

California High-Speed Rail Authority

# ***Bakersfield to Palmdale***

## ***Project Section***

### **Draft Project Environmental Impact Report/Environmental Impact Statement**

**Appendix 3.4-A: Noise and Vibration Figures**

**January 2020**

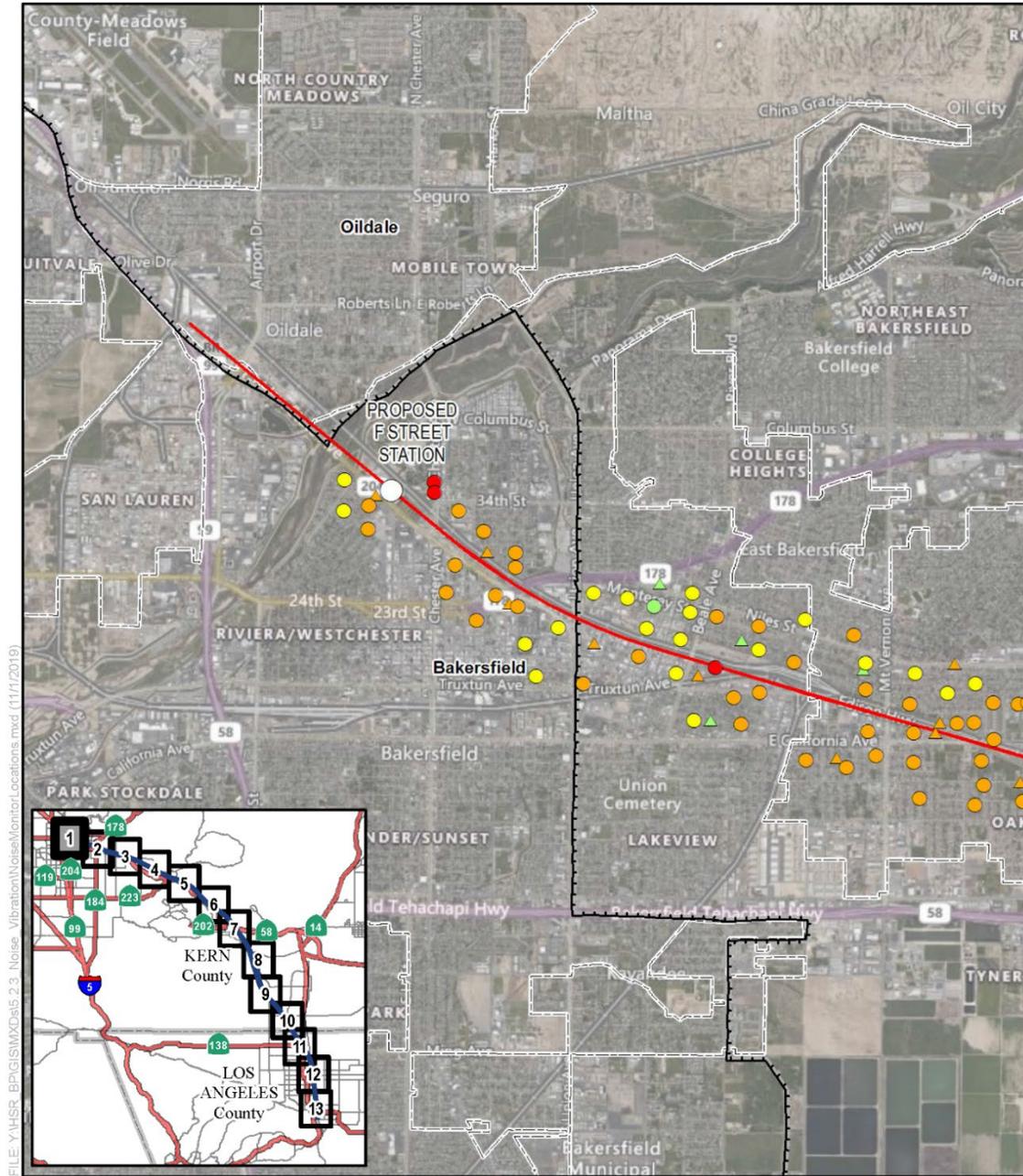


The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the Federal Railroad Administration and the State of California.

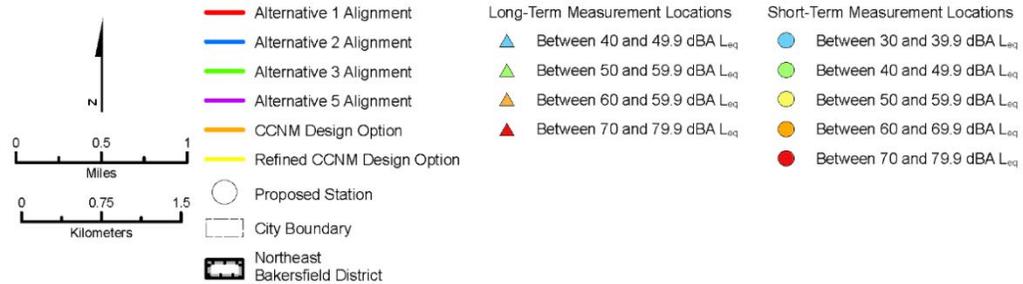
**This page intentionally left blank**

## APPENDIX 3.4-A: NOISE AND VIBRATION FIGURES

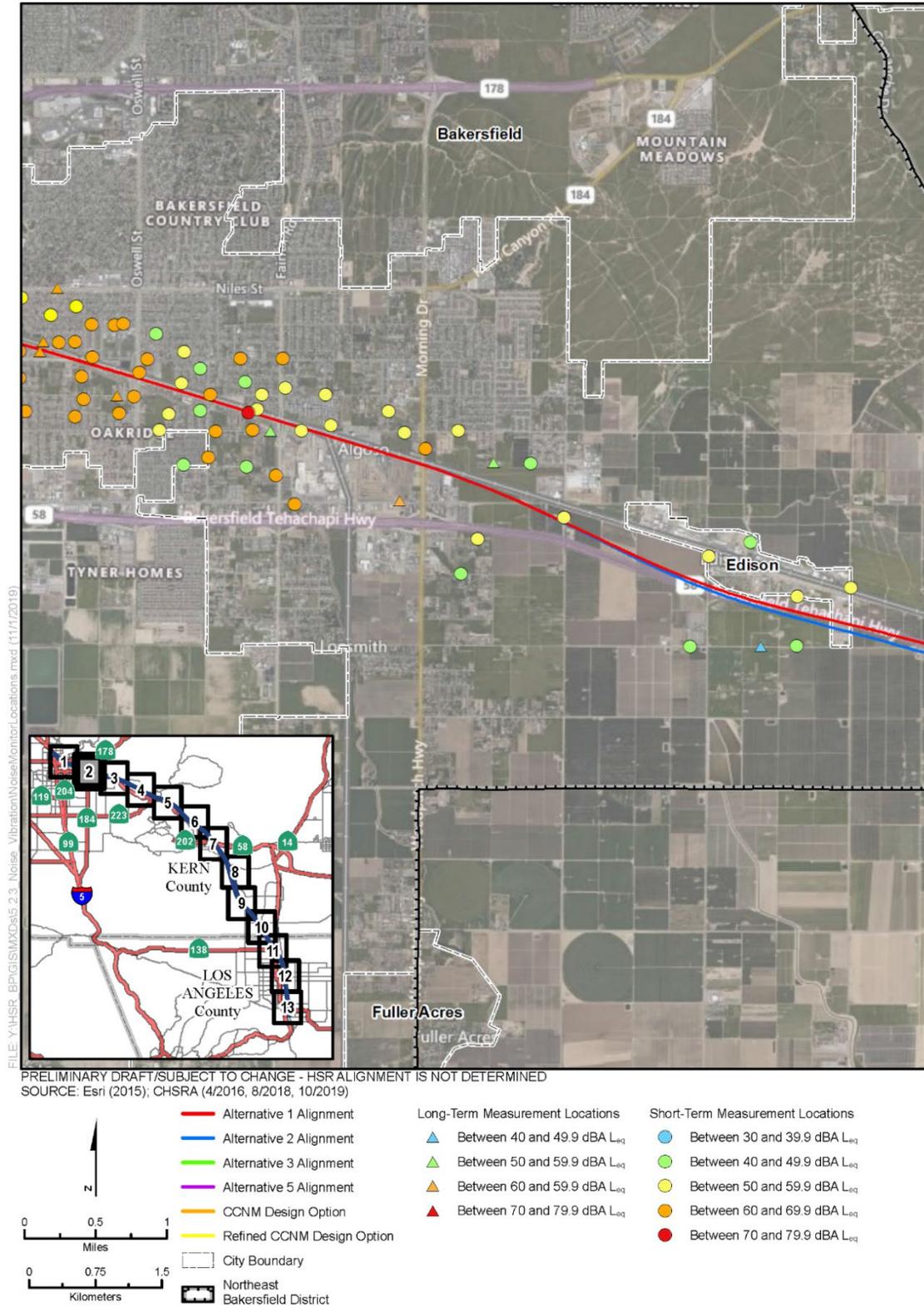
**This page intentionally left blank**



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015), CHSRA (4/2016, 8/2018, 10/2019)

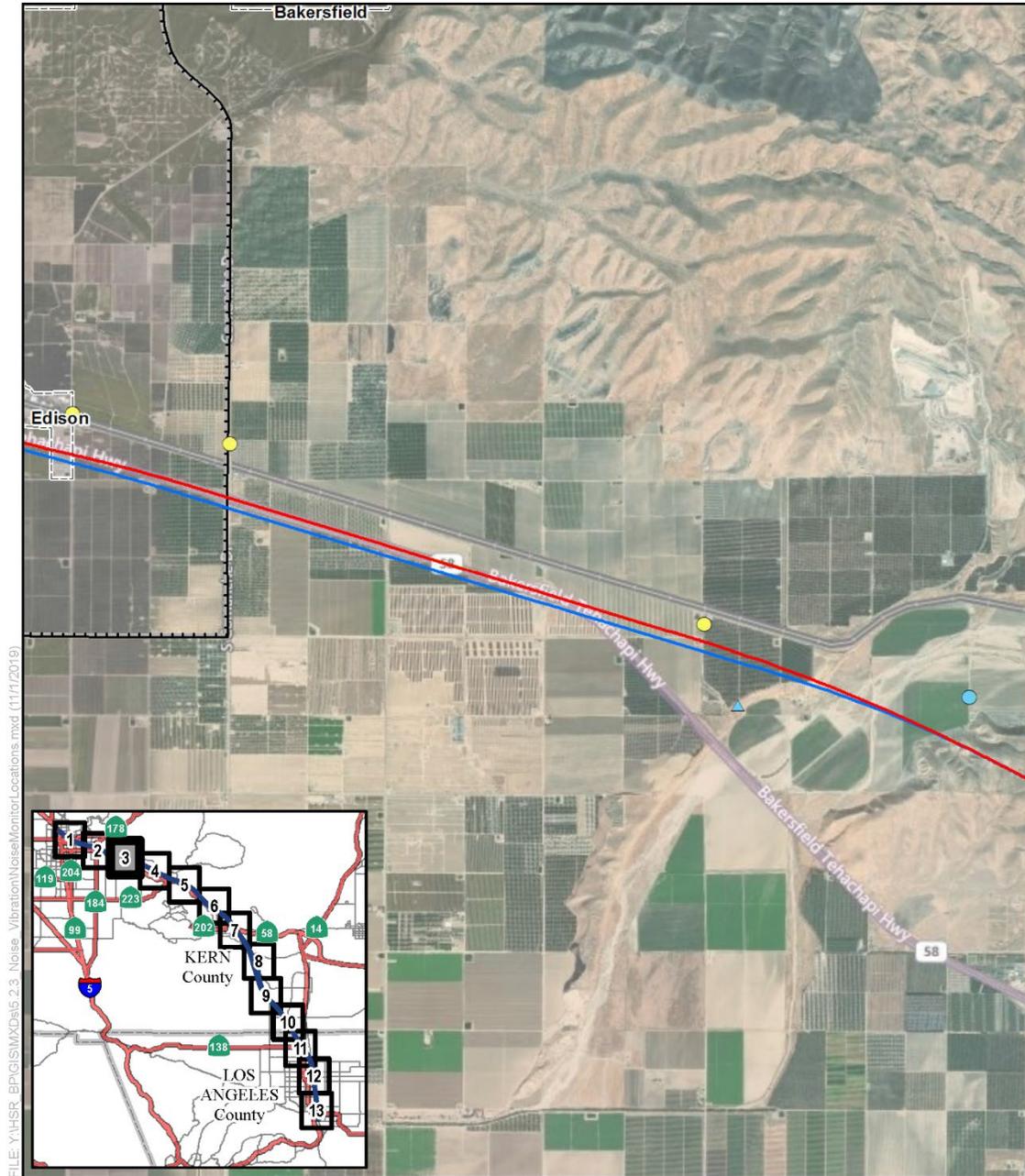


**Figure 3.4-A-1 Noise Level Measurement Locations**  
 (Sheet 1 of 13)



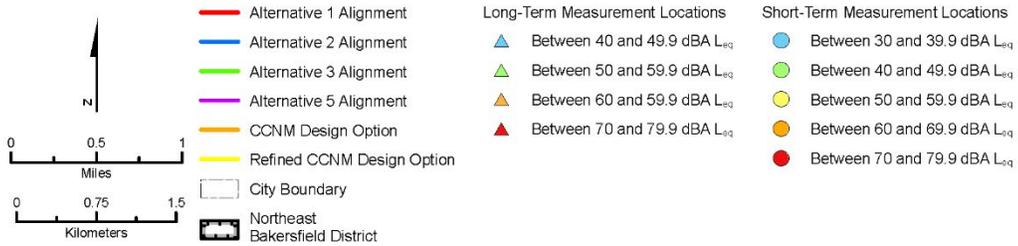
**Figure 3.4-A-1 Noise Level Measurement Locations**

(Sheet 2 of 13)



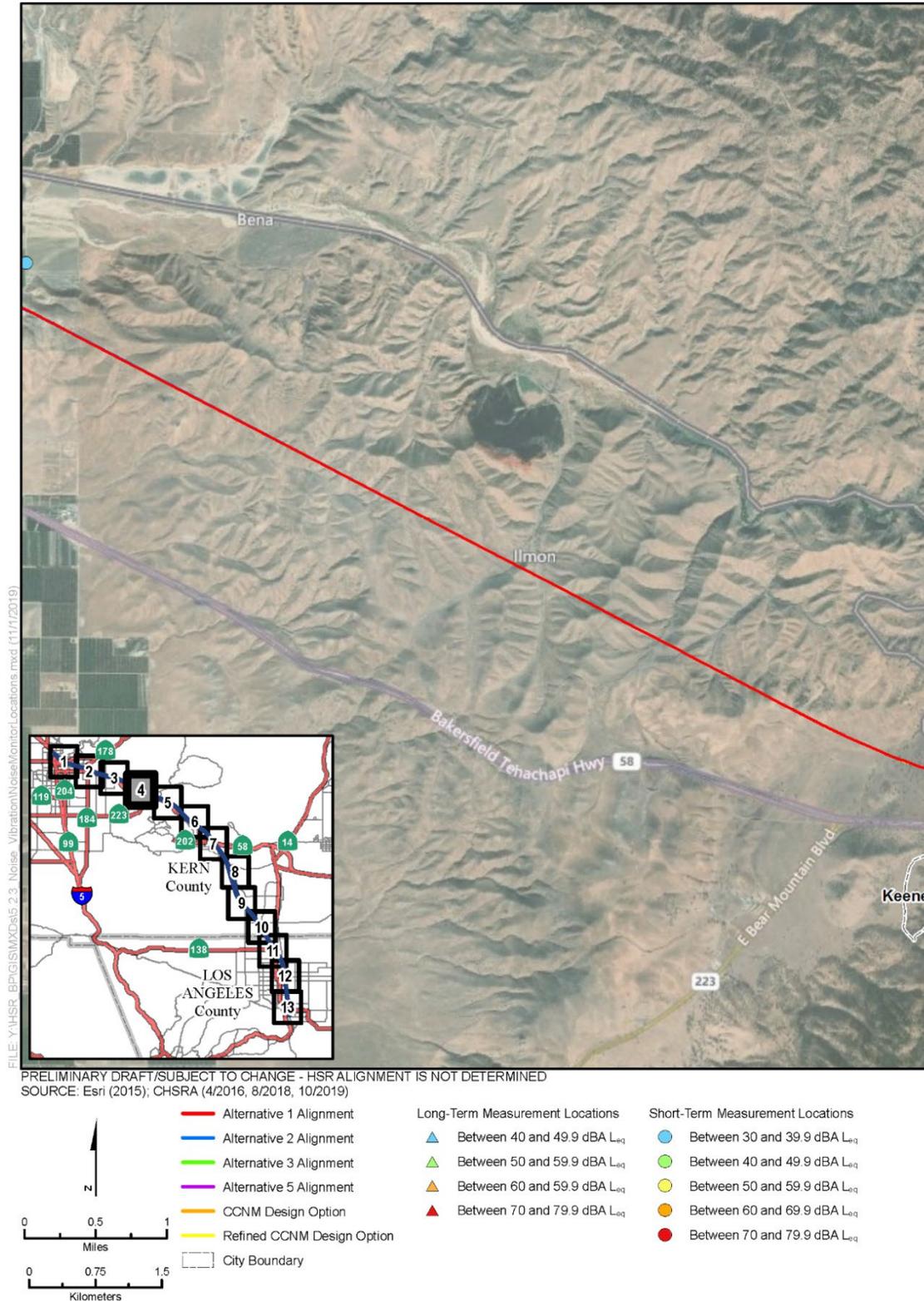
FILE: Y:\HSR\_BP\GIS\MapDocs\5.2.3\_Noise\_Vibration\Noise\MonitorLocations.mxd (11/17/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



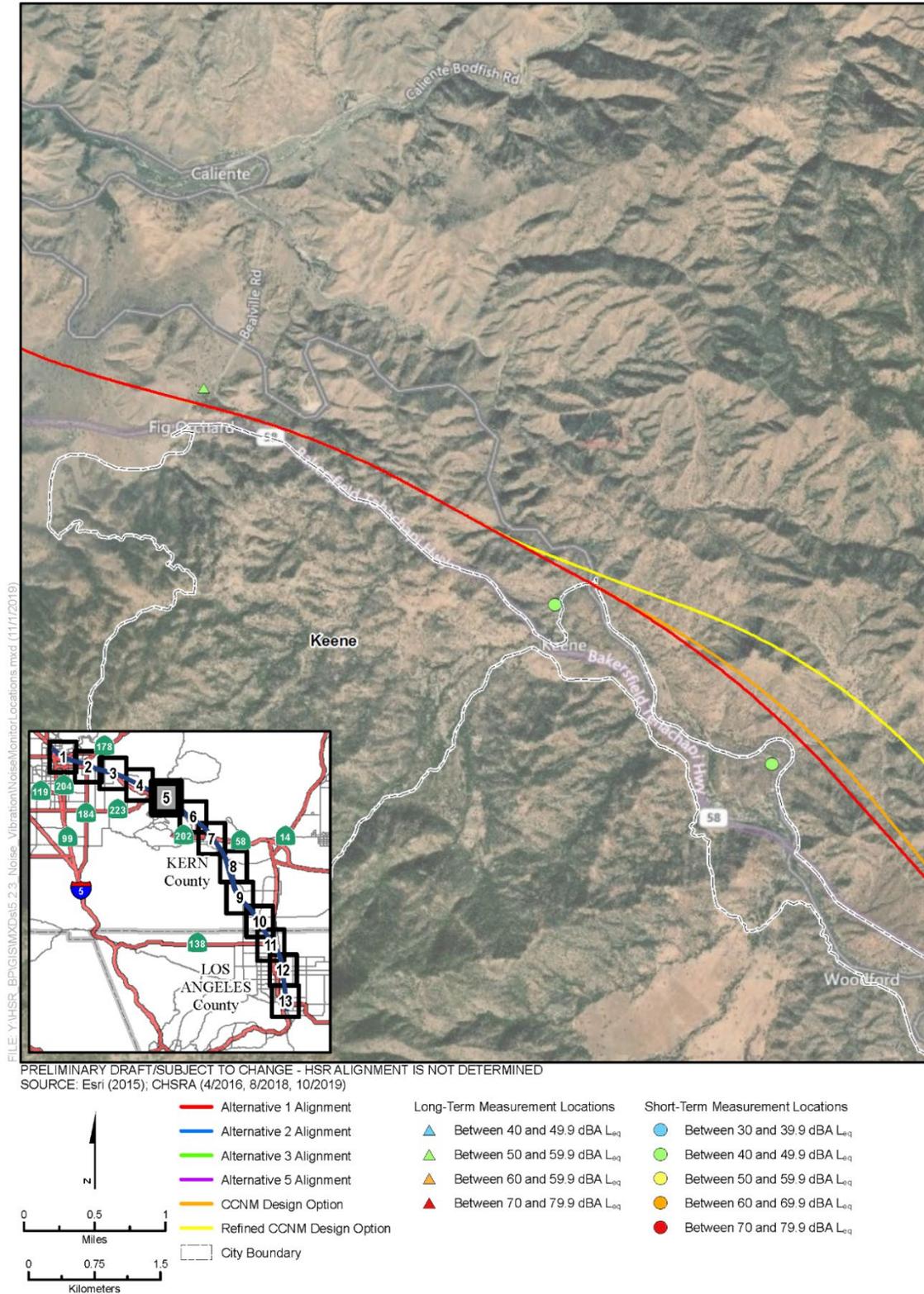
**Figure 3.4-A-1 Noise Level Measurement Locations**

(Sheet 3 of 13)



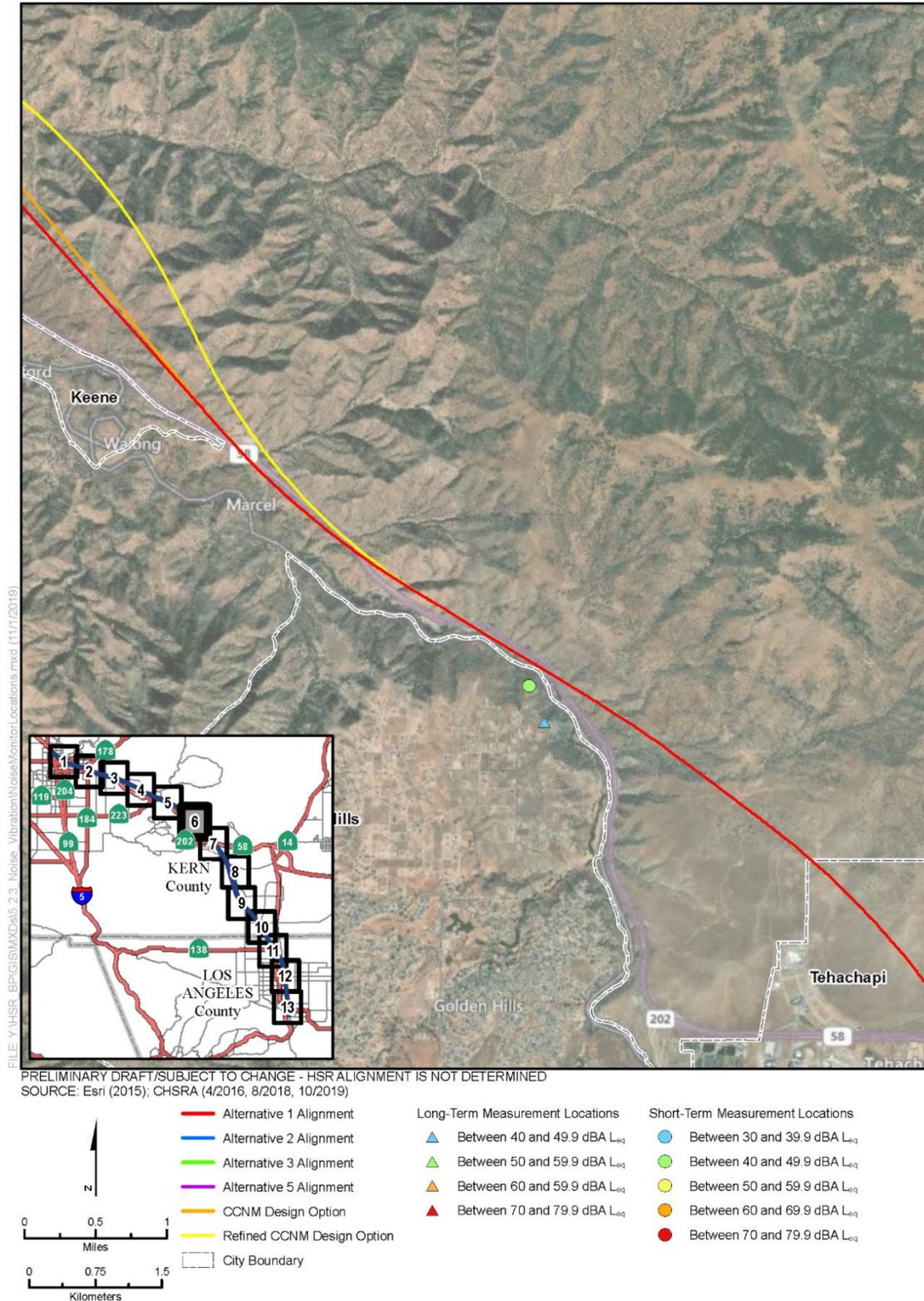
**Figure 3.4-A-1 Noise Level Measurement Locations**

(Sheet 4 of 13)



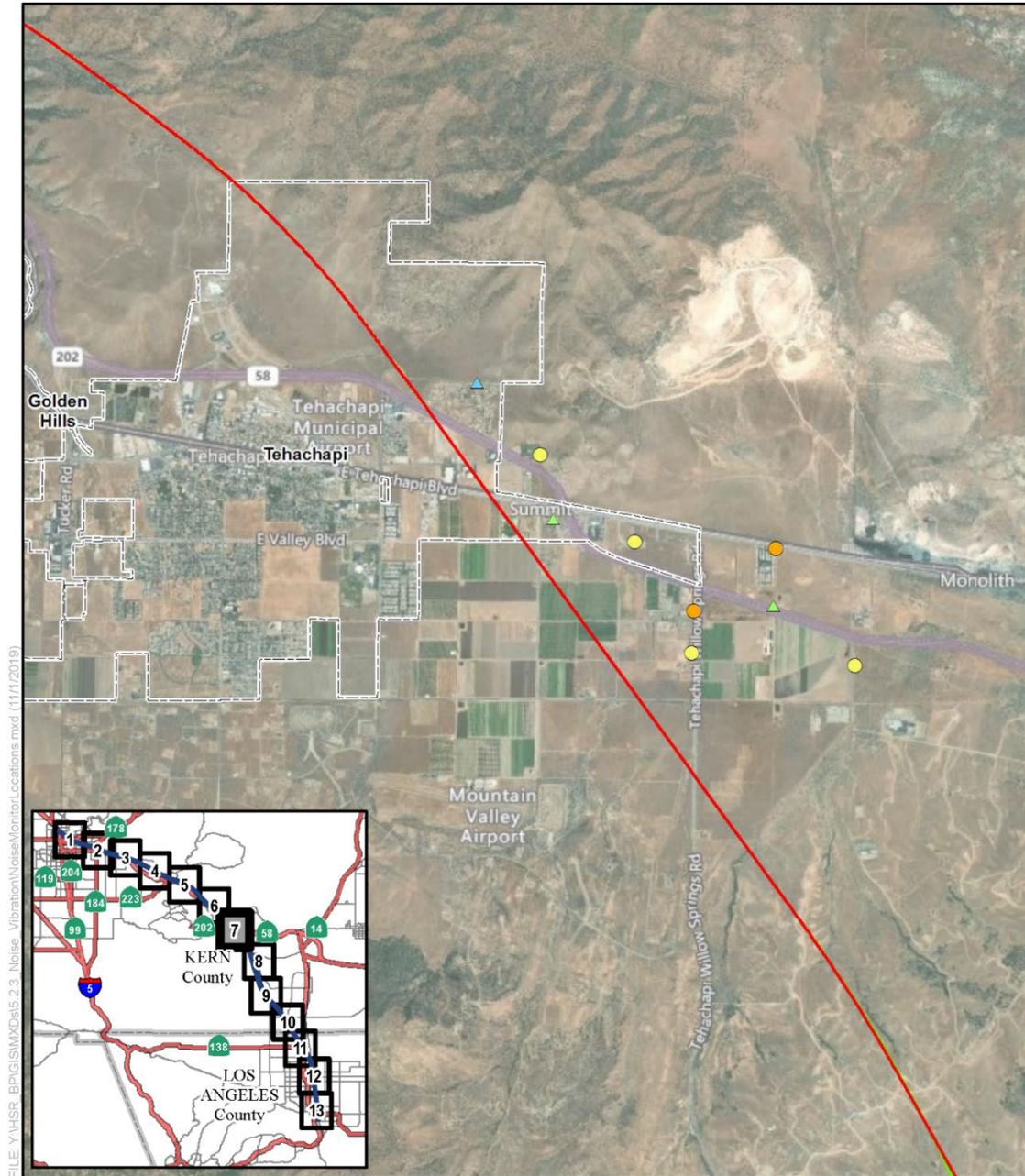
**Figure 3.4-A-1 Noise Level Measurement Locations**

(Sheet 5 of 13)



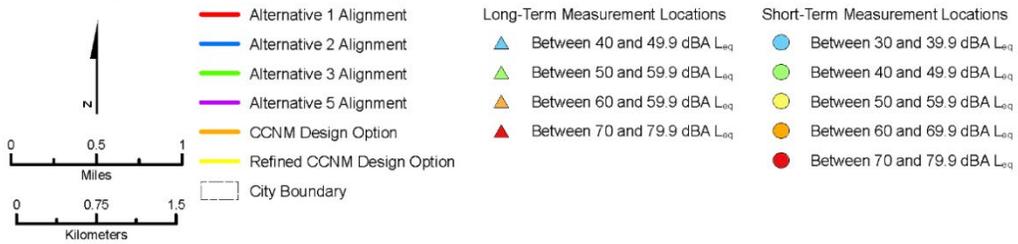
**Figure 3.4-A-1 Noise Level Measurement Locations**

(Sheet 6 of 13)



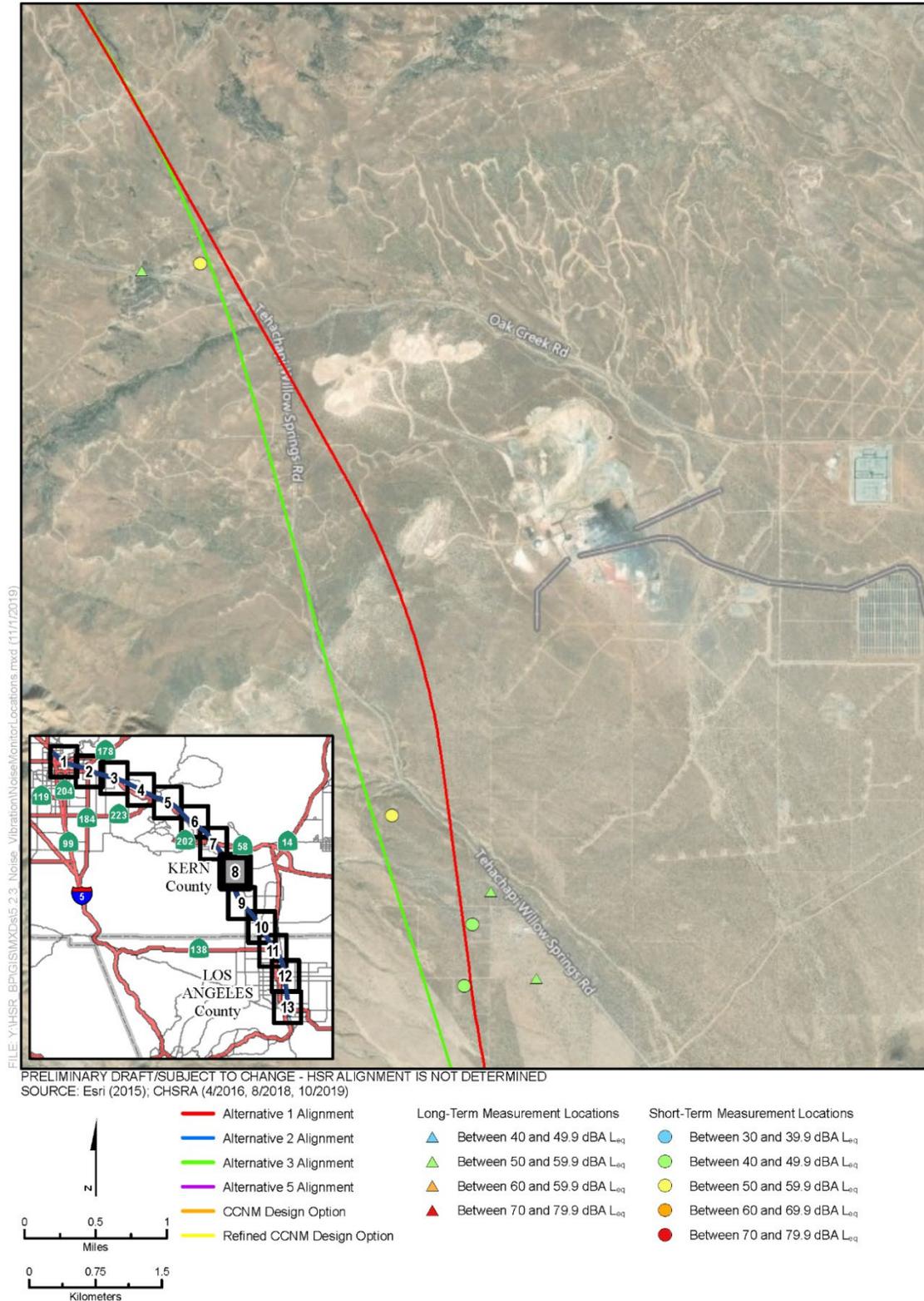
FILE: Y:\HSR\_BP\GIS\MYD\5.2.3\_Noise\_Vibration\Noise\center\_locations.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015), CHSRA (4/2016, 8/2018, 10/2019)



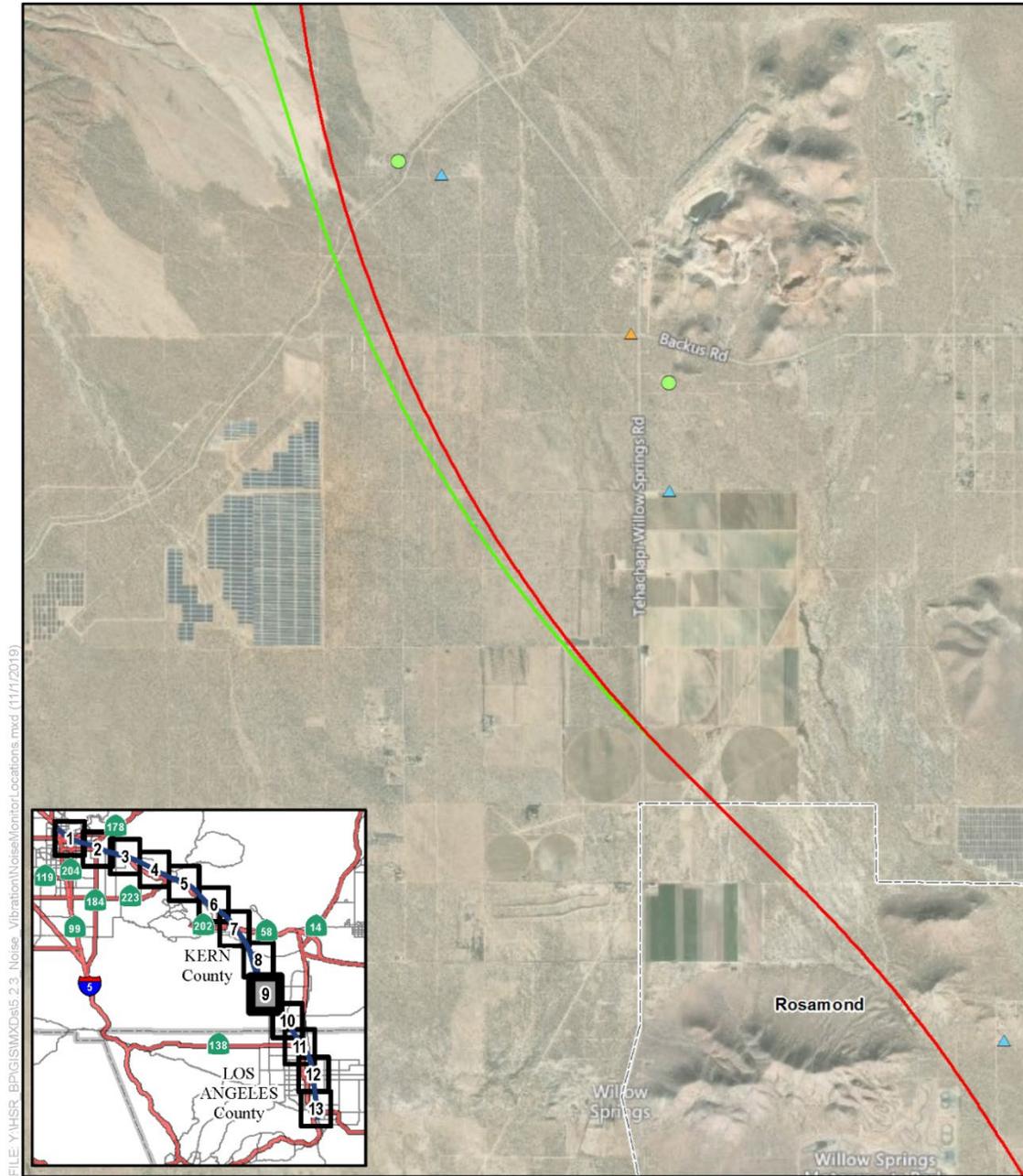
**Figure 3.4-A-1 Noise Level Measurement Locations**

(Sheet 7 of 13)



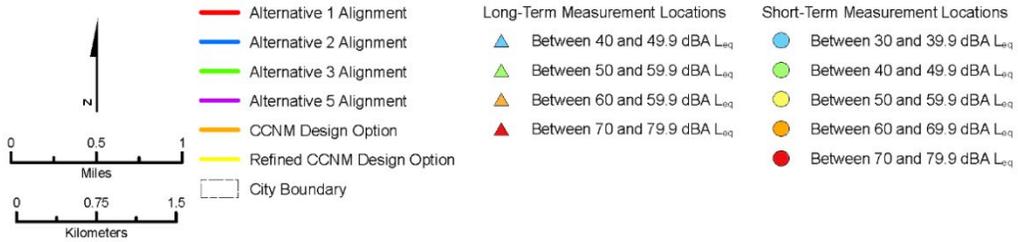
**Figure 3.4-A-1 Noise Level Measurement Locations**

(Sheet 8 of 13)



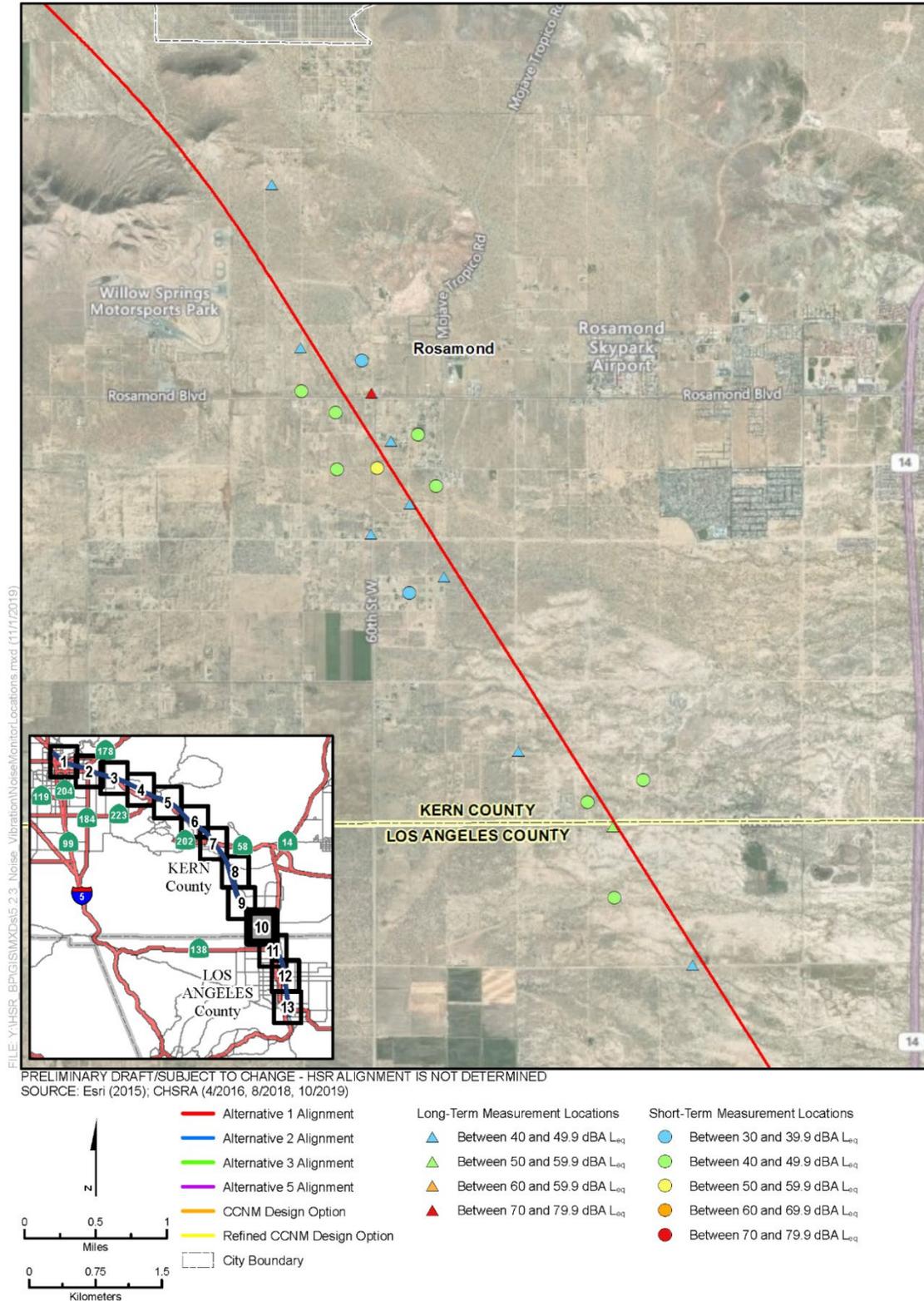
FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\Noise\center\_locations.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015), CHSRA (4/2016, 8/2018, 10/2019)



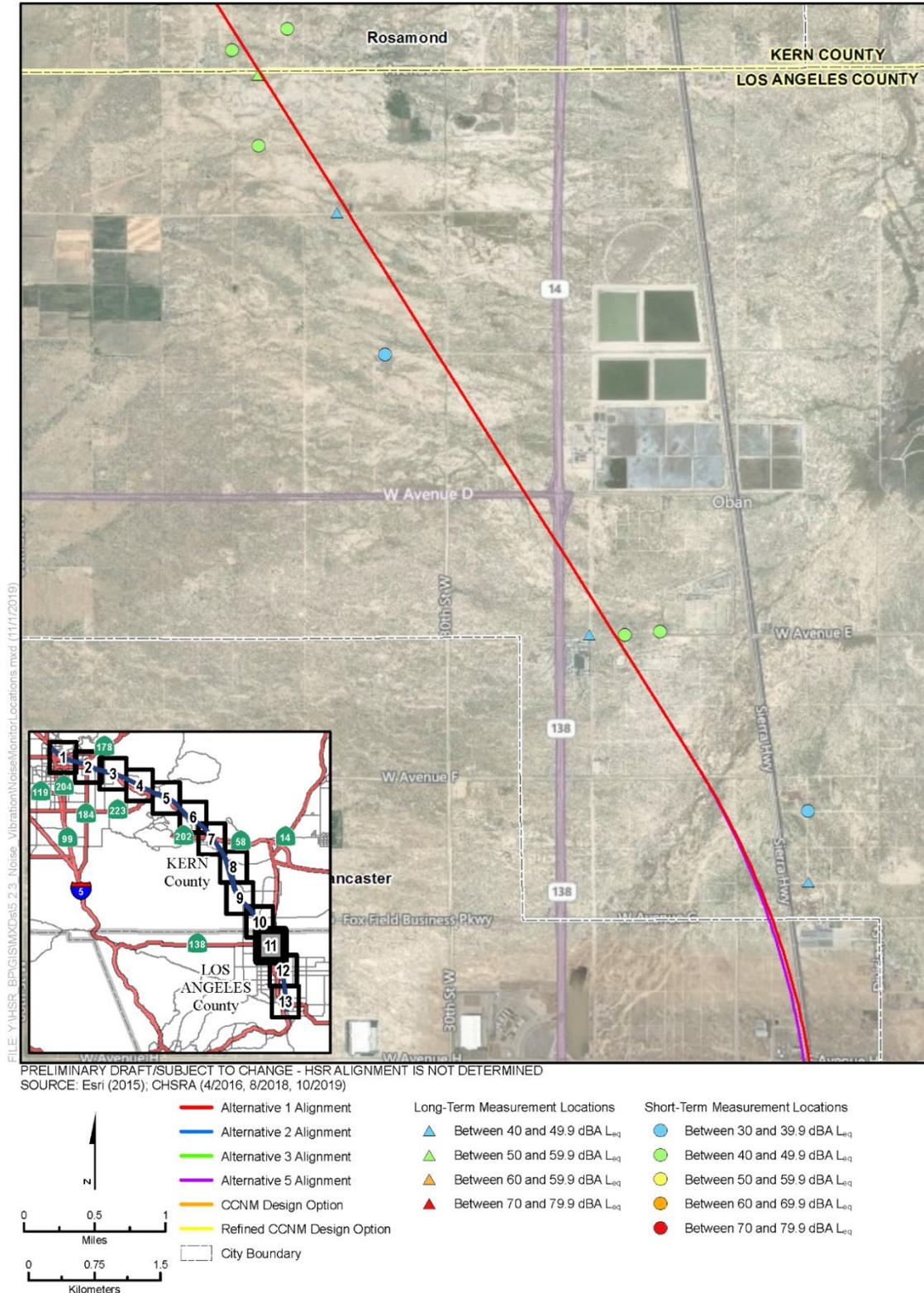
**Figure 3.4-A-1 Noise Level Measurement Locations**

(Sheet 9 of 13)



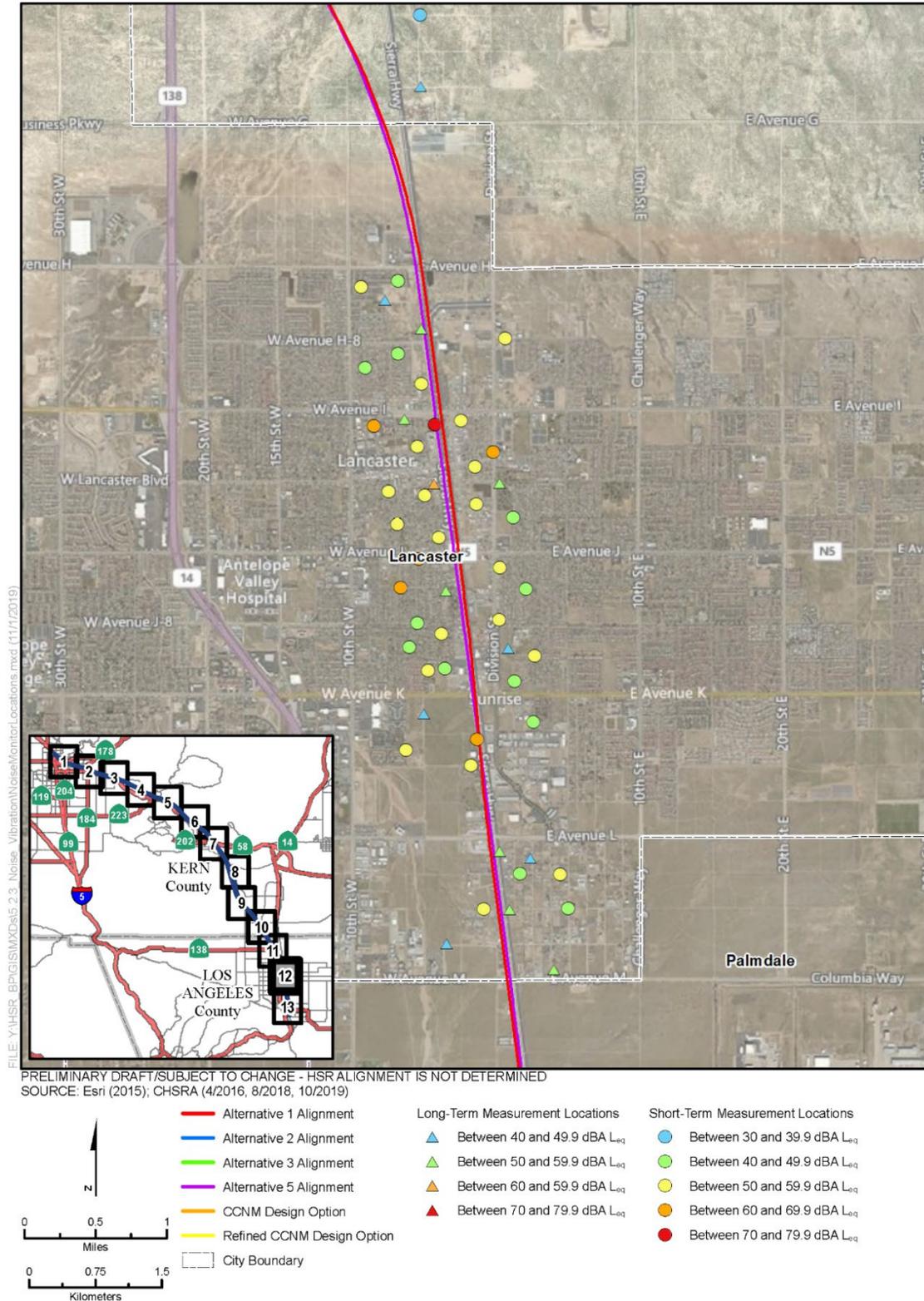
**Figure 3.4-A-1 Noise Level Measurement Locations**

(Sheet 10 of 13)



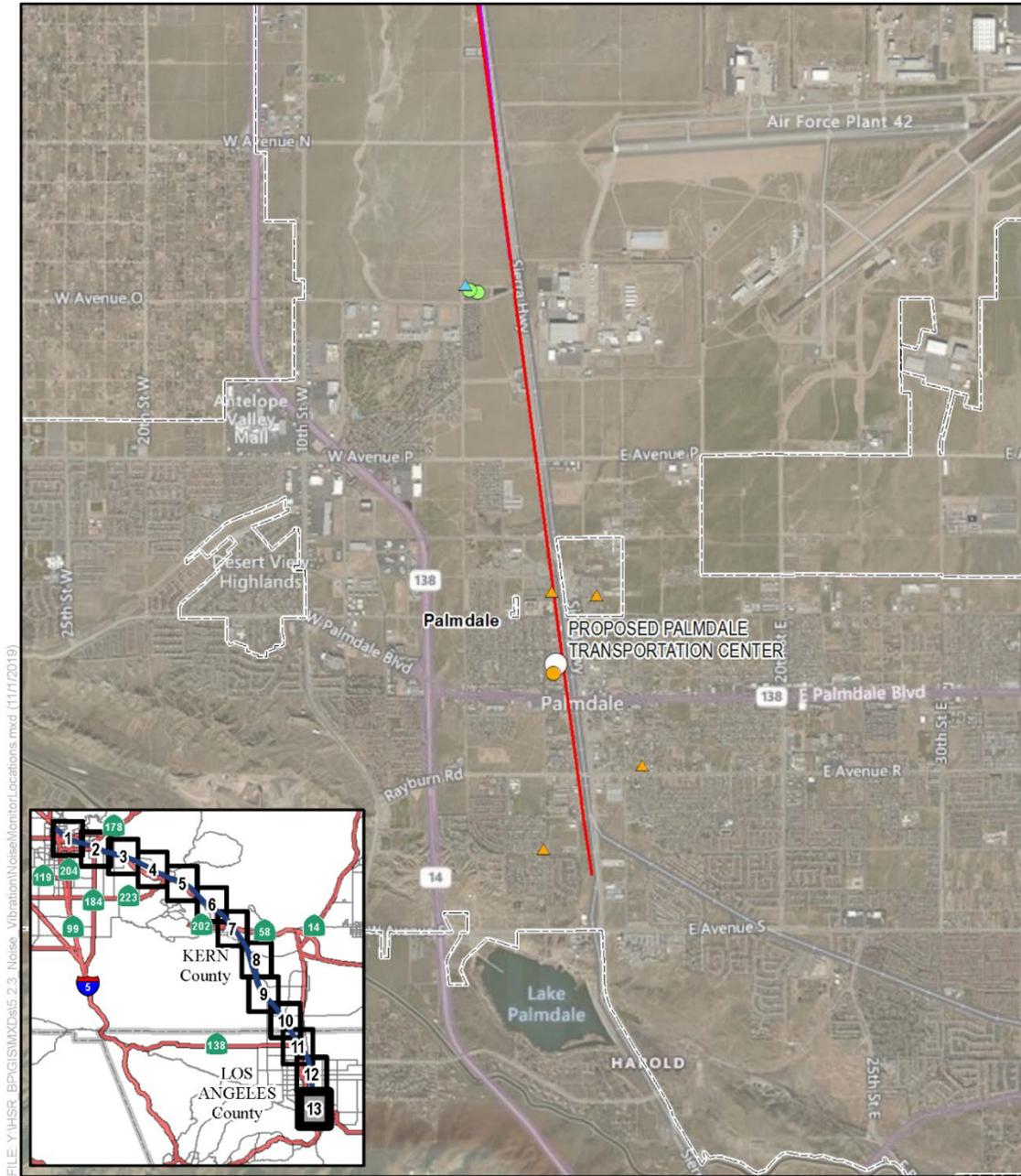
**Figure 3.4-A-1 Noise Level Measurement Locations**

