72	94	No	No
58	137-573-10	601 Rembrant Street	Kern County	Residential	2	Viaduct/Straddle Bent	215	61.7	72	94	No	No
59	137-573-11	606 Rembrant Street	Kern County	Residential	2	Viaduct/Straddle Bent	211	61.8	72	94	No	No
60	137-573-17	603 Pentz Street	Kern County	Residential	2	Viaduct/Straddle Bent	214	61.7	72	94	No	No
61	138-320-06	1351 Ogden Street	Kern County	Residential	2	Viaduct/Straddle Bent	42	75.7	72	94	Yes	No
62	138-320-08	1337 Ogden Street	Kern County	Residential	2	Viaduct/Straddle Bent	250	60.4	72	94	No	No
63	142-020-17	2810 Citrus Drive	Kern County	Residential	2	Viaduct/Straddle Bent	203	62.2	72	94	No	No
64	142-100-03	2805 Edison Highway	Kern County	Residential	2	Viaduct/Straddle Bent	99	68.3	72	94	No	No
65	142-150-05	2903 Pioneer Drive	Kern County	Residential	2	Viaduct/Straddle Bent	262	60.0	72	94	No	No
66	142-160-10	2927 Edison Highway	Kern County	Residential	2	Viaduct/Straddle Bent	138	65.5	72	94	No	No
67	142-160-11	2931 Edison Highway	Kern County	Residential	2	Viaduct/Straddle Bent	140	65.4	72	94	No	No
68	142-160-12	3003 Edison Highway	Kern County	Residential	2	Viaduct/Straddle Bent	143	65.2	72	94	No	No
69	142-160-15	3009 Edison Highway	Kern County	Residential	2	Viaduct/Straddle Bent	138	65.5	72	94	No	No
70	142-160-22	2915 Edison Highway	Kern County	Residential	2	Viaduct/Straddle Bent	126	66.3	72	94	No	No
71	142-160-23	2829 Edison Highway	Kern County	Residential	2	Viaduct/Straddle Bent	109	67.5	72	94	No	No
72	142-160-32	2903 Edison Highway	Kern County	Residential	2	Viaduct/Straddle Bent	118	66.8	72	94	No	No
73	364-212-03	5920 State Road	Kern County	Residential	2	Viaduct/Straddle Bent	157	64.4	72	94	No	No
74	364-212-05	5930 State Road	Kern County	Shelter	2	Viaduct/Straddle Bent	50	74.2	72	94	Yes	No

No.	APN	Address	City/County	Land Use	Land Use Category	Rail Profile Type	Distance to Nearest Track	Estimated Vibration Level (VdB)	FTA Annoyance Criteria	FTA Damage Criteria	Exceed FTA Annoyance Criteria?	Exceed FTA Damage Criteria?
75	364-212-09	6000 State Road	Kern County	Residential	2	Viaduct/Straddle Bent	135	65.7	72	94	No	No
76	364-212-11	6000 State Loop Road	Kern County	Residential	2	Viaduct/Straddle Bent	140	65.4	72	94	No	No
77	364-212-12	6000 State Road	Kern County	Residential	2	Viaduct/Straddle Bent	11	87.2	72	94	Yes	No
78	364-212-14	6040 State Road	Kern County	Residential	2	Viaduct/Straddle Bent	105	67.8	72	94	No	No
79	364-212-22	6050 State Road	Kern County	Motel	2	Viaduct/Straddle Bent	87	69.4	72	94	No	No
80	016-050-05	525 Sumner Street	Bakersfield	Meeting Room/ Restaurant	3	Viaduct/Straddle Bent	84	69.7	75	94	No	No

APN = Assessor's Parcel Number
FTA = Federal Transit Administration
VdB = vibration velocity level

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