(Sheet 11 of 13)



**Figure 3.4-A-1 Noise Level Measurement Locations**

(Sheet 12 of 13)

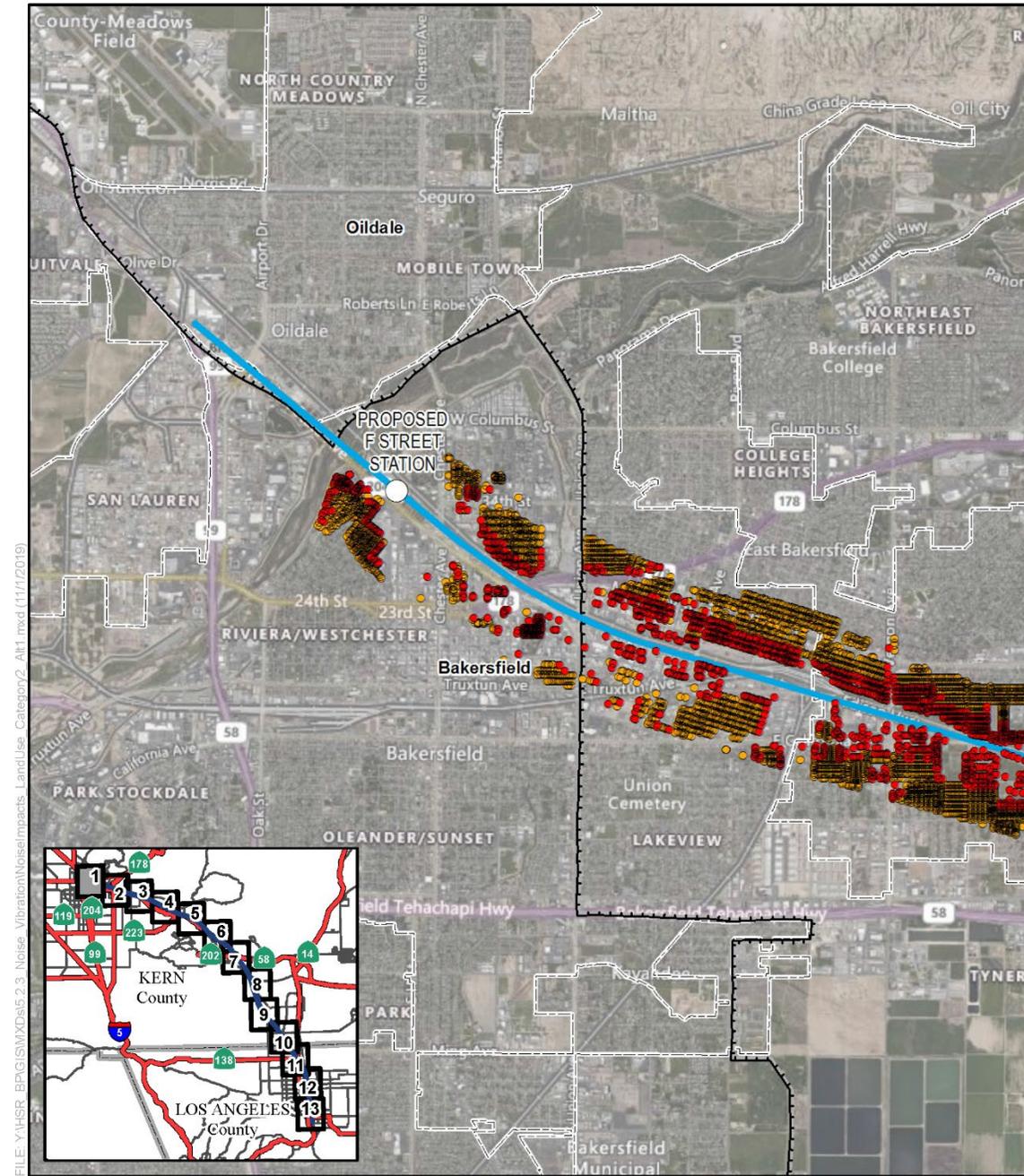


FILE: Y:\HSR\_BP\GIS\MapDocs\5.2.3\_Noise\_Vibration\Noise\center\_locations.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015), CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-1 Noise Level Measurement Locations**  
 (Sheet 13 of 13)

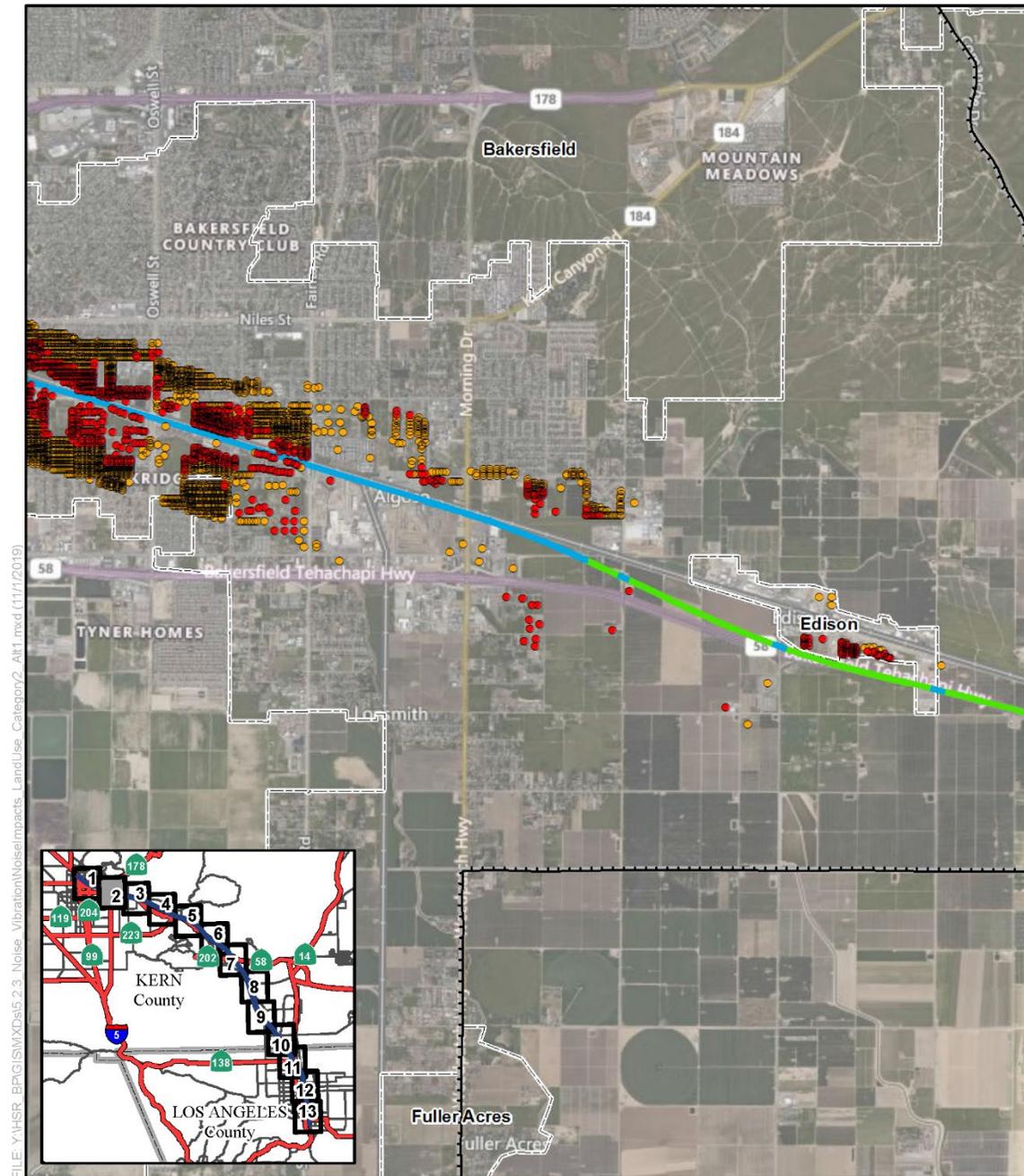


FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt1.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

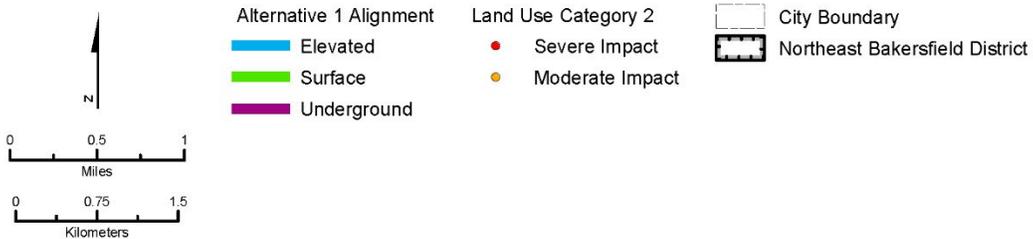
	Alternative 1 Alignment	Land Use Category 2	City Boundary
	<span style="color: blue;">—</span> Elevated	<span style="color: red;">●</span> Severe Impact	Northeast Bakersfield District
	<span style="color: green;">—</span> Surface	<span style="color: orange;">●</span> Moderate Impact	
	<span style="color: purple;">—</span> Underground	Proposed Station	

**Figure 3.4-A-2 Land Use Category 2 Noise Impacts—Alternative 1**  
 (Sheet 1 of 13)

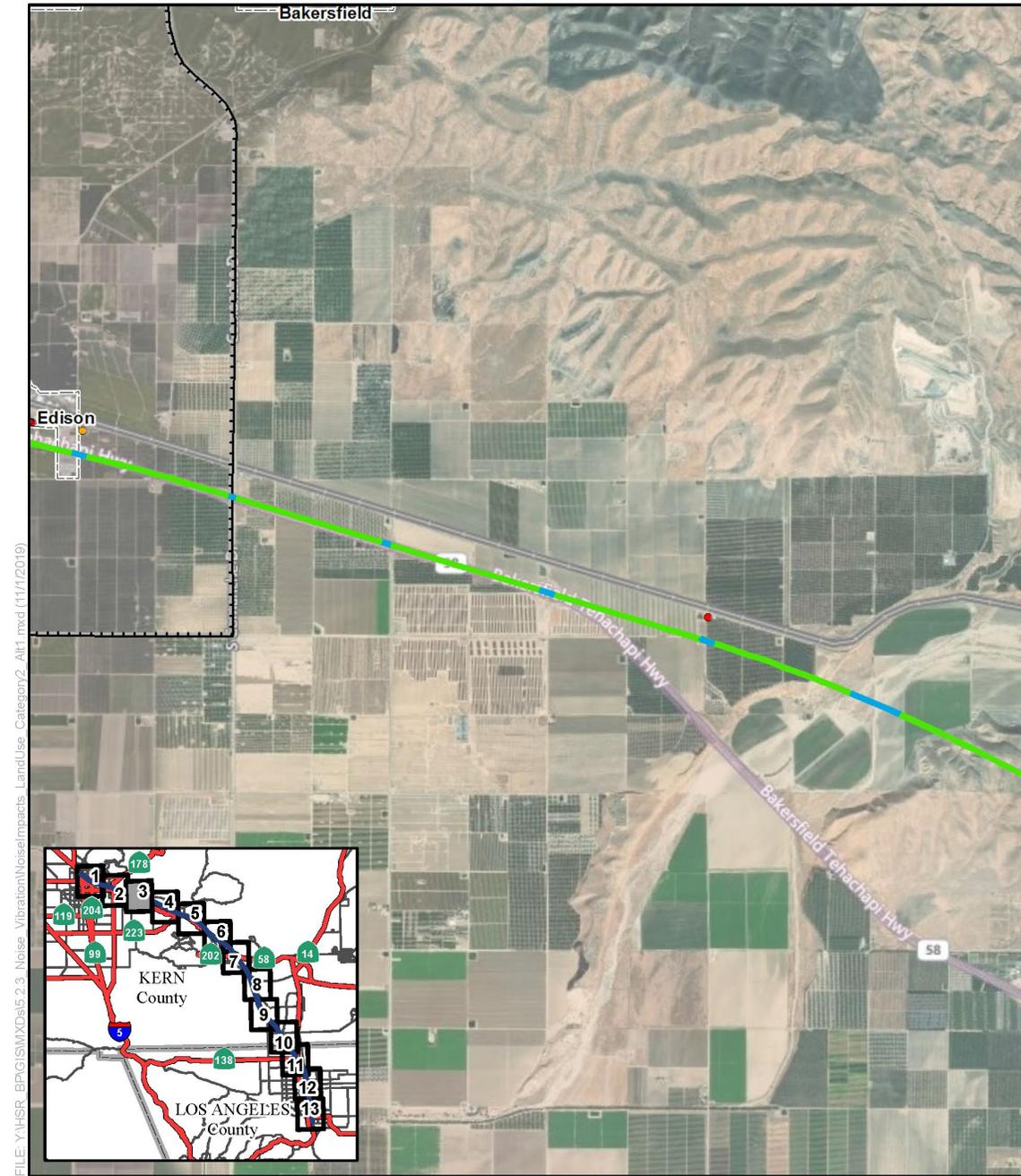


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category2\_A11.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

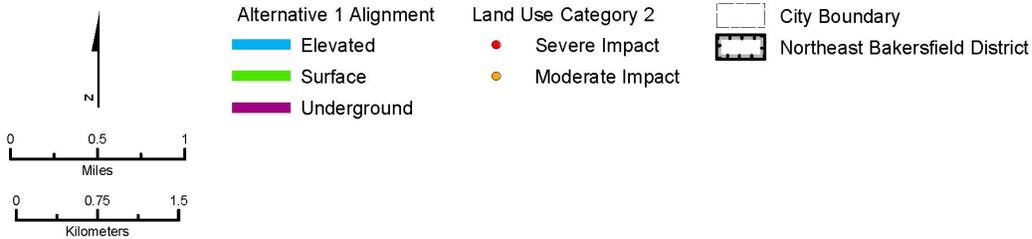


**Figure 3.4-A-2 Land Use Category 2 Noise Impacts—Alternative 1**  
 (Sheet 2 of 13)



FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt1.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

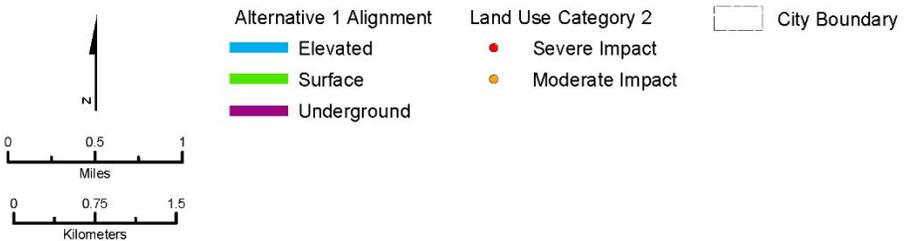


**Figure 3.4-A-2 Land Use Category 2 Noise Impacts—Alternative 1**  
 (Sheet 3 of 13)

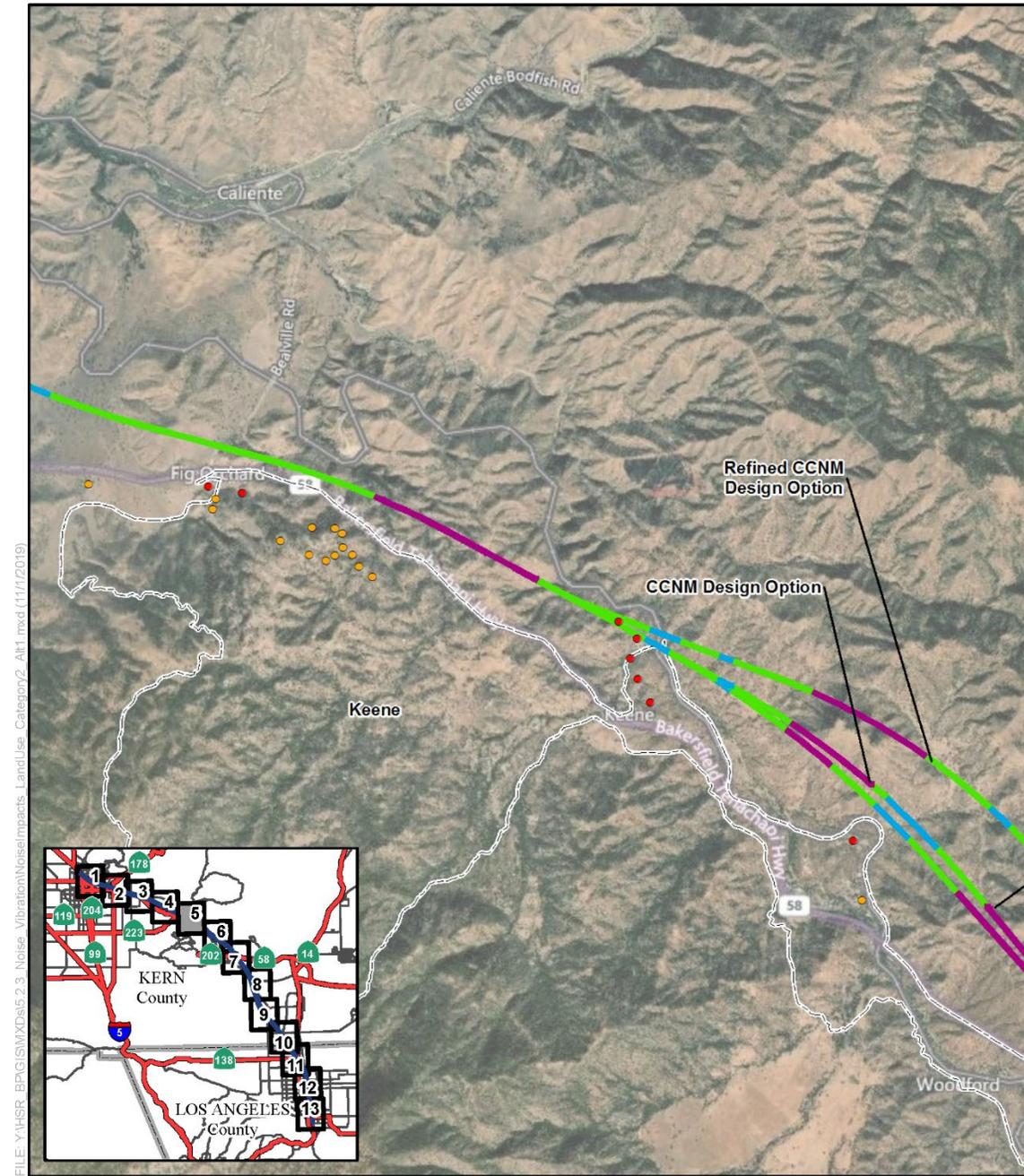


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3.Noise.Vibration\Noise\Impacts\_LandUse\_Category2\_Alt1.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-2 Land Use Category 2 Noise Impacts—Alternative 1**  
 (Sheet 4 of 13)

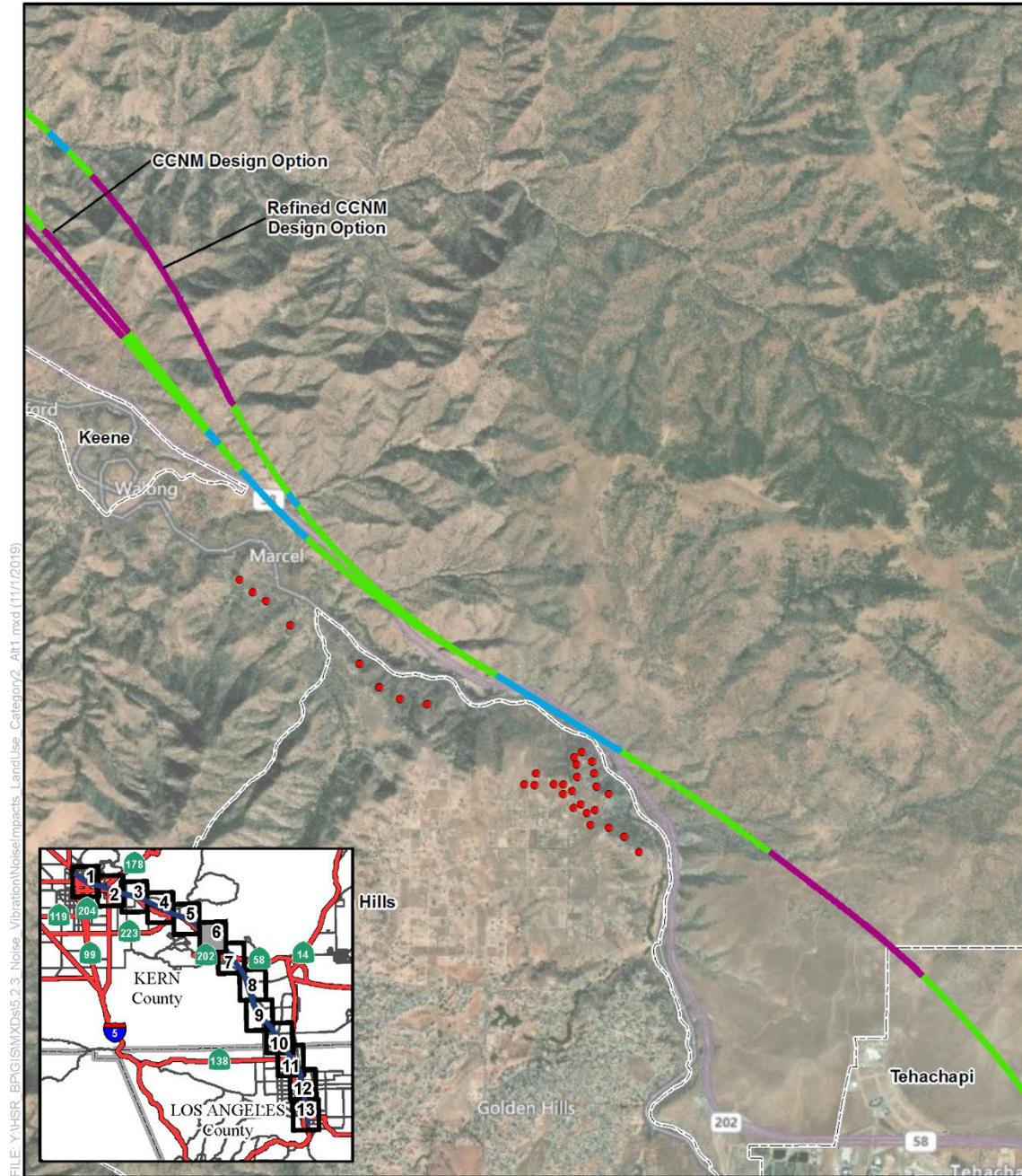


FILE: Y:\HSR\_BP\GIS\WXD\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt1.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

  	<b>Alternative 1 Alignment</b> Elevated Surface Underground	<b>Land Use Category 2</b> Severe Impact Moderate Impact	City Boundary
----------	--	--	---------------

**Figure 3.4-A-2 Land Use Category 2 Noise Impacts—Alternative 1**  
 (Sheet 5 of 13)

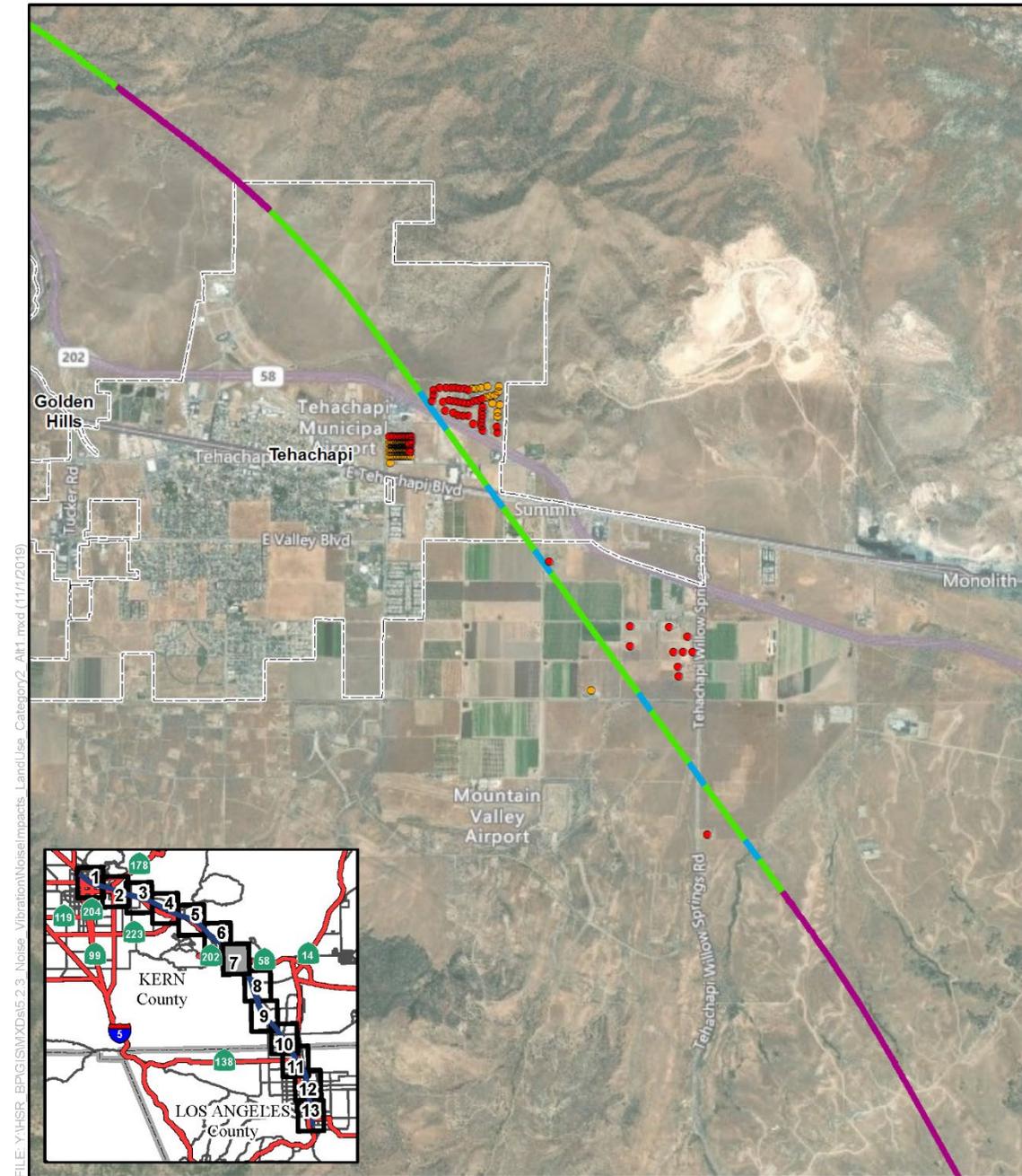


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category2\_Alt1.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

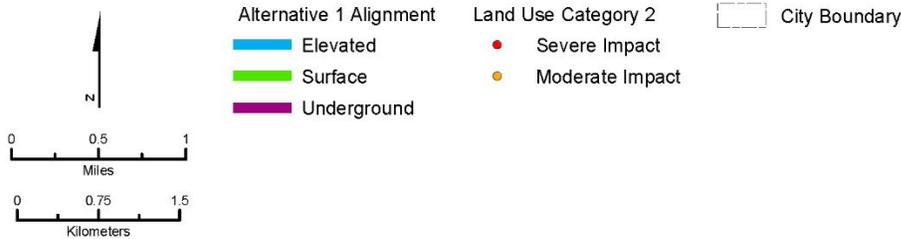
  	<b>Alternative 1 Alignment</b> Elevated Surface Underground	<b>Land Use Category 2</b> Severe Impact Moderate Impact	City Boundary
----------	--	--	---------------

**Figure 3.4-A-2 Land Use Category 2 Noise Impacts—Alternative 1**  
 (Sheet 6 of 13)

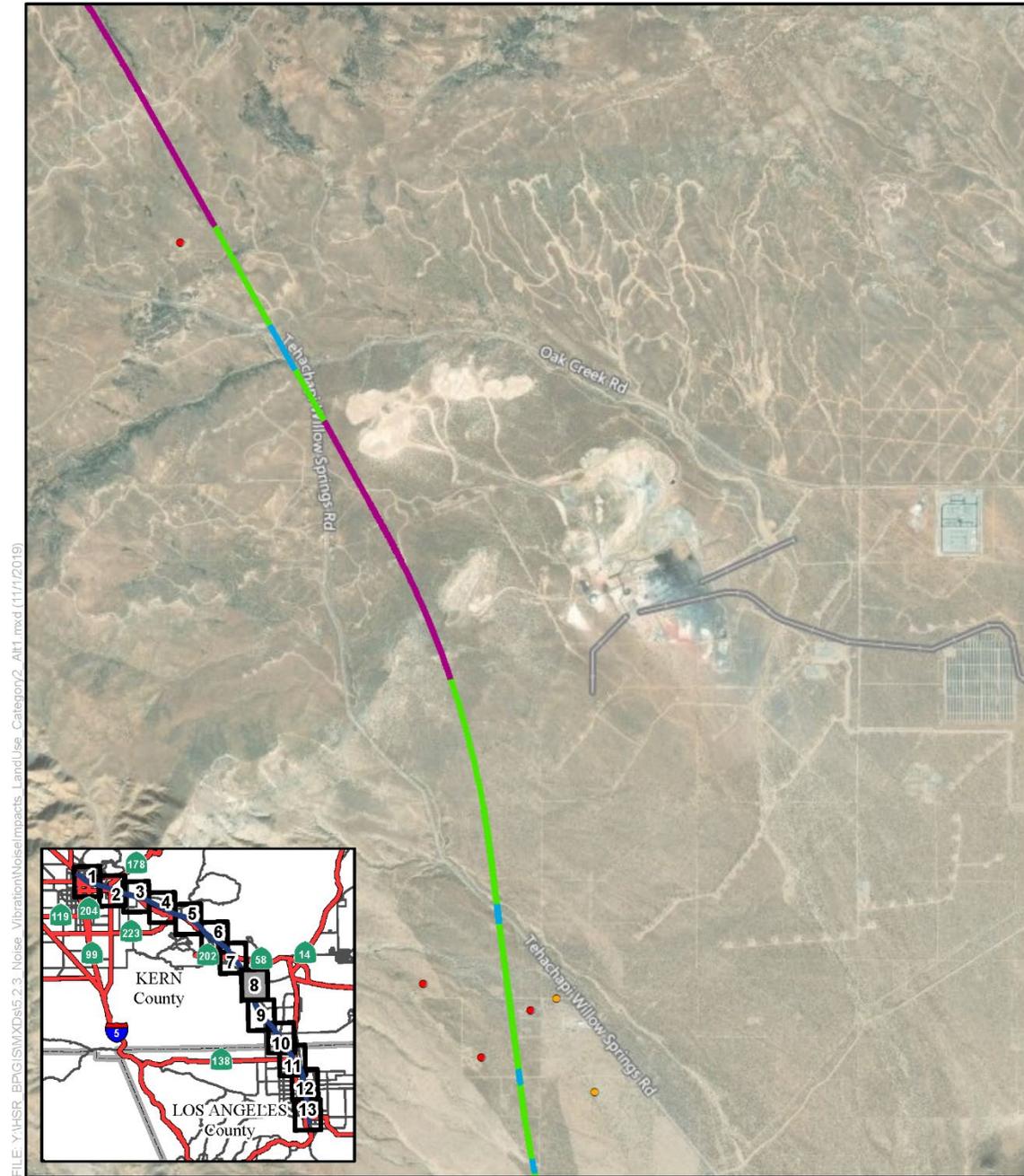


FILE: Y:\HSR\_BP\GIS\WXD\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt1.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

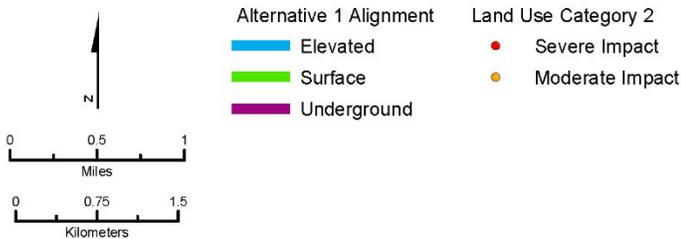


**Figure 3.4-A-2 Land Use Category 2 Noise Impacts—Alternative 1**  
 (Sheet 7 of 13)

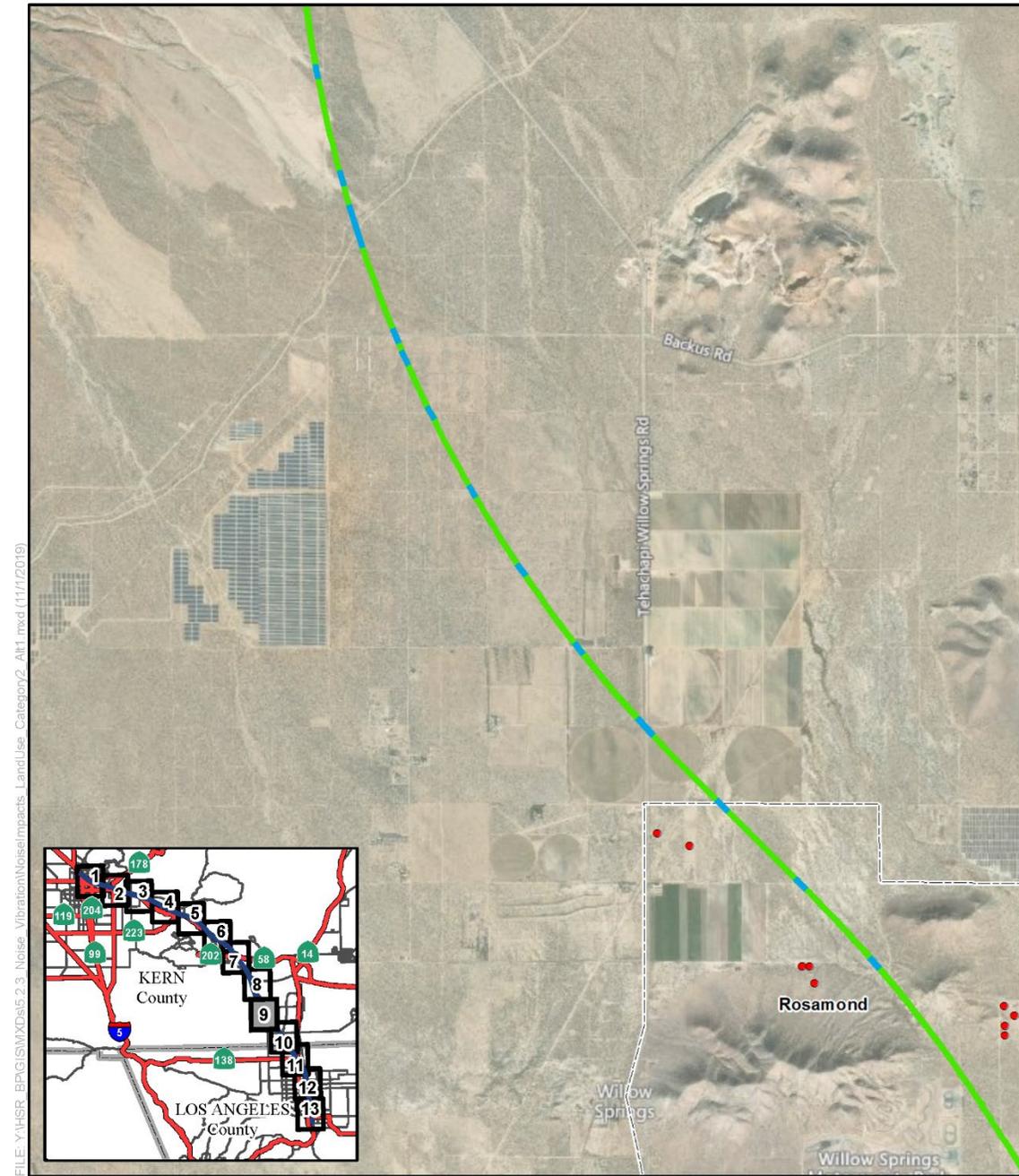


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt1.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

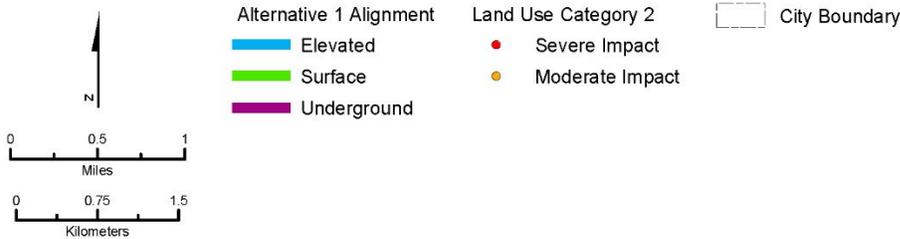


**Figure 3.4-A-2 Land Use Category 2 Noise Impacts—Alternative 1**  
 (Sheet 8 of 13)

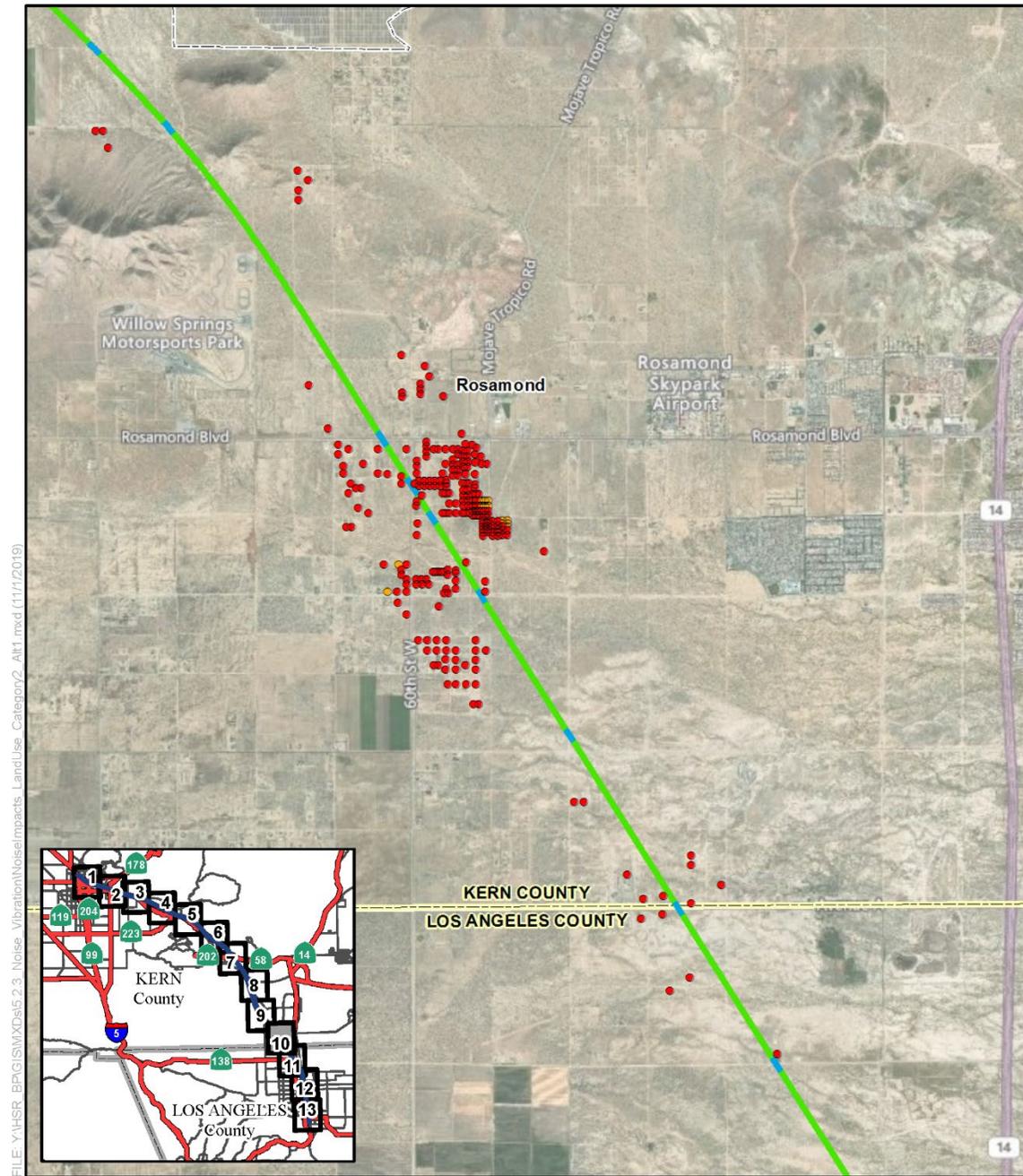


FILE: Y:\HSR\_BP\GIS\WXD\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt1.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-2 Land Use Category 2 Noise Impacts—Alternative 1**  
 (Sheet 9 of 13)

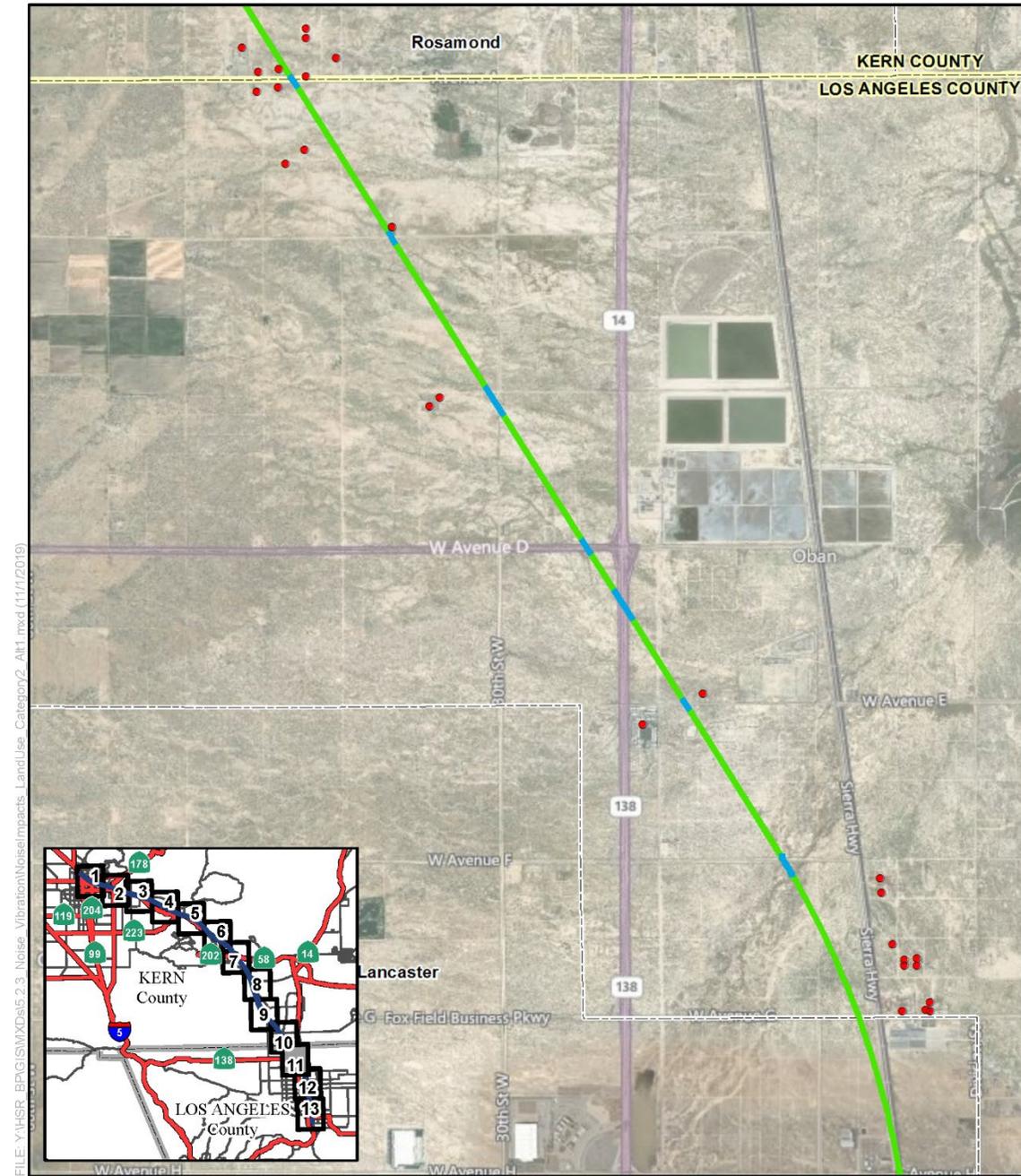


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category2\_Alt1.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

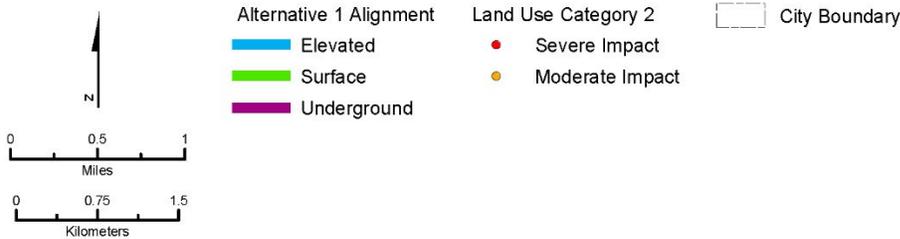
  	<b>Alternative 1 Alignment</b> Elevated Surface Underground	<b>Land Use Category 2</b> Severe Impact Moderate Impact	City Boundary
----------	--	--	---------------

**Figure 3.4-A-2 Land Use Category 2 Noise Impacts—Alternative 1**  
 (Sheet 10 of 13)

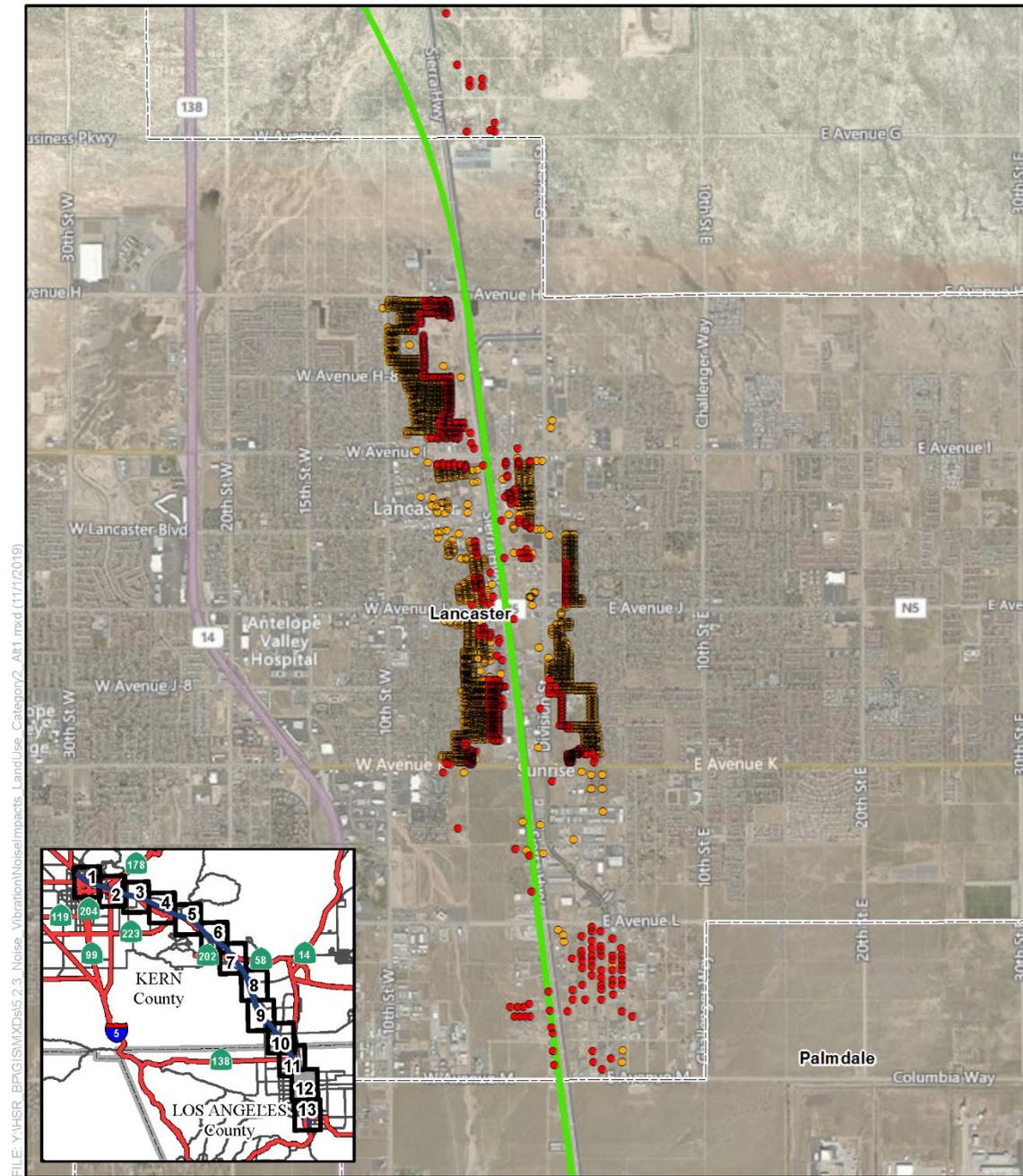


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3.Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt1.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



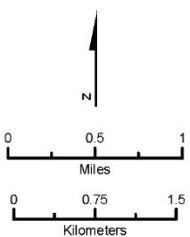
**Figure 3.4-A-2 Land Use Category 2 Noise Impacts—Alternative 1**  
 (Sheet 11 of 13)



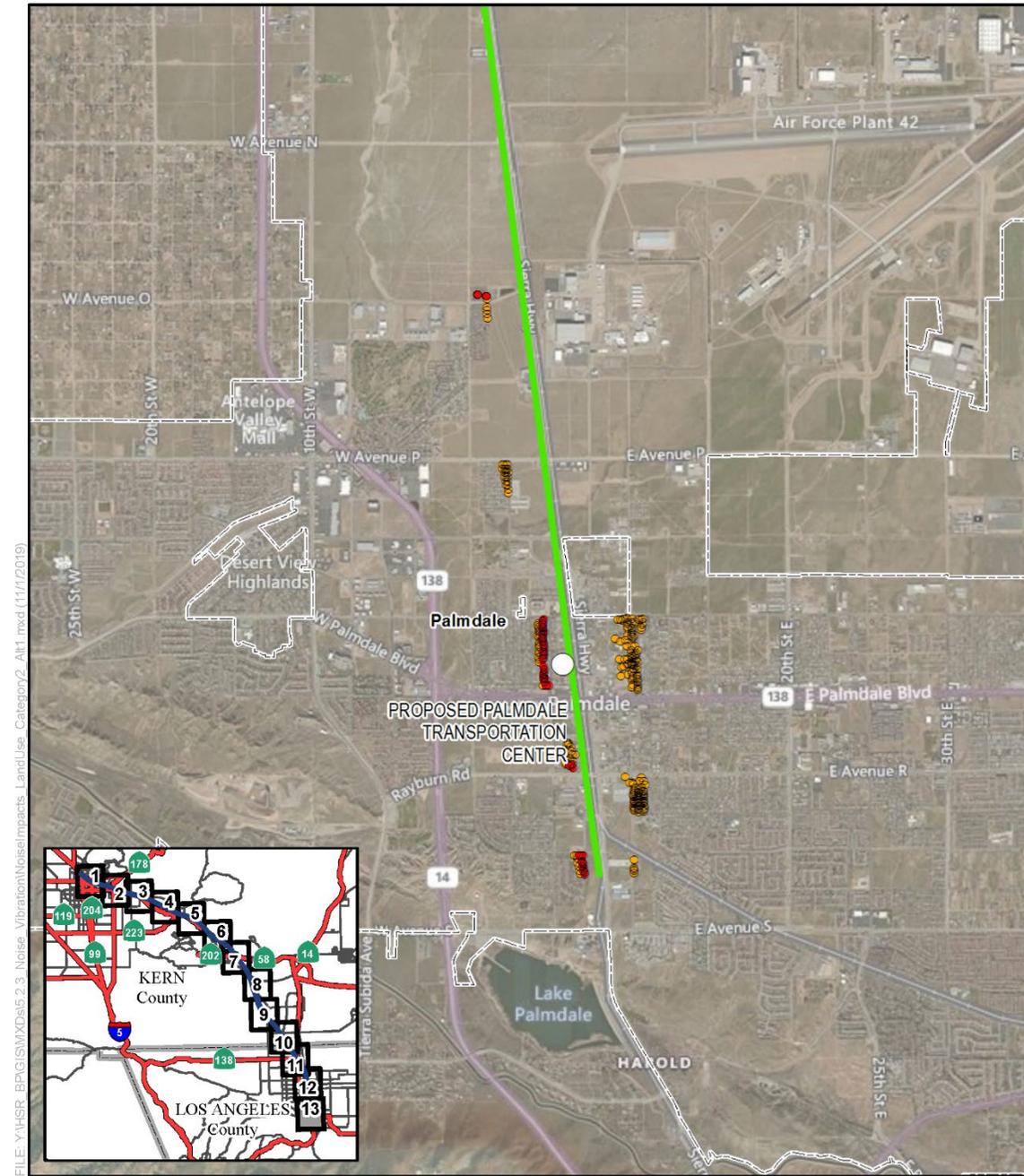
FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt1.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

Alternative 1 Alignment      Land Use Category 2      City Boundary  
 — Elevated                      • Severe Impact  
 — Surface                         • Moderate Impact  
 — Underground



**Figure 3.4-A-2 Land Use Category 2 Noise Impacts—Alternative 1**  
 (Sheet 12 of 13)

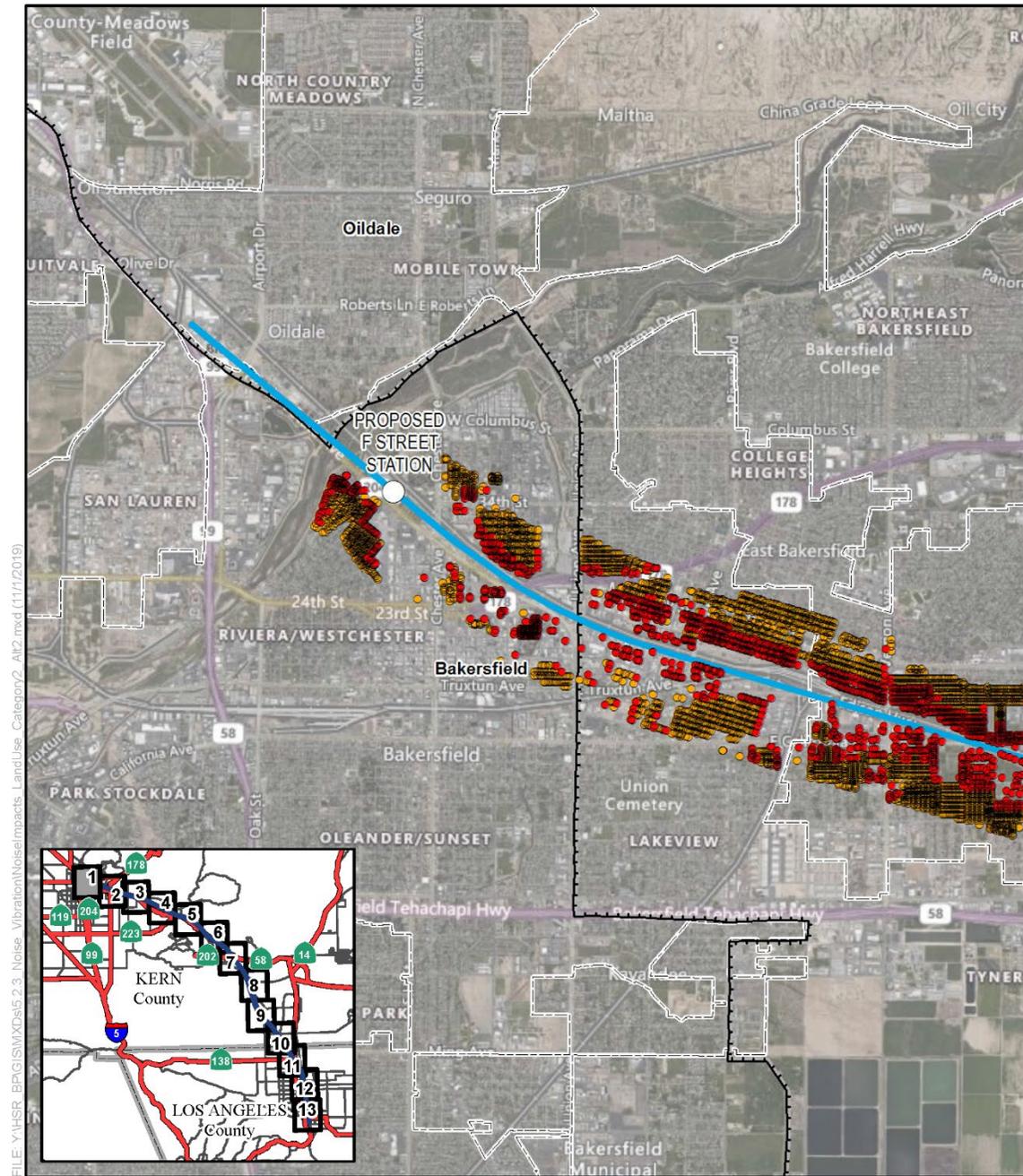


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt1.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



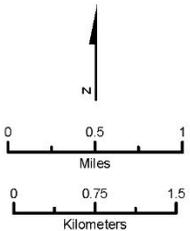
**Figure 3.4-A-2 Land Use Category 2 Noise Impacts—Alternative 1**  
 (Sheet 13 of 13)



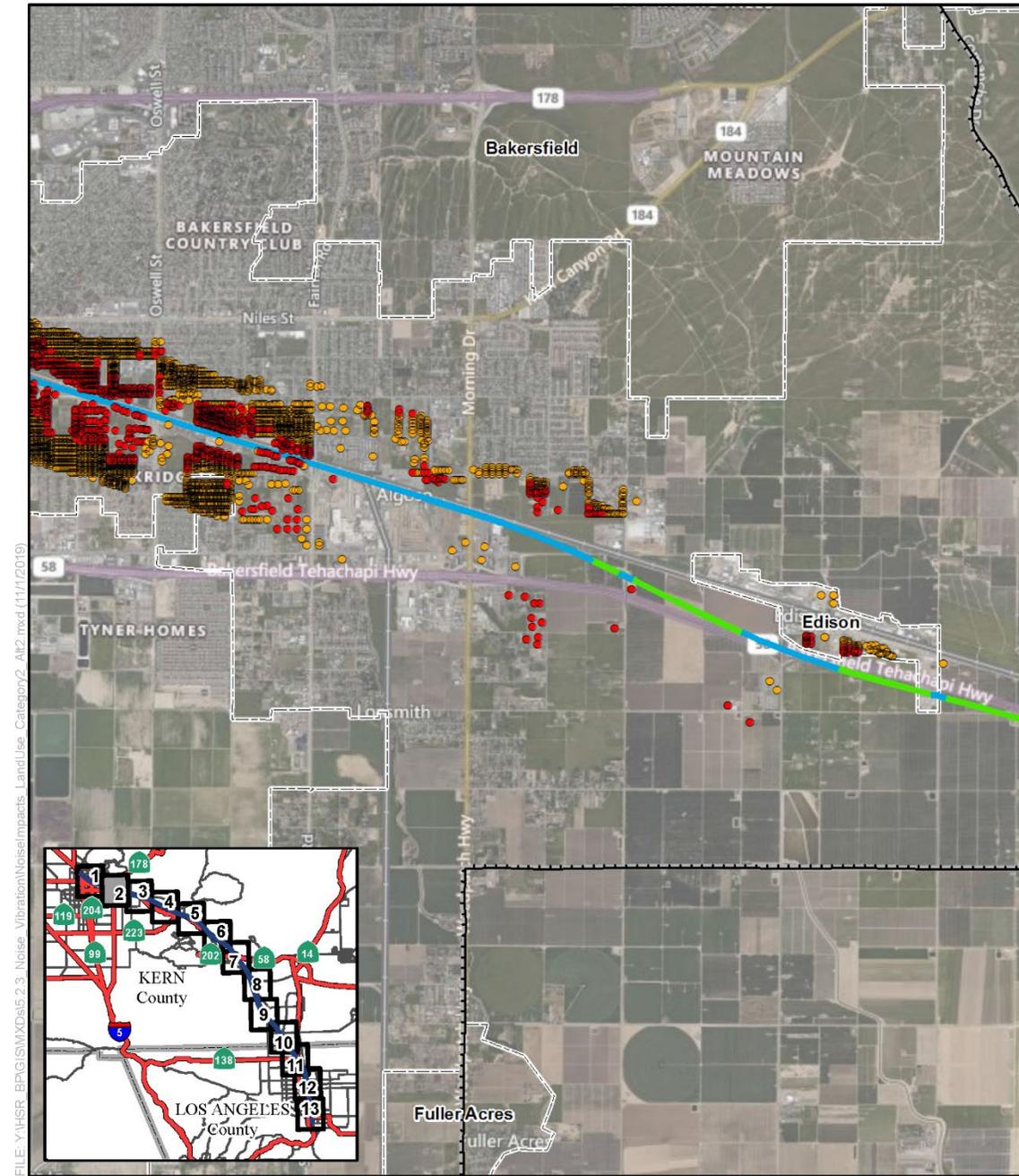
FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt2.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

- |                                |                            |                                |
|--------------------------------|----------------------------|--------------------------------|
| <b>Alternative 2 Alignment</b> | <b>Land Use Category 2</b> | <b>City Boundary</b>           |
| Elevated                       | Severe Impact              | Northeast Bakersfield District |
| Surface                        | Moderate Impact            |                                |
| Underground                    |                            |                                |
| Proposed Station               |                            |                                |

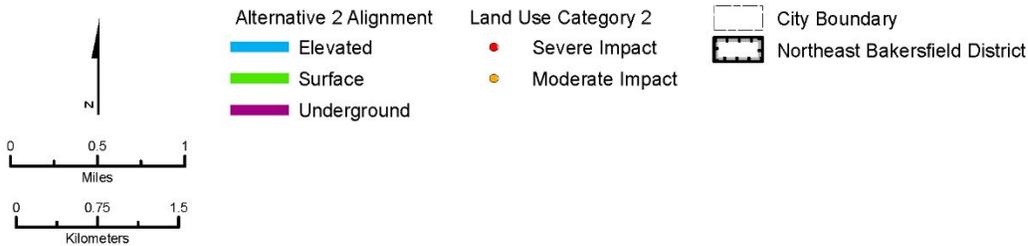


**Figure 3.4-A-3 Land Use Category 2 Noise Impacts—Alternative 2**  
 (Sheet 1 of 13)

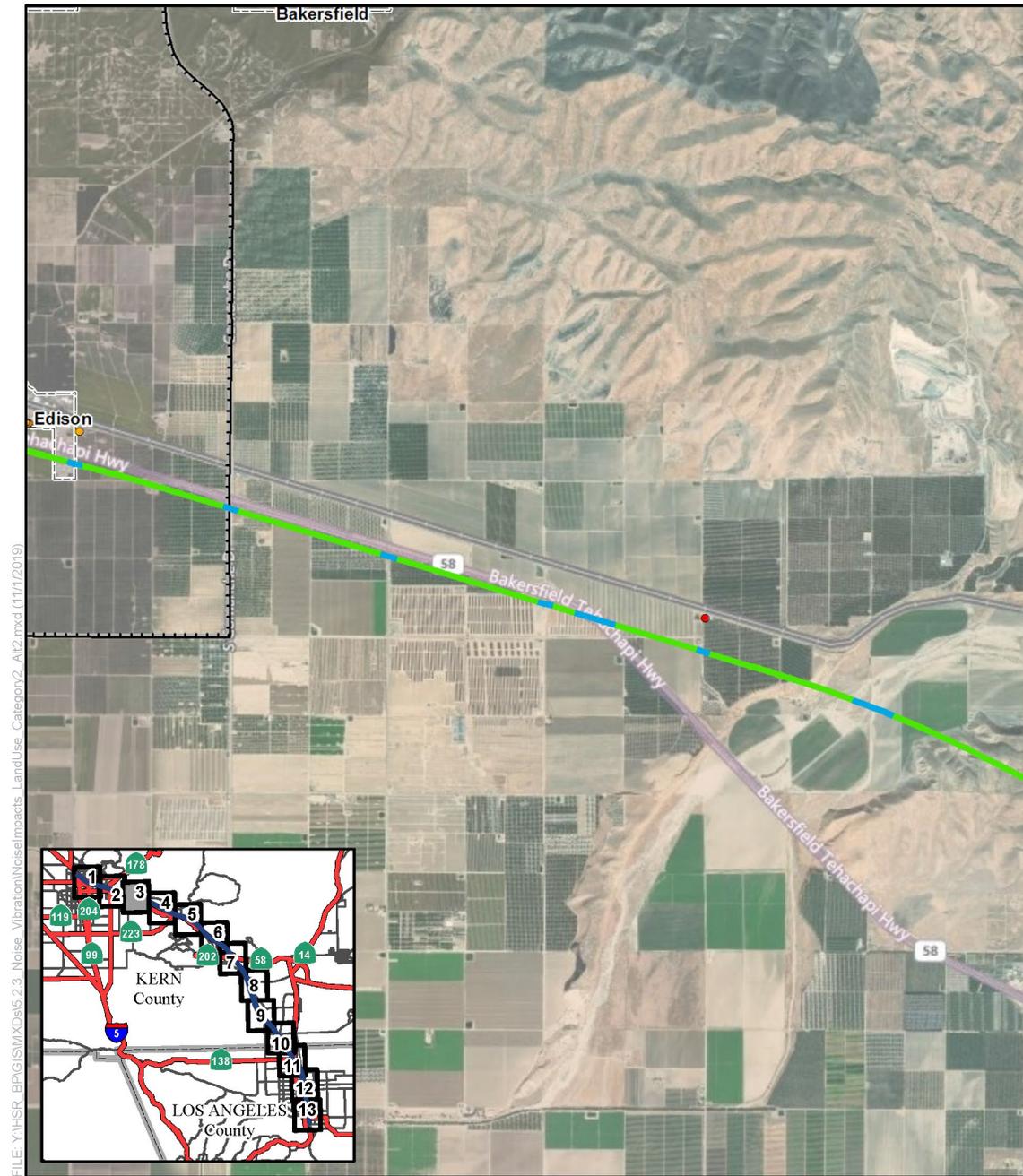


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt2.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-3 Land Use Category 2 Noise Impacts—Alternative 2**  
 (Sheet 2 of 13)



FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt2.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

  	<b>Alternative 2 Alignment</b> Elevated Surface Underground	<b>Land Use Category 2</b> Severe Impact Moderate Impact	City Boundary Northeast Bakersfield District
----------	--	--	---

**Figure 3.4-A-3 Land Use Category 2 Noise Impacts—Alternative 2**  
 (Sheet 3 of 13)

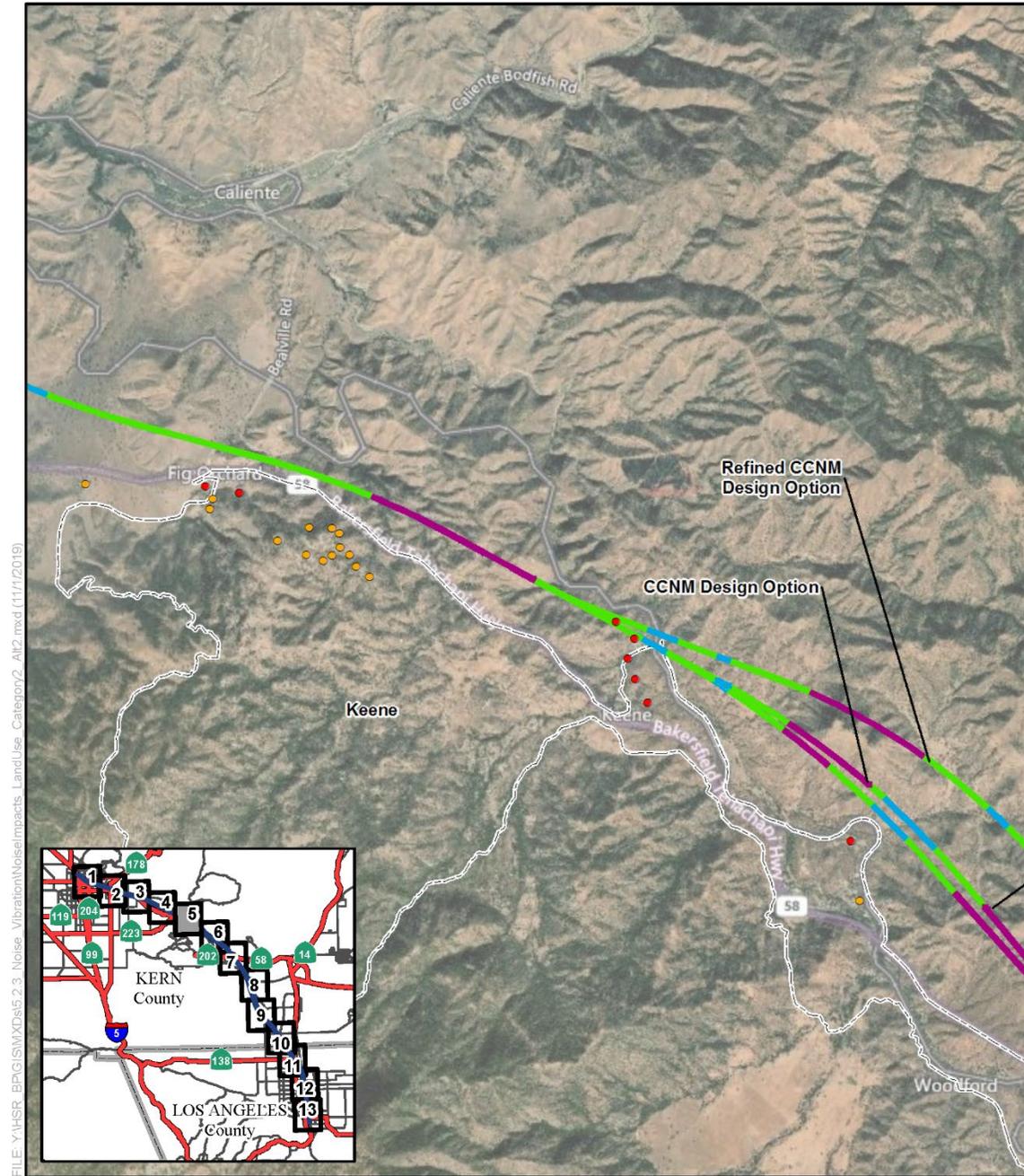


FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt2.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

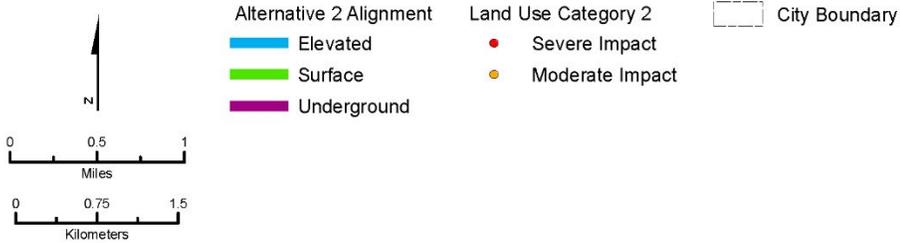


**Figure 3.4-A-3 Land Use Category 2 Noise Impacts—Alternative 2**  
 (Sheet 4 of 13)

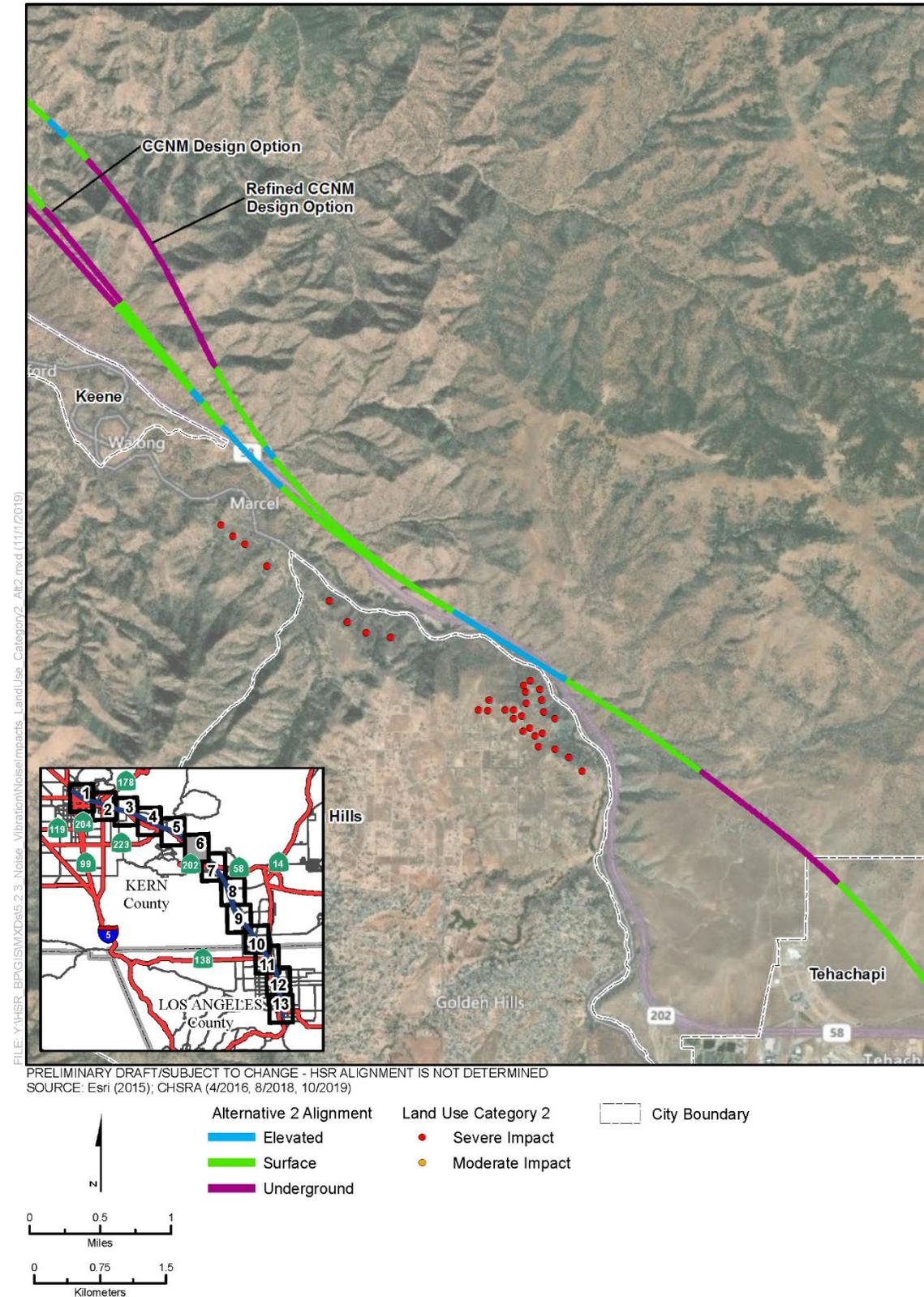


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category2\_Alt2.mxd (11/11/2019)

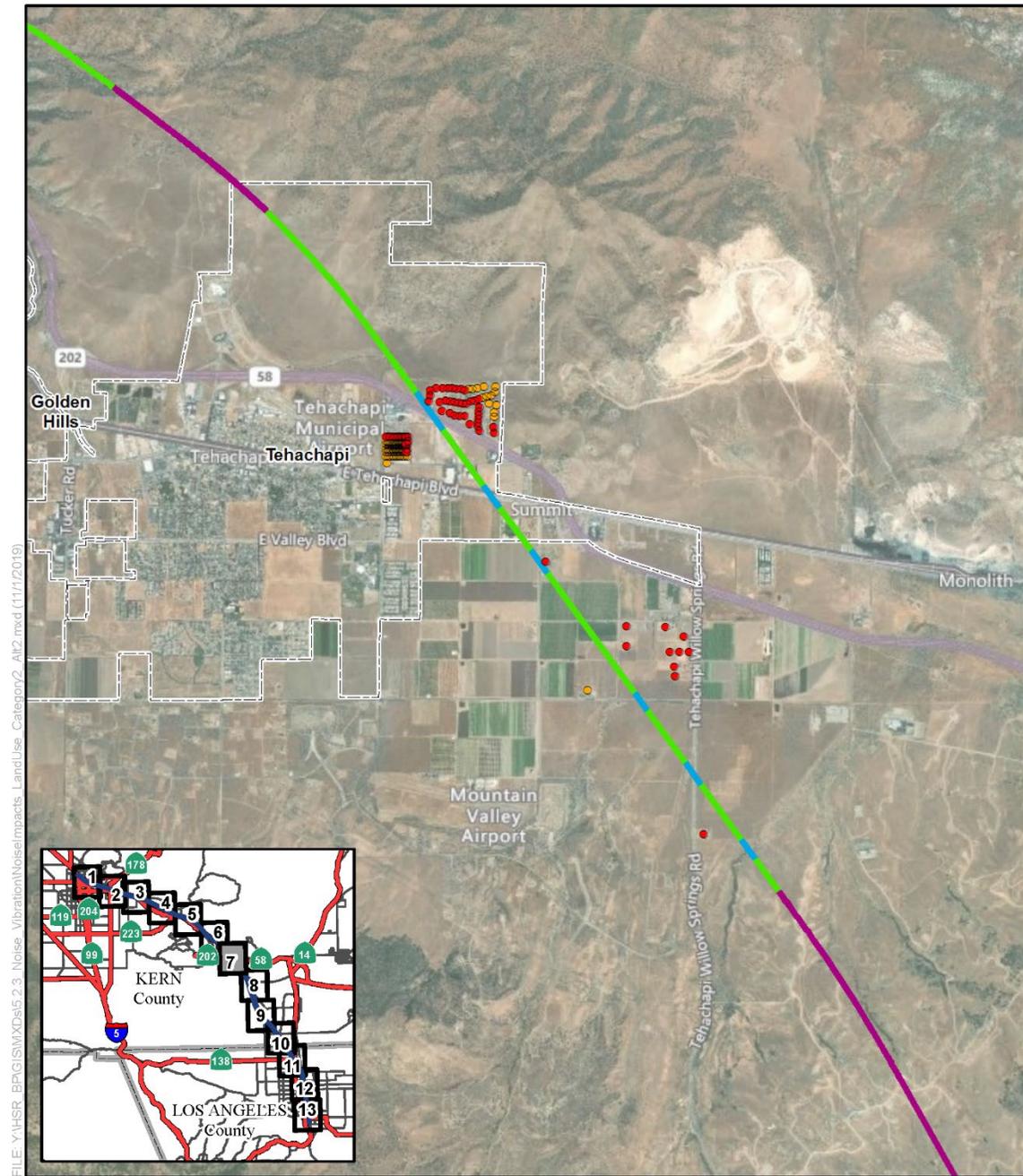
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-3 Land Use Category 2 Noise Impacts—Alternative 2**  
 (Sheet 5 of 13)

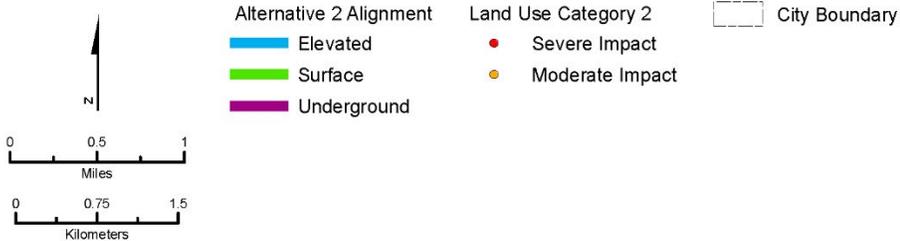


**Figure 3.4-A-3 Land Use Category 2 Noise Impacts—Alternative 2**  
(Sheet 6 of 13)

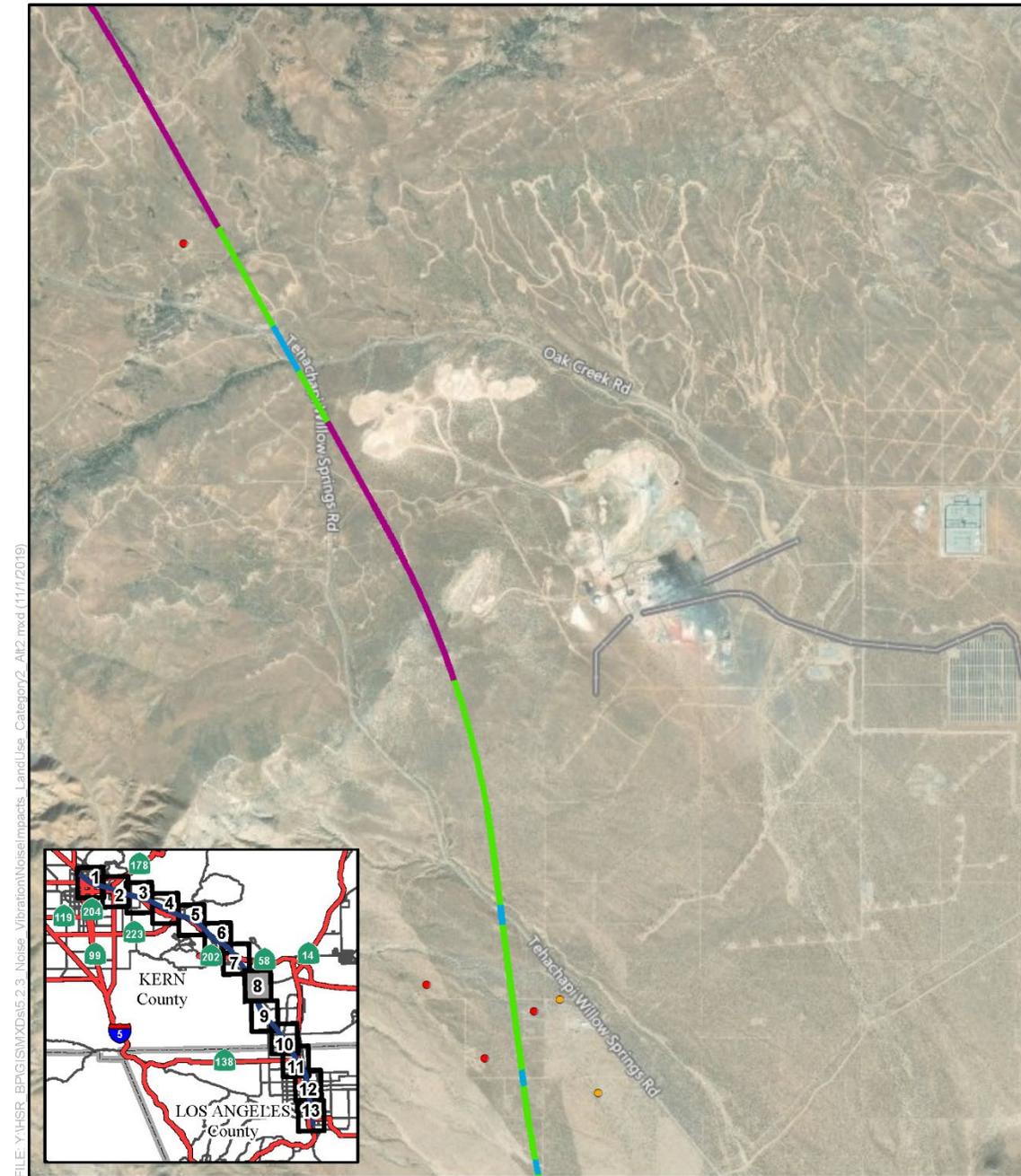


FILE: Y:\HSR\_BP\GIS\MXD\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category2\_Alt2.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-3 Land Use Category 2 Noise Impacts—Alternative 2**  
 (Sheet 7 of 13)

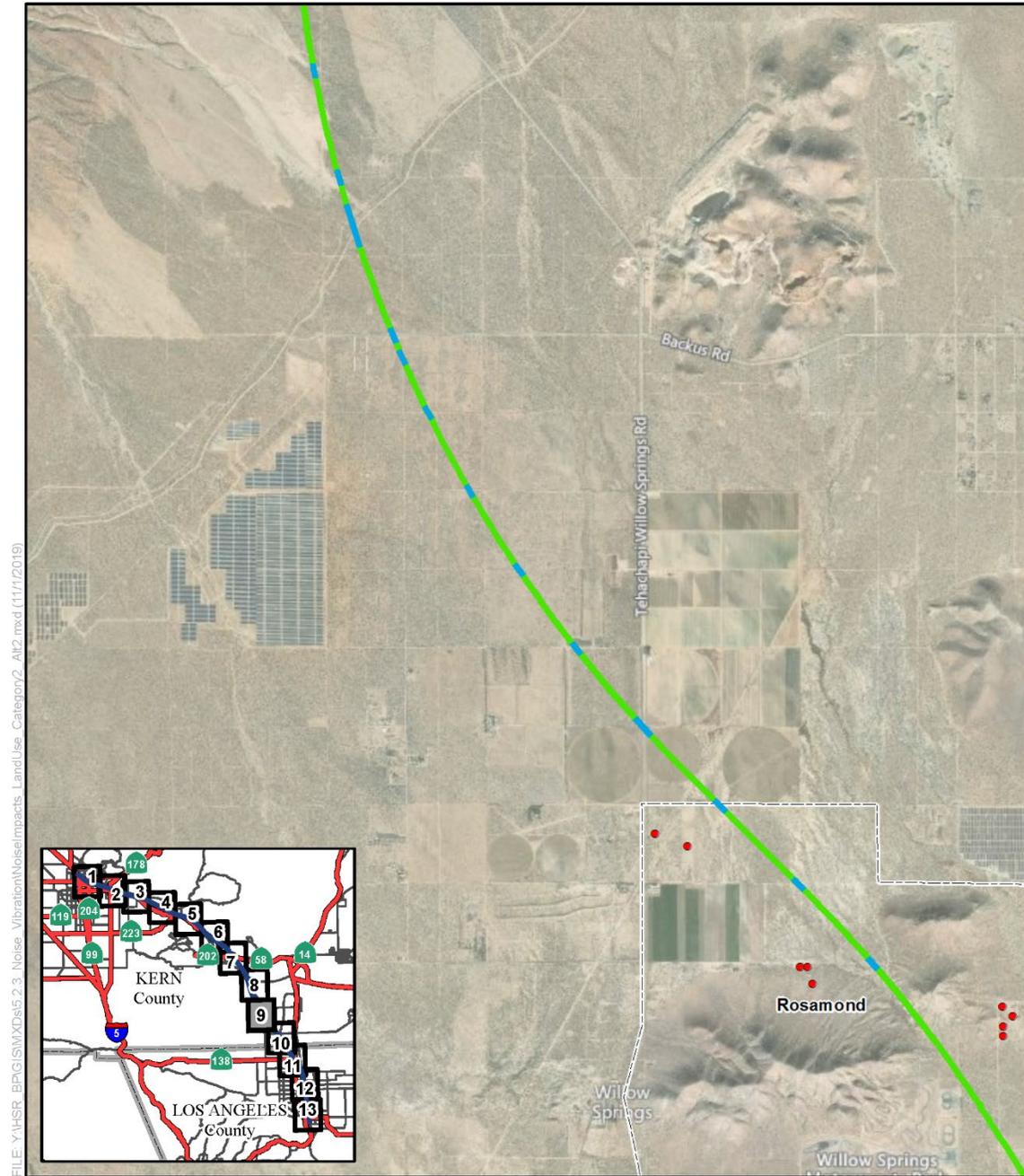


FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3.Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt2.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

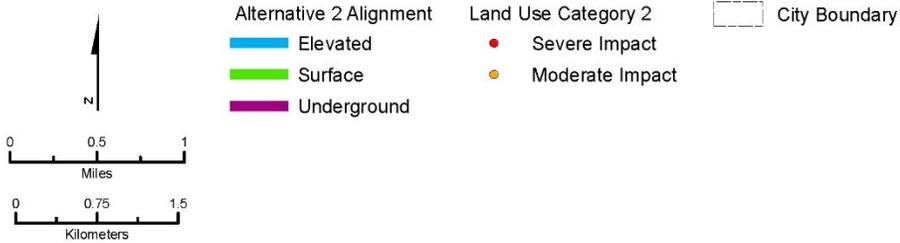


**Figure 3.4-A-3 Land Use Category 2 Noise Impacts—Alternative 2**  
 (Sheet 8 of 13)

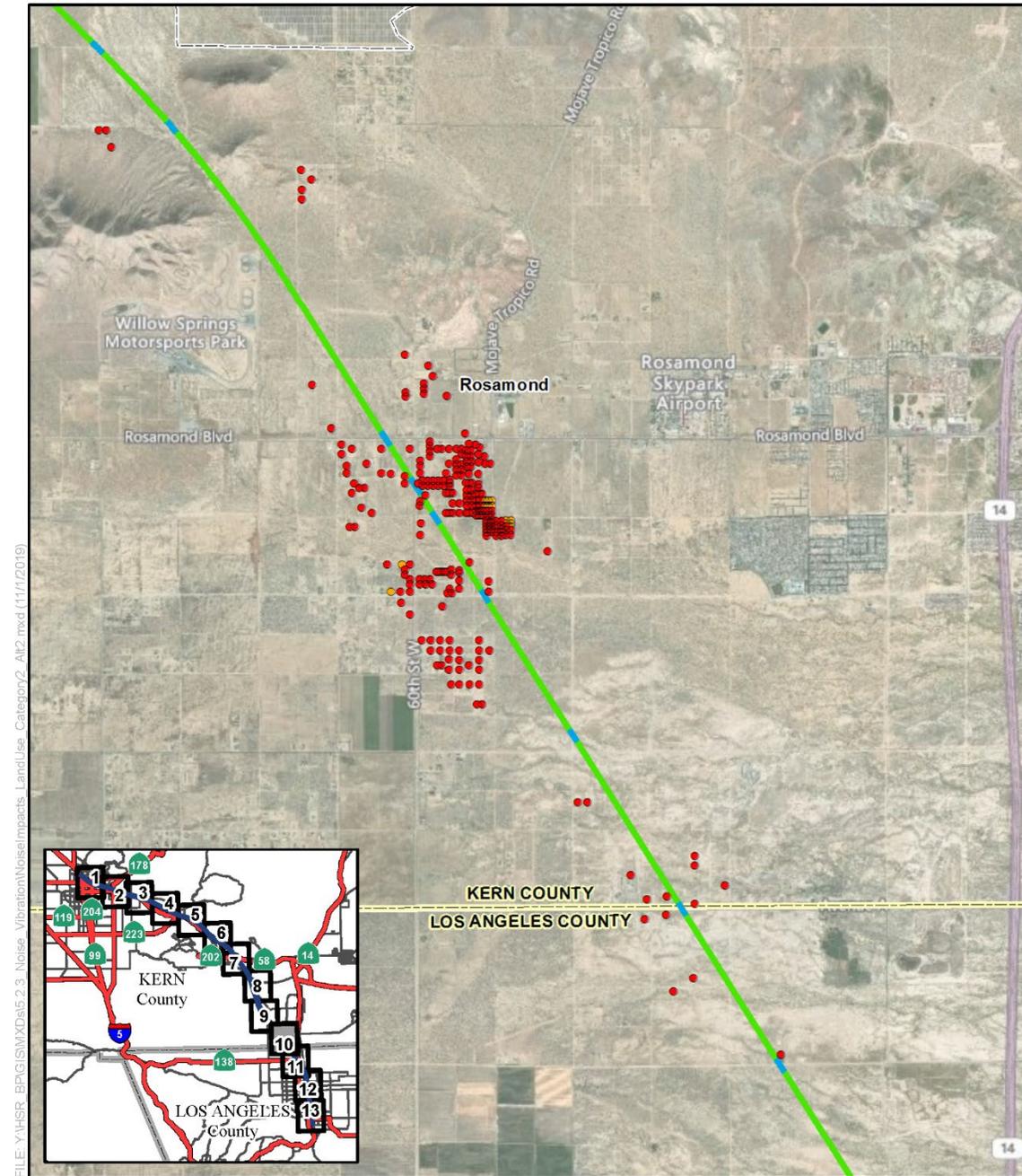


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category2\_Alt2.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-3 Land Use Category 2 Noise Impacts—Alternative 2**  
 (Sheet 9 of 13)

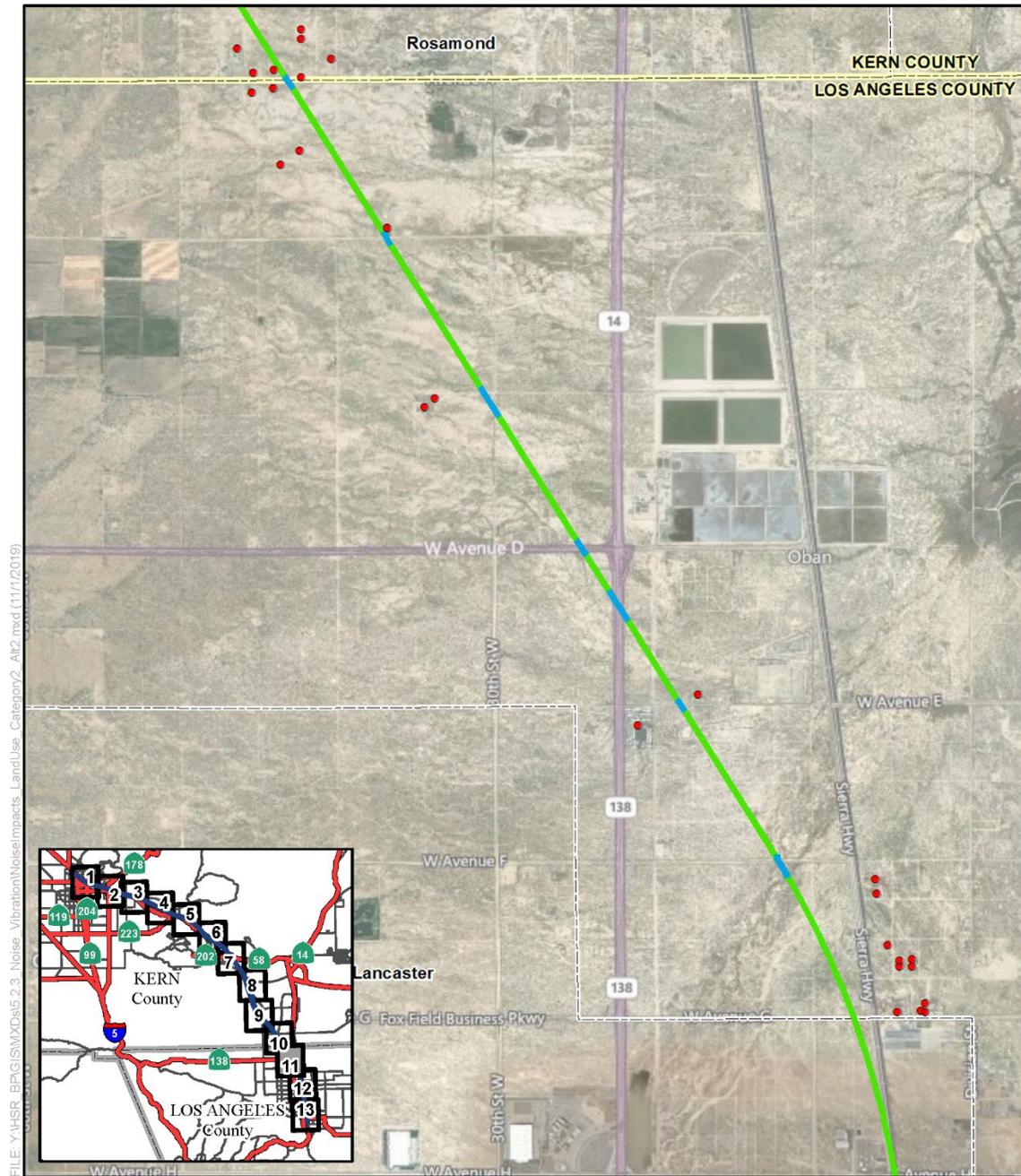


FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt2.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



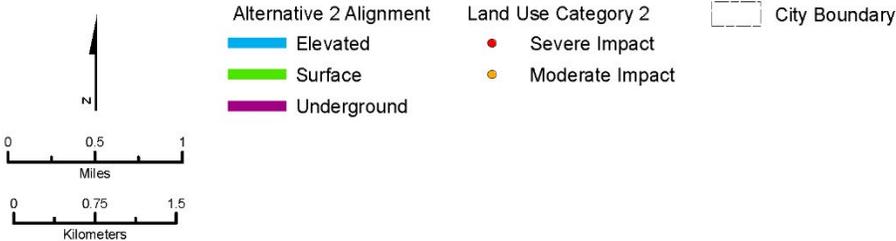
**Figure 3.4-A-3 Land Use Category 2 Noise Impacts—Alternative 2**  
 (Sheet 10 of 13)



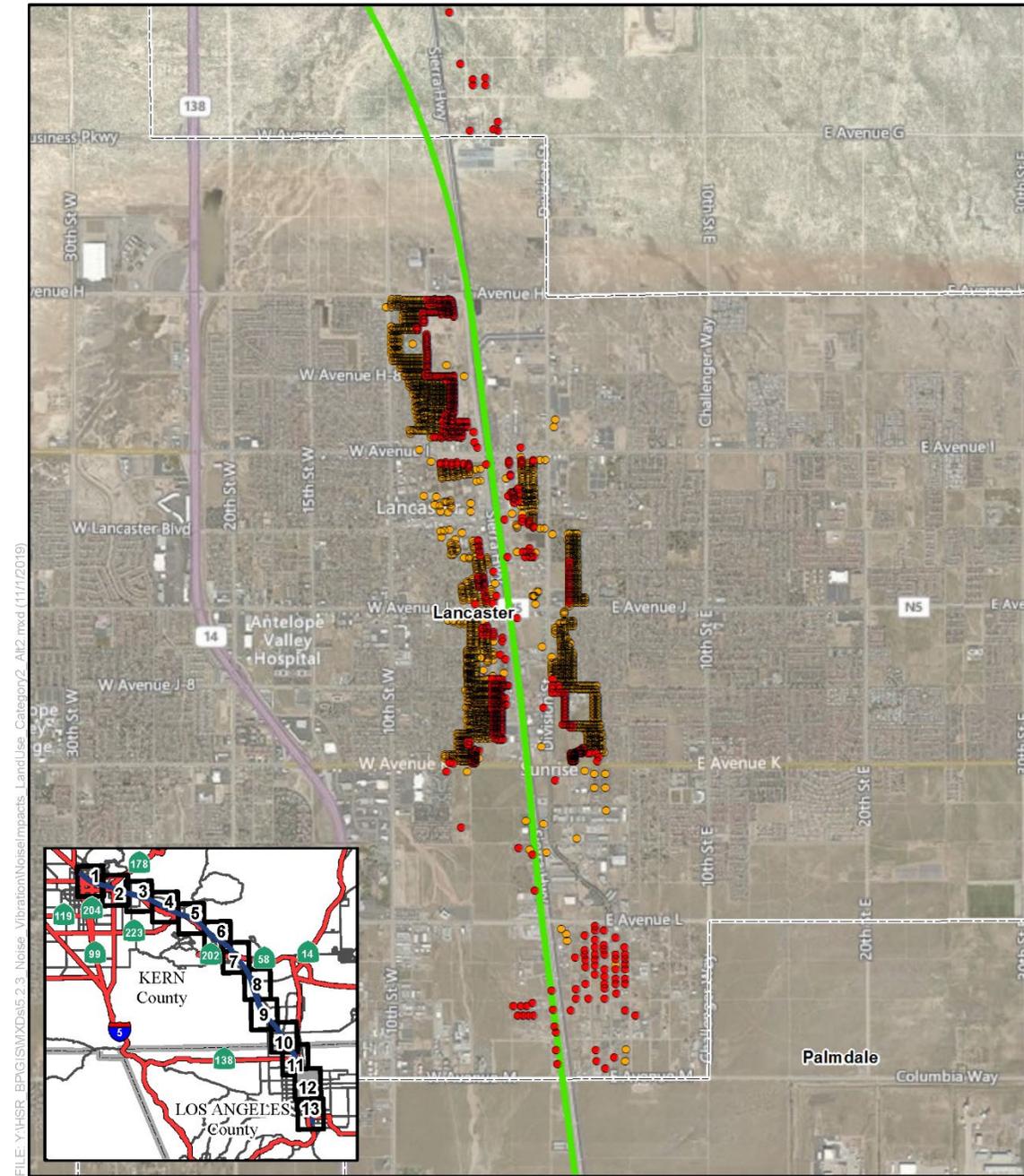
FILE: Y:\HSR\_BP\GIS\MXD\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category2\_Alt2.mxd (11/11/2019)



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-3 Land Use Category 2 Noise Impacts—Alternative 2**  
 (Sheet 11 of 13)

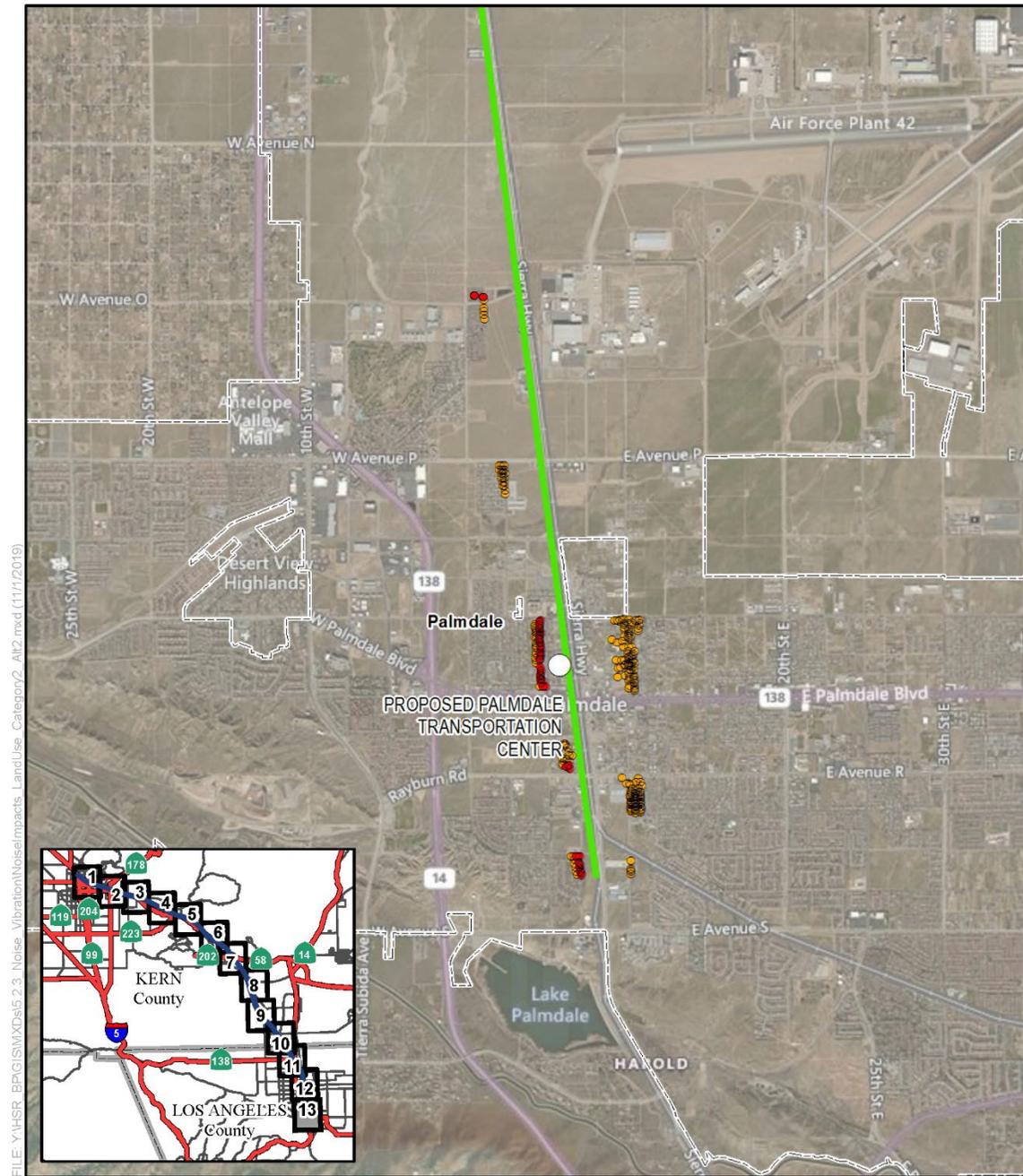


FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3.Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt2.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

  	<b>Alternative 2 Alignment</b> Elevated Surface Underground	<b>Land Use Category 2</b> Severe Impact Moderate Impact	City Boundary
----------	--	--	---------------

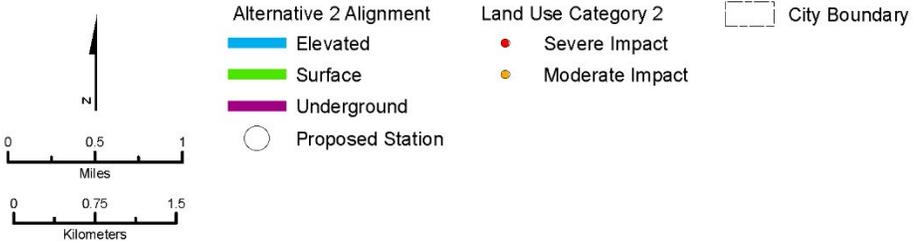
**Figure 3.4-A-3 Land Use Category 2 Noise Impacts—Alternative 2**  
 (Sheet 12 of 13)



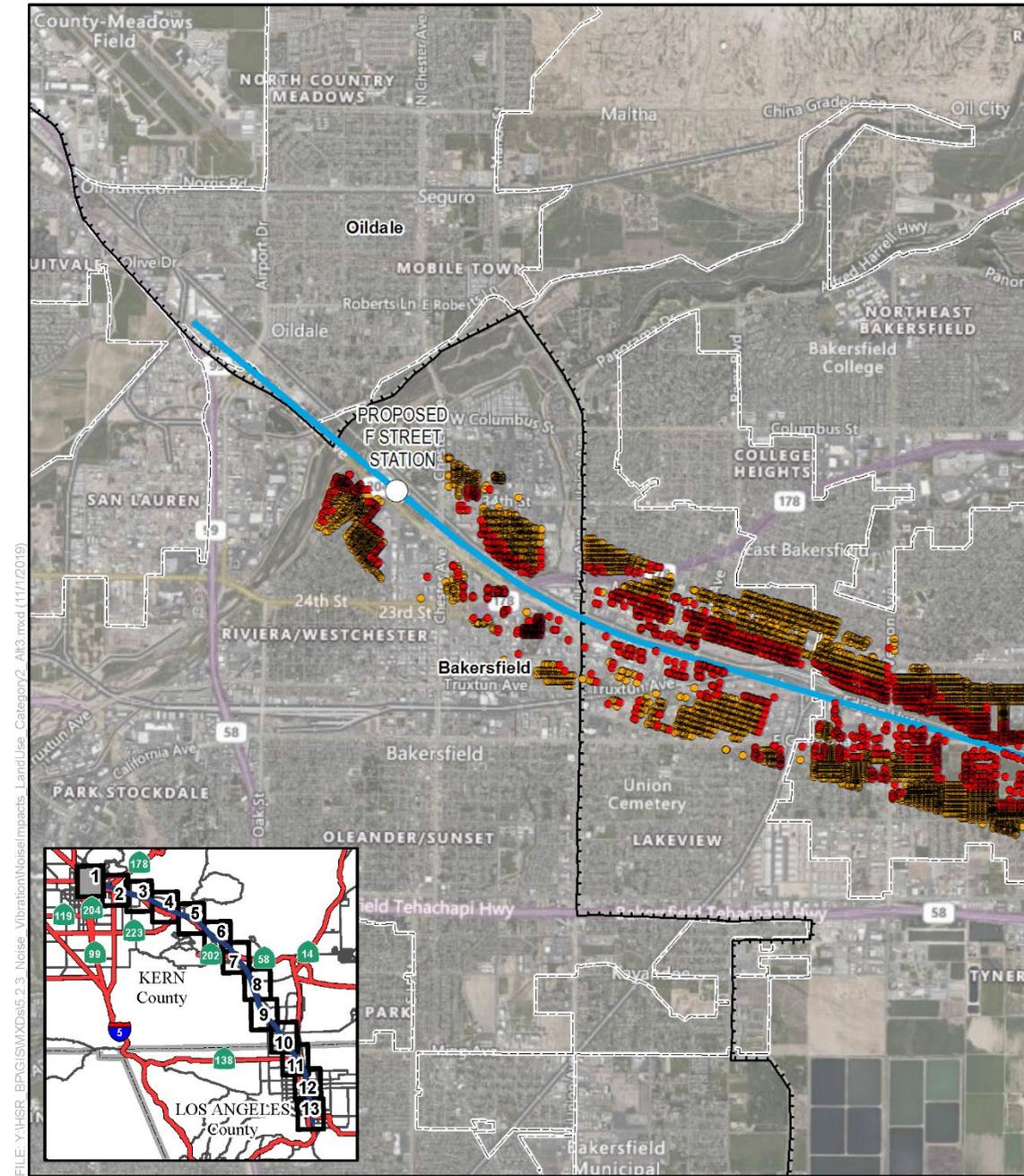
FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt2.mxd (11/11/2019)



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



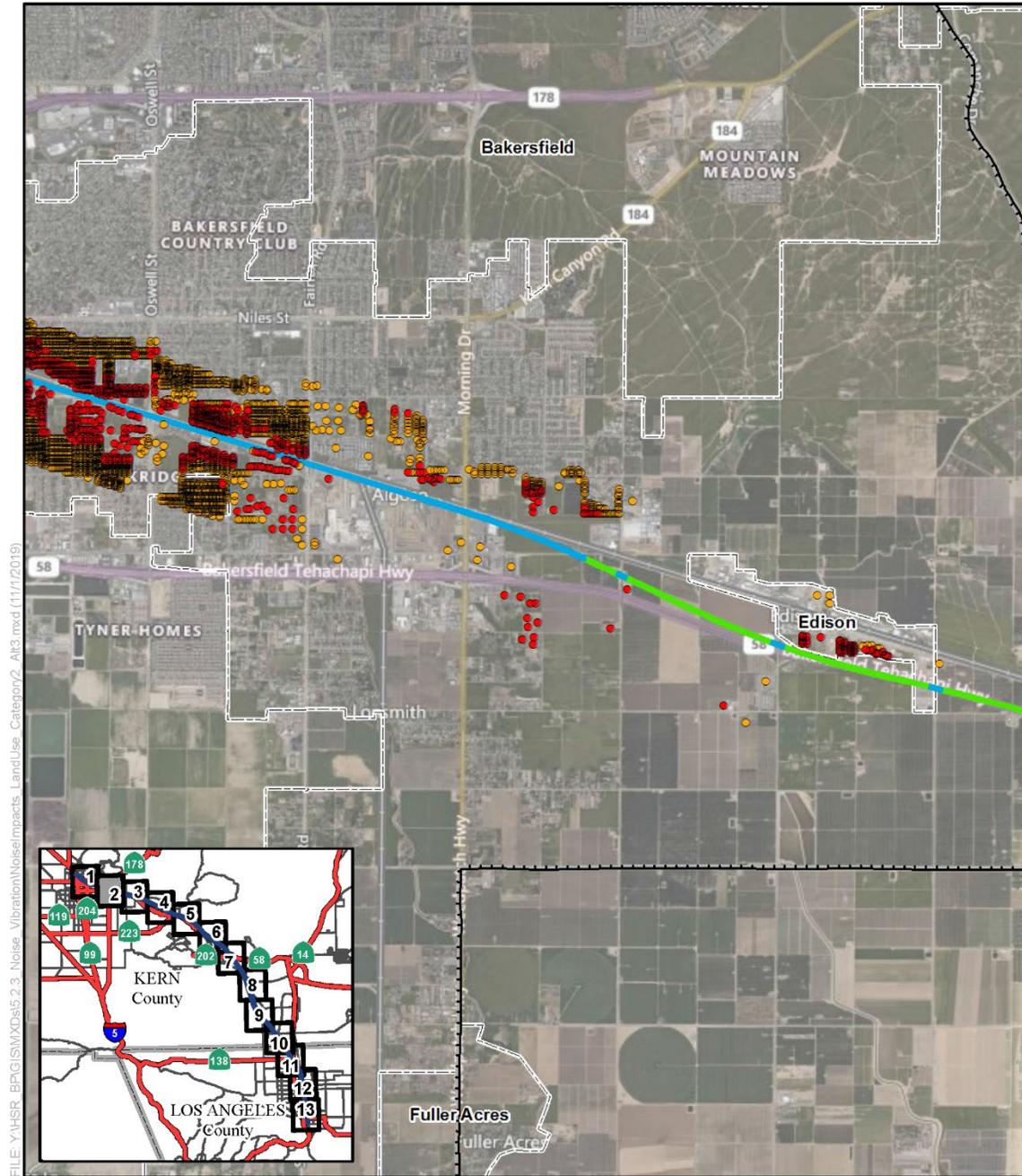
**Figure 3.4-A-3 Land Use Category 2 Noise Impacts—Alternative 2**  
 (Sheet 13 of 13)



FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt3.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

**Figure 3.4-A-4 Land Use Category 2 Noise Impacts—Alternative 3**  
 (Sheet 1 of 13)

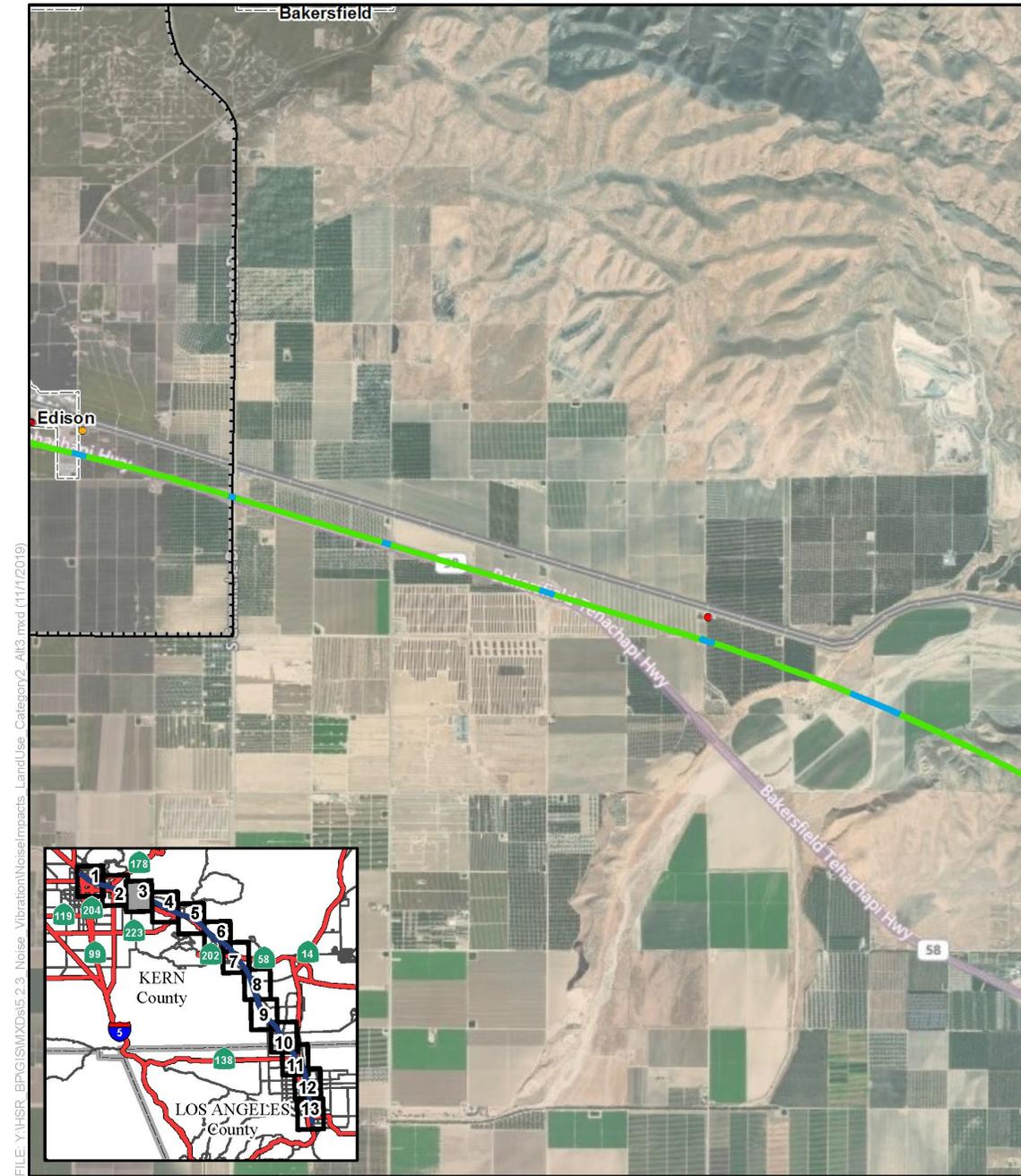


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category2\_Alt3.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

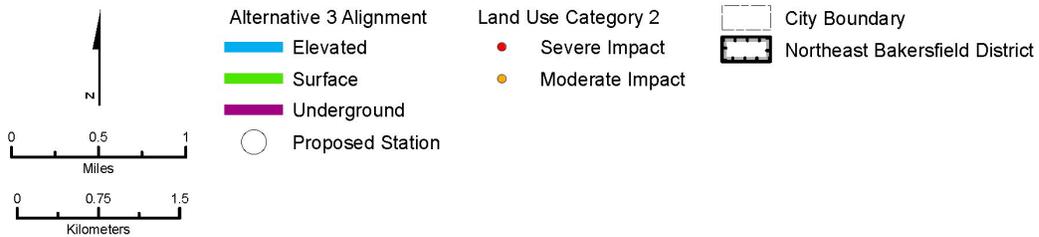
	<b>Alternative 3 Alignment</b> Elevated Surface Underground Proposed Station	<b>Land Use Category 2</b> Severe Impact Moderate Impact	City Boundary Northeast Bakersfield District
--	--	--	---

**Figure 3.4-A-4 Land Use Category 2 Noise Impacts—Alternative 3**  
 (Sheet 2 of 13)

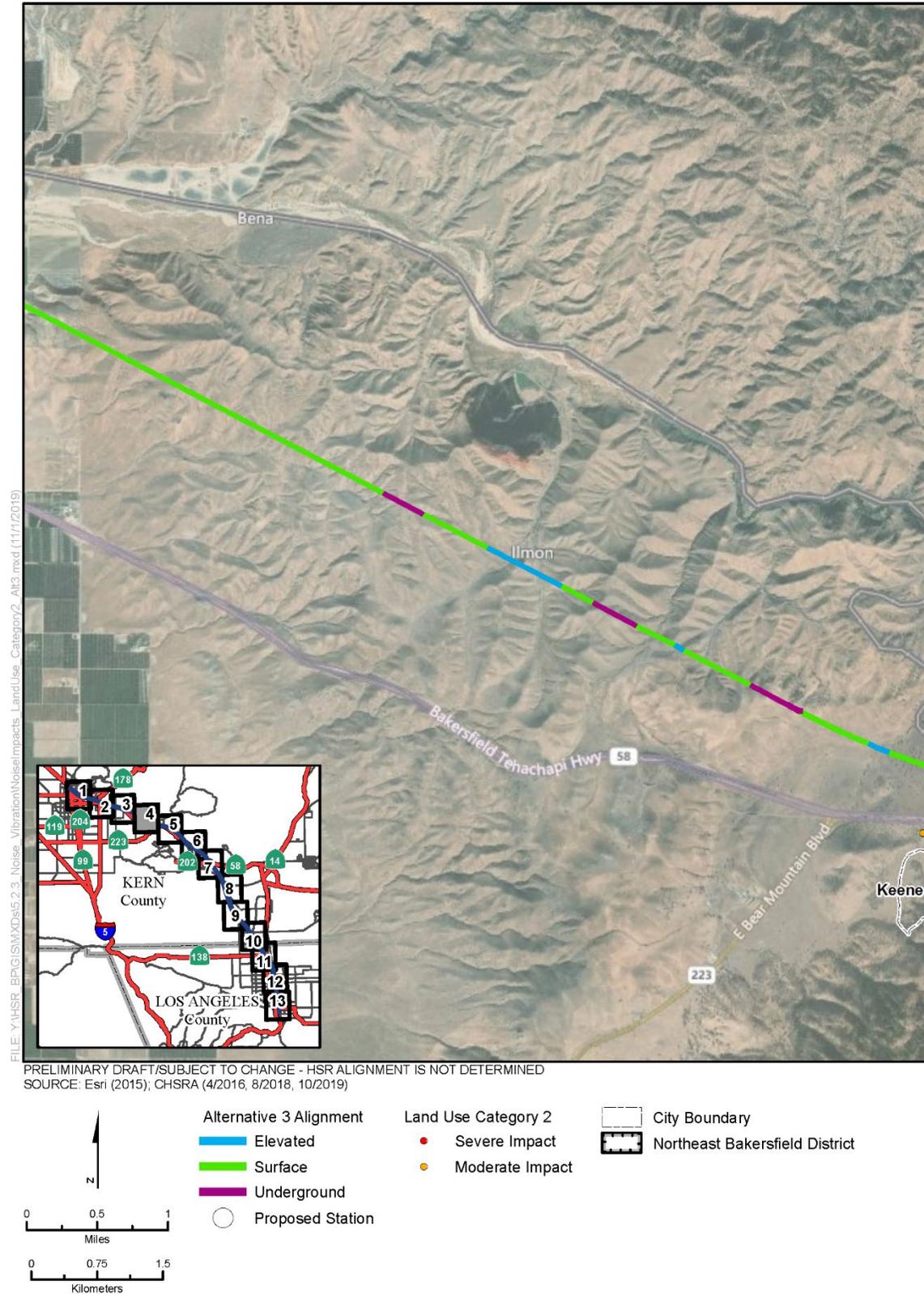


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt3.mxd (11/12/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

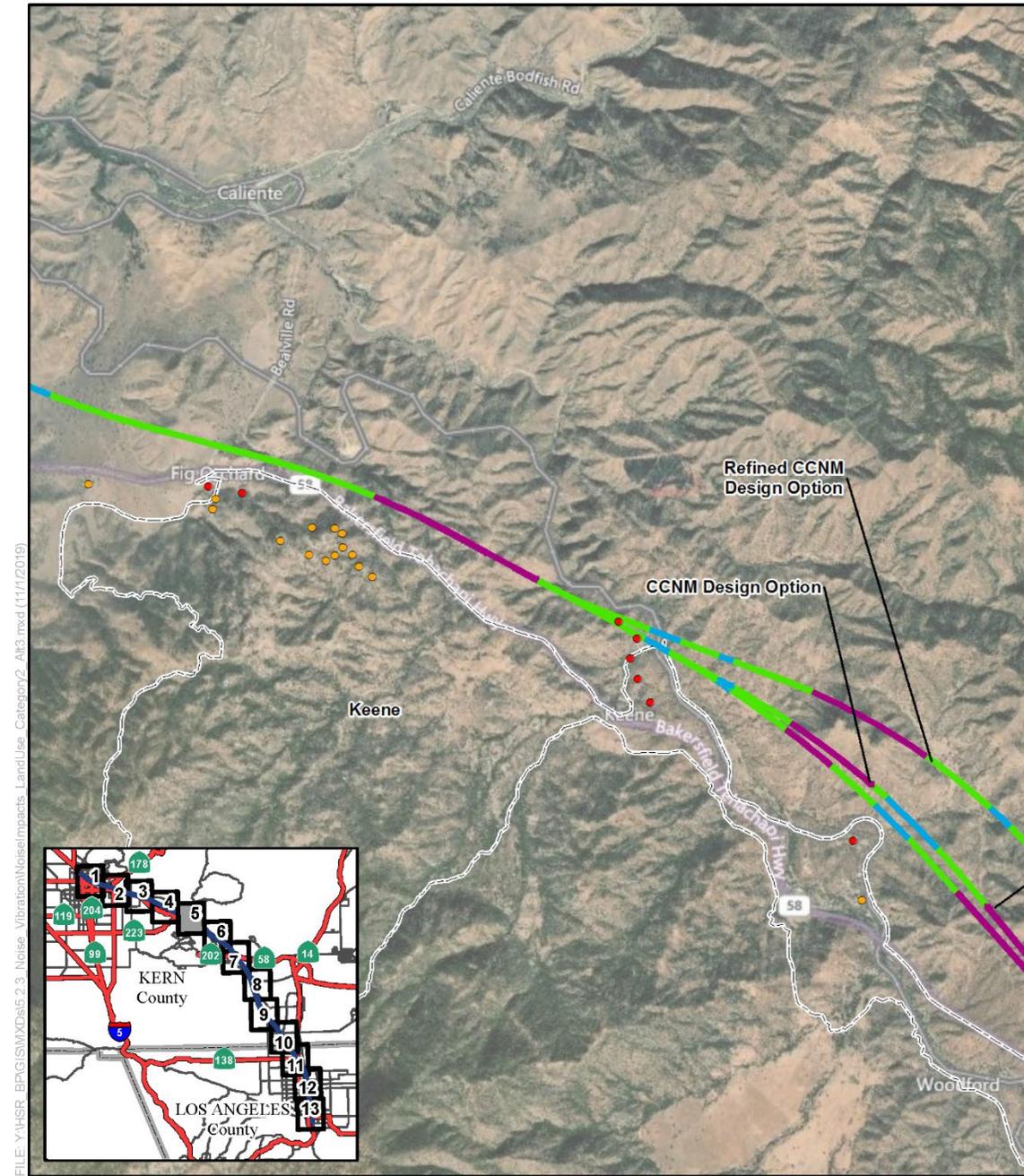


**Figure 3.4-A-4 Land Use Category 2 Noise Impacts—Alternative 3**  
 (Sheet 3 of 13)



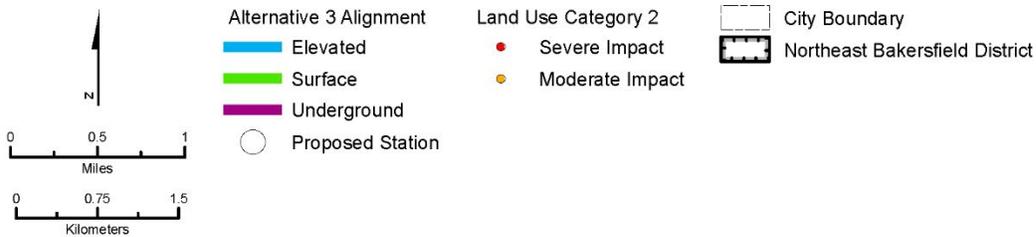
**Figure 3.4-A-4 Land Use Category 2 Noise Impacts—Alternative 3**

(Sheet 4 of 13)

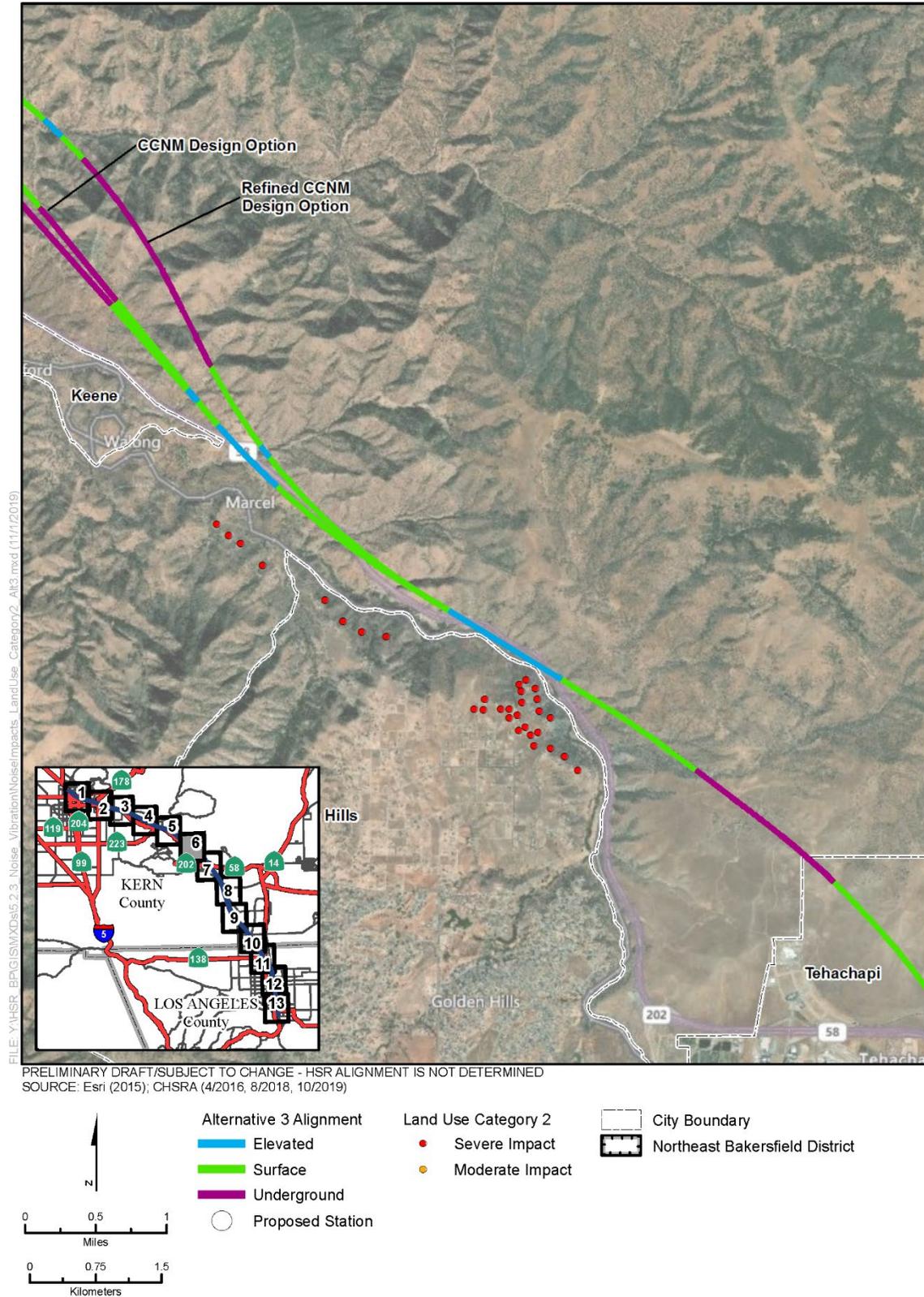


FILE: Y:\HSR\_BP\GIS\WXD\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt3.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

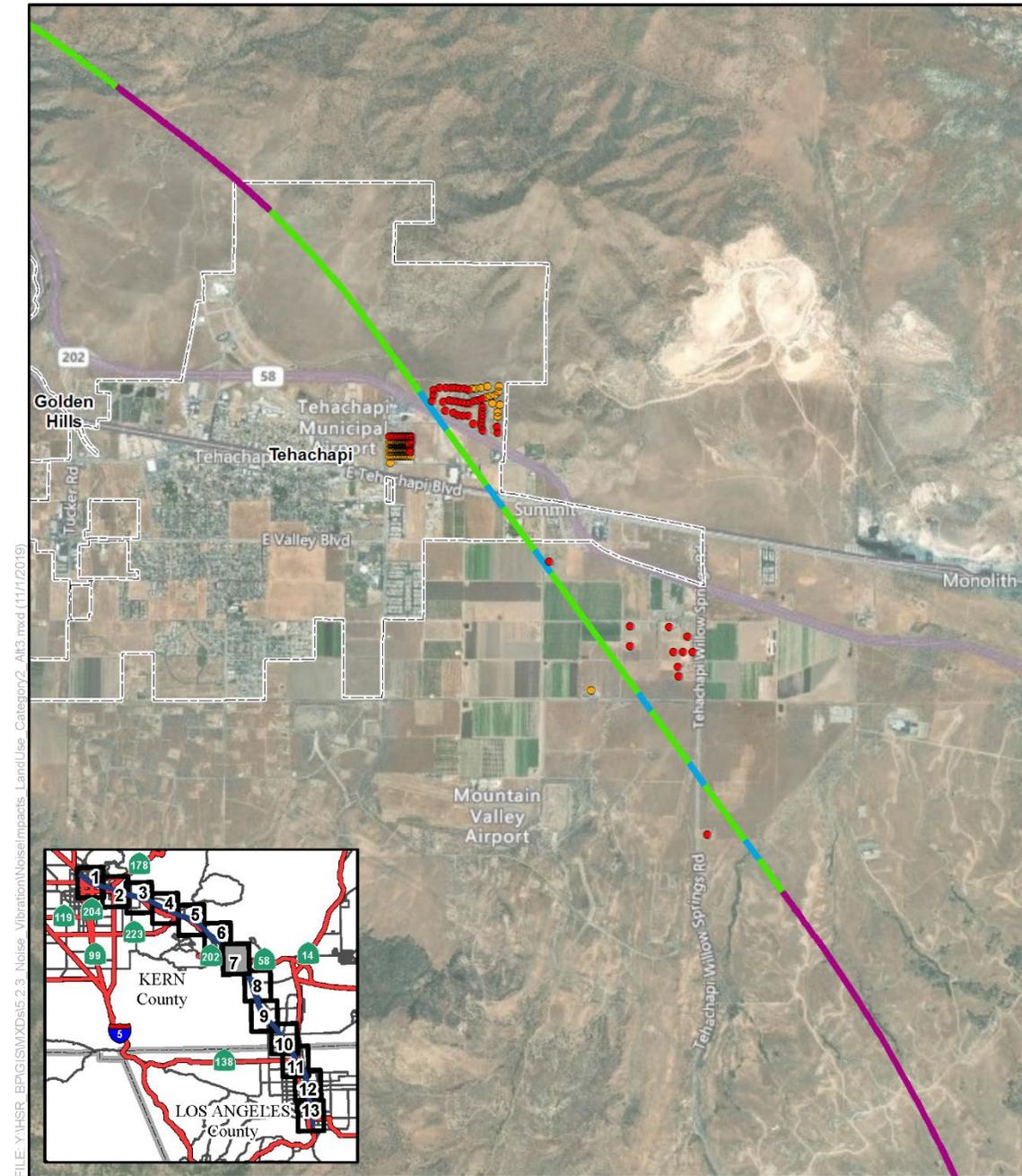


**Figure 3.4-A-4 Land Use Category 2 Noise Impacts—Alternative 3**  
 (Sheet 5 of 13)



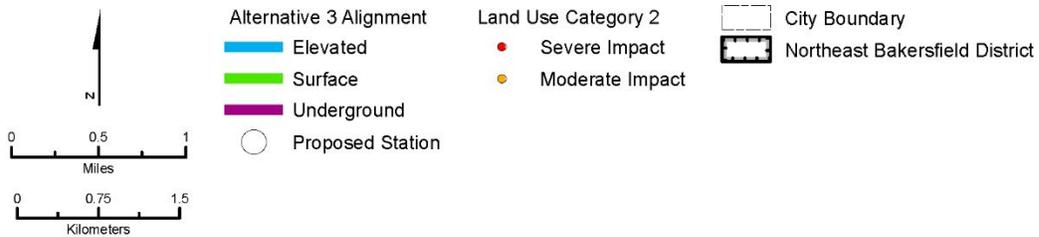
**Figure 3.4-A-4 Land Use Category 2 Noise Impacts—Alternative 3**

(Sheet 6 of 13)

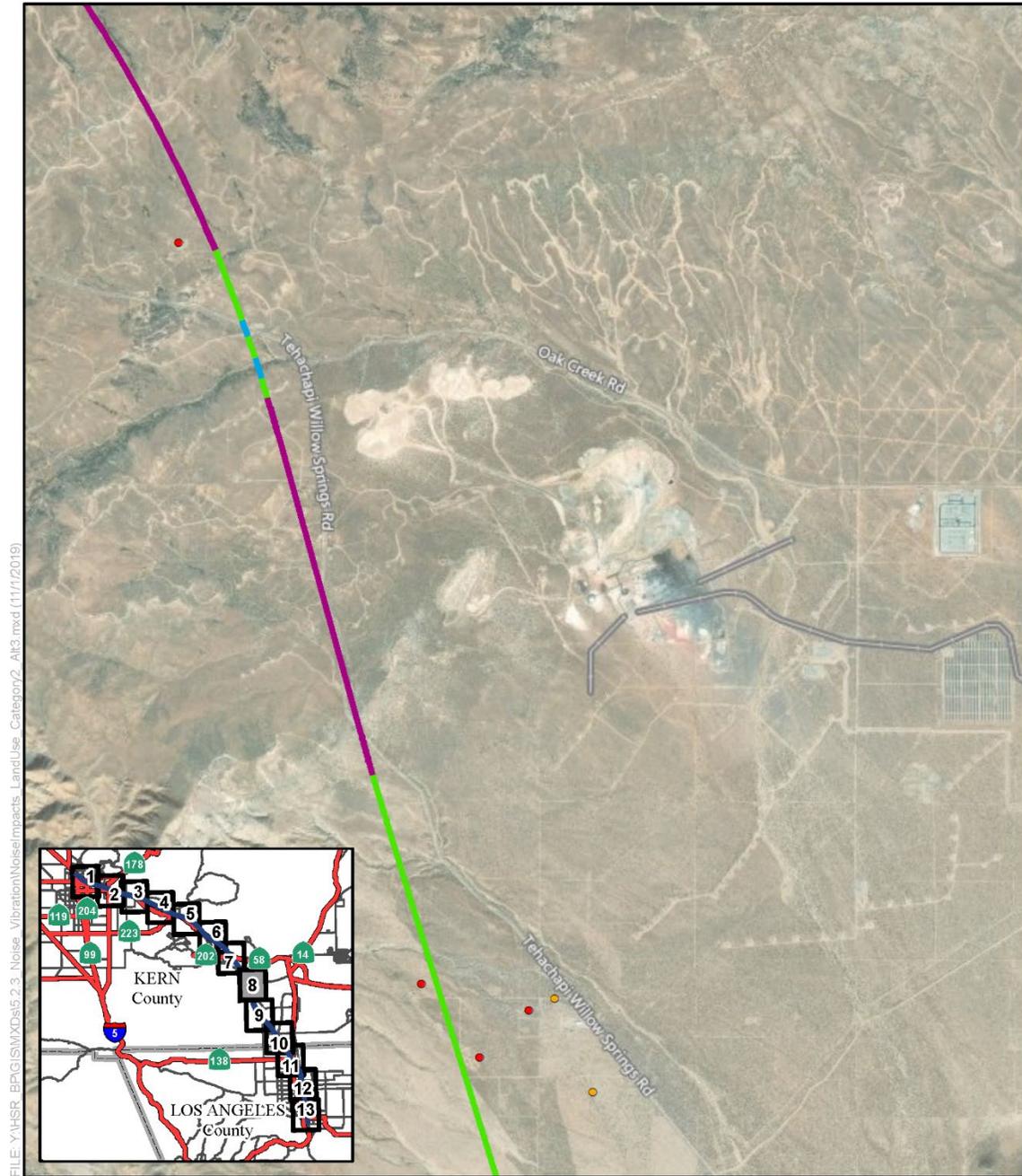


FILE: Y:\HSR\_BP\GIS\WXD\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt3.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-4 Land Use Category 2 Noise Impacts—Alternative 3**  
 (Sheet 7 of 13)

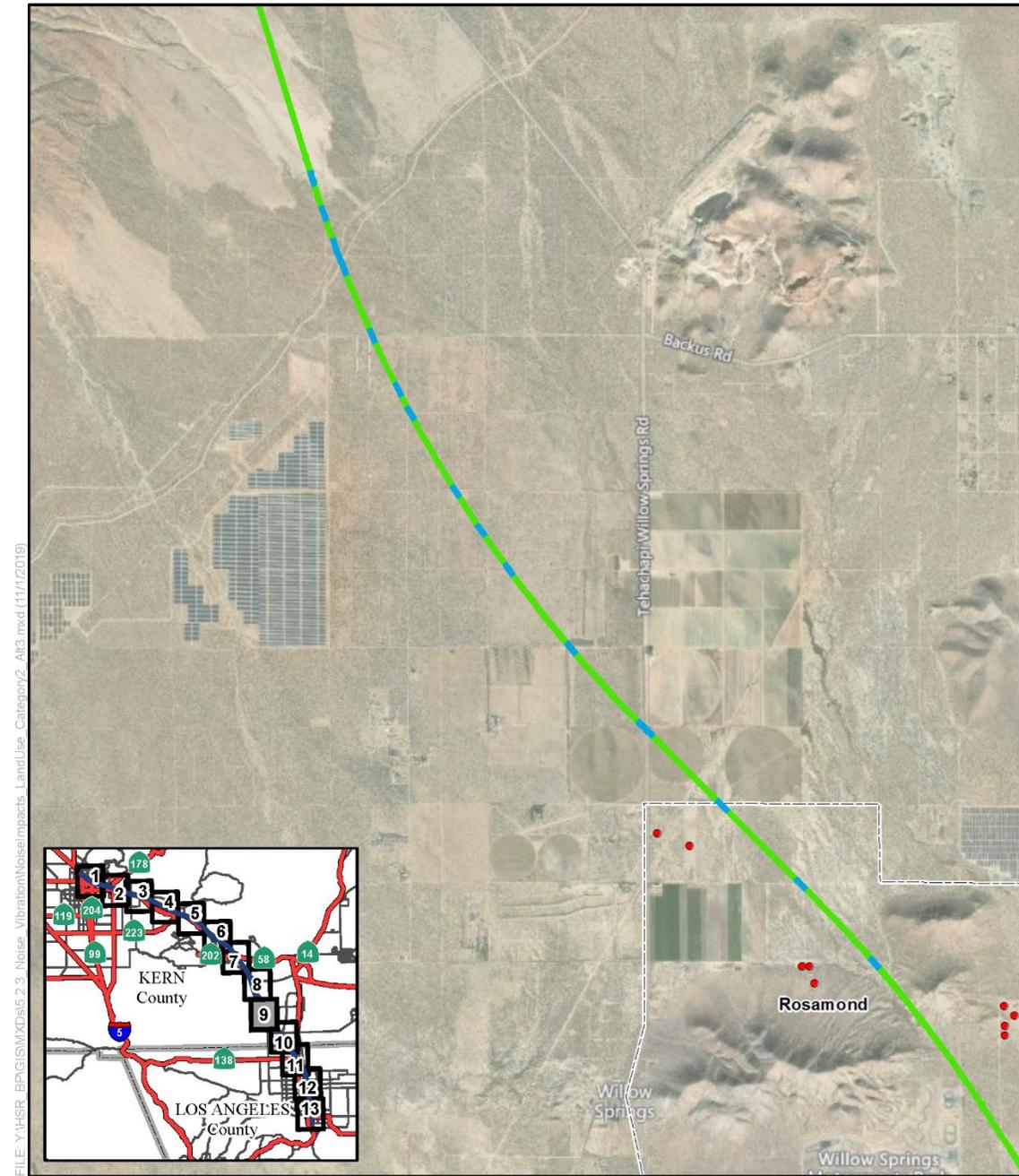


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category2\_Alt3.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

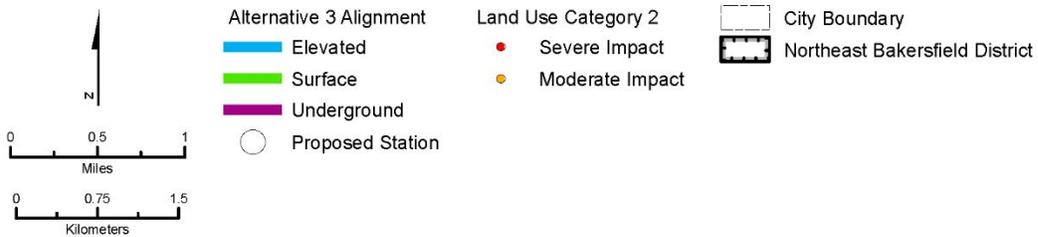
  	<b>Alternative 3 Alignment</b> Elevated Surface Underground Proposed Station	<b>Land Use Category 2</b> Severe Impact Moderate Impact	City Boundary Northeast Bakersfield District
----------	--	--	---

**Figure 3.4-A-4 Land Use Category 2 Noise Impacts—Alternative 3**  
 (Sheet 8 of 13)

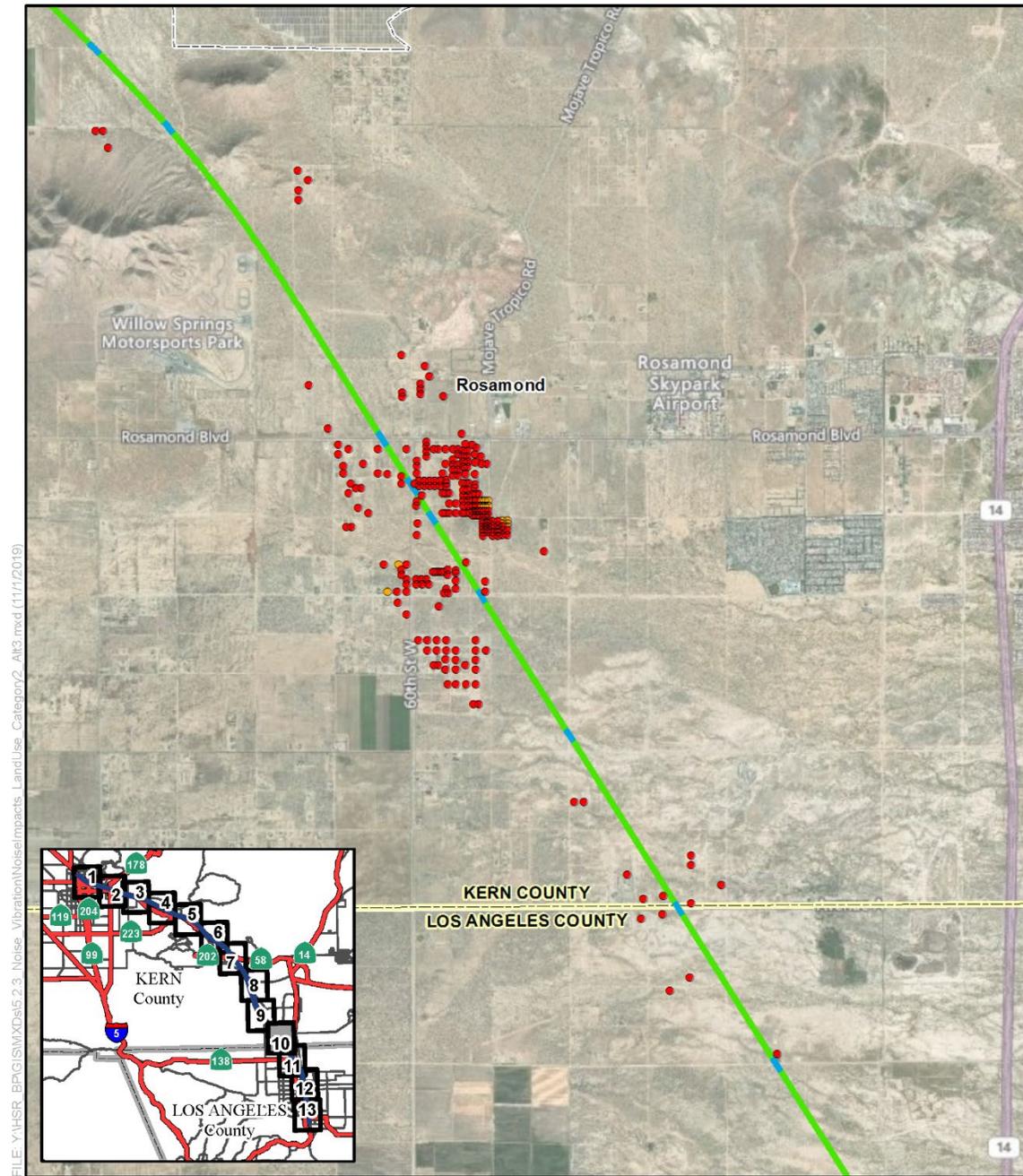


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt3.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

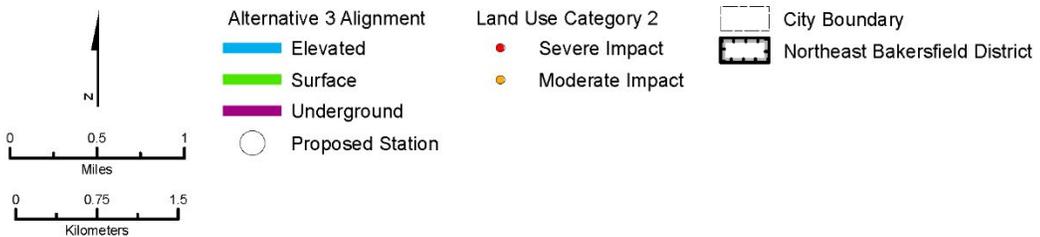


**Figure 3.4-A-4 Land Use Category 2 Noise Impacts—Alternative 3**  
 (Sheet 9 of 13)



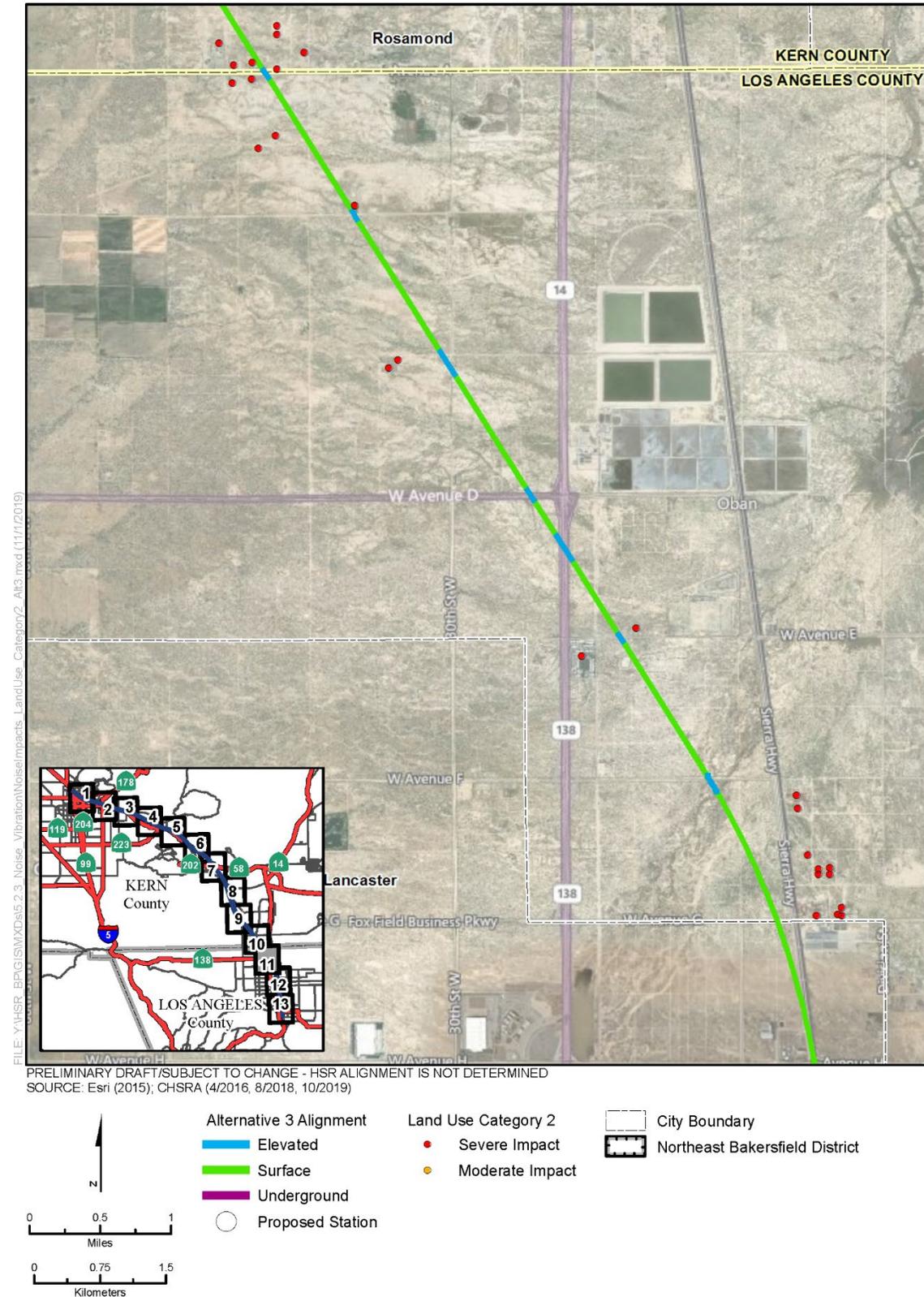
FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category2\_Alt3.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

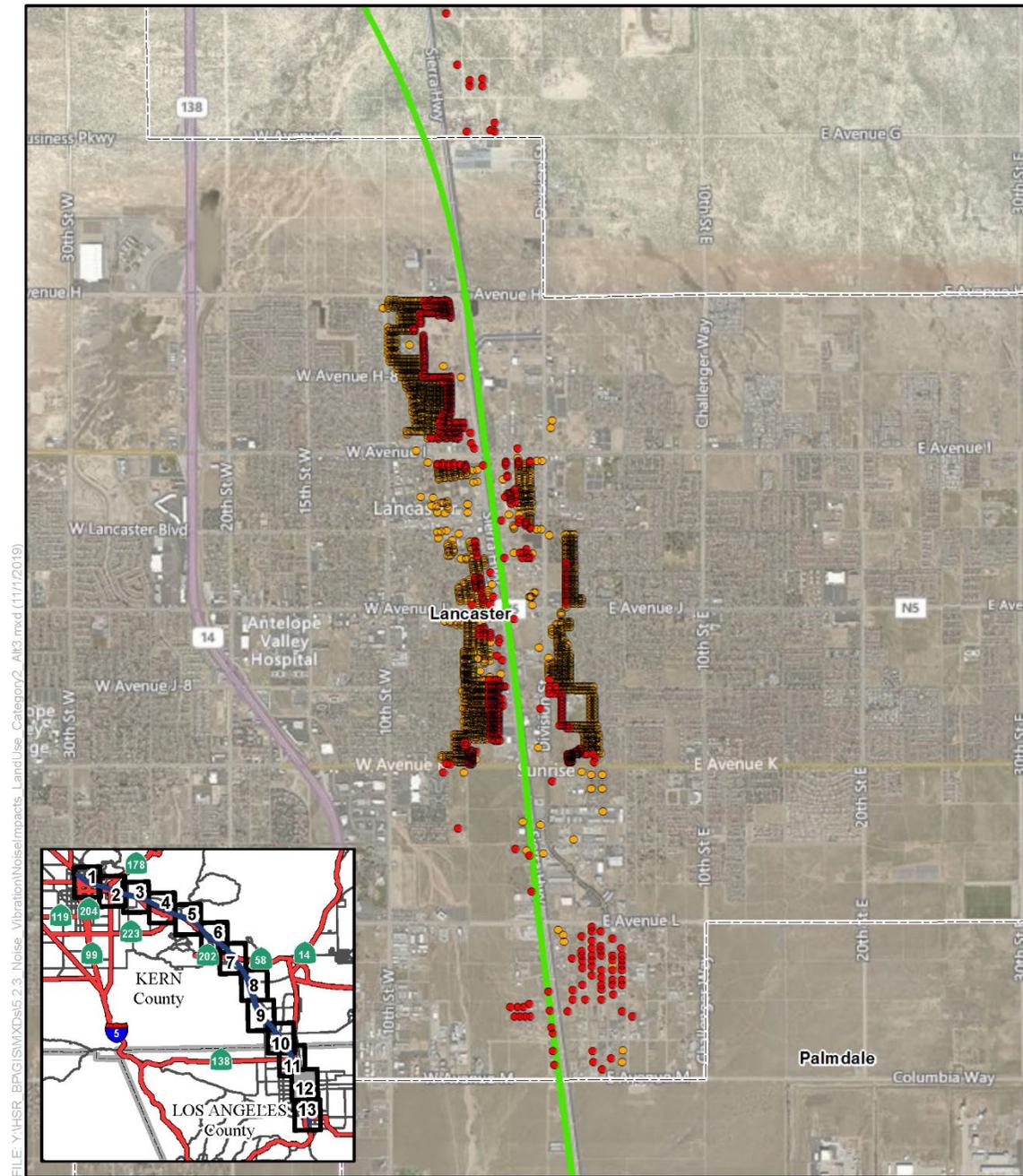


**Figure 3.4-A-4 Land Use Category 2 Noise Impacts—Alternative 3**

(Sheet 10 of 13)

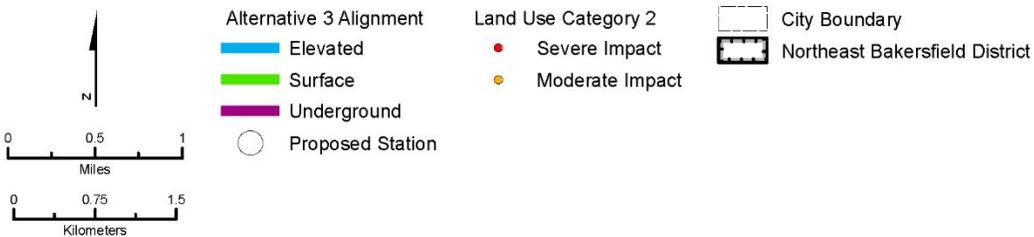


**Figure 3.4-A-4 Land Use Category 2 Noise Impacts—Alternative 3**  
(Sheet 11 of 13)

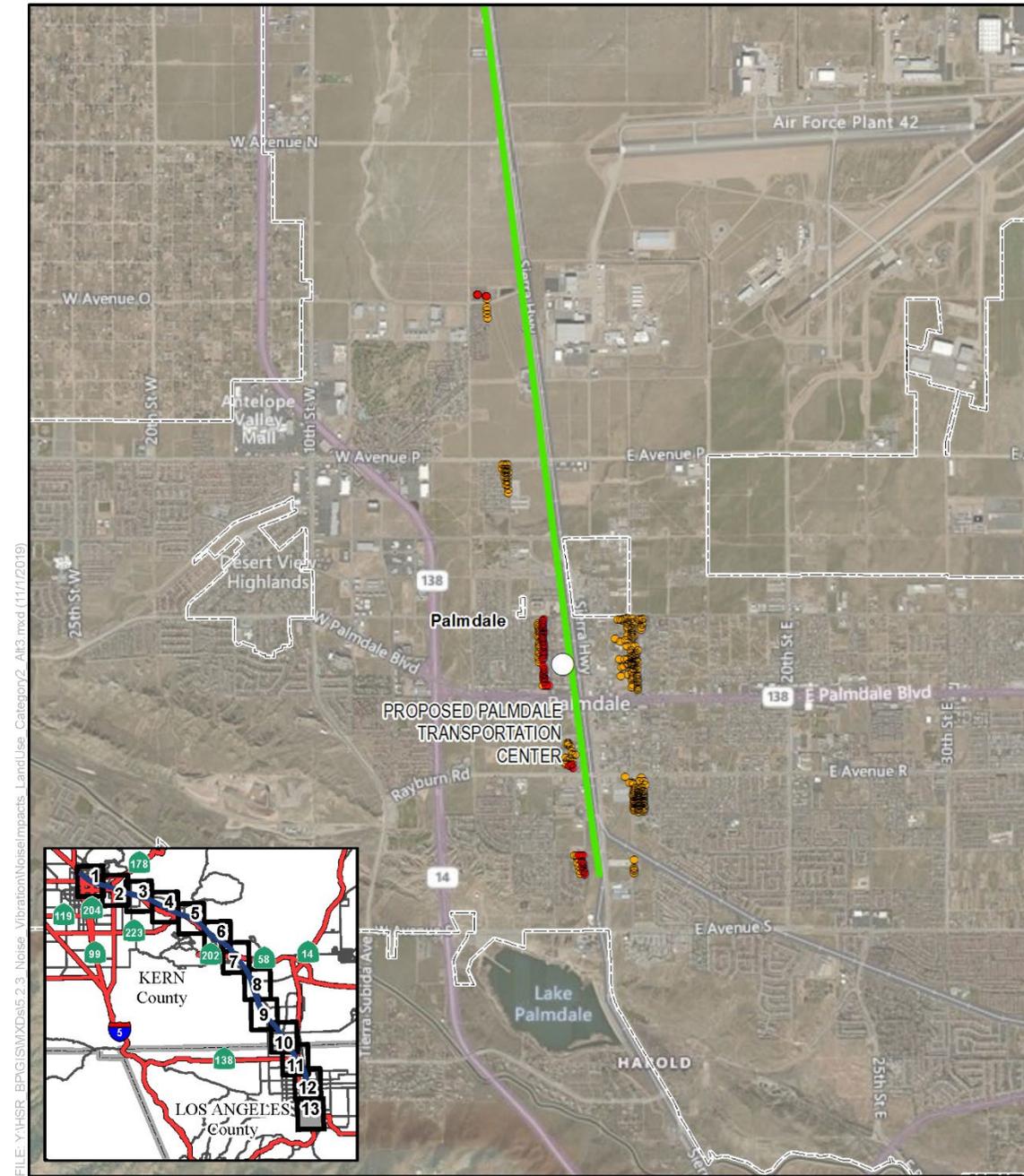


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt3.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

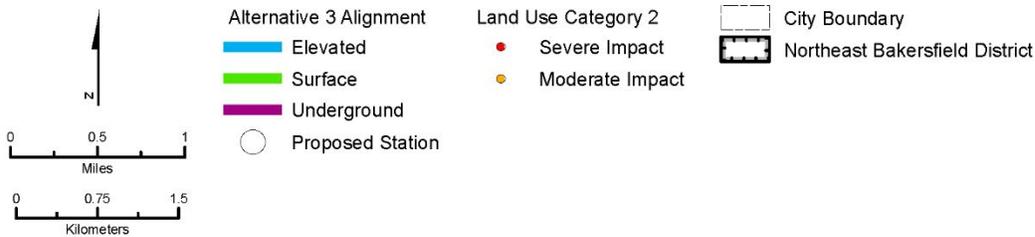


**Figure 3.4-A-4 Land Use Category 2 Noise Impacts—Alternative 3**  
 (Sheet 12 of 13)

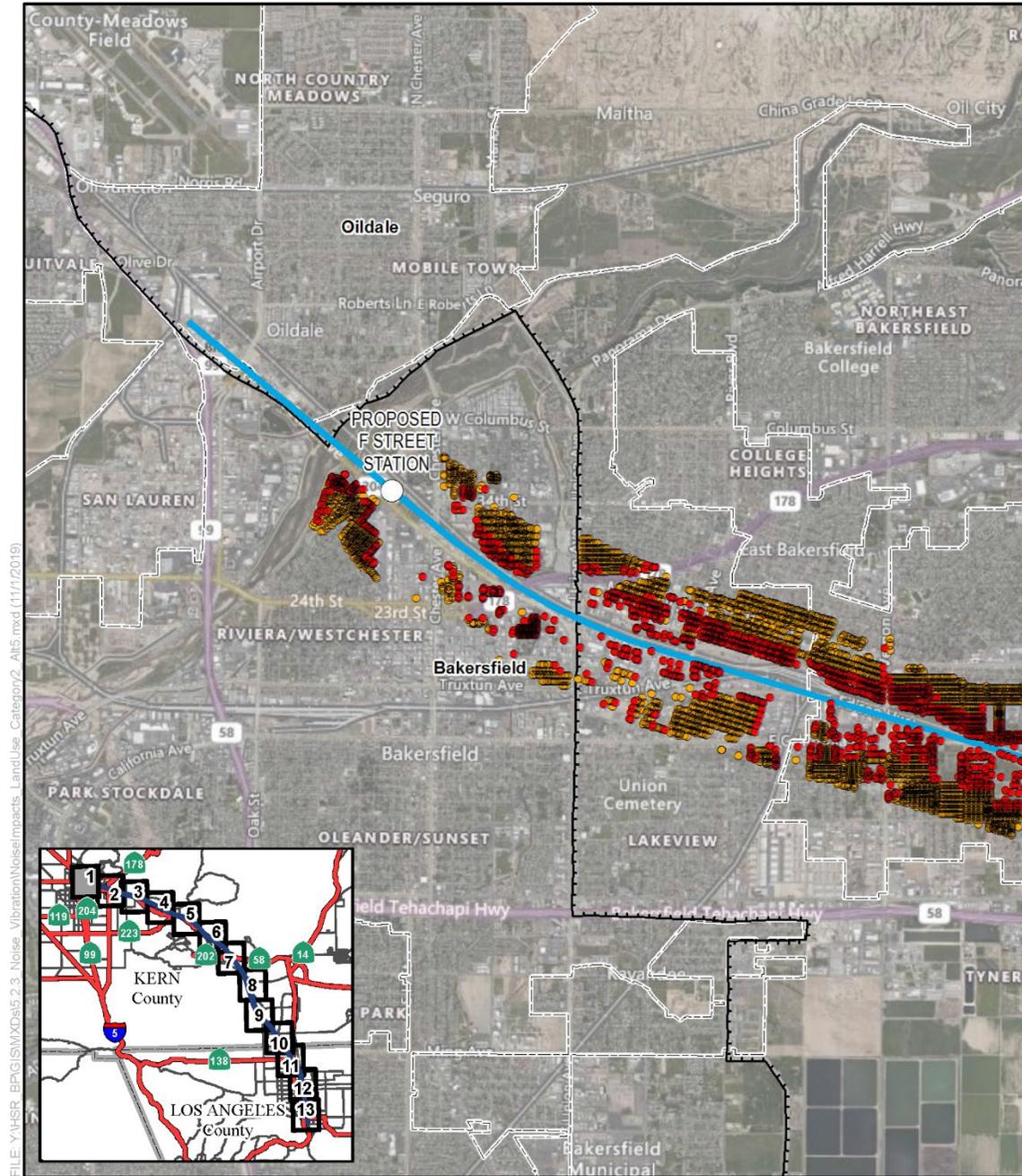


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt3.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



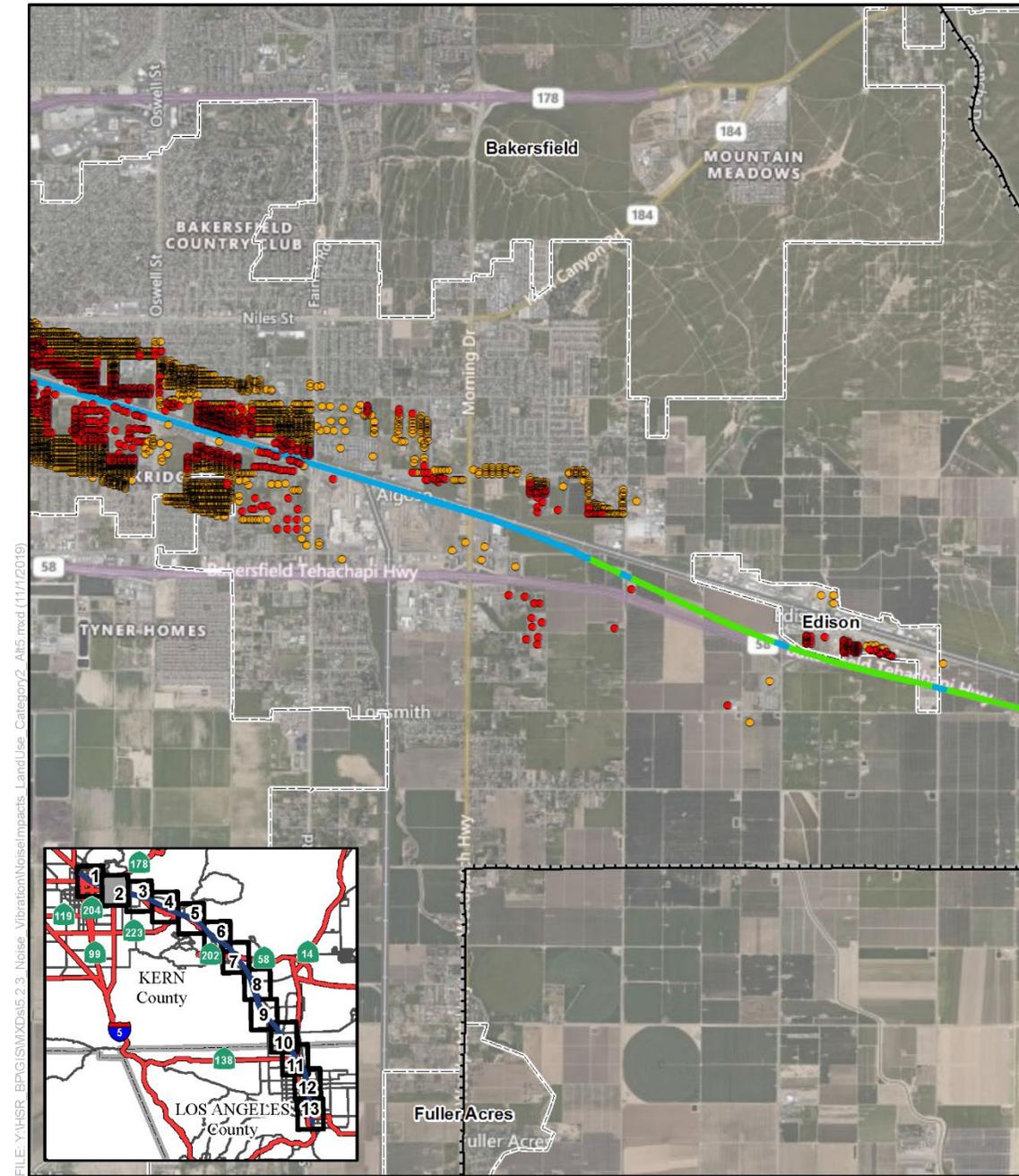
**Figure 3.4-A-4 Land Use Category 2 Noise Impacts—Alternative 3**  
 (Sheet 13 of 13)



FILE: Y:\HSR\_BPG\ISWXD\5 2 3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category2\_Alt5.mxd (11/11/2019)

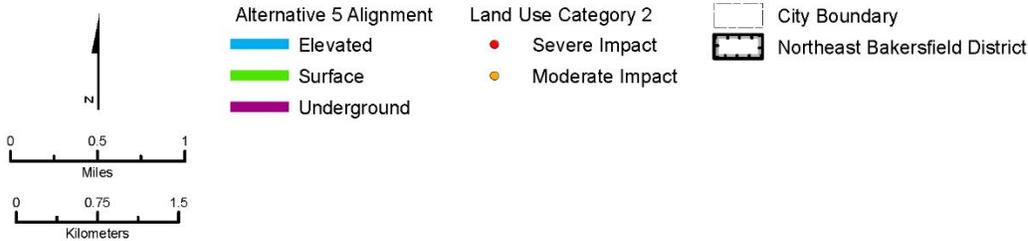
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

**Figure 3.4-A-5 Land Use Category 2 Noise Impacts—Alternative 5**  
 (Sheet 1 of 13)

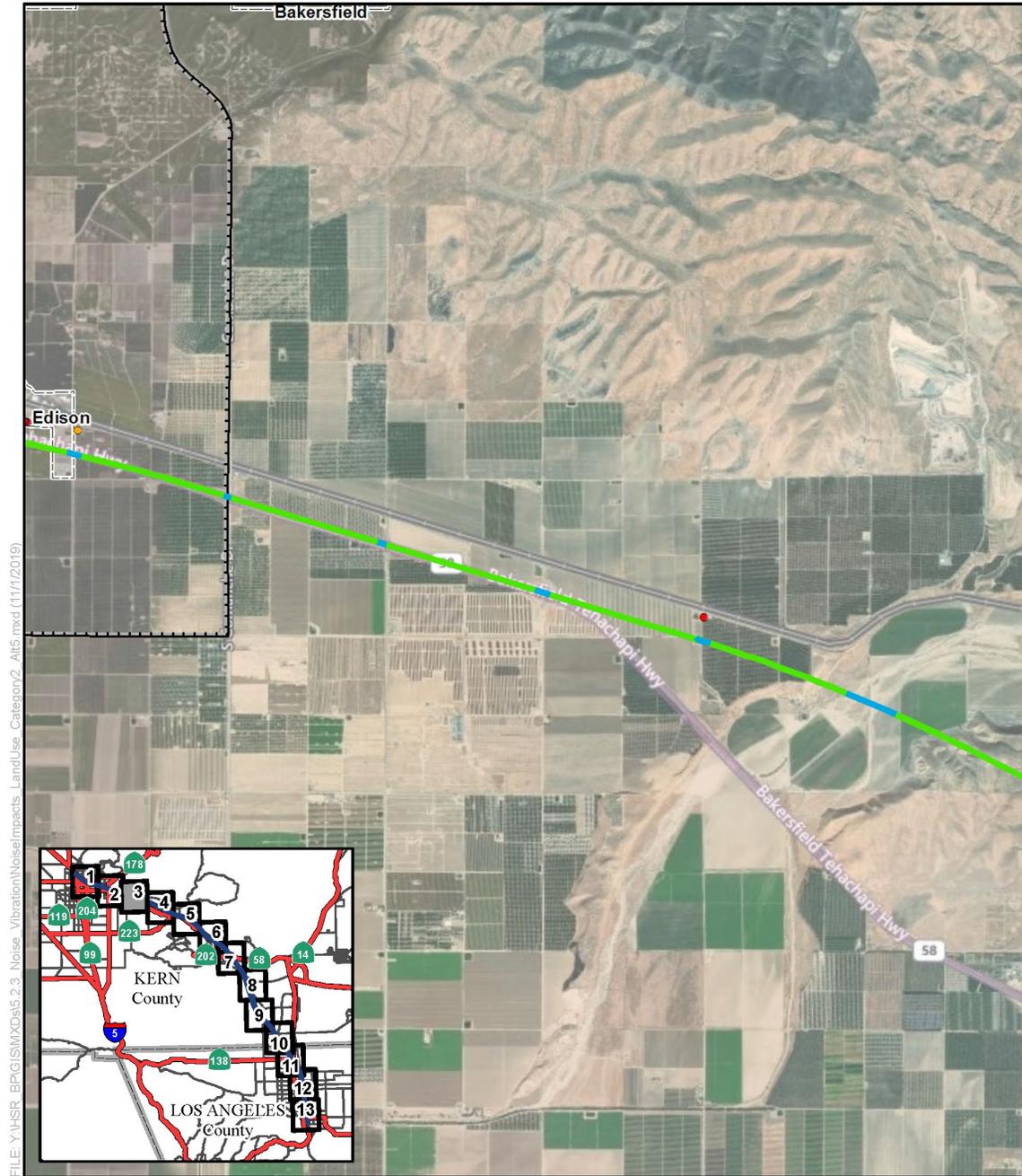


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt5.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-5 Land Use Category 2 Noise Impacts—Alternative 5**  
 (Sheet 2 of 13)



FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt5.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

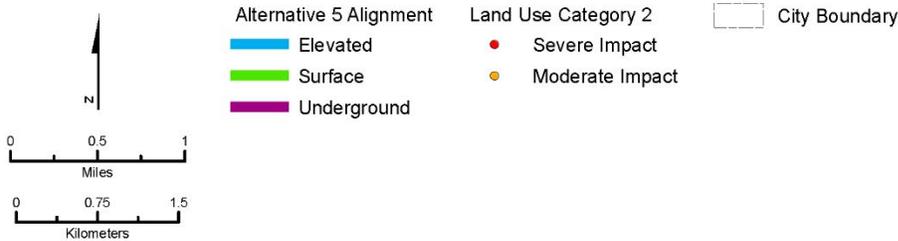
- |                          |                             |   |
|--------------------------|-----------------------------|---|
| Alternative 5 Alignment  | Land Use Category 2         | City Boundary                               |
| Blue line: Elevated      | Red dot: Severe Impact      | Hatched box: Northeast Bakersfield District |
| Green line: Surface      | Orange dot: Moderate Impact |   |
| Purple line: Underground |                             |   |

**Figure 3.4-A-5 Land Use Category 2 Noise Impacts—Alternative 5**  
 (Sheet 3 of 13)

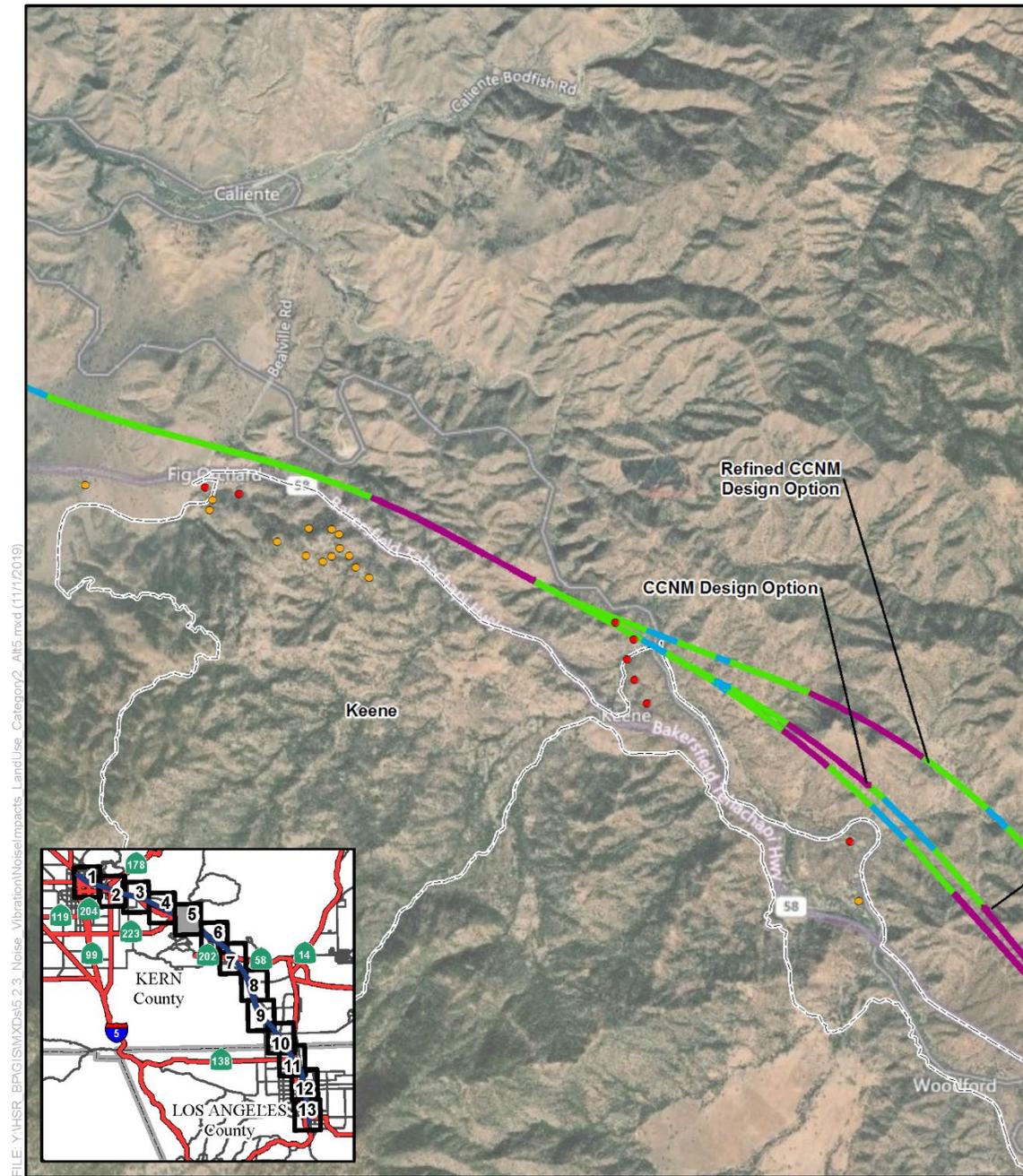


FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3.Noise.Vibration\NoiseImpacts\_LandUse\_Category2\_Alt5.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-5 Land Use Category 2 Noise Impacts—Alternative 5**  
 (Sheet 4 of 13)

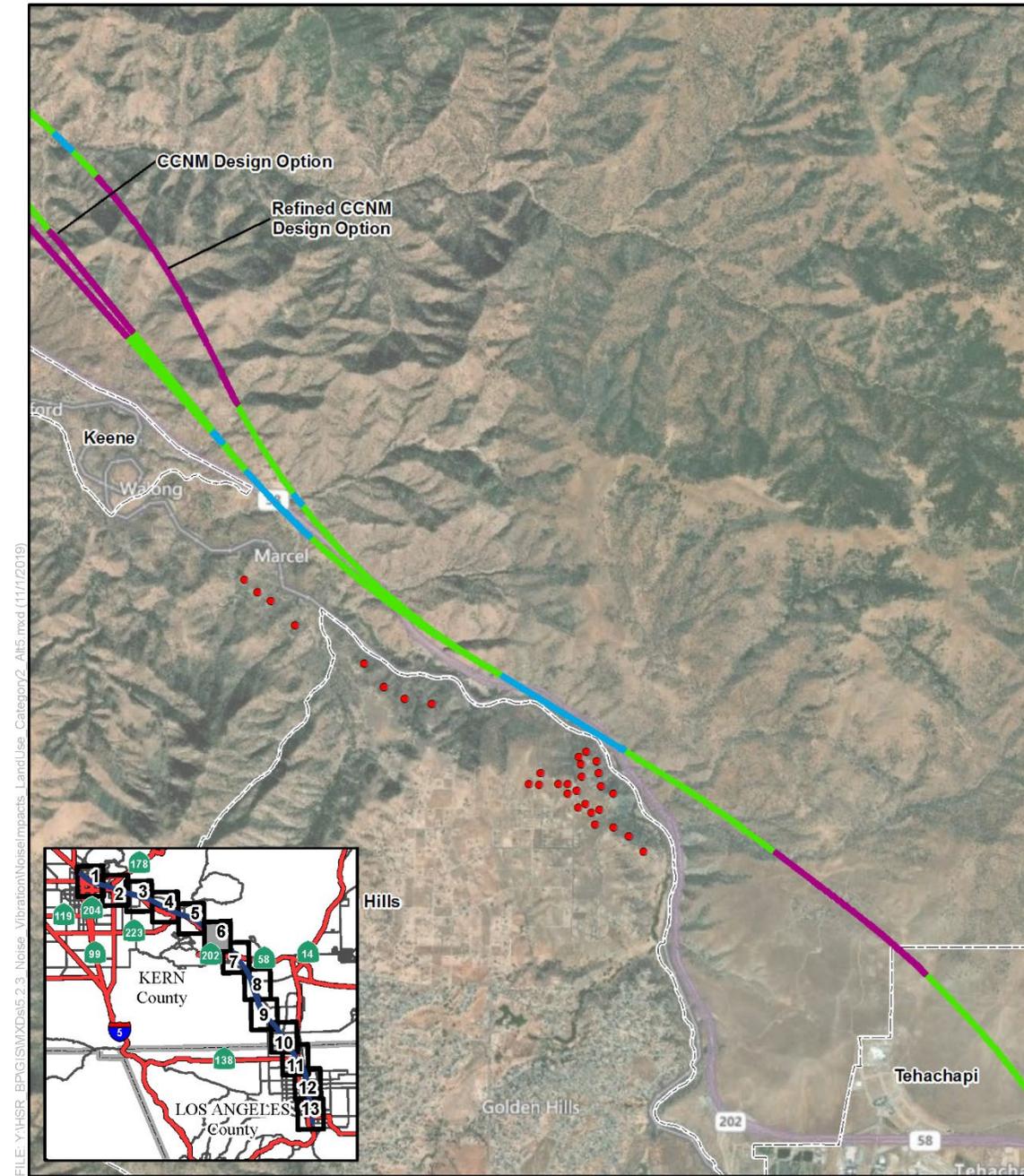


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category2\_Alt5.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

  	<b>Alternative 5 Alignment</b> Elevated Surface Underground	<b>Land Use Category 2</b> Severe Impact Moderate Impact	City Boundary
----------	--	--	---------------

**Figure 3.4-A-5 Land Use Category 2 Noise Impacts—Alternative 5**  
 (Sheet 5 of 13)

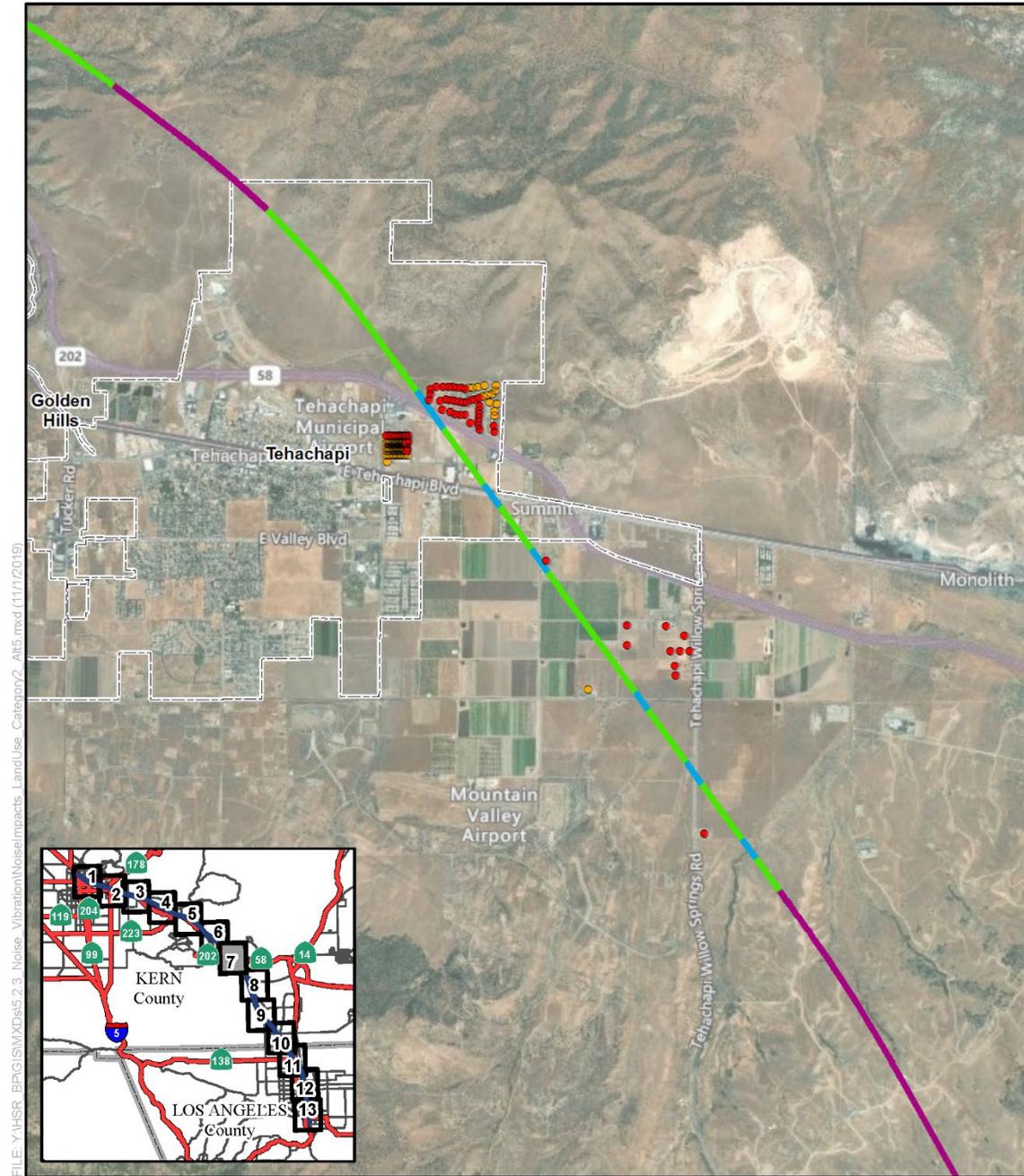


FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt5.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

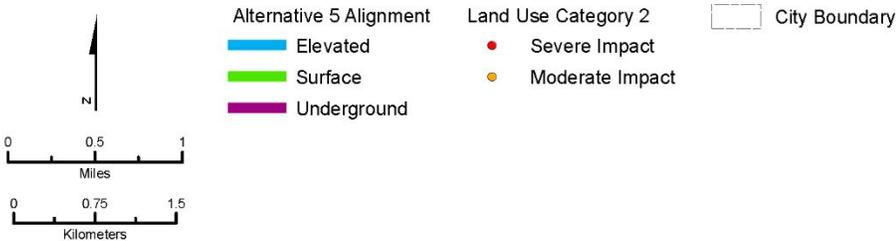
 	<b>Alternative 5 Alignment</b> Elevated Surface Underground	<b>Land Use Category 2</b> Severe Impact Moderate Impact	City Boundary
------	--	--	---------------

**Figure 3.4-A-5 Land Use Category 2 Noise Impacts—Alternative 5**  
 (Sheet 6 of 13)

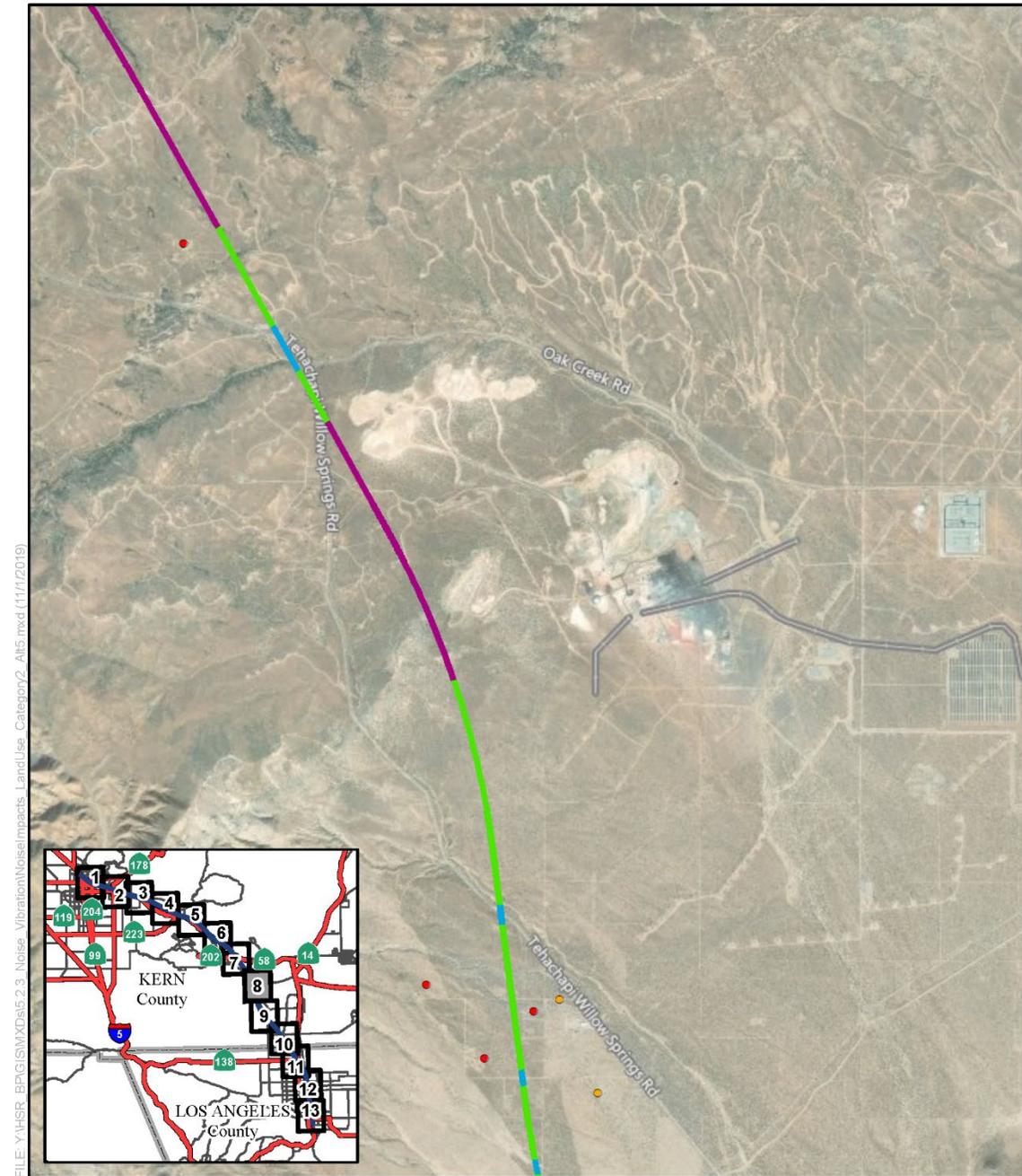


FILE: Y:\HSR\_BP\GIS\MXD\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt5.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-5 Land Use Category 2 Noise Impacts—Alternative 5**  
 (Sheet 7 of 13)

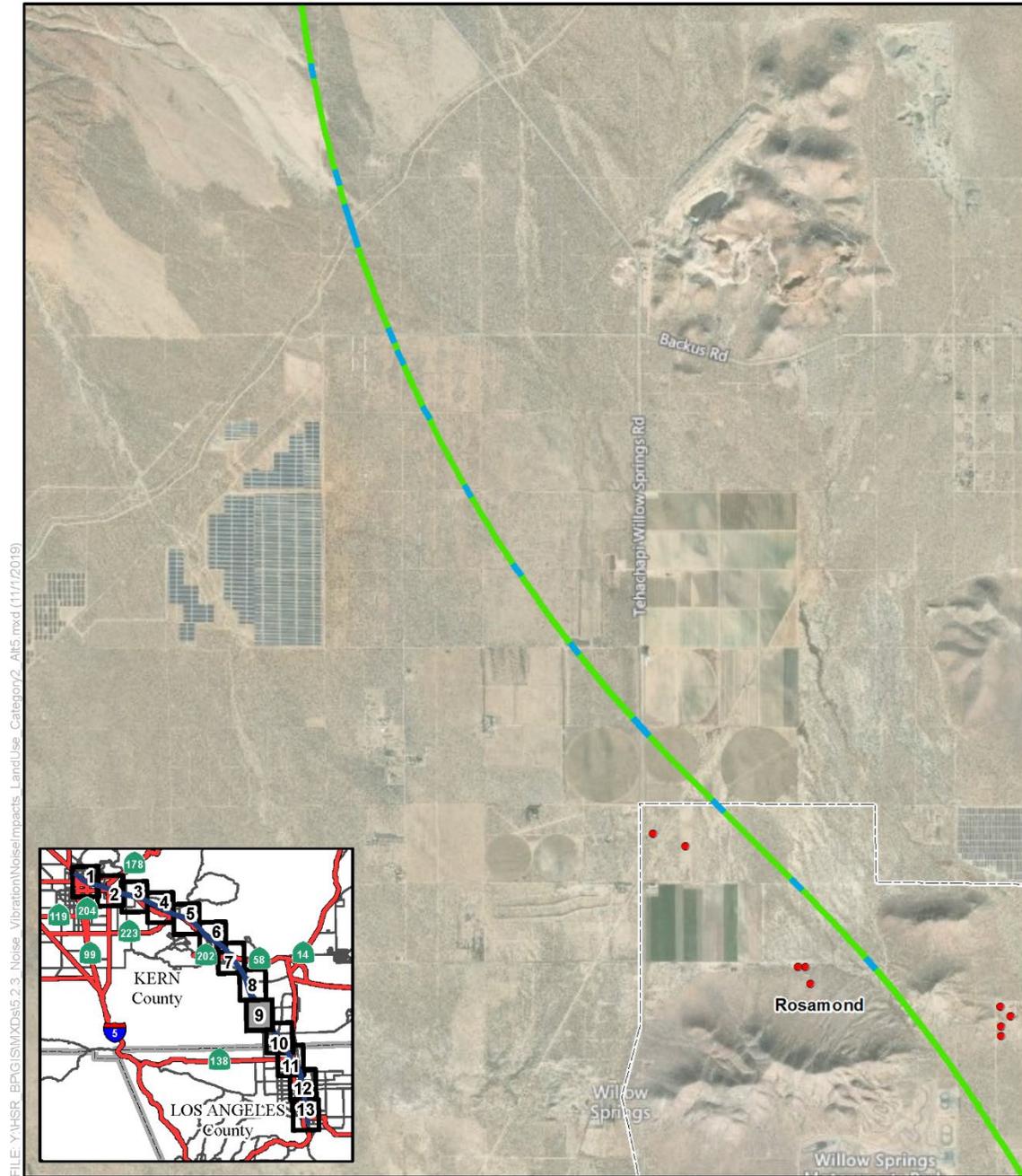


FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3.Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt5.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



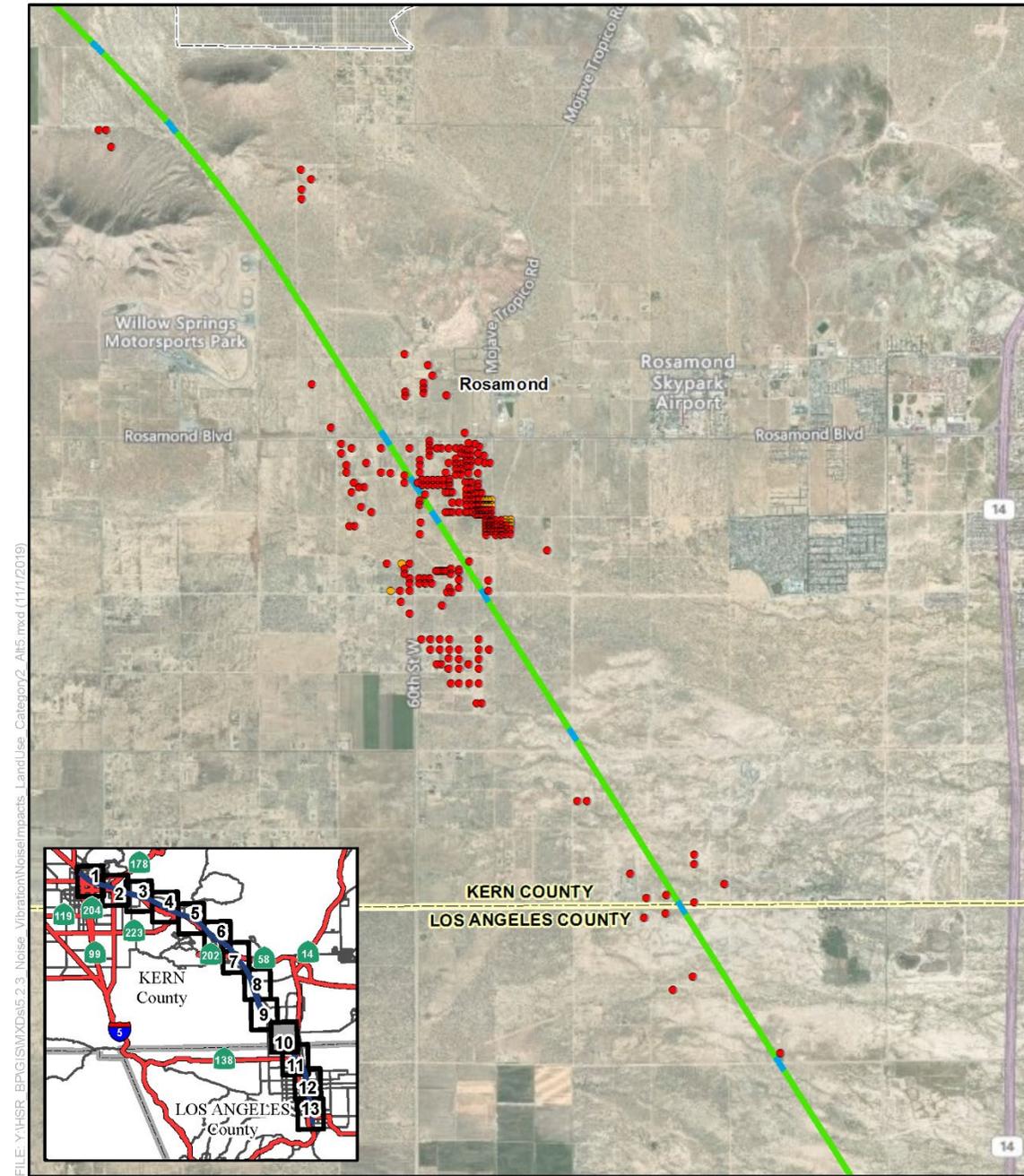
**Figure 3.4-A-5 Land Use Category 2 Noise Impacts—Alternative 5**  
 (Sheet 8 of 13)



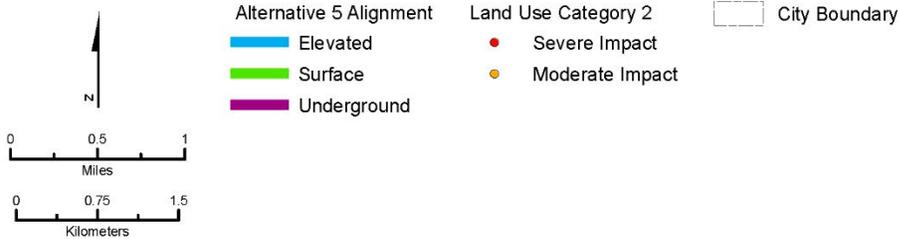
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



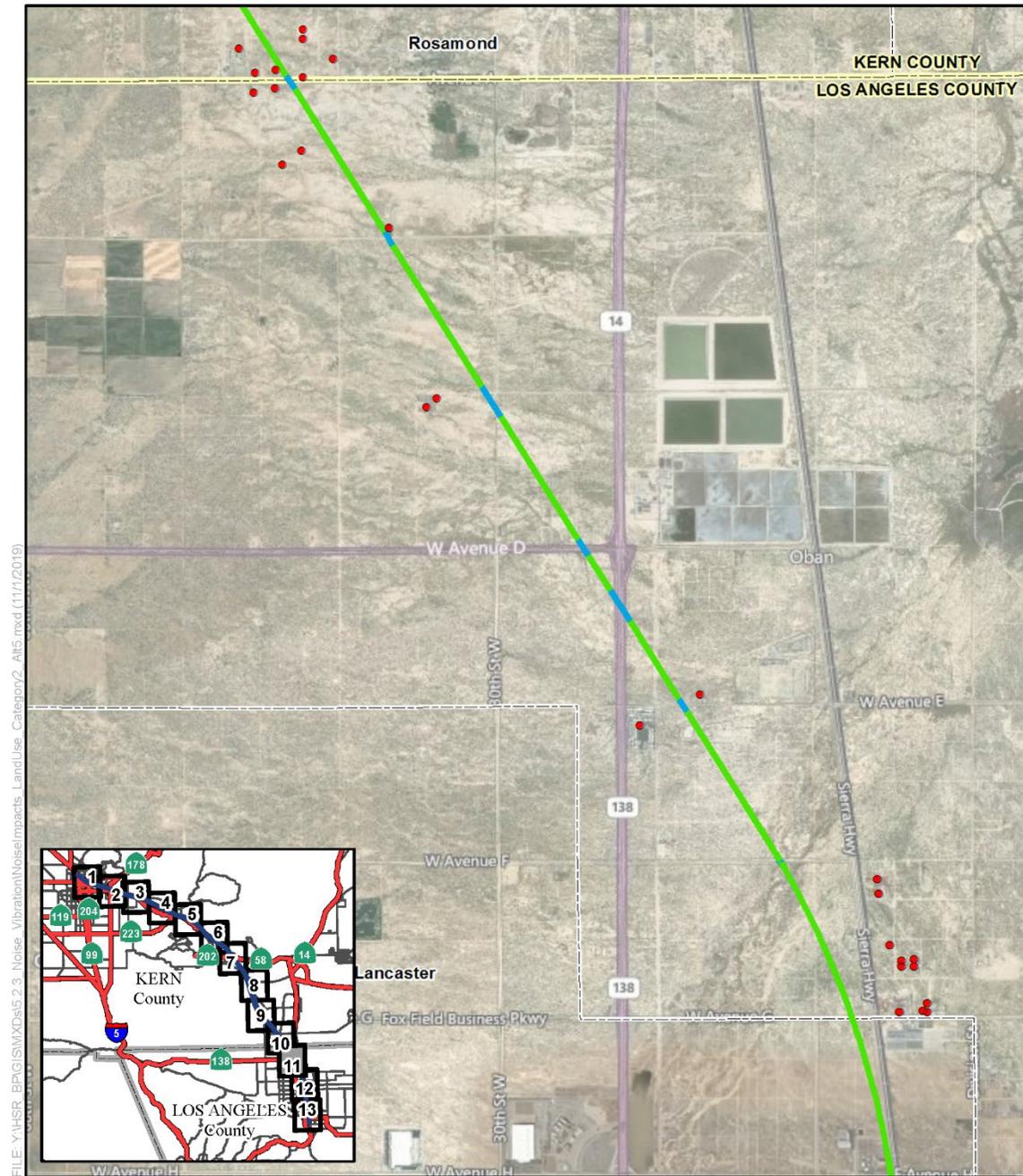
**Figure 3.4-A-5 Land Use Category 2 Noise Impacts—Alternative 5**  
 (Sheet 9 of 13)



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-5 Land Use Category 2 Noise Impacts—Alternative 5**  
 (Sheet 10 of 13)

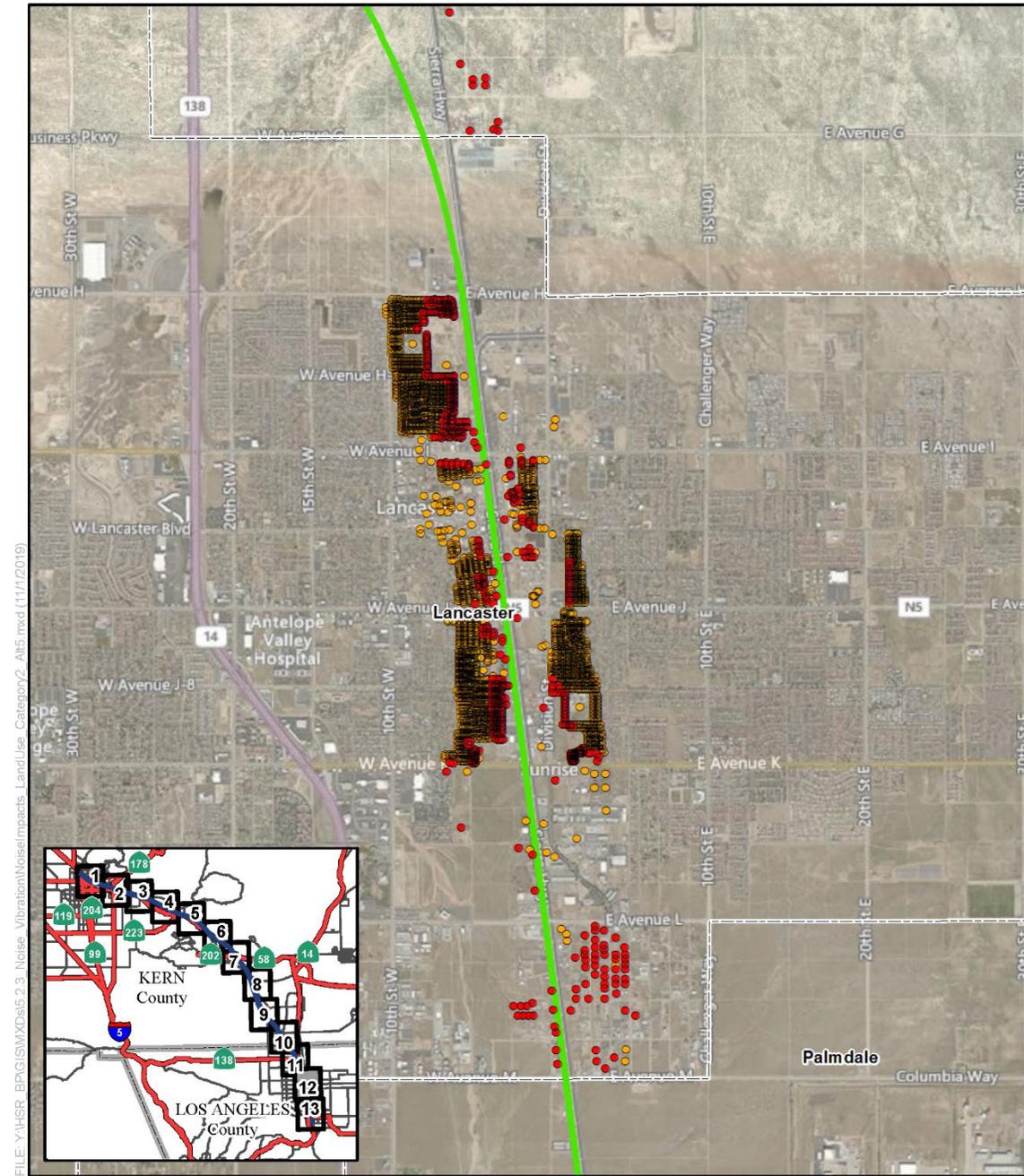


FILE: Y:\HSR\_BP\GIS\MXD\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category2\_Alt5.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

  	<b>Alternative 5 Alignment</b> Elevated Surface Underground	<b>Land Use Category 2</b> Severe Impact Moderate Impact	City Boundary
----------	--	--	---------------

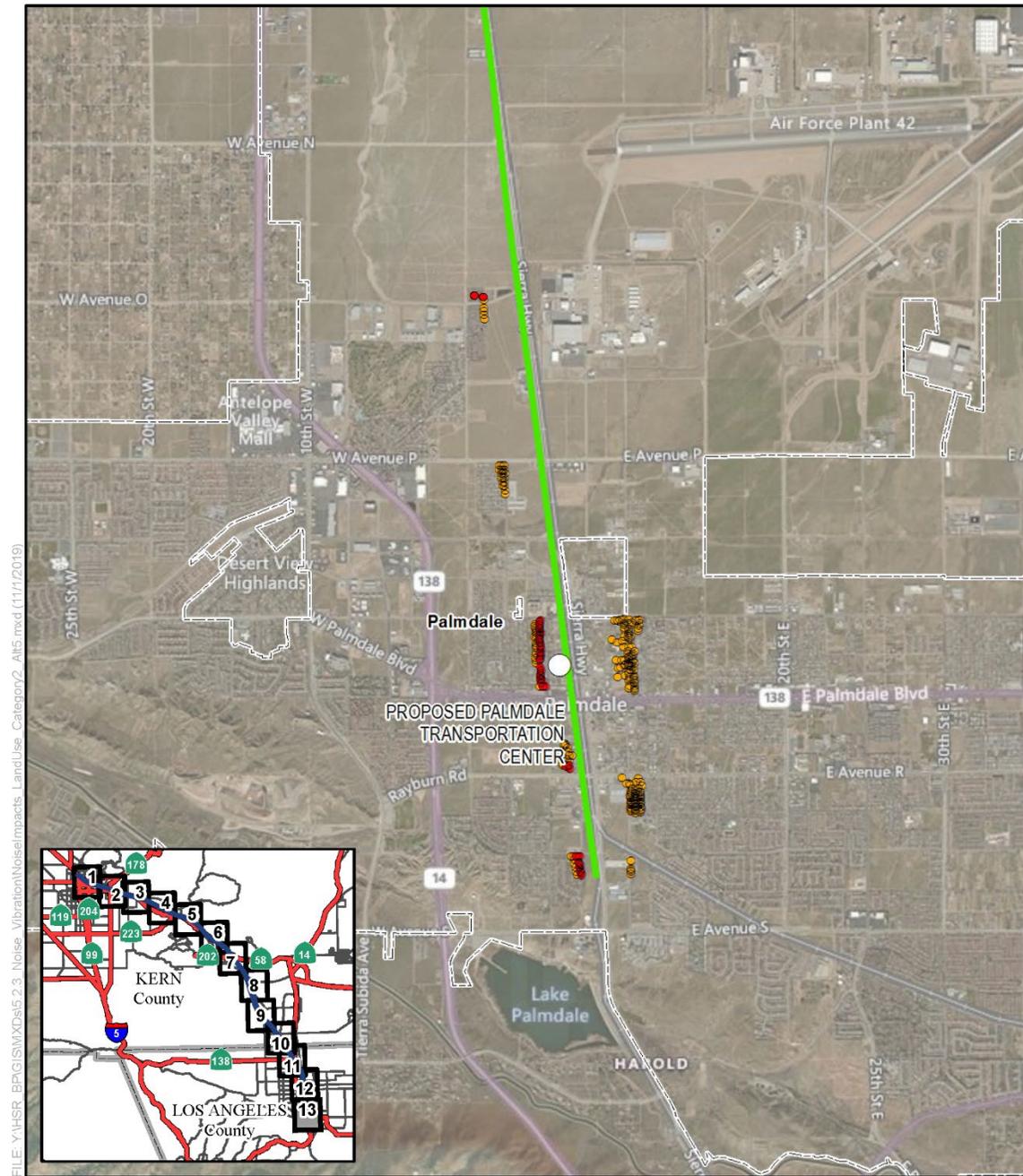
**Figure 3.4-A-5 Land Use Category 2 Noise Impacts—Alternative 5**  
 (Sheet 11 of 13)



FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt5.mxd (11/11/2019)

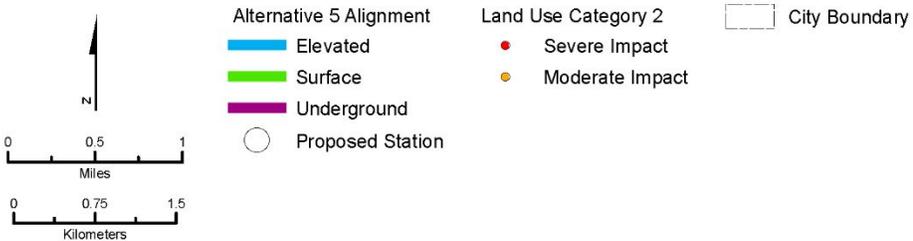
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

**Figure 3.4-A-5 Land Use Category 2 Noise Impacts—Alternative 5**  
 (Sheet 12 of 13)

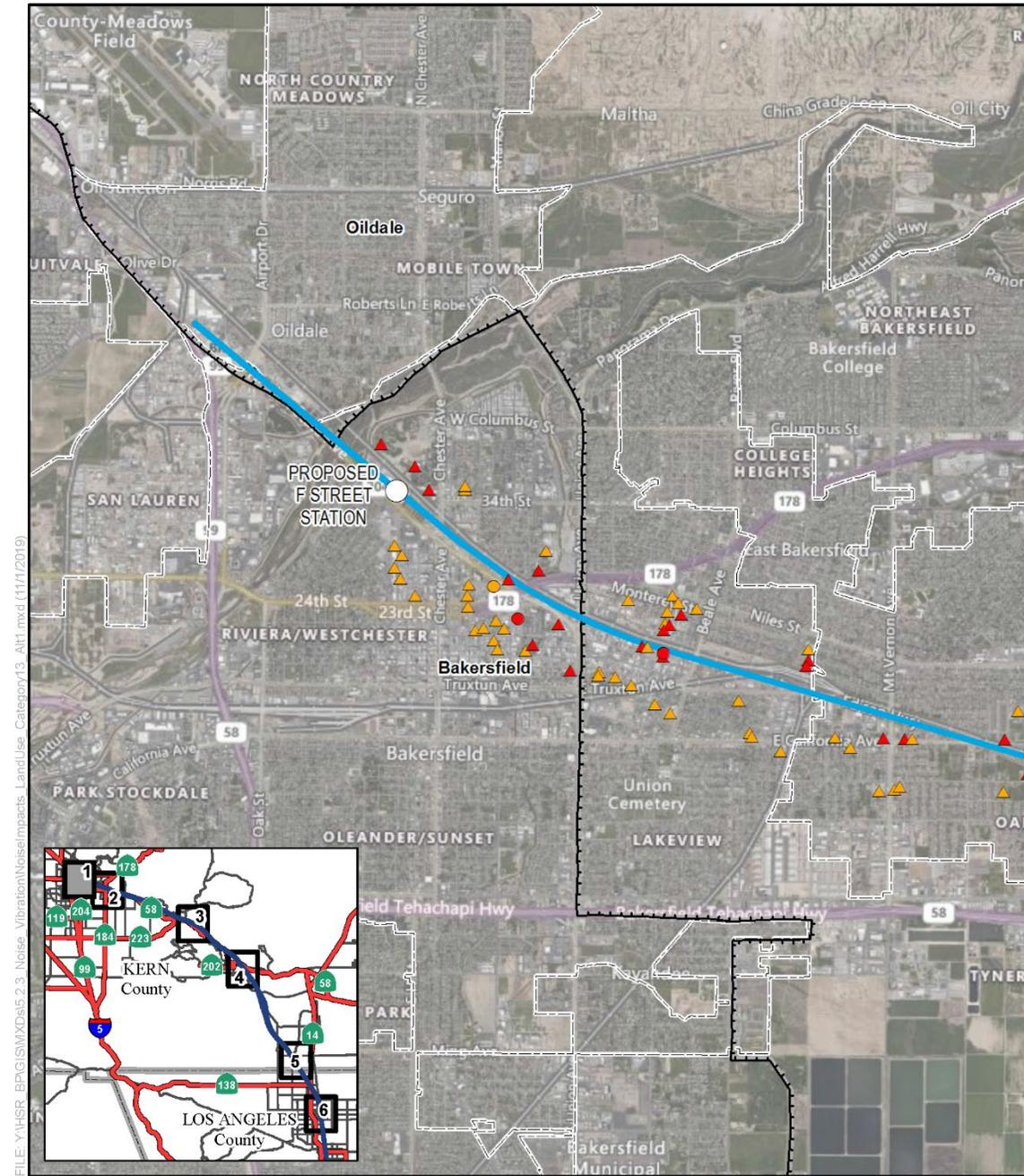


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category2\_Alt5.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

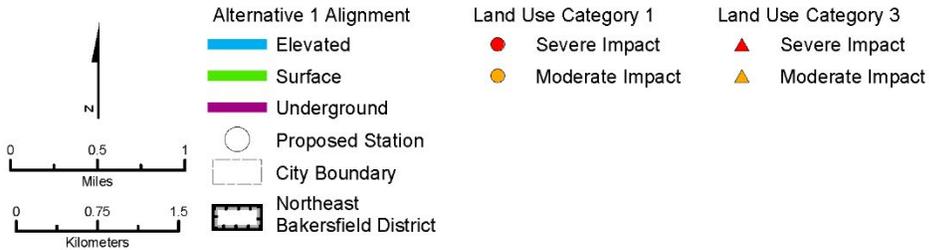


**Figure 3.4-A-5 Land Use Category 2 Noise Impacts—Alternative 5**  
 (Sheet 13 of 13)

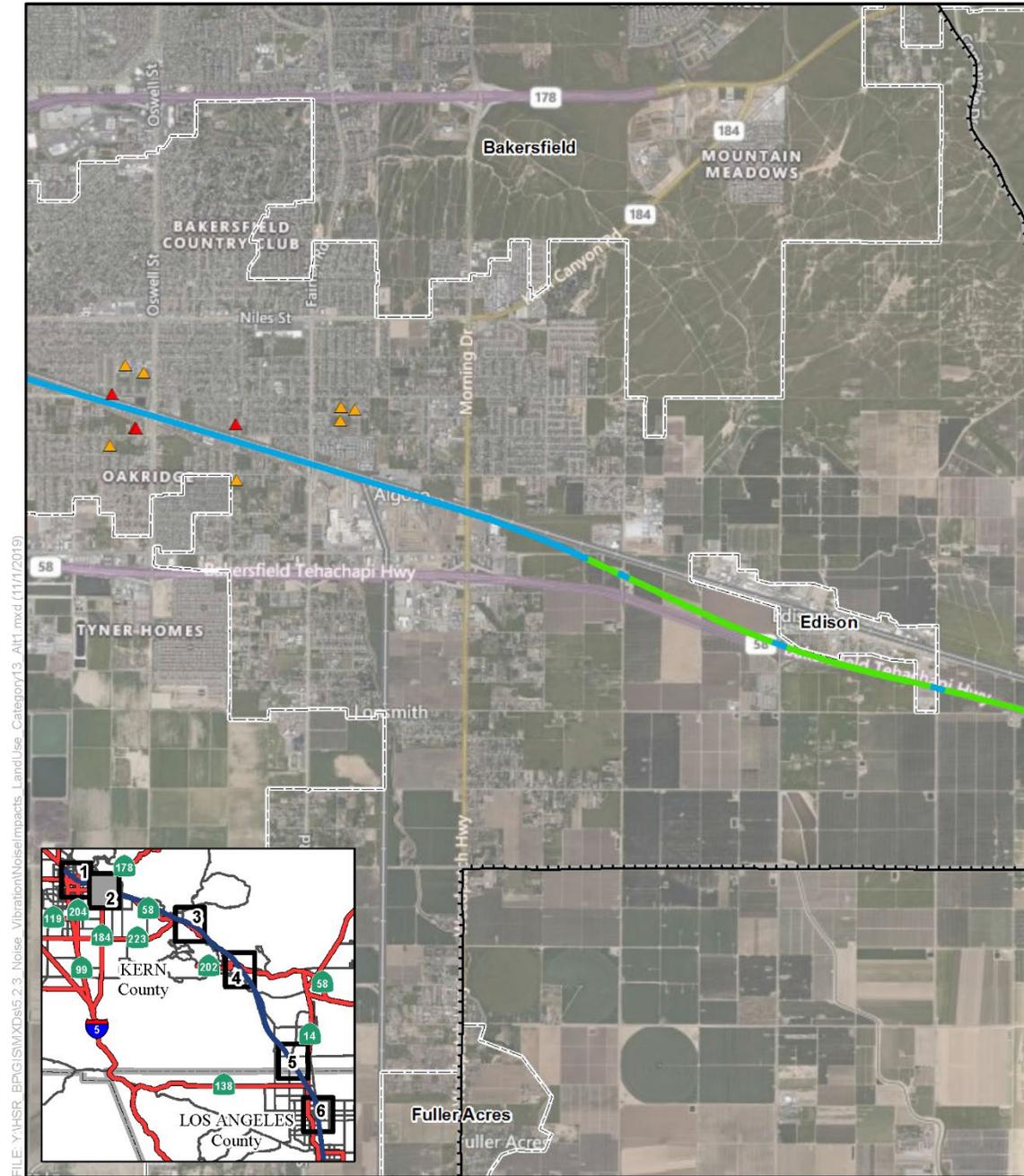


FILE: Y:\HSR\_BP\GIS\WXD\S5 2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category13\_Alt1.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-6 Land Use Categories 1 and 3 Noise Impacts—Alternative 1**  
 (Sheet 1 of 7)

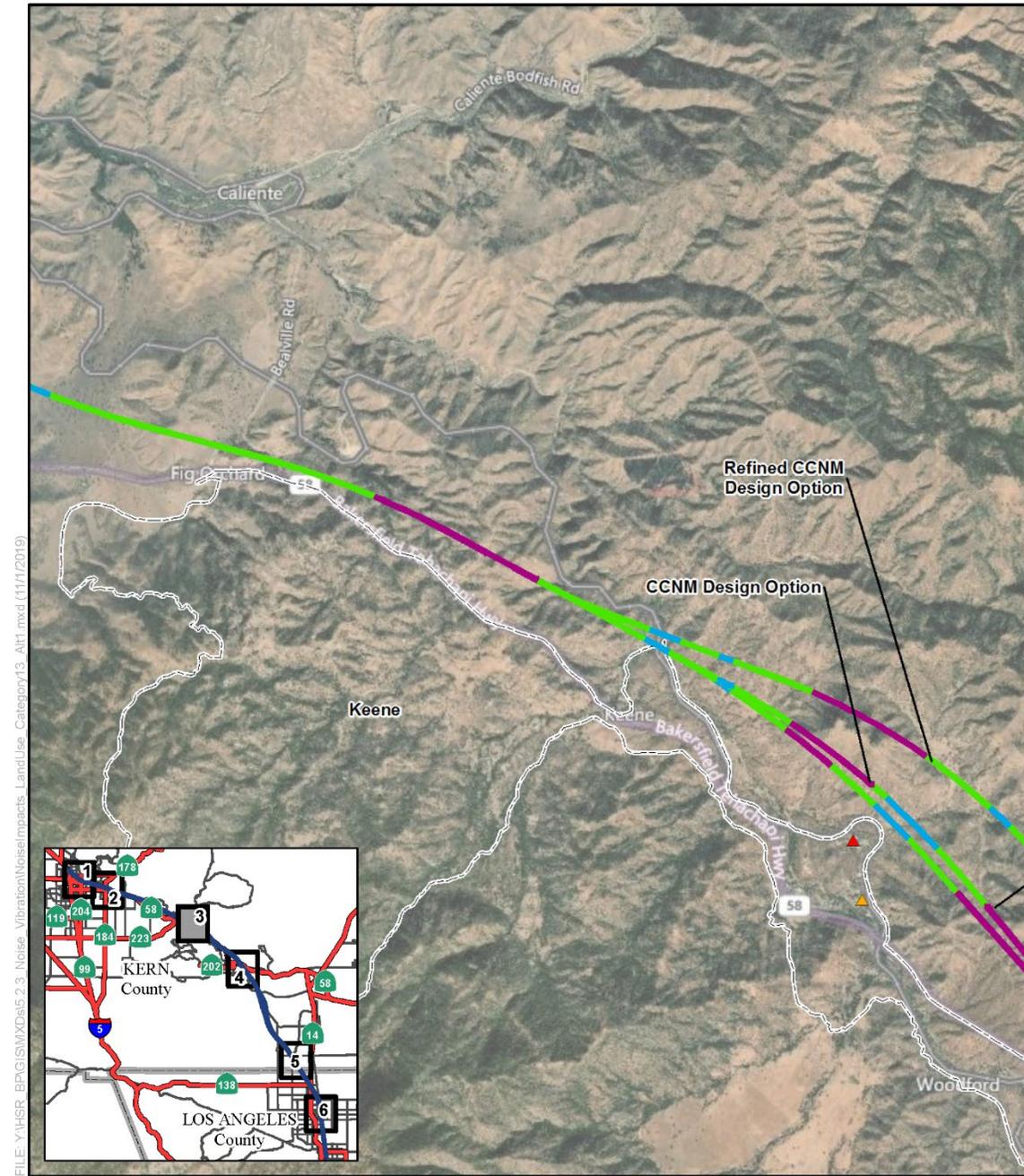


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category13\_Atl1.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

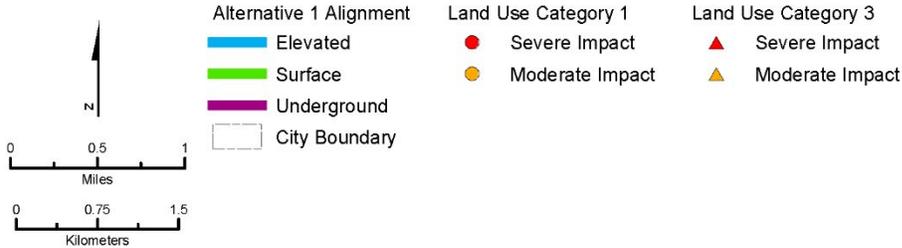
	<b>Alternative 1 Alignment</b> Elevated Surface Underground City Boundary Northeast Bakersfield District	<b>Land Use Category 1</b> Severe Impact Moderate Impact	<b>Land Use Category 3</b> Severe Impact Moderate Impact
--	---	--	--

**Figure 3.4-A-6 Land Use Categories 1 and 3 Noise Impacts—Alternative 1**  
 (Sheet 2 of 7)

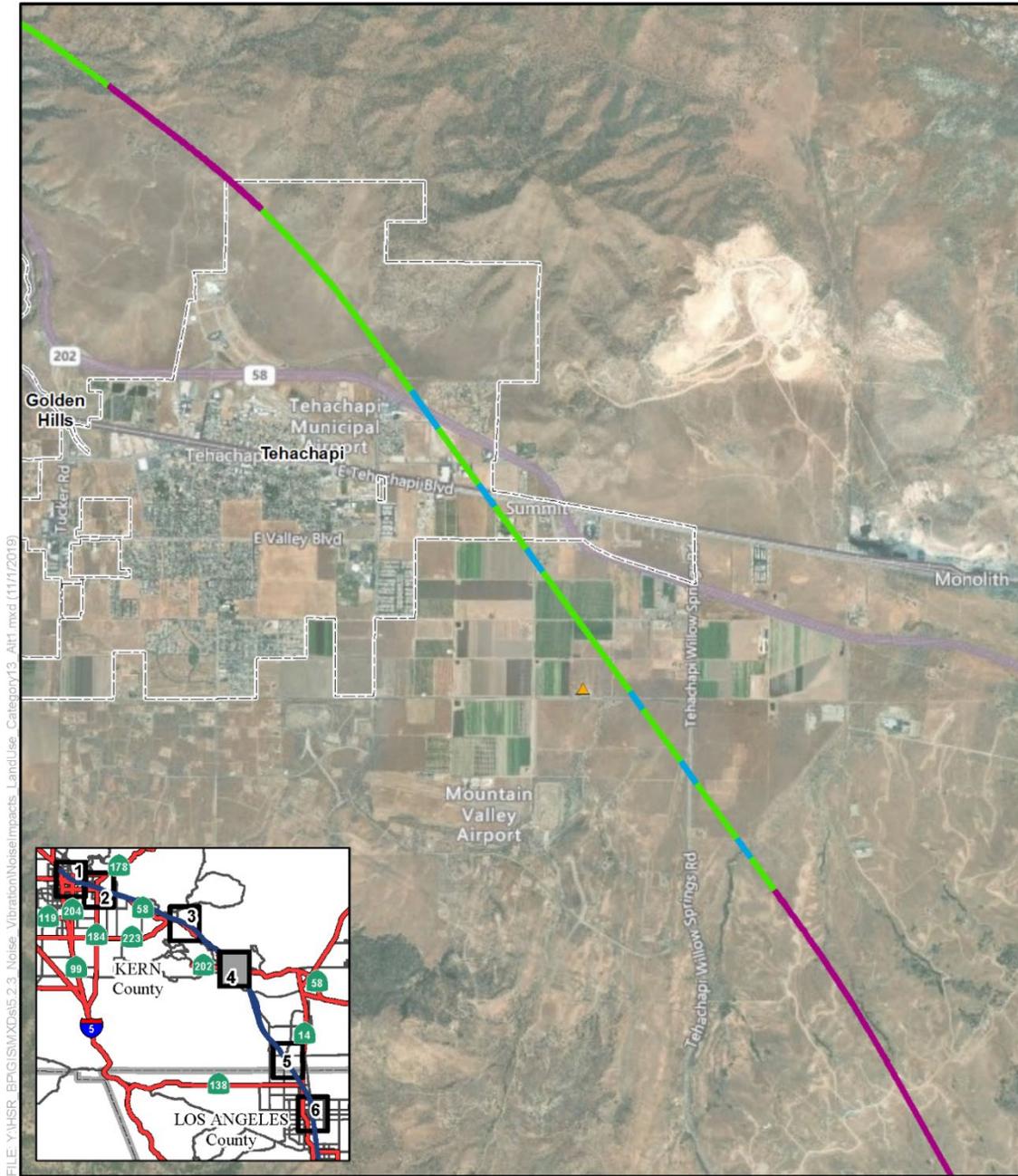


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3.Noise\_Vibration\NoiseImpacts\_LandUse\_Category13\_Alt1.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

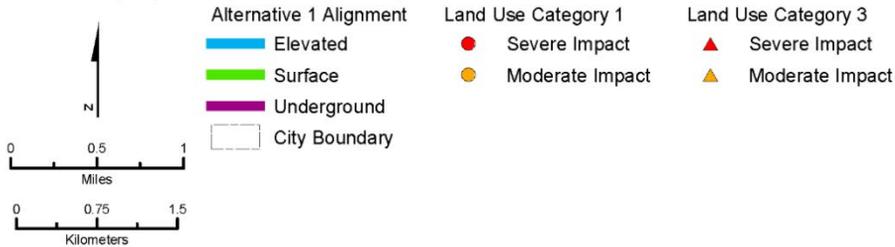


**Figure 3.4-A-6 Land Use Categories 1 and 3 Noise Impacts—Alternative 1**  
 (Sheet 3 of 7)

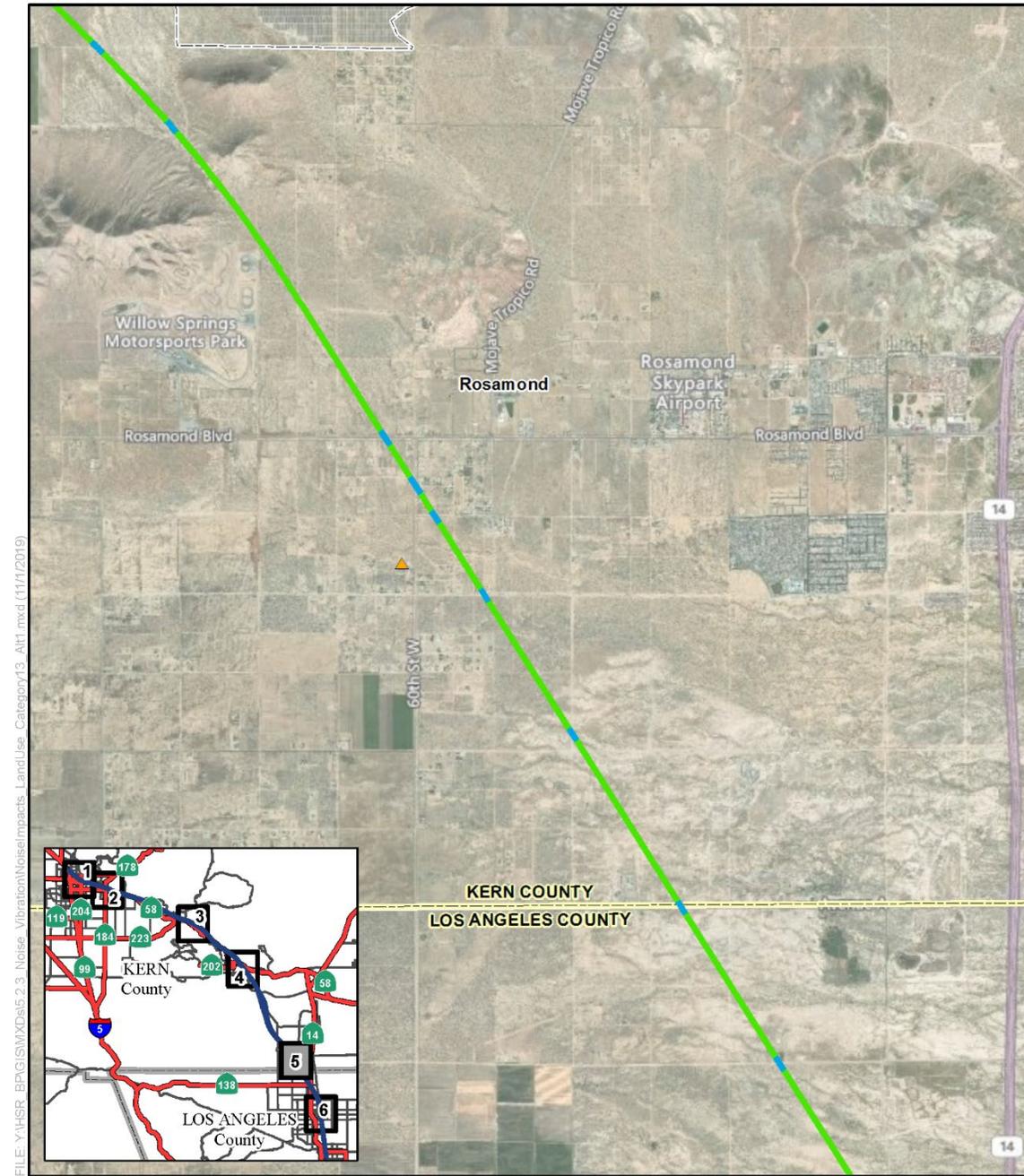


FILE: Y:\HSR\_BPG\GISMXD\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category13\_A11.mxd (11/17/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-6 Land Use Categories 1 and 3 Noise Impacts—Alternative 1**  
 (Sheet 4 of 7)

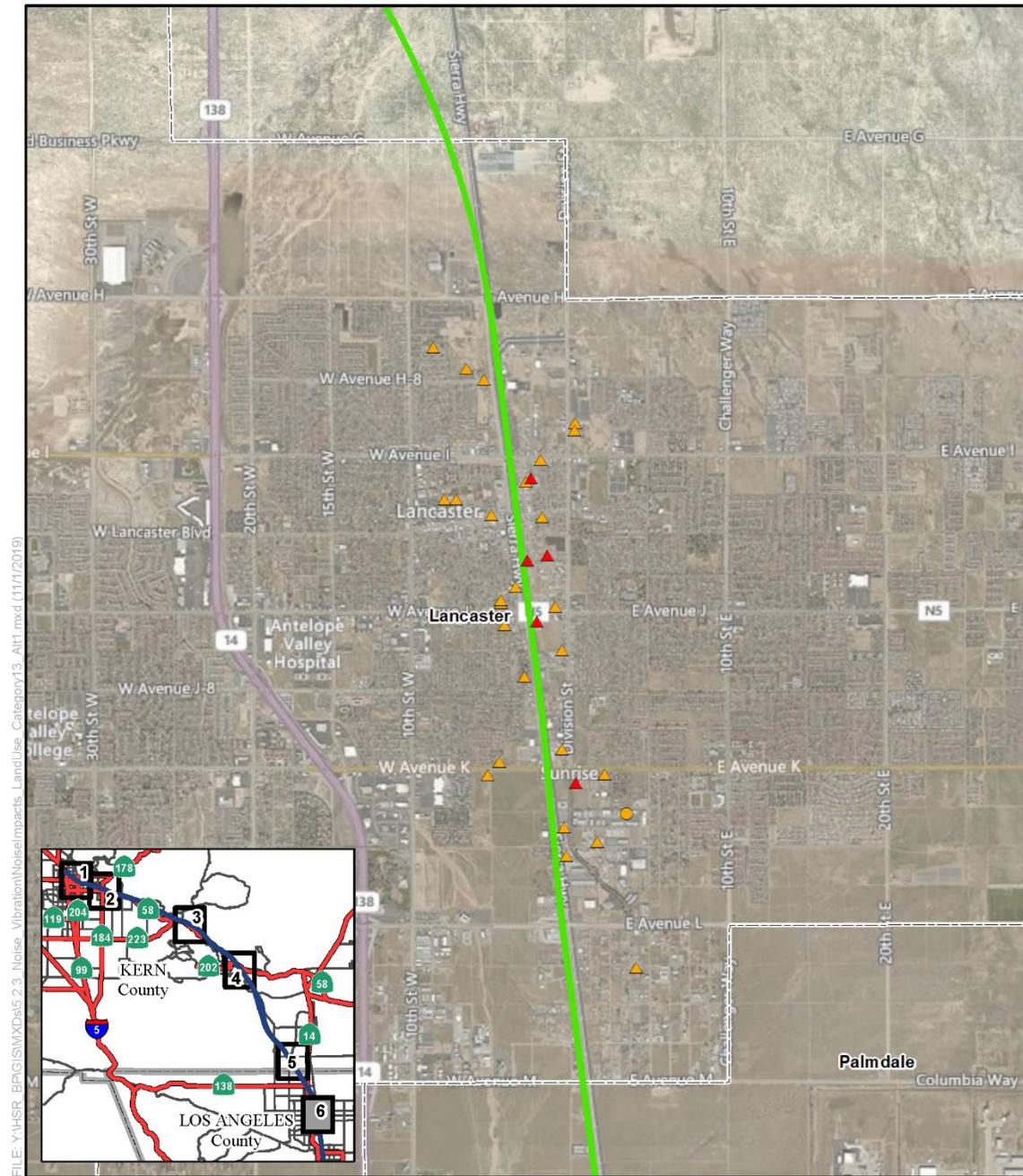


FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3.Noise\_Vibration\NoiseImpacts\_LandUse\_Category13\_Alt1.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

  	<b>Alternative 1 Alignment</b> Elevated Surface Underground City Boundary	<b>Land Use Category 1</b> Severe Impact Moderate Impact	<b>Land Use Category 3</b> Severe Impact Moderate Impact
----------	---	--	--

**Figure 3.4-A-6 Land Use Categories 1 and 3 Noise Impacts—Alternative 1**  
 (Sheet 5 of 7)

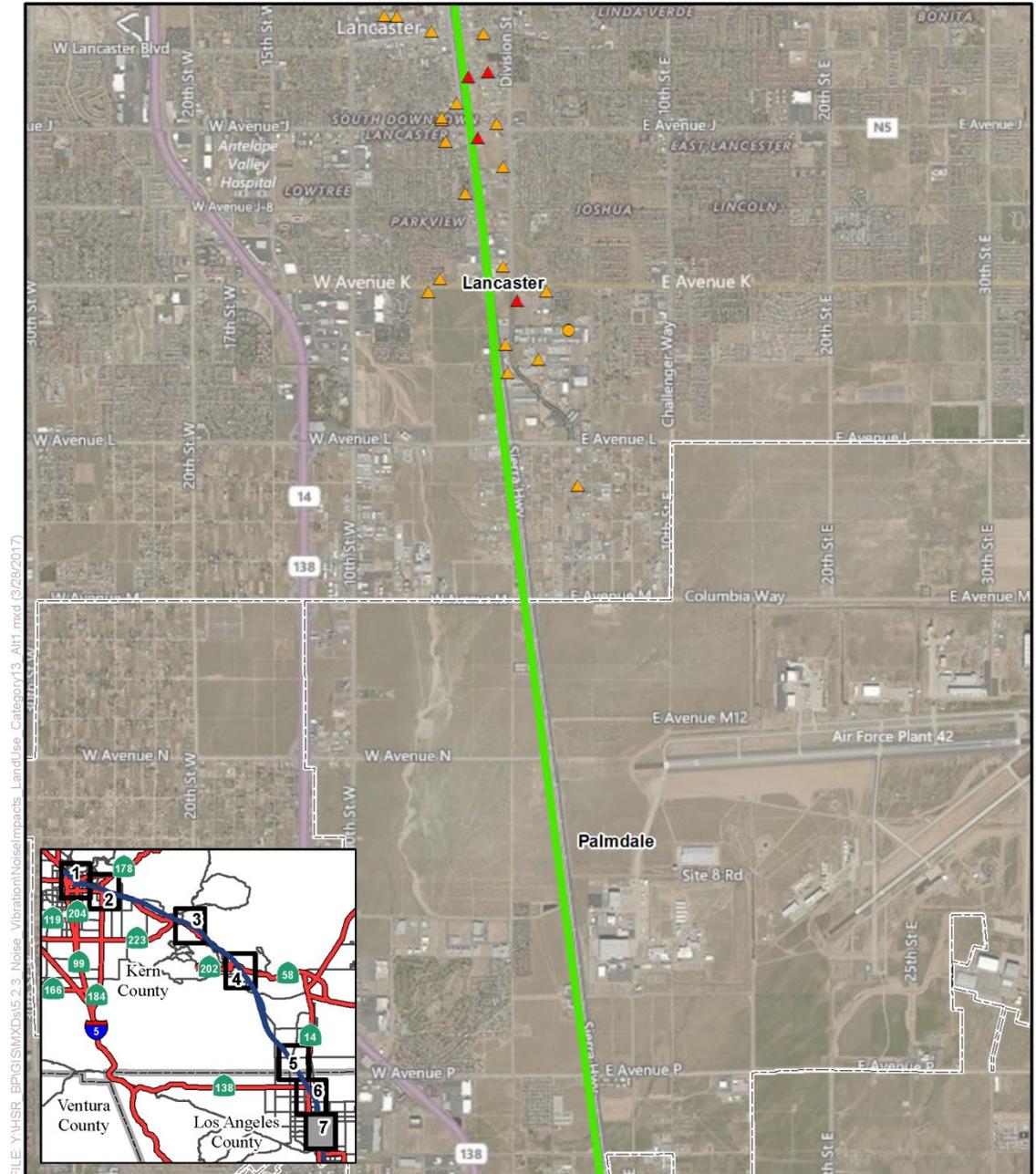


FILE: Y:\HSR\_BP\GIS\MapDocs\5.2.3.Noise.Vibration\NoiseImpacts.LandUse.Category13\_Alt1.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

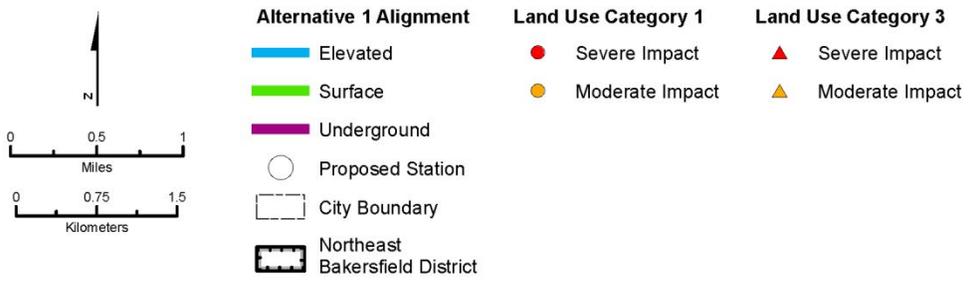
  	<b>Alternative 1 Alignment</b> Elevated Surface Underground City Boundary	<b>Land Use Category 1</b> Severe Impact Moderate Impact	<b>Land Use Category 3</b> Severe Impact Moderate Impact
----------	---	--	--

**Figure 3.4-A-6 Land Use Categories 1 and 3 Noise Impacts—Alternative 1**  
 (Sheet 6 of 7)

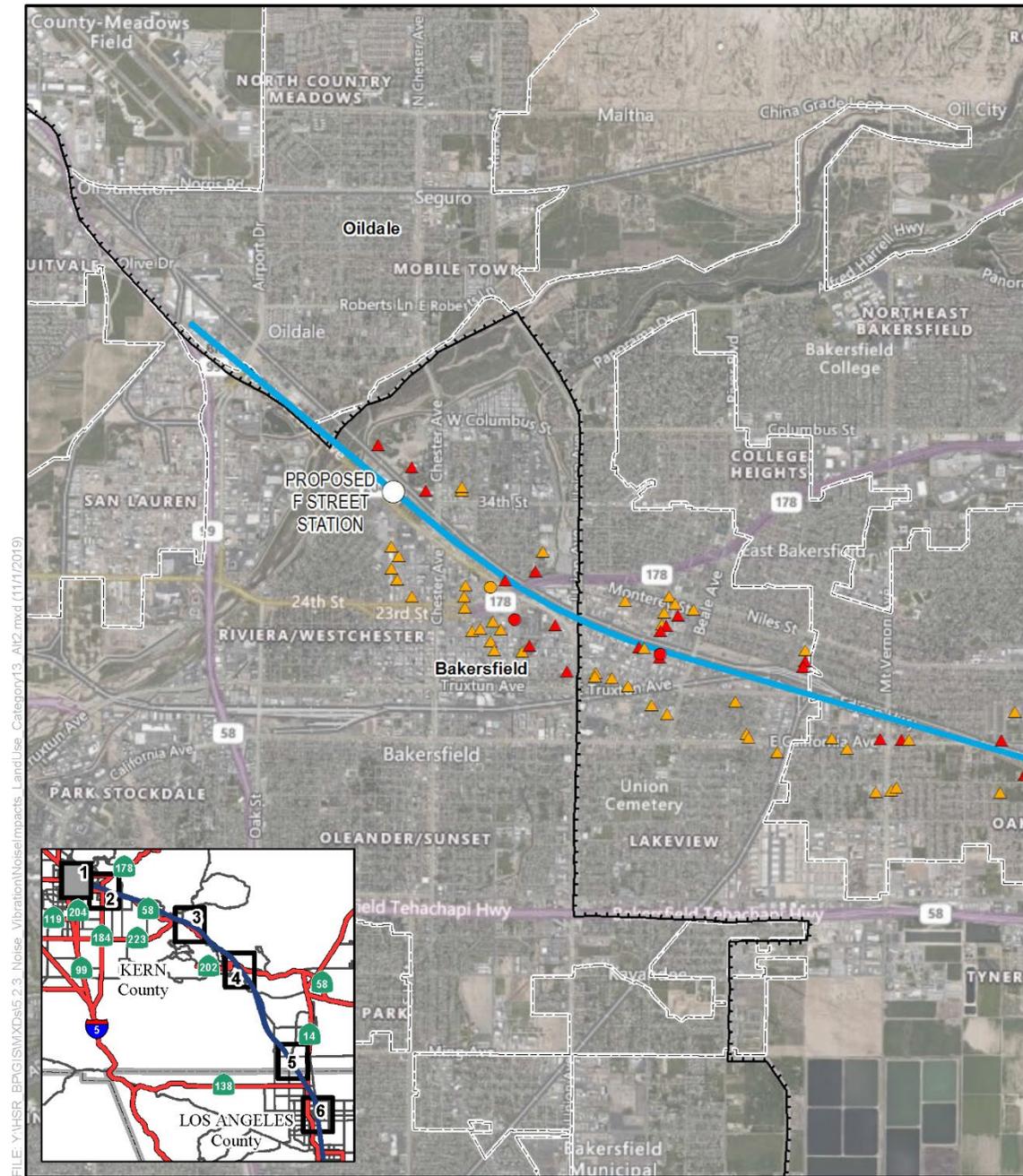


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category13\_Alt1.mxd (2/28/2017)

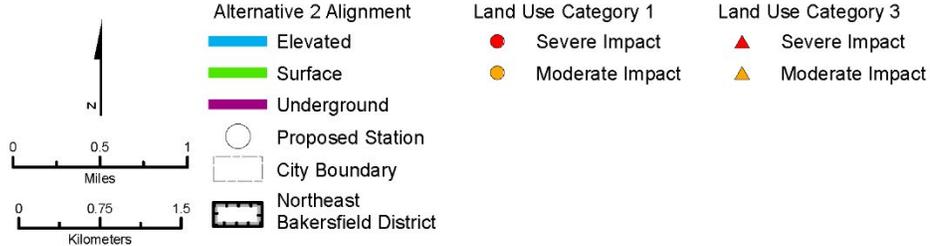
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016)



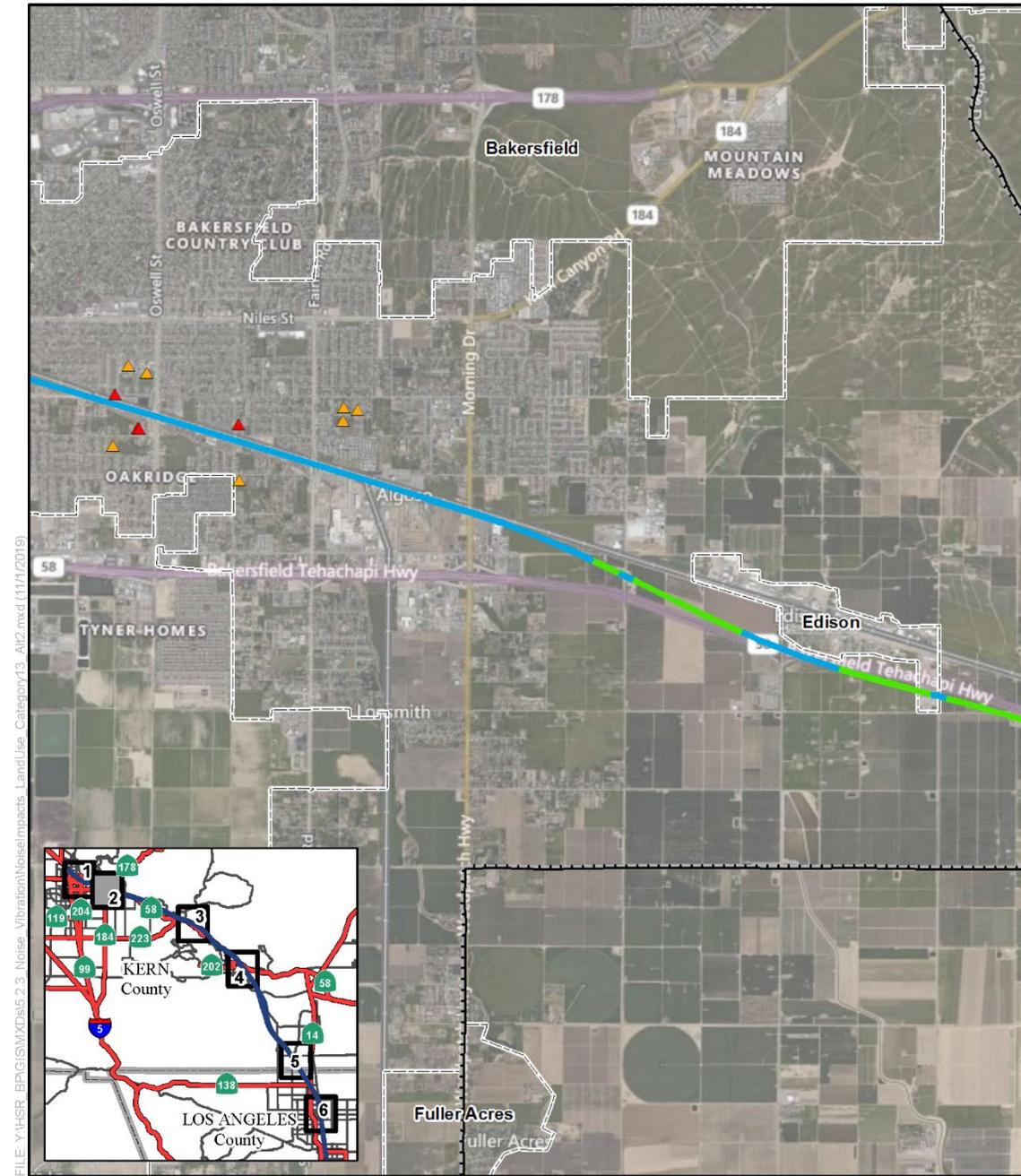
**Figure 3.4-A-6 Land Use Categories 1 and 3 Noise Impacts—Alternative 1**  
 (Sheet 7 of 7)



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-7 Land Use Categories 1 and 3 Noise Impacts—Alternative 2**  
 (Sheet 1 of 7)

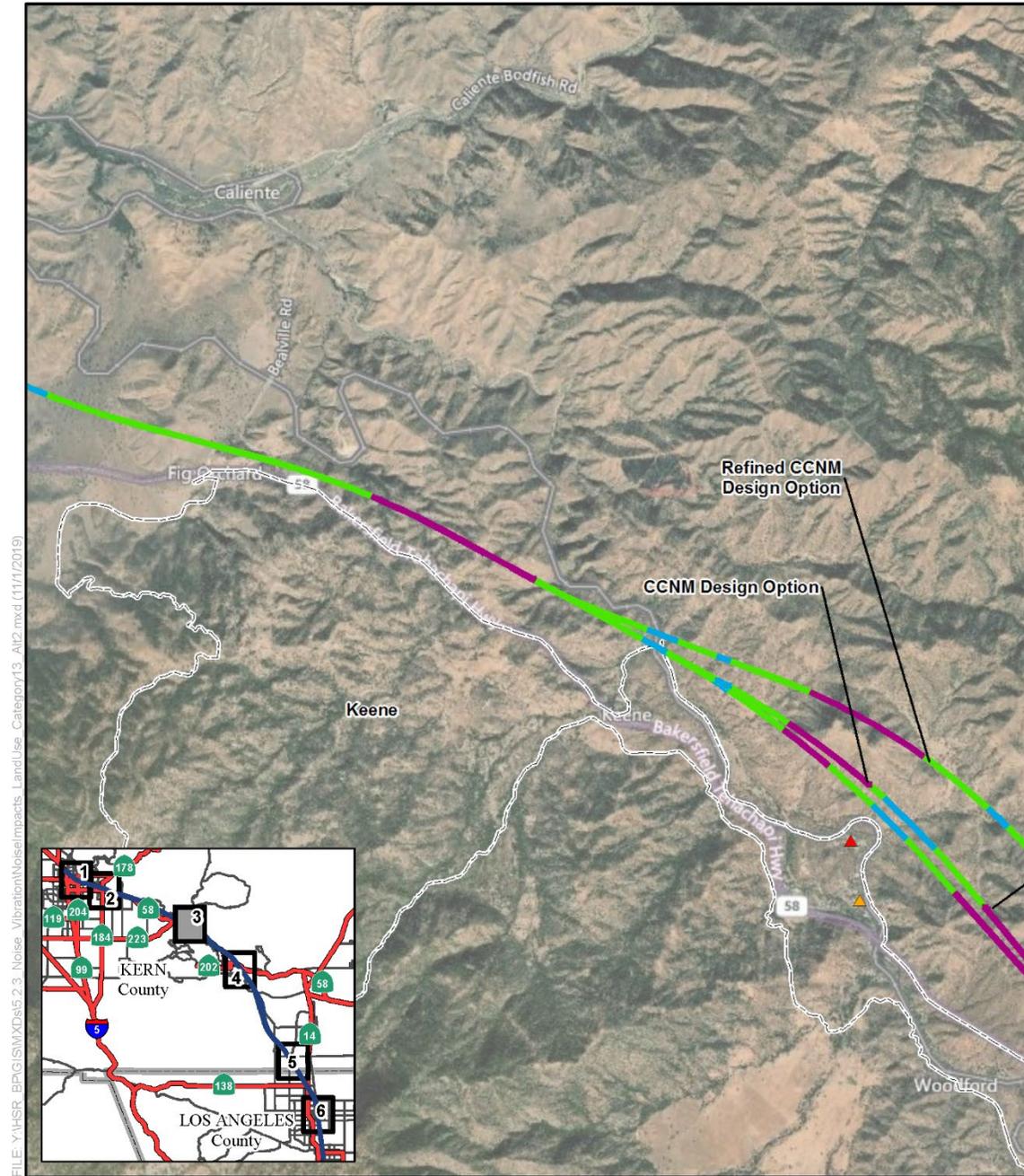


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3.Noise\_Vibration\NoiseImpacts\_LandUse\_Category\13\_Alt2.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

 	<b>Alternative 2 Alignment</b> Elevated Surface Underground City Boundary Northeast Bakersfield District	<b>Land Use Category 1</b> Severe Impact Moderate Impact	<b>Land Use Category 3</b> Severe Impact Moderate Impact
------	---	--	--

**Figure 3.4-A-7 Land Use Categories 1 and 3 Noise Impacts—Alternative 2**  
 (Sheet 2 of 7)

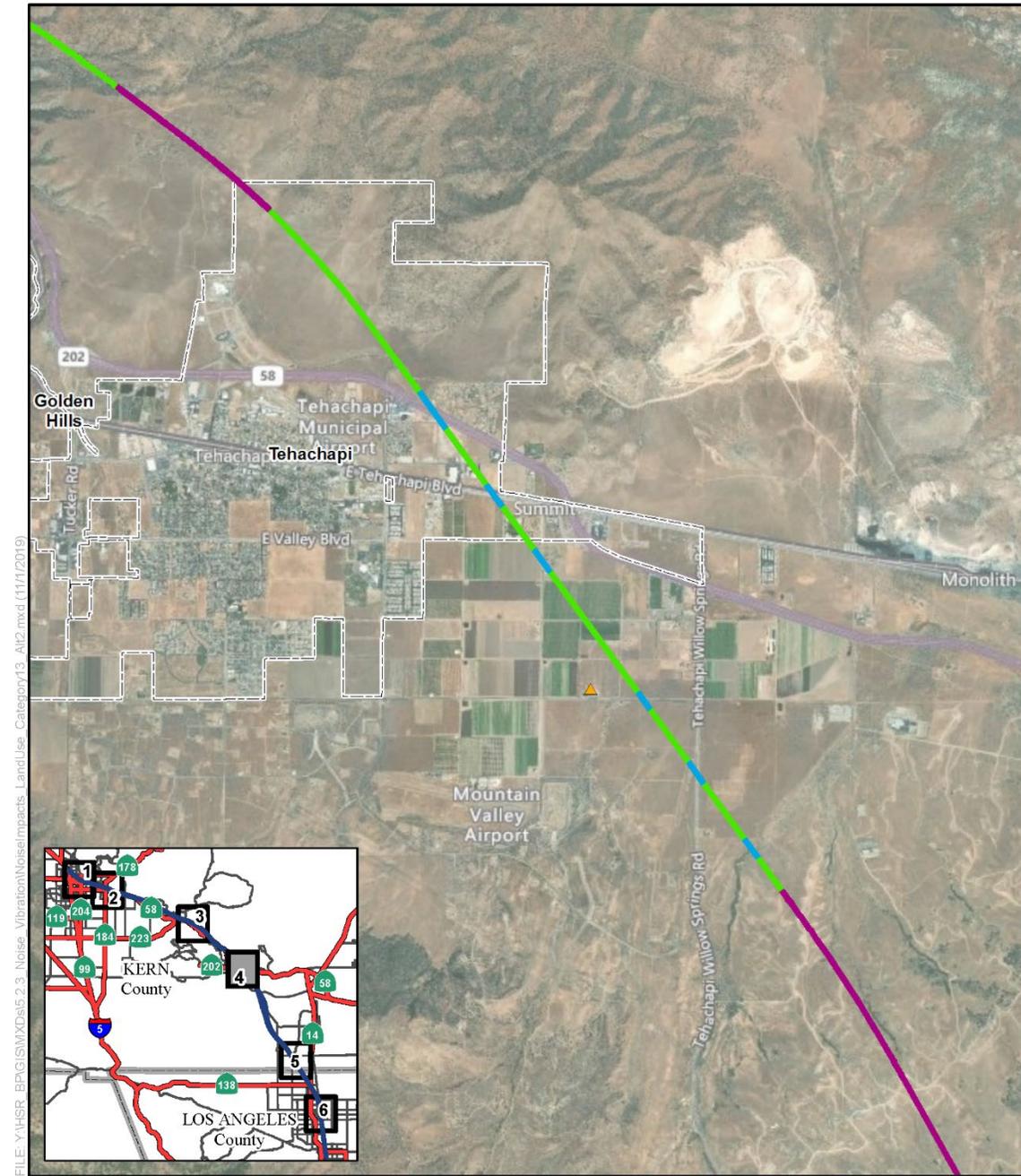


FILE: Y:\HSR\_BP\GIS\MXD\5 2 3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category\13\_Alt2.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

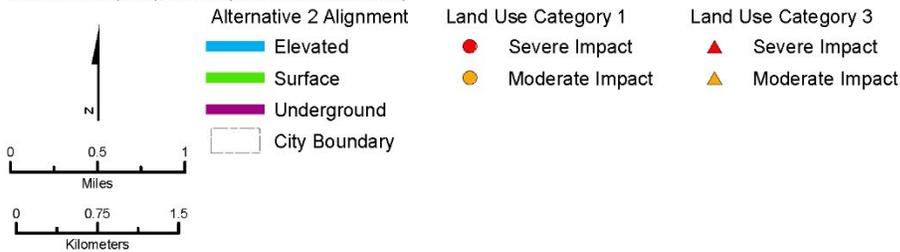
  	<b>Alternative 2 Alignment</b> Elevated Surface Underground City Boundary	<b>Land Use Category 1</b> Severe Impact Moderate Impact	<b>Land Use Category 3</b> Severe Impact Moderate Impact
----------	---	--	--

**Figure 3.4-A-7 Land Use Categories 1 and 3 Noise Impacts—Alternative 2**  
 (Sheet 3 of 7)

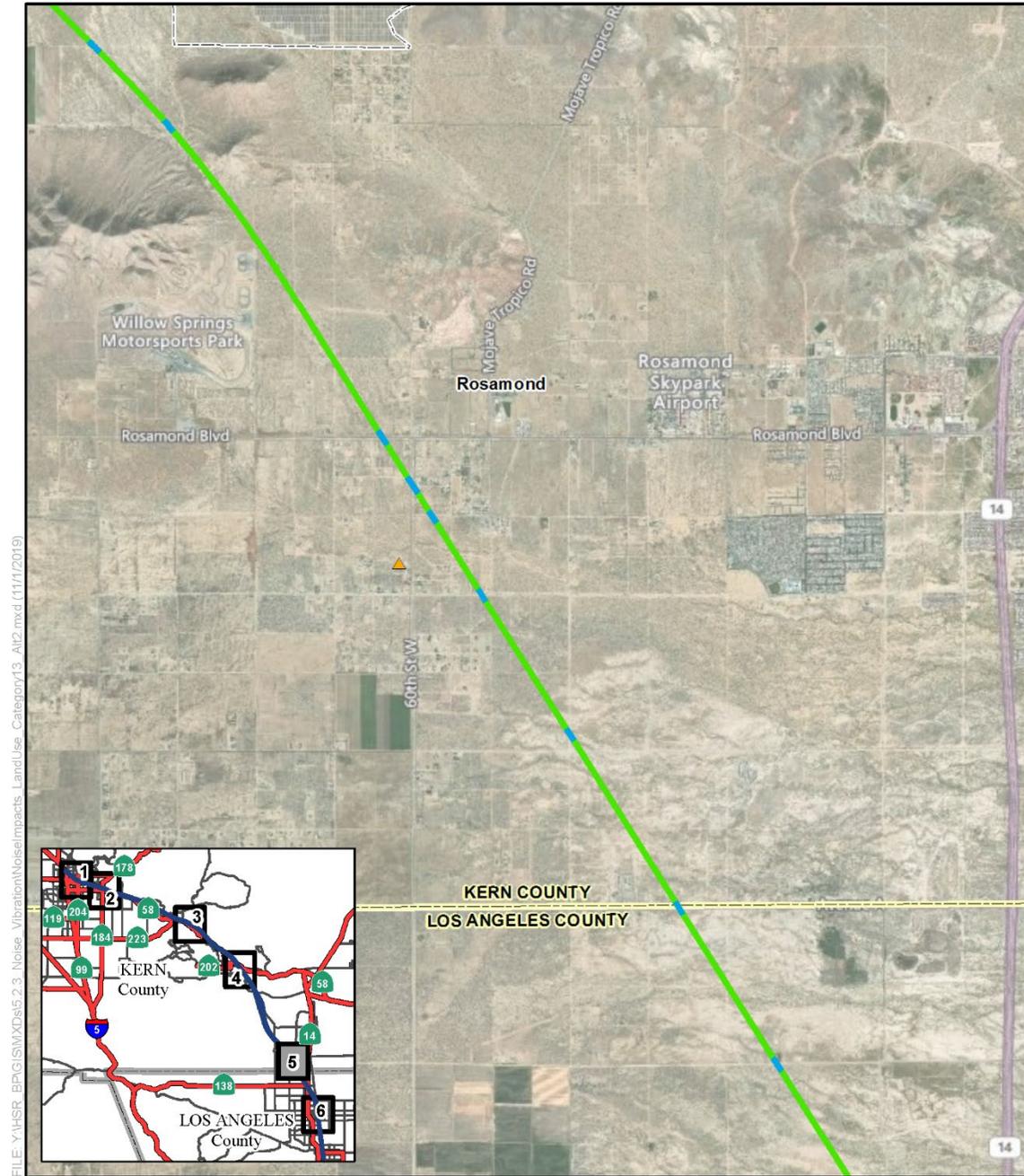


FILE: Y:\HSR\_BP\GIS\WXD\5.2.3.Noise\_Vibration\NoiseImpacts\_LandUse\_Category13\_Alt2.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

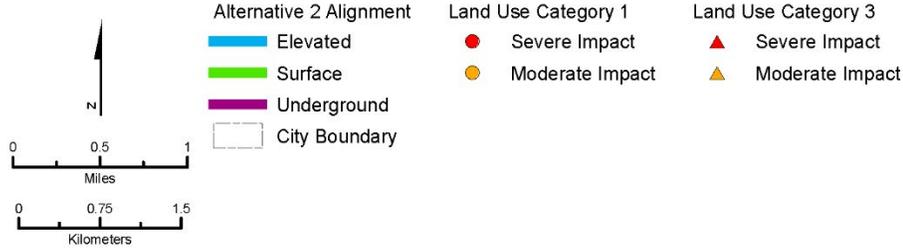


**Figure 3.4-A-7 Land Use Categories 1 and 3 Noise Impacts—Alternative 2**  
 (Sheet 4 of 7)

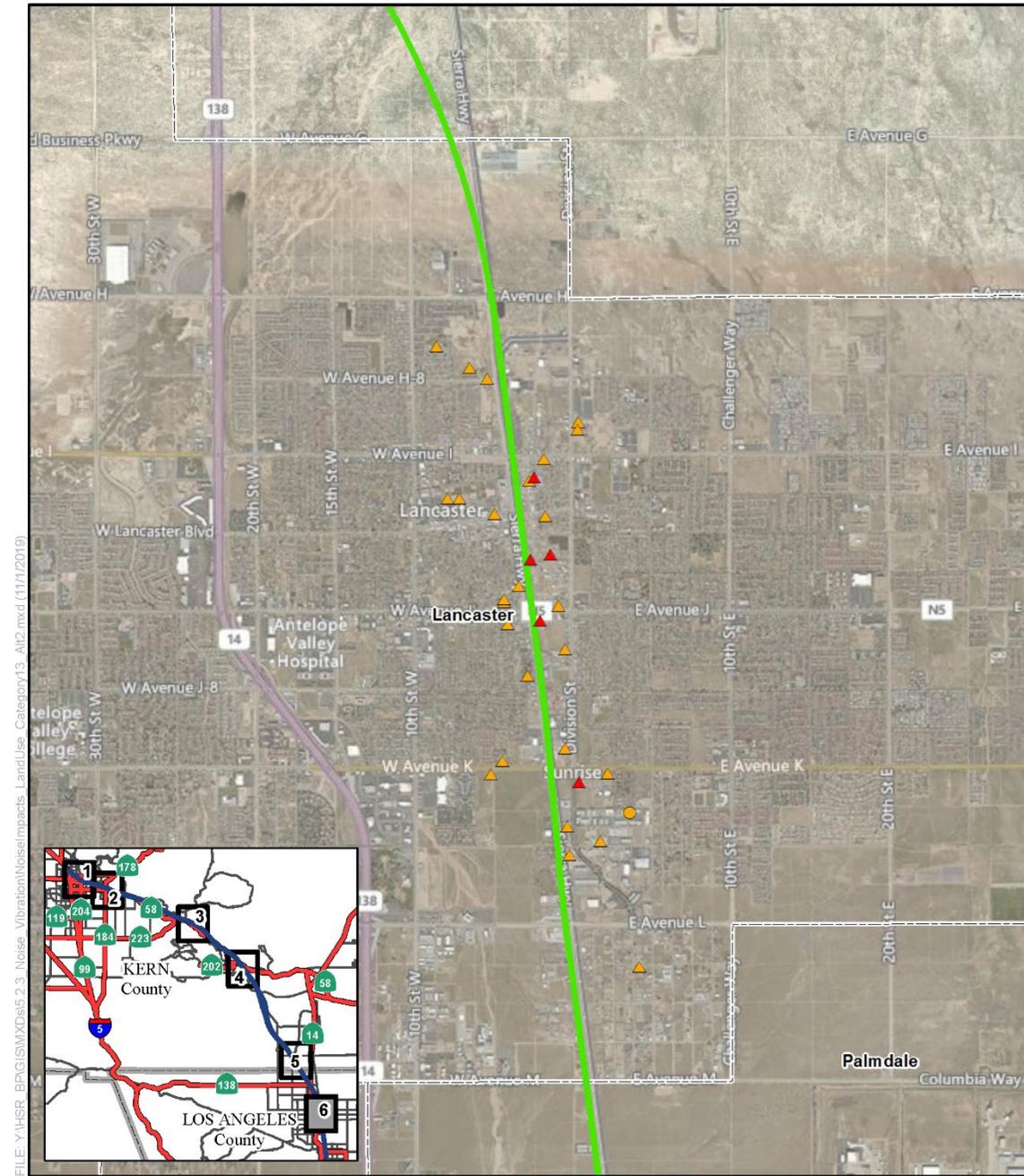


FILE: Y:\HSR\_BP\GIS\MXD\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category13\_Alt2.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

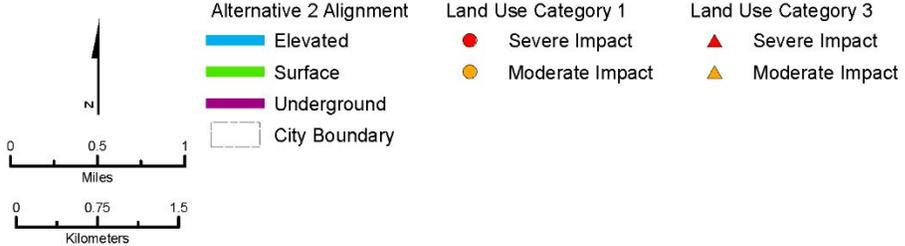


**Figure 3.4-A-7 Land Use Categories 1 and 3 Noise Impacts—Alternative 2**  
 (Sheet 5 of 7)

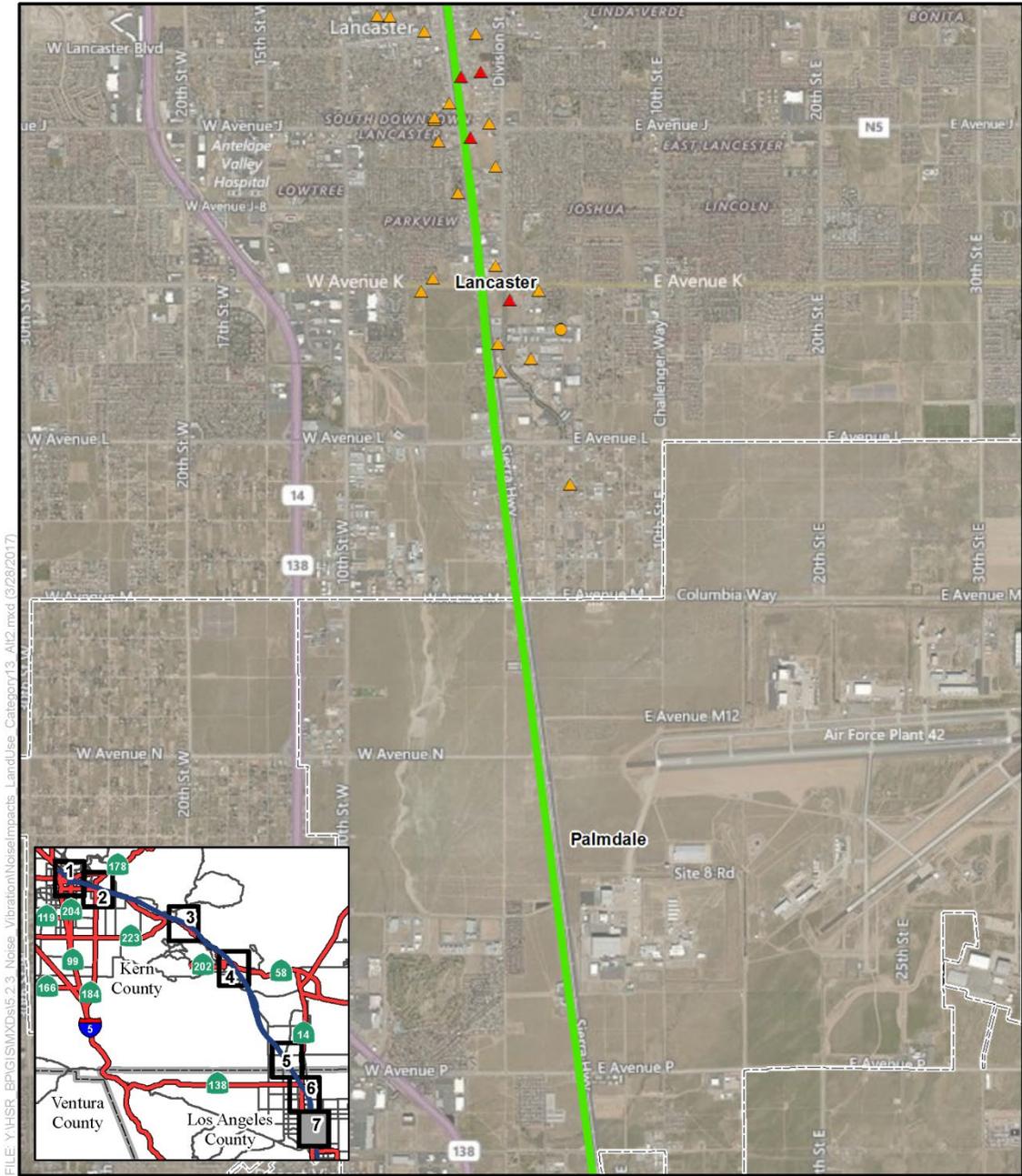


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3.Noise\_Vibration\NoiseImpacts\_LandUse\_Category13\_Alt2.mxd (11/1/2019)

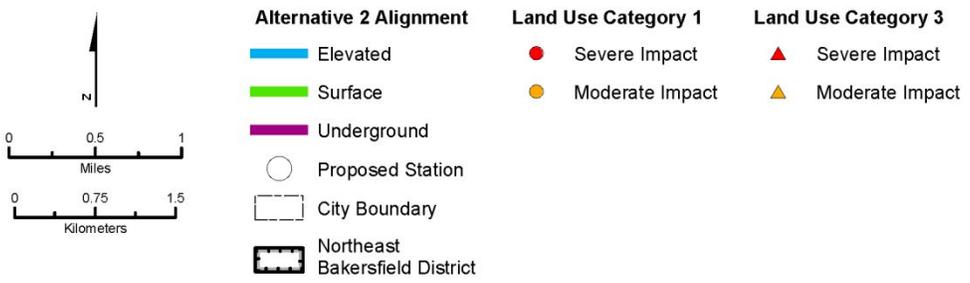
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



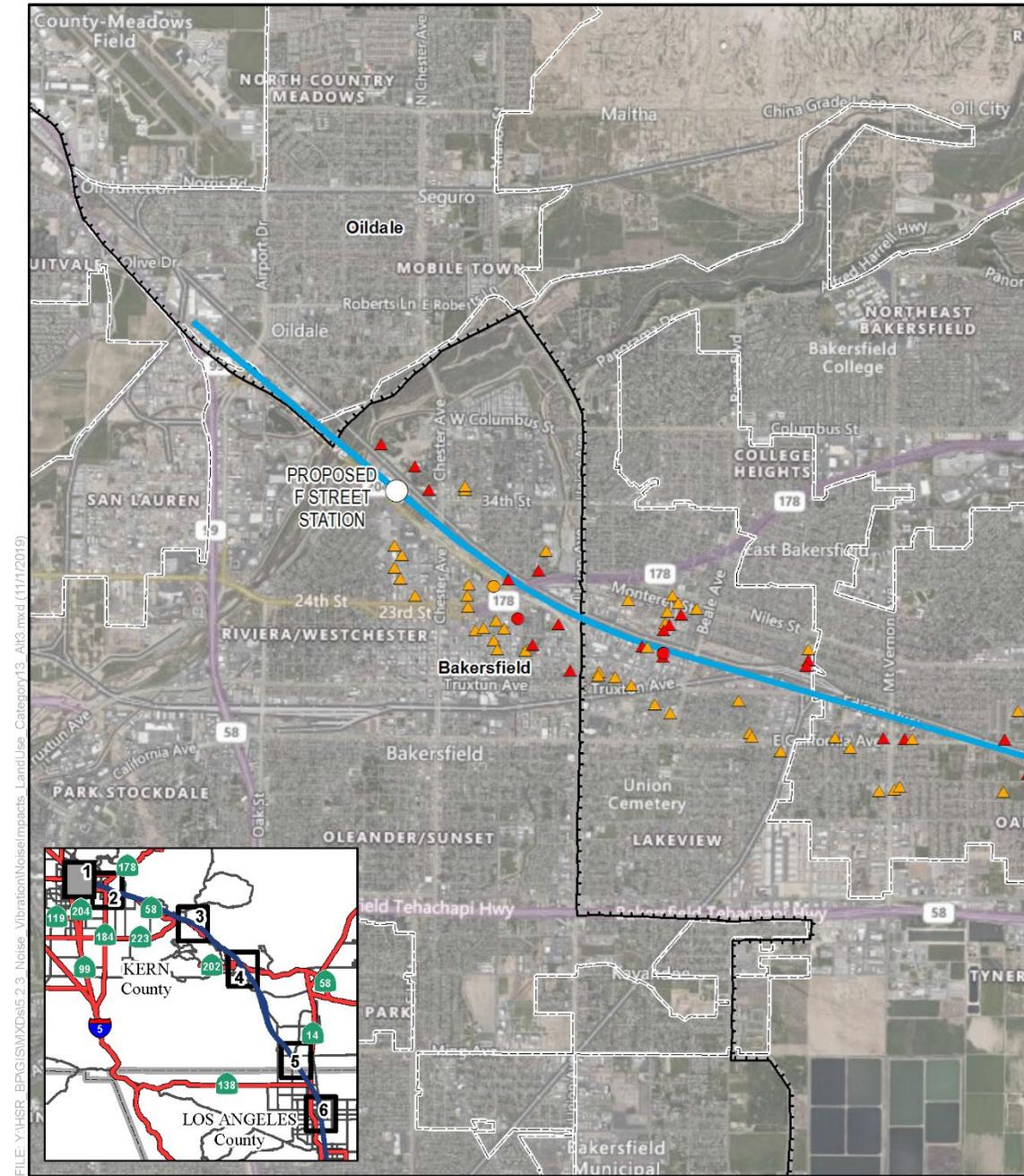
**Figure 3.4-A-7 Land Use Categories 1 and 3 Noise Impacts—Alternative 2**  
 (Sheet 6 of 7)



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016)

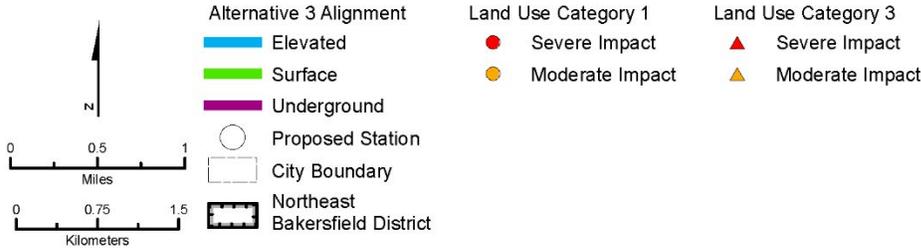


**Figure 3.4-A-7 Land Use Categories 1 and 3 Noise Impacts—Alternative 2**  
 (Sheet 7 of 7)

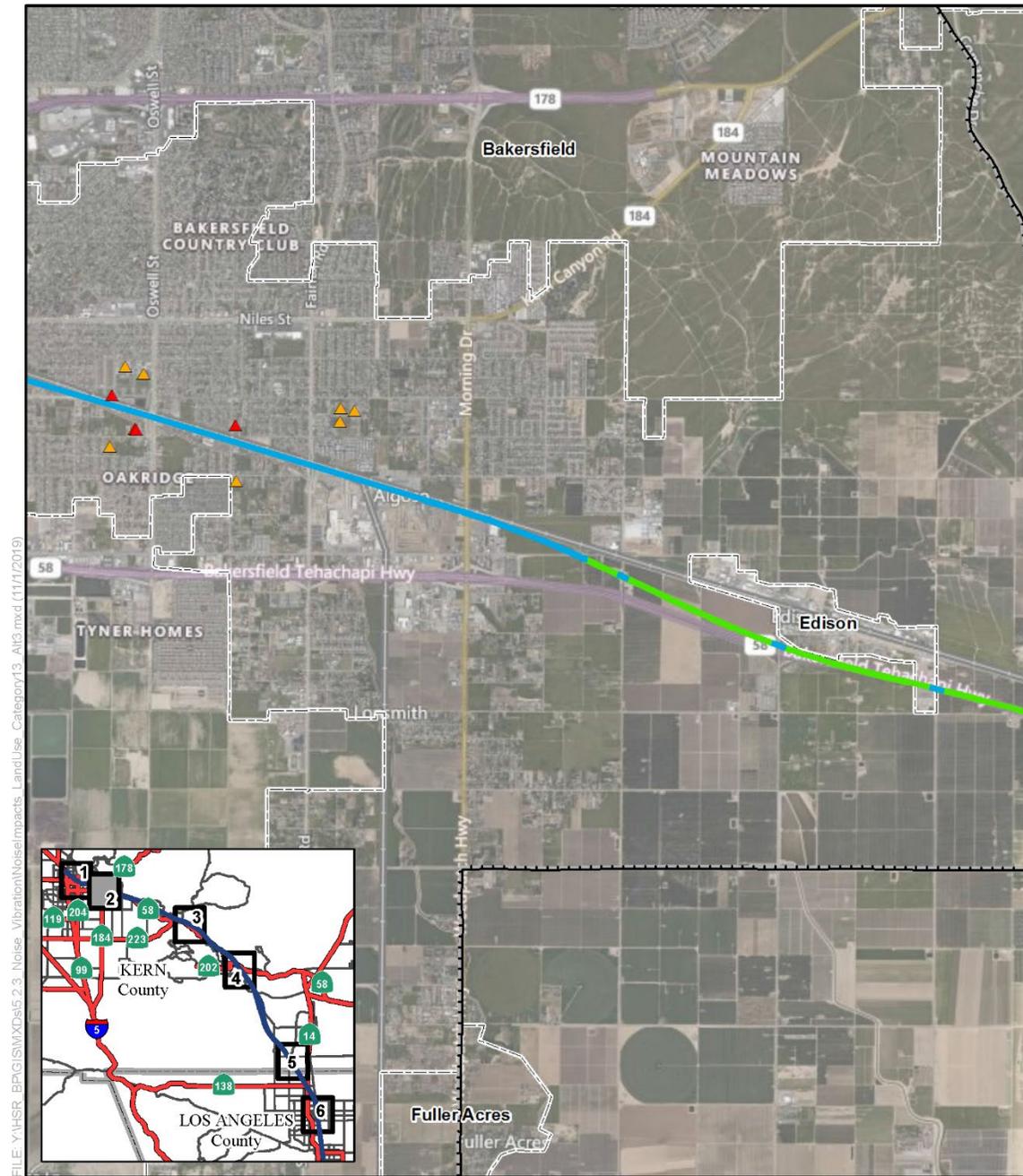


FILE: Y:\HSR\_BP\GIS\WXD\S5 2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category13\_Alt3.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

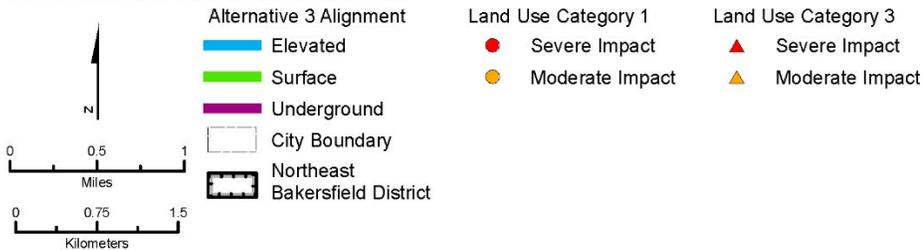


**Figure 3.4-A-8 Land Use Categories 1 and 3 Noise Impacts—Alternative 3**  
 (Sheet 1 of 7)

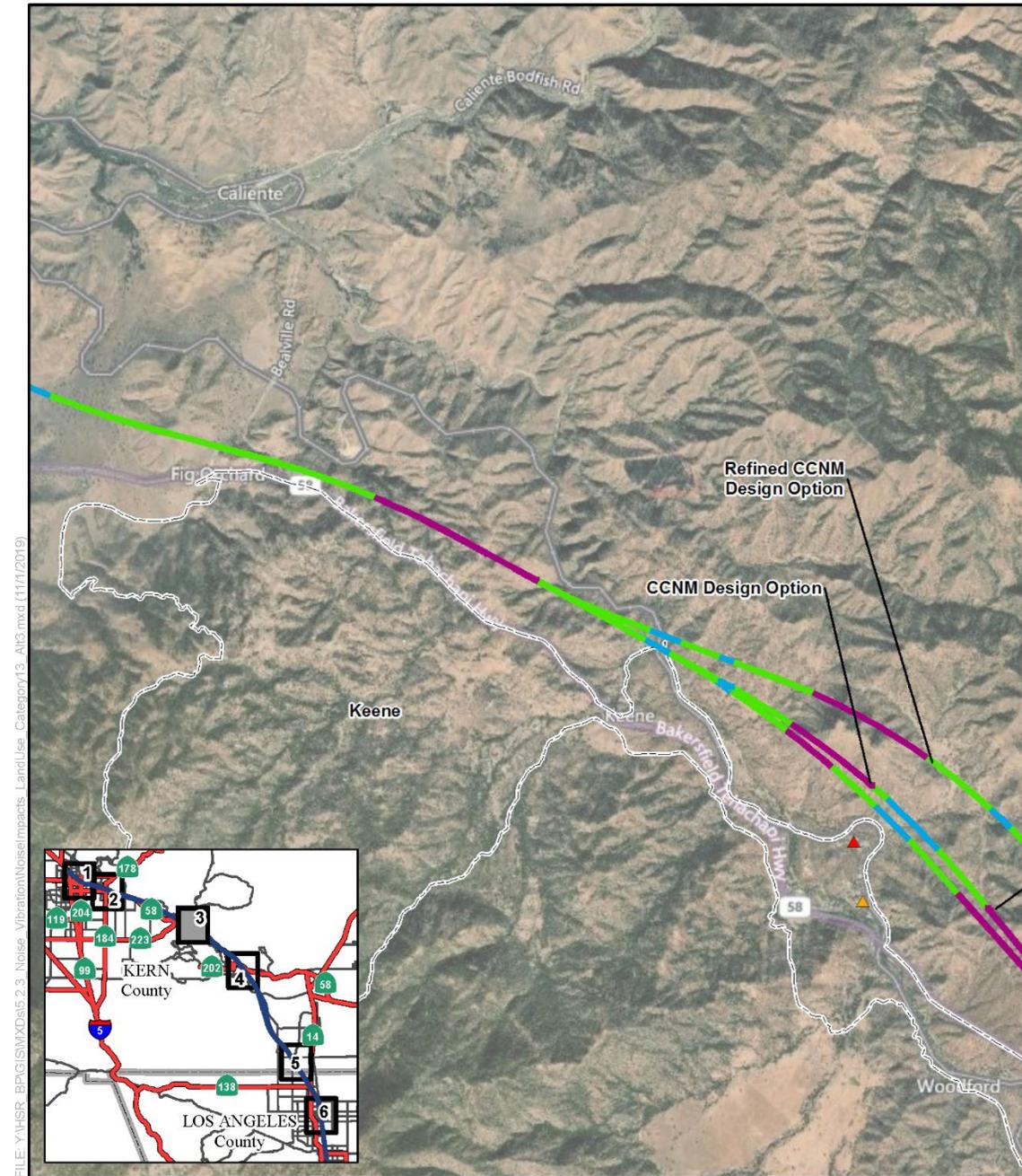


FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category13\_Alt3.mxd (11/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

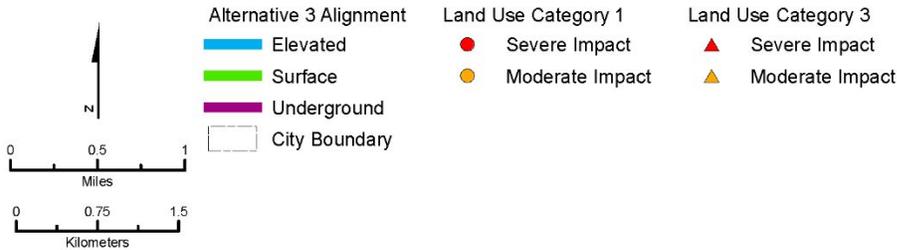


**Figure 3.4-A-8 Land Use Categories 1 and 3 Noise Impacts—Alternative 3**  
 (Sheet 2 of 7)

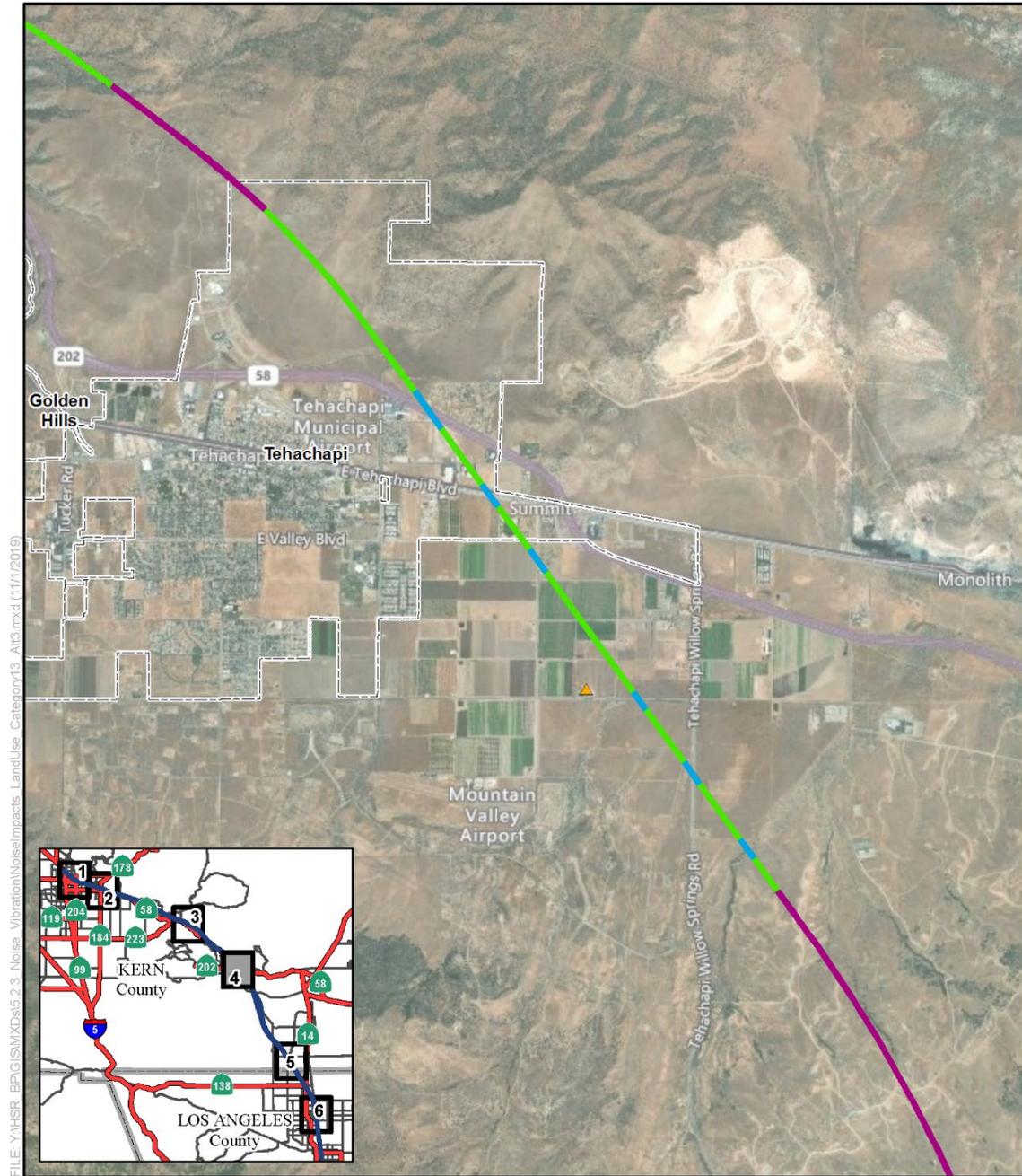


FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category13\_Alt3.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-8 Land Use Categories 1 and 3 Noise Impacts—Alternative 3**  
 (Sheet 3 of 7)

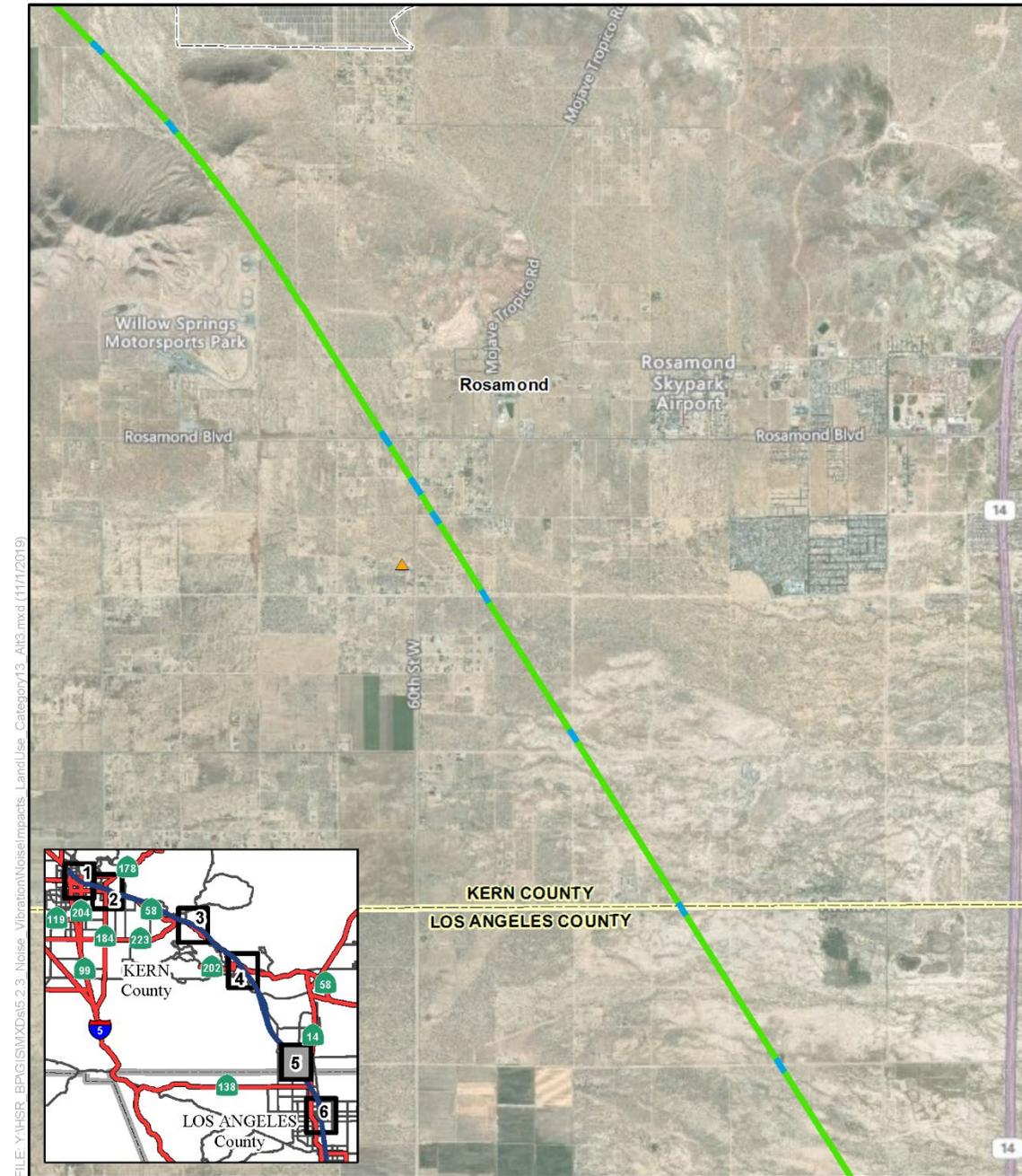


FILE: Y:\HSR\_BP\GIS\MXD\5 2 3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category13\_Alt3.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

  	<b>Alternative 3 Alignment</b> Elevated Surface Underground City Boundary	<b>Land Use Category 1</b> Severe Impact Moderate Impact	<b>Land Use Category 3</b> Severe Impact Moderate Impact
----------	---	--	--

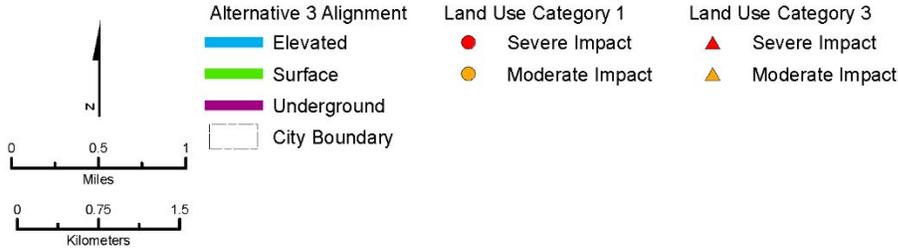
**Figure 3.4-A-8 Land Use Categories 1 and 3 Noise Impacts—Alternative 3**  
 (Sheet 4 of 7)



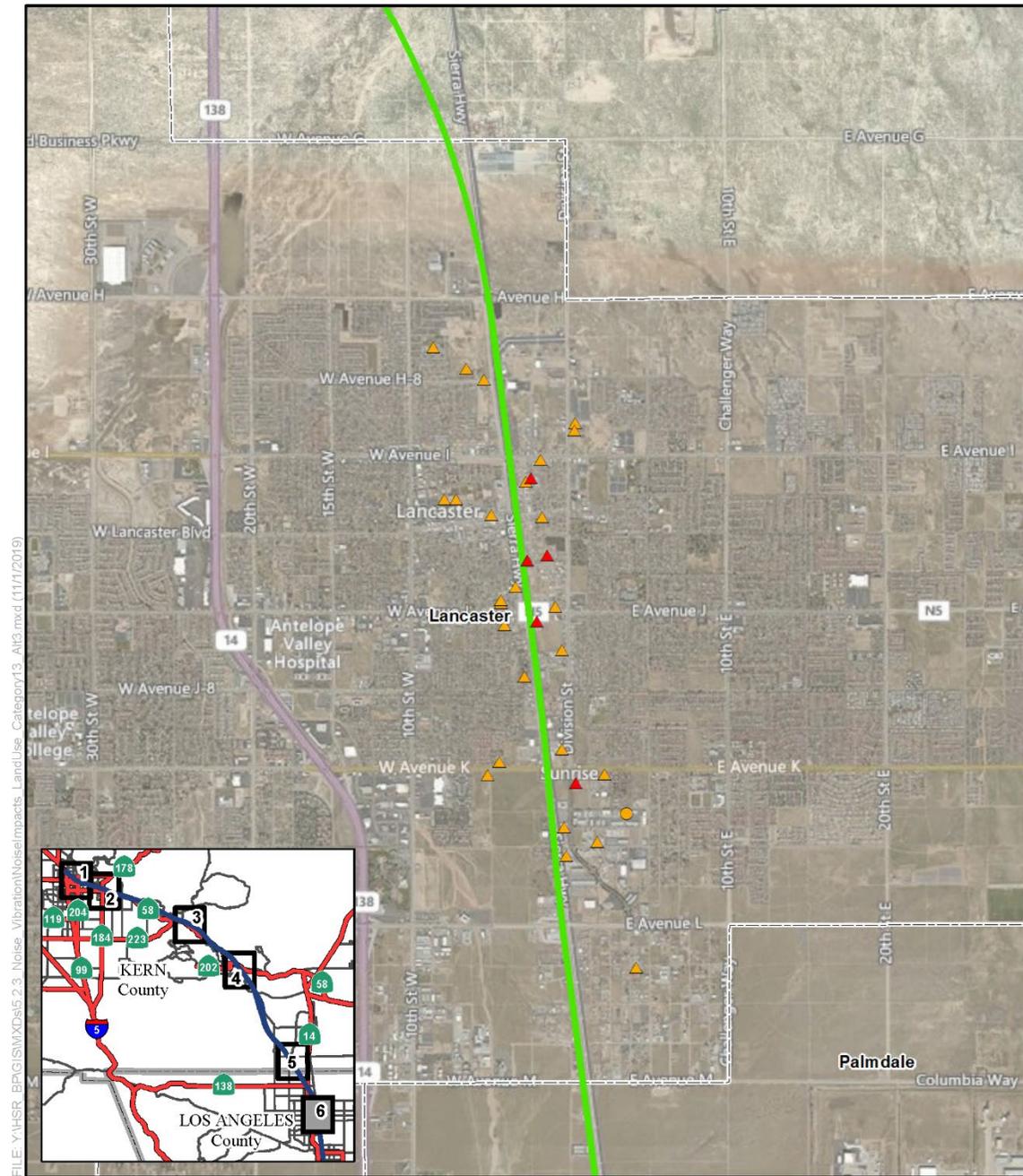
FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category13\_Alt3.mxd (11/1/2019)



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

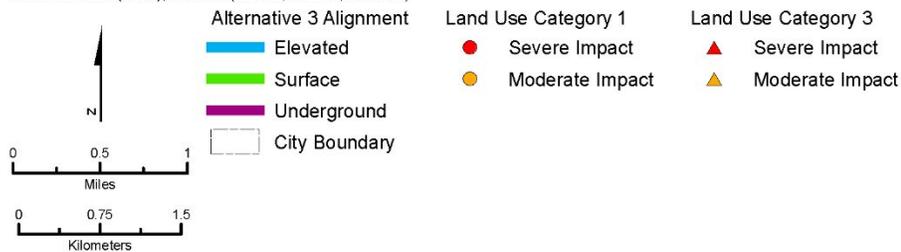


**Figure 3.4-A-8 Land Use Categories 1 and 3 Noise Impacts—Alternative 3**  
 (Sheet 5 of 7)

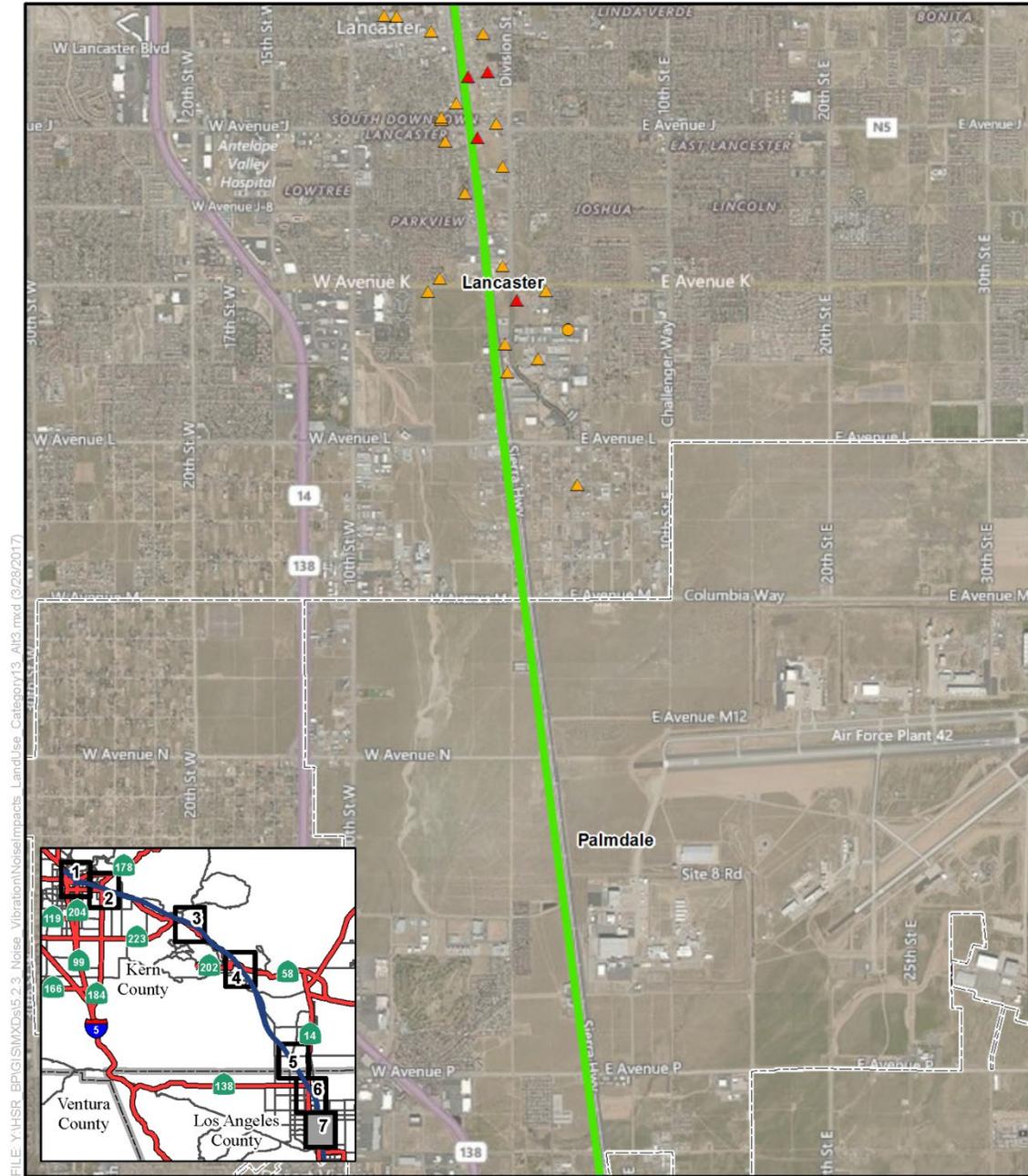


FILE: Y:\HSR\_BP\GIS\WXD\5.2.3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category\13\_Alt3.mxd (11/1/2019)

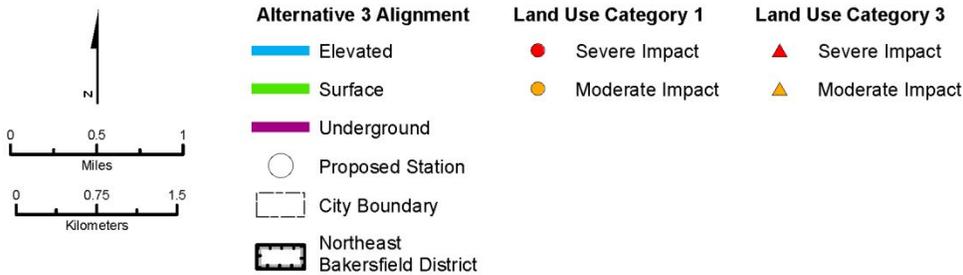
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



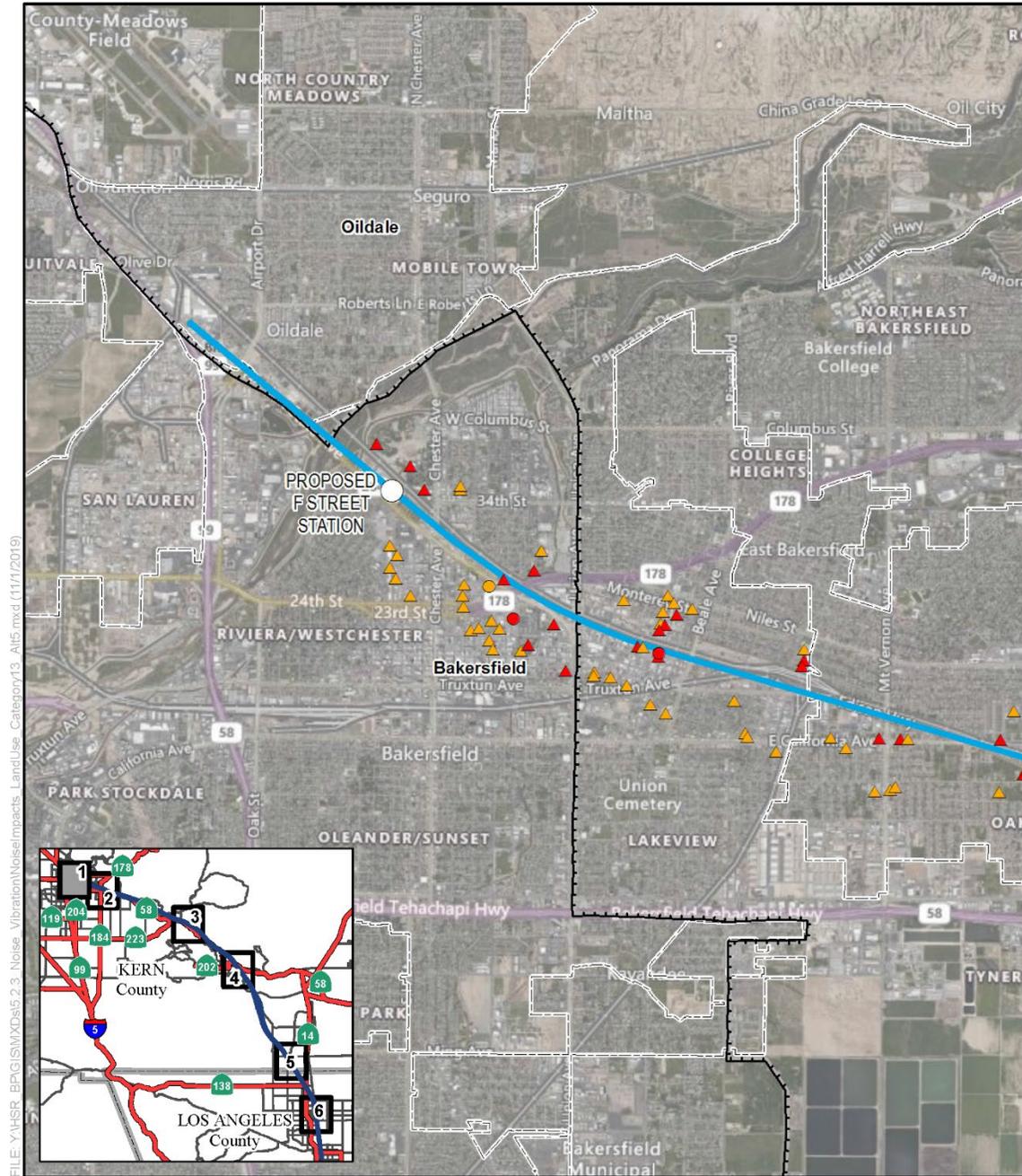
**Figure 3.4-A-8 Land Use Categories 1 and 3 Noise Impacts—Alternative 3**  
 (Sheet 6 of 7)



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016)



**Figure 3.4-A-8 Land Use Categories 1 and 3 Noise Impacts—Alternative 3**  
 (Sheet 7 of 7)

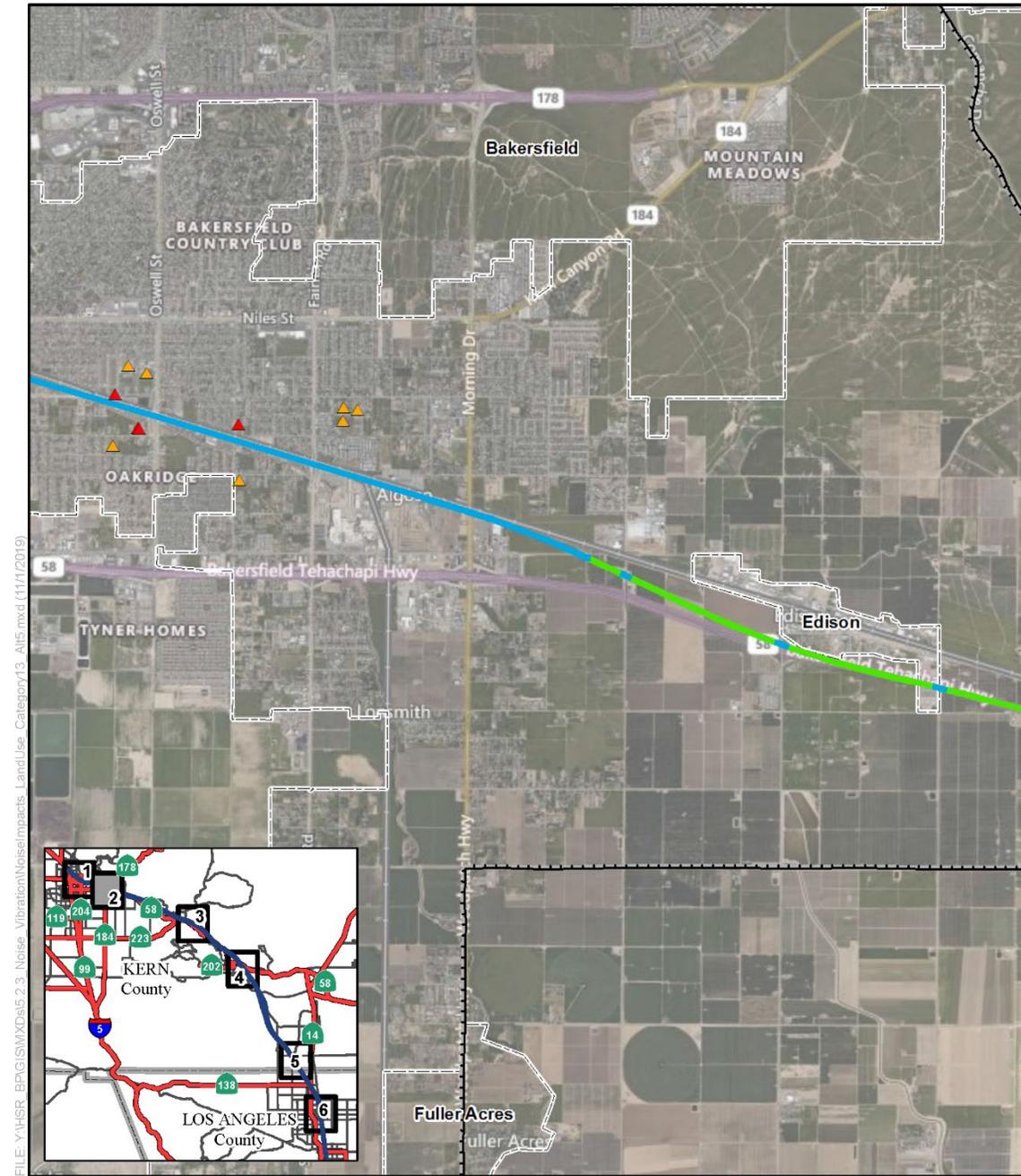


FILE: Y:\HSR\_BP\GIS\MapDocs\5.2.3.Noise.Vibration\NoiseImpacts\_LandUse\_Category13\_Alt5.mxd (11/11/2019)

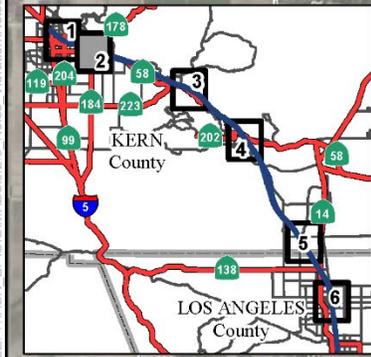
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

  	<b>Alternative 5 Alignment</b> Elevated Surface Underground Proposed Station City Boundary Northeast Bakersfield District	<b>Land Use Category 1</b> Severe Impact Moderate Impact	<b>Land Use Category 3</b> Severe Impact Moderate Impact
----------	---	--	--

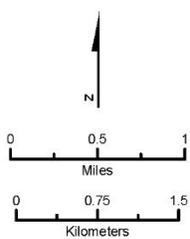
**Figure 3.4-A-9 Land Use Categories 1 and 3 Noise Impacts—Alternative 5**  
 (Sheet 1 of 7)



FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3.Noise\_Vibration\NoiseImpacts\_LandUse\_Category13\_Alt5.mxd (11/1/2019)

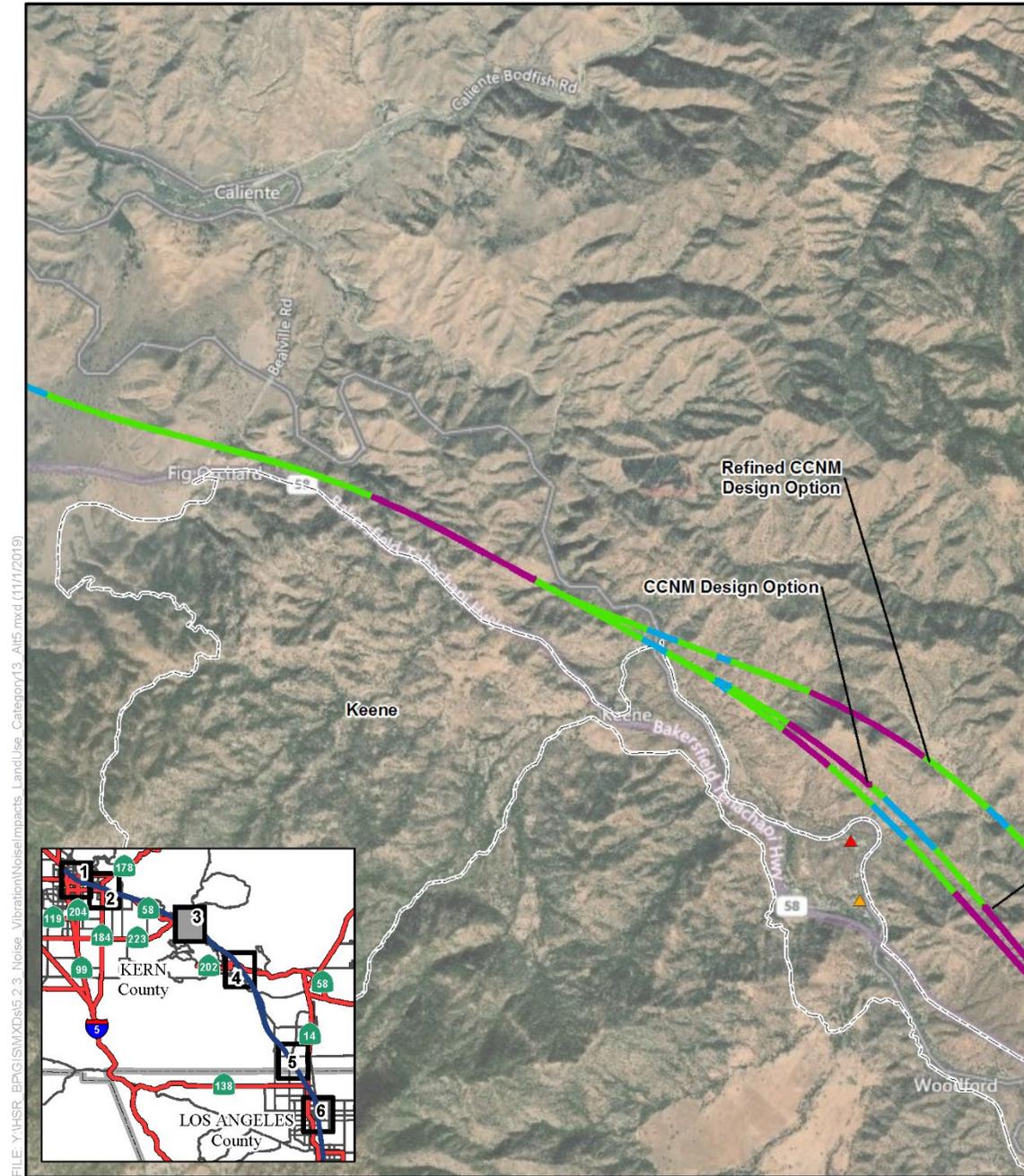


PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



- |   |   |   |
|---|---|---|
| <b>Alternative 5 Alignment</b>  | <b>Land Use Category 1</b>                            | <b>Land Use Category 3</b>                            |
| <span style="color: blue;">—</span> Elevated  | <span style="color: red;">●</span> Severe Impact      | <span style="color: red;">▲</span> Severe Impact      |
| <span style="color: green;">—</span> Surface  | <span style="color: yellow;">●</span> Moderate Impact | <span style="color: yellow;">▲</span> Moderate Impact |
| <span style="color: purple;">—</span> Underground   |   |   |
| <span style="border: 1px dashed black; display: inline-block; width: 10px; height: 10px;"></span> City Boundary                 |   |   |
| <span style="border: 2px solid black; display: inline-block; width: 10px; height: 10px;"></span> Northeast Bakersfield District |   |   |

**Figure 3.4-A-9 Land Use Categories 1 and 3 Noise Impacts—Alternative 5**  
 (Sheet 2 of 7)

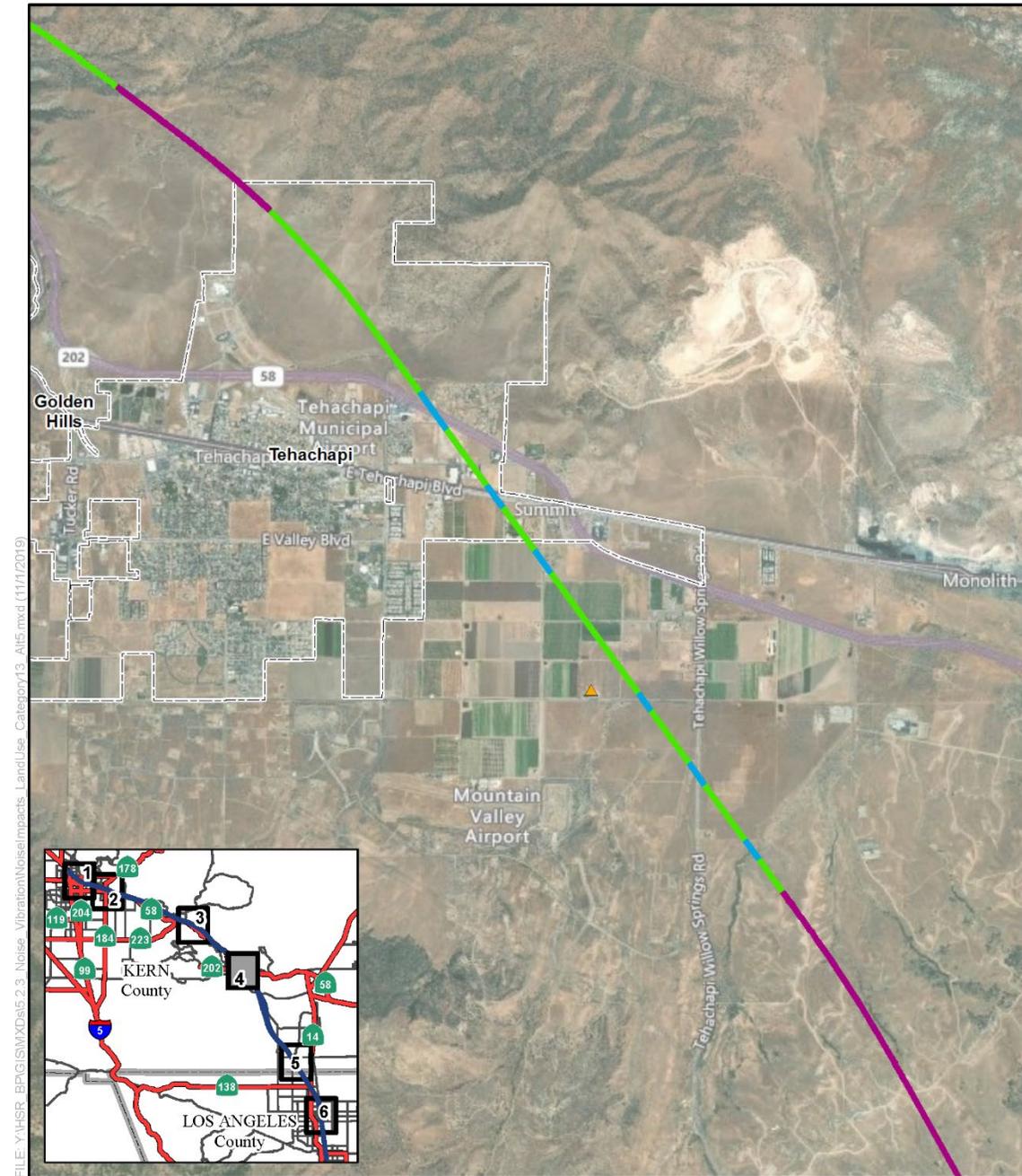


FILE: Y:\HSR\_BP\GIS\MXD\5 2 3\_Noise\_Vibration\Noise\Impacts\_LandUse\_Category\13\_Alt5.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

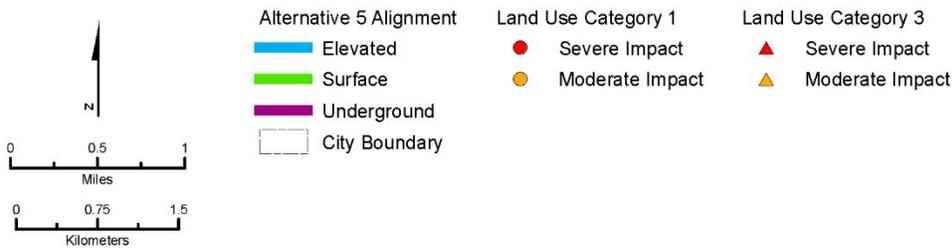
  	<b>Alternative 5 Alignment</b> Elevated Surface Underground City Boundary	<b>Land Use Category 1</b> Severe Impact Moderate Impact	<b>Land Use Category 3</b> Severe Impact Moderate Impact
----------	---	--	--

**Figure 3.4-A-9 Land Use Categories 1 and 3 Noise Impacts—Alternative 5**  
 (Sheet 3 of 7)

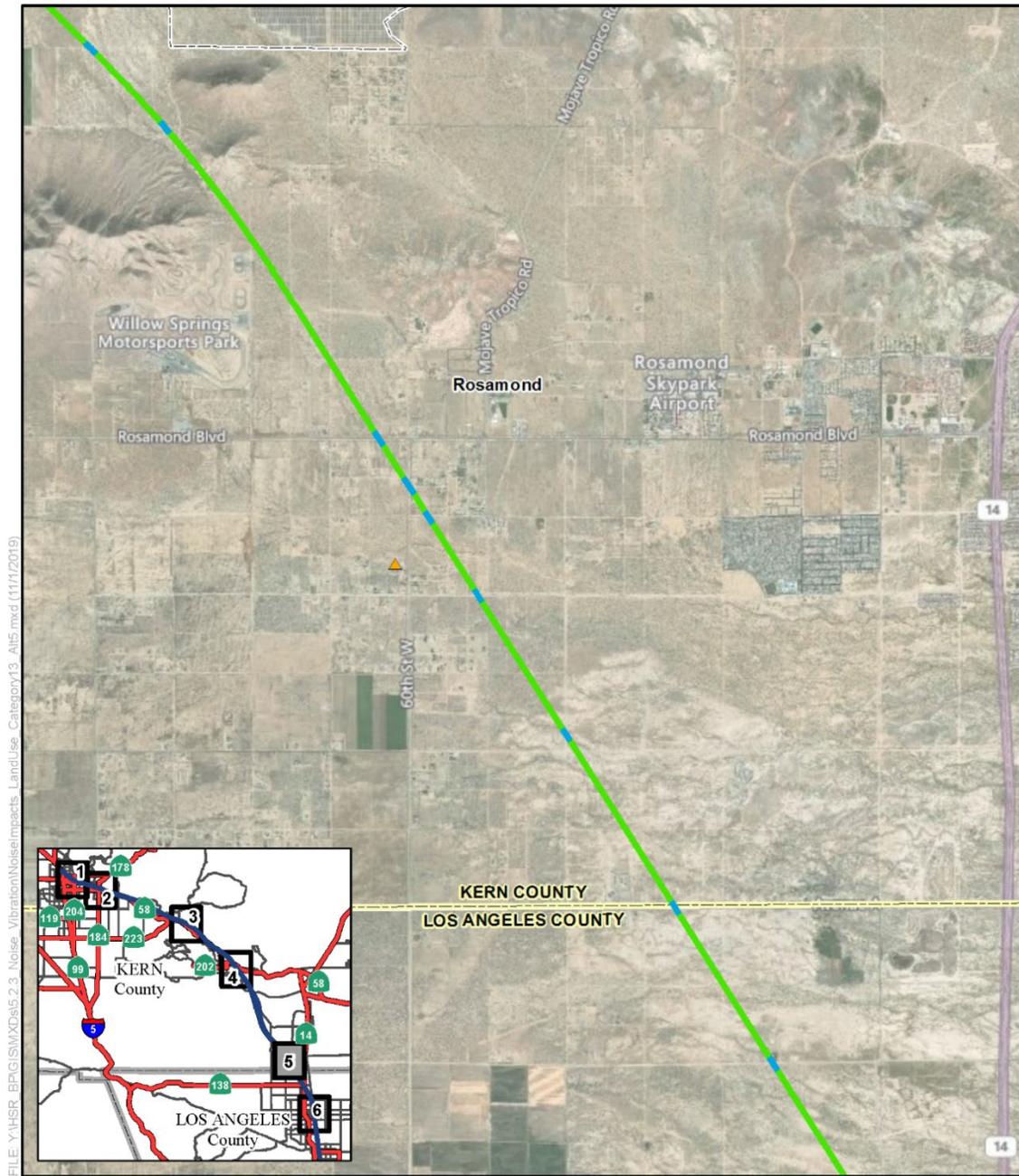


FILE: Y:\HSR\_BP\GIS\WXD\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category13\_Alt5.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



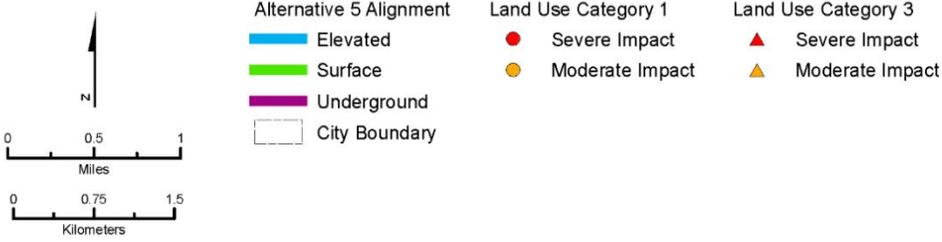
**Figure 3.4-A-9 Land Use Categories 1 and 3 Noise Impacts—Alternative 5**  
 (Sheet 4 of 7)



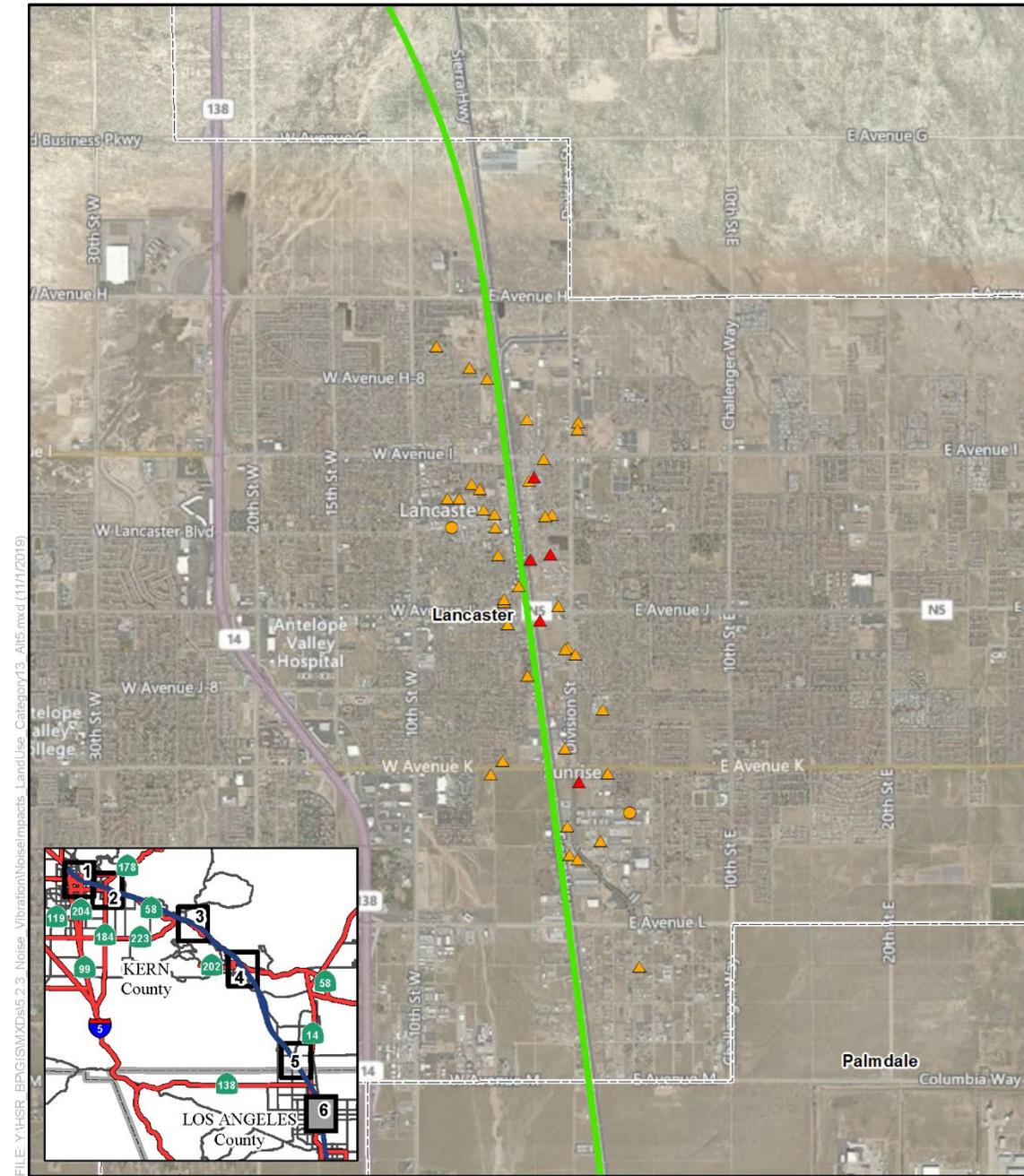
FILE: Y:\HSR\_BPG\GISMXD\d5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Category13\_Alt5.mxd (11/17/2019)



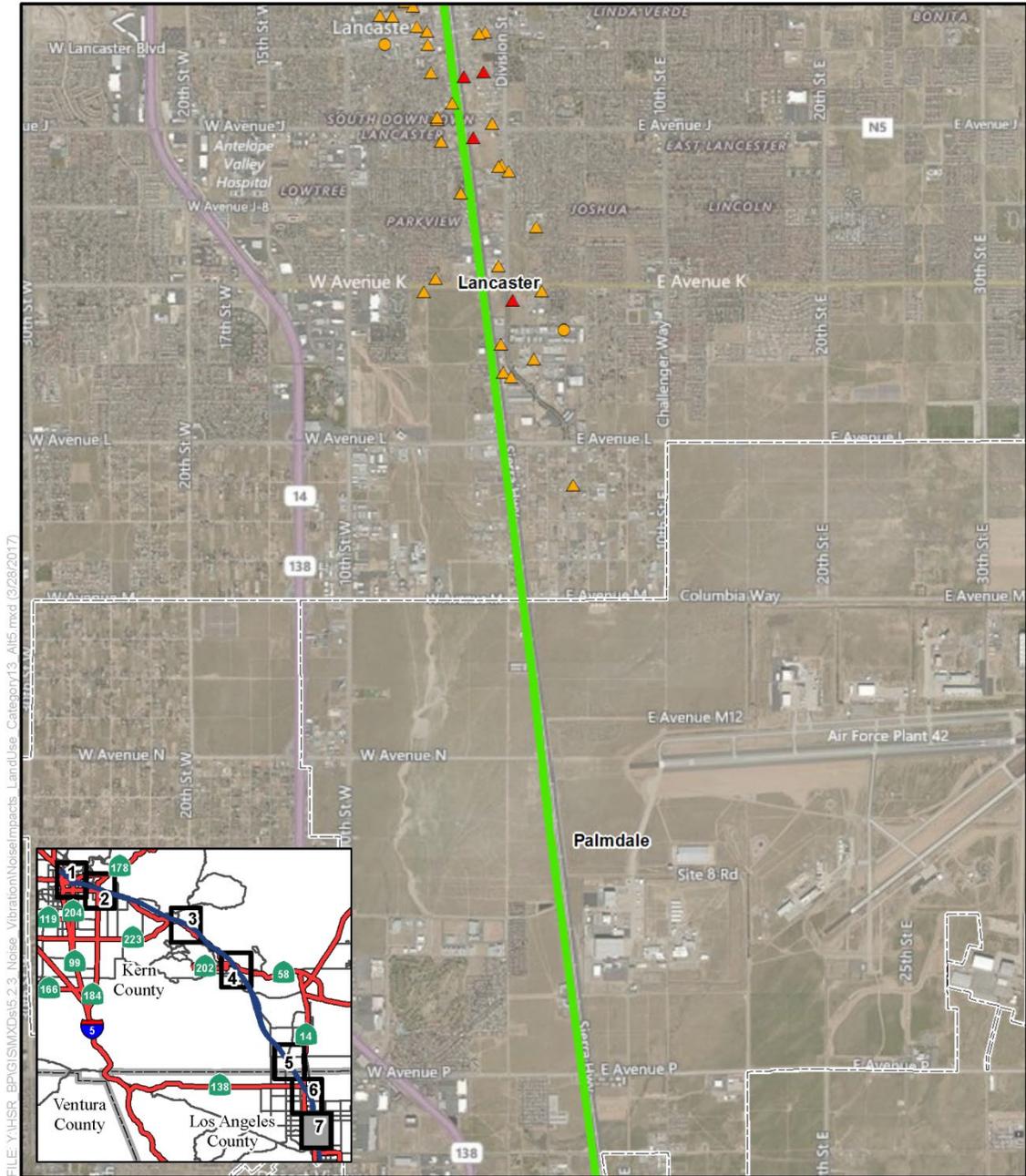
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-9 Land Use Categories 1 and 3 Noise Impacts—Alternative 5**  
 (Sheet 5 of 7)

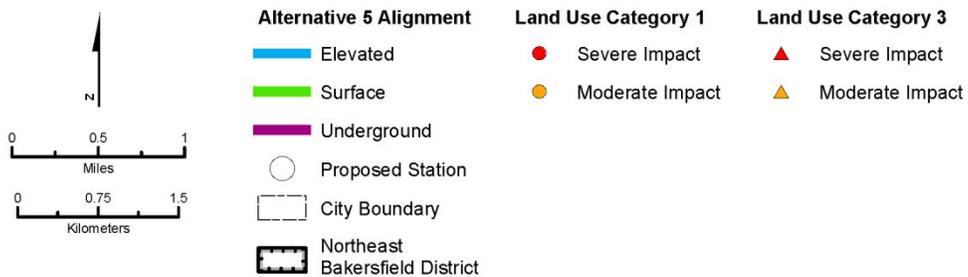


**Figure 3.4-A-9 Land Use Categories 1 and 3 Noise Impacts—Alternative 5**  
(Sheet 6 of 7)

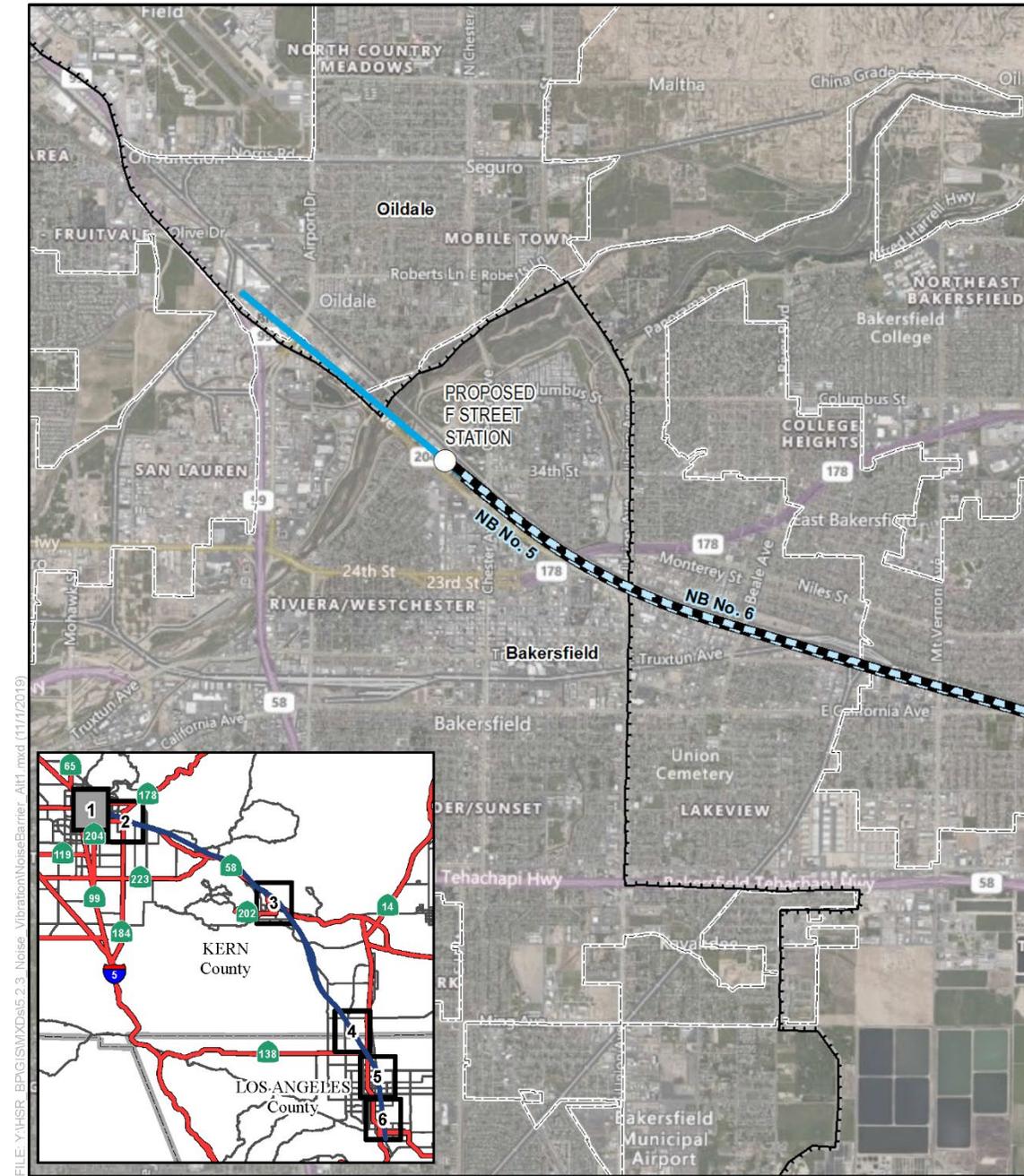


FILE: Y:\HSR\_BP\GIS\MXD\5.2.3\_Noise\_Vibration\NoiseImpacts\_LandUse\_Catagor13\_A15.mxd (3/28/2017)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
SOURCE: Esri (2015); CHSRA (4/2016)

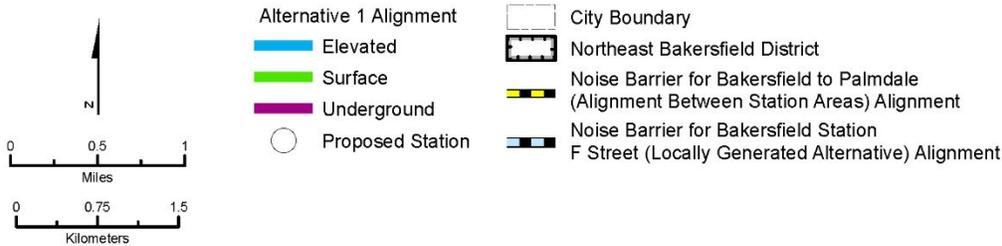


**Figure 3.4-A-9 Land Use Categories 1 and 3 Noise Impacts—Alternative 5**  
(Sheet 7 of 7)

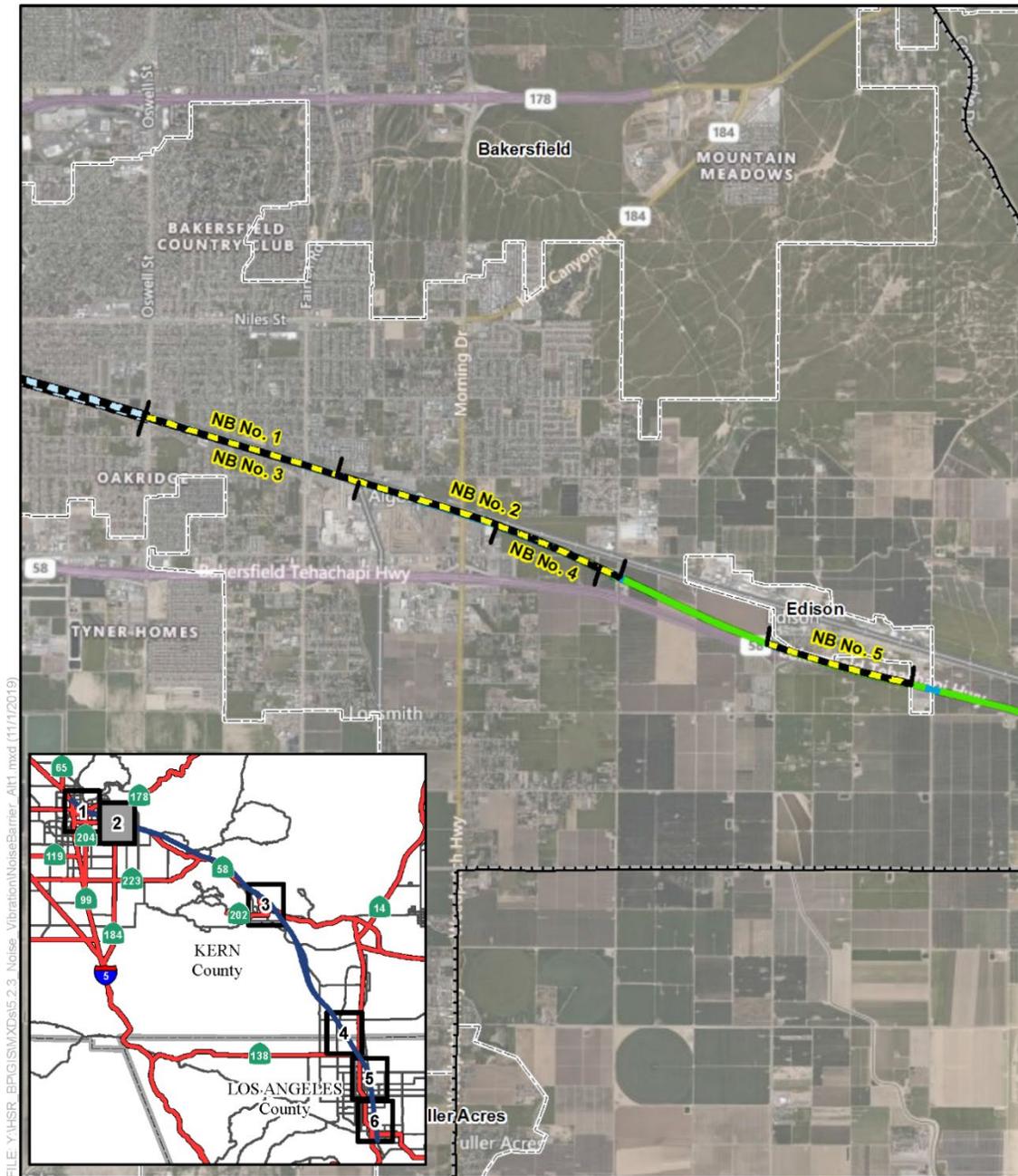


FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3.Noise.Vibration\NoiseBarrier\_Alt1.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-10 Noise Barrier—Alternative 1**  
 (Sheet 1 of 6)

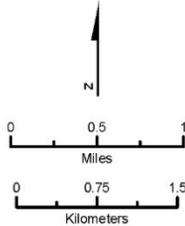


FILE: Y:\HSR\_BPG\GISMXD\5.2.3\_Noise\_Vibration\NoiseBarrier\_Alt1.mxd (11/17/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

Alternative 1 Alignment  
— Elevated  
— Surface  
— Underground

City Boundary  
 Northeast Bakersfield District  
 Noise Barrier for Bakersfield to Palmdale (Alignment Between Station Areas) Alignment  
 Noise Barrier for Bakersfield Station  
 F Street (Locally Generated Alternative) Alignment

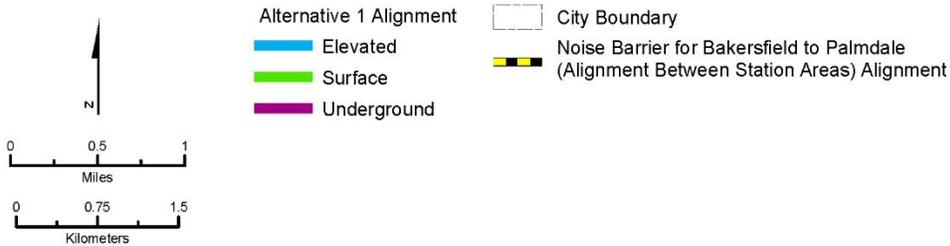


**Figure 3.4-A-10 Noise Barrier—Alternative 1**  
(Sheet 2 of 6)

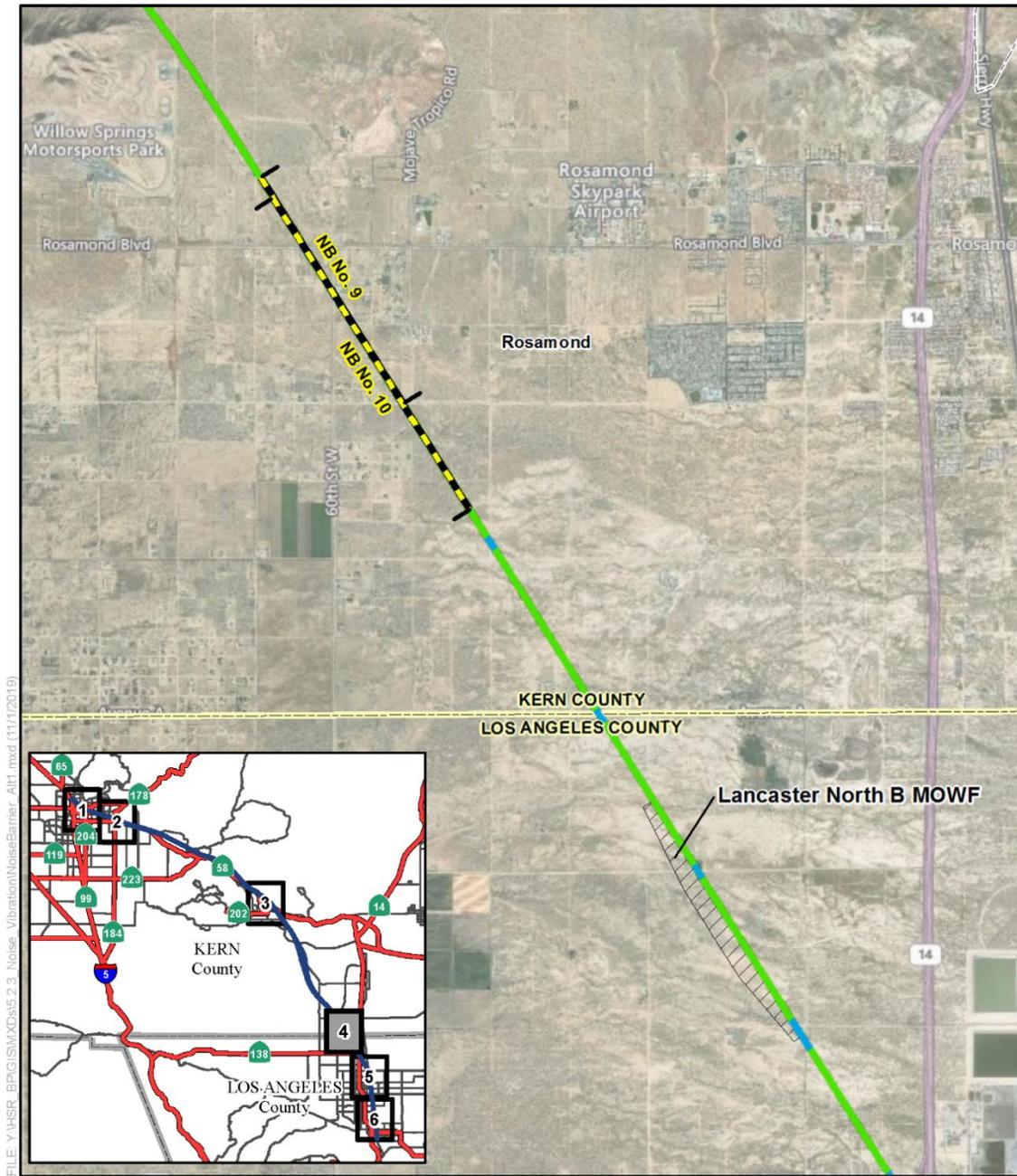


FILE: Y:\HSR\_BP\GIS\WXS\5.2.3\_Noise\_Vibration\NoiseBarrier\_Alt1.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-10 Noise Barrier—Alternative 1**  
 (Sheet 3 of 6)

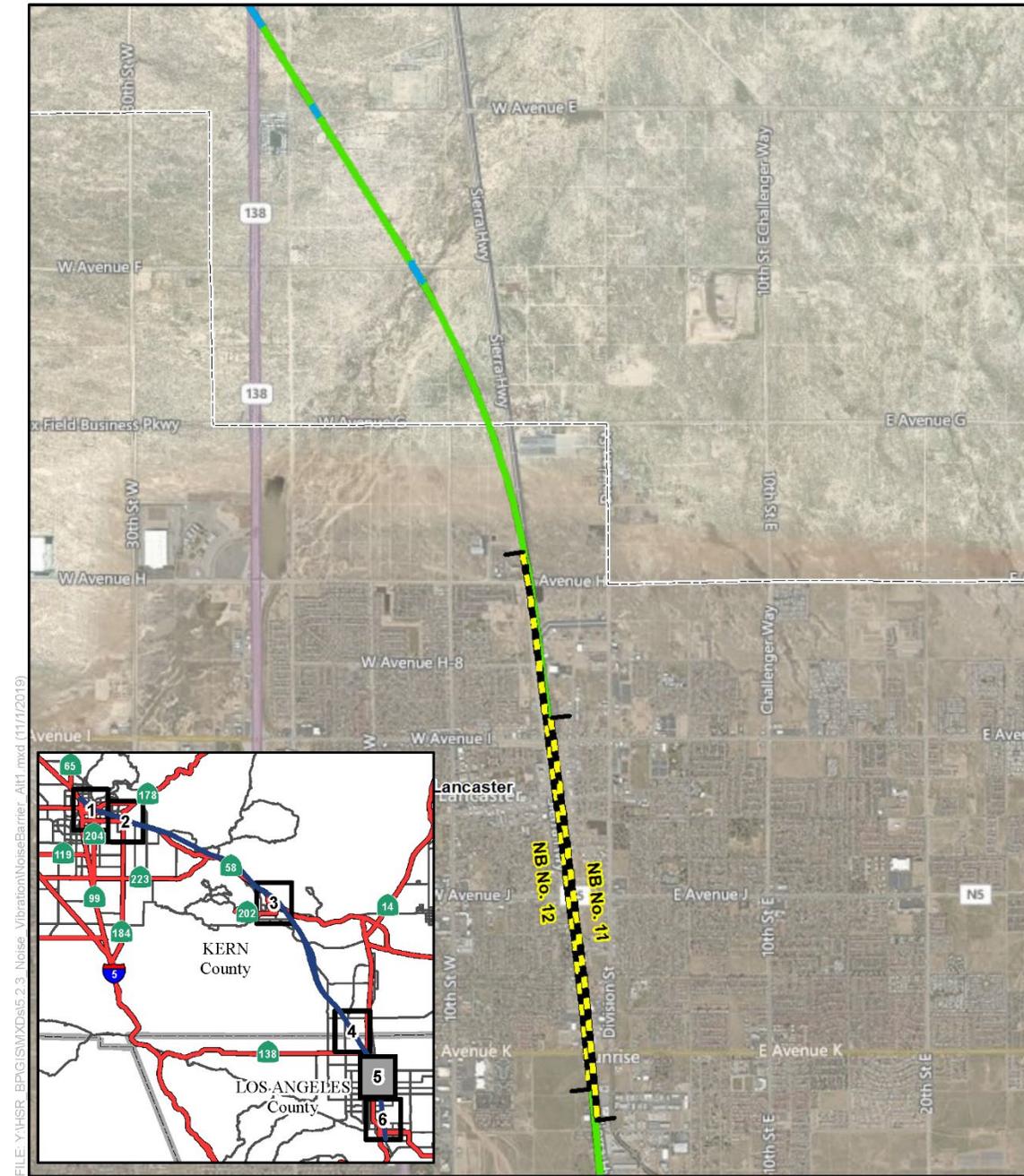


FILE: Y:\HSR\_BPG\GISMXD\5.2.3\_Noise\_Vibration\NoiseBarrier\_Alt1.mxd (11/17/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



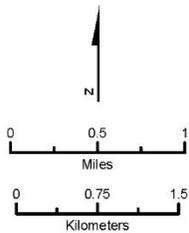
**Figure 3.4-A-10 Noise Barrier—Alternative 1**  
 (Sheet 4 of 6)



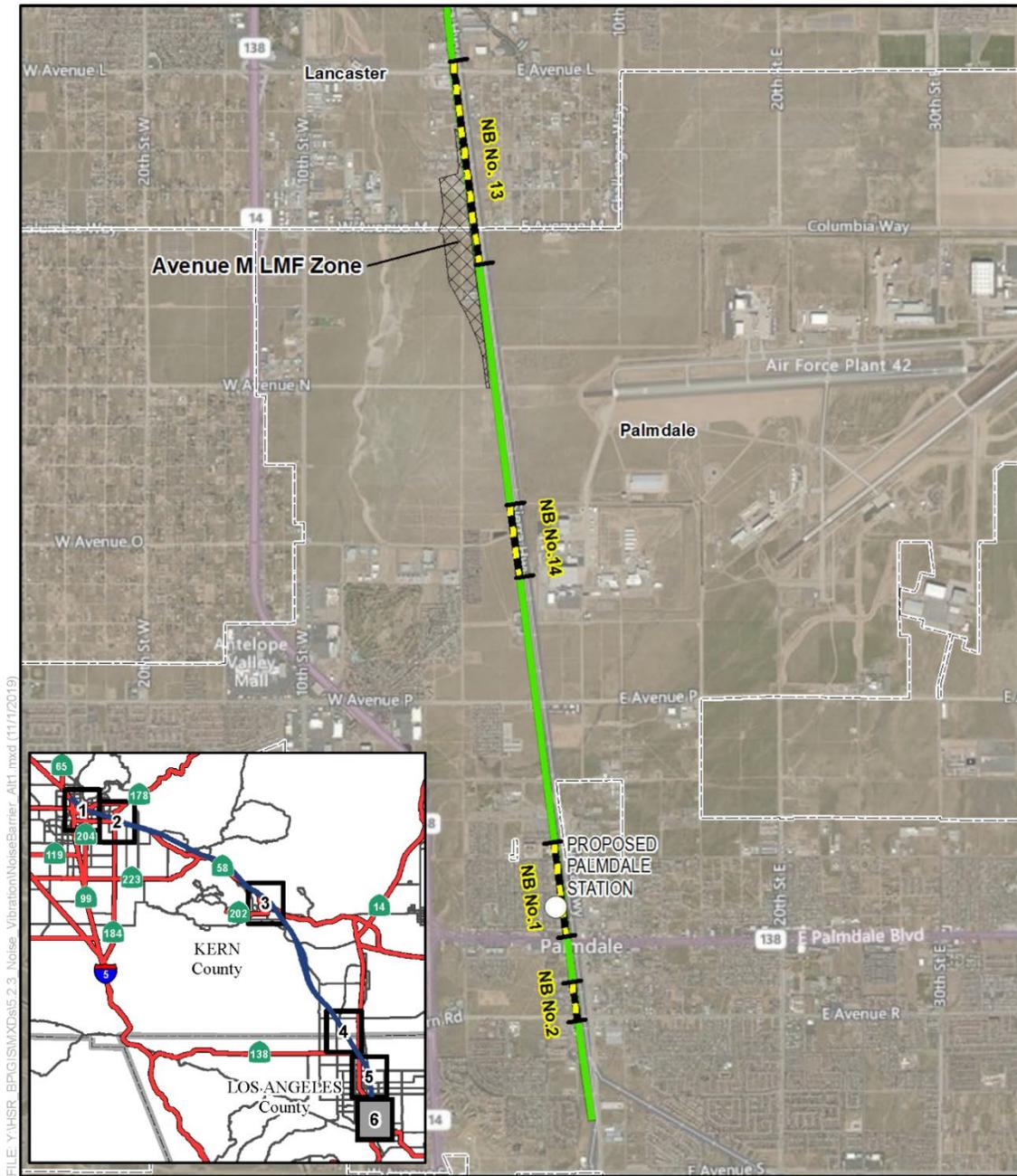
FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3.Noise\_Vibration\NoiseBarrier\_Alt1.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

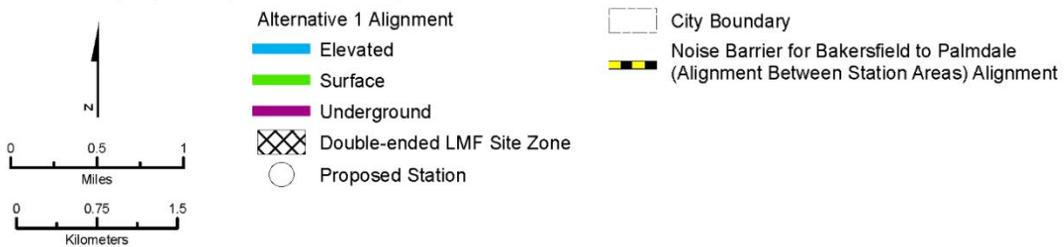
- Alternative 1 Alignment
- █ Elevated
- █ Surface
- █ Underground
- City Boundary
- Noise Barrier for Bakersfield to Palmdale (Alignment Between Station Areas) Alignment



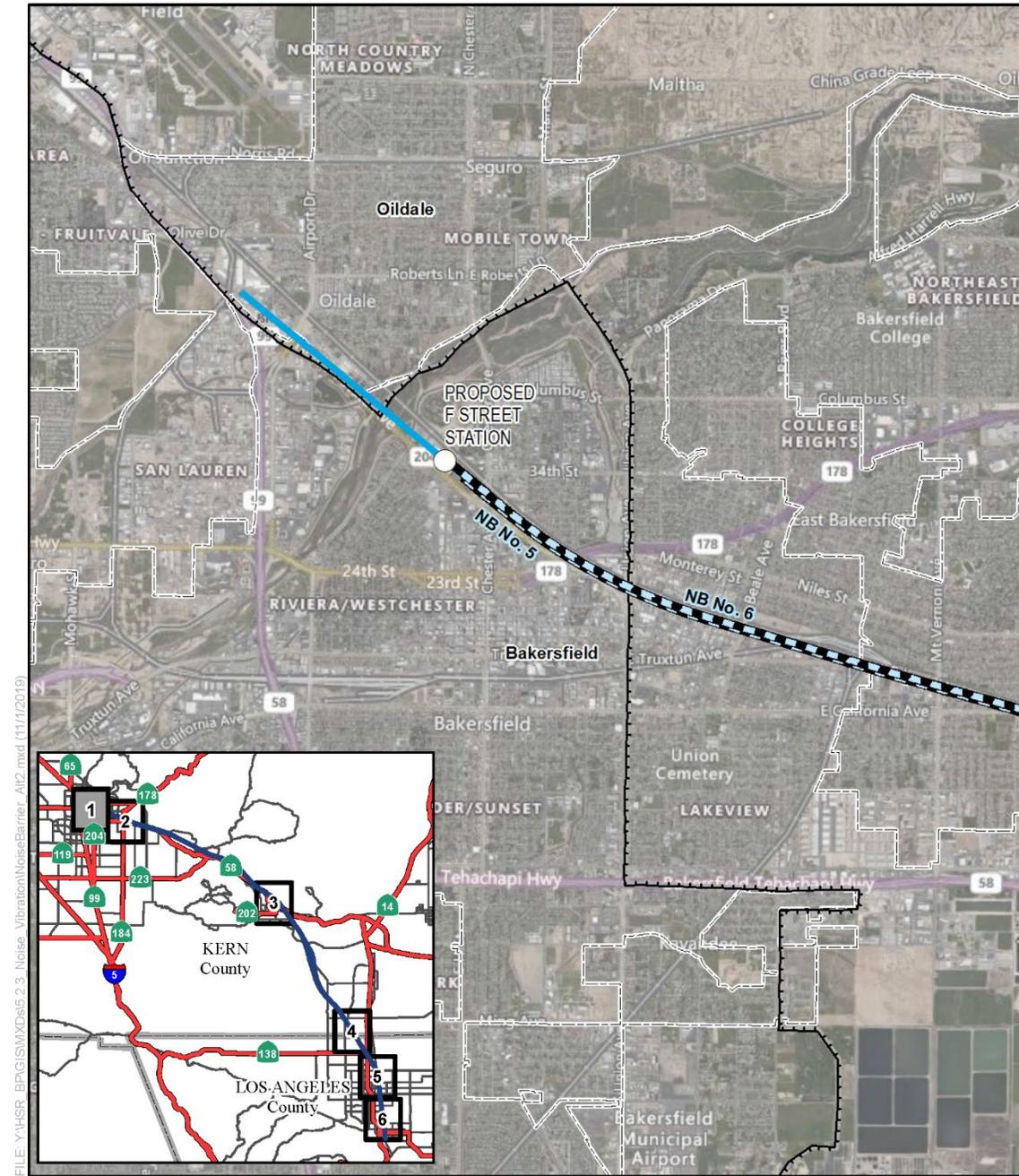
**Figure 3.4-A-10 Noise Barrier—Alternative 1**  
 (Sheet 5 of 6)



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

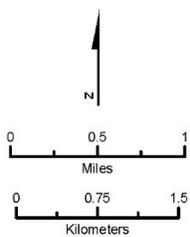


**Figure 3.4-A-10 Noise Barrier—Alternative 1**  
 (Sheet 6 of 6)



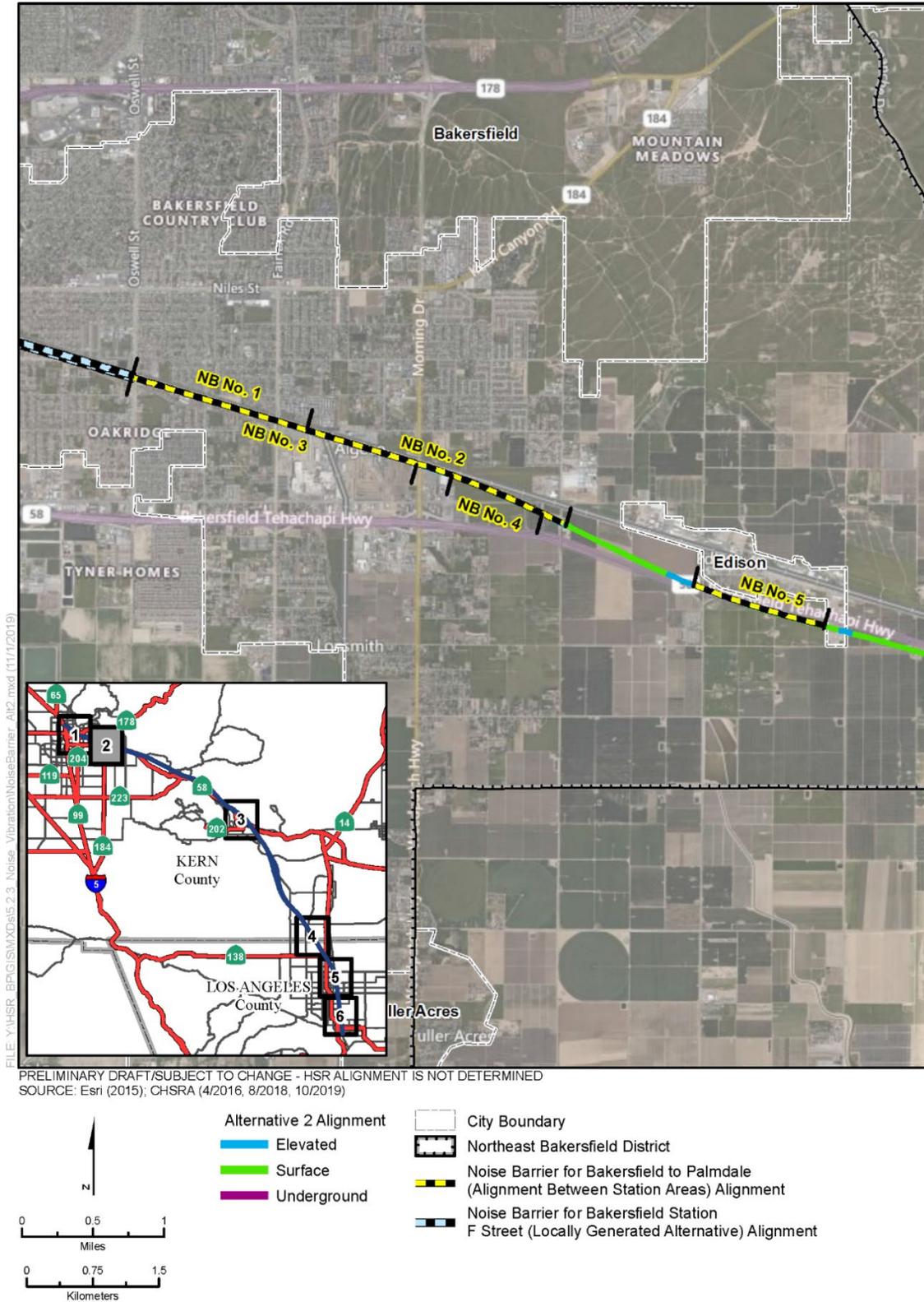
FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3.Noise.Vibration\NoiseBarrier\_Alt2.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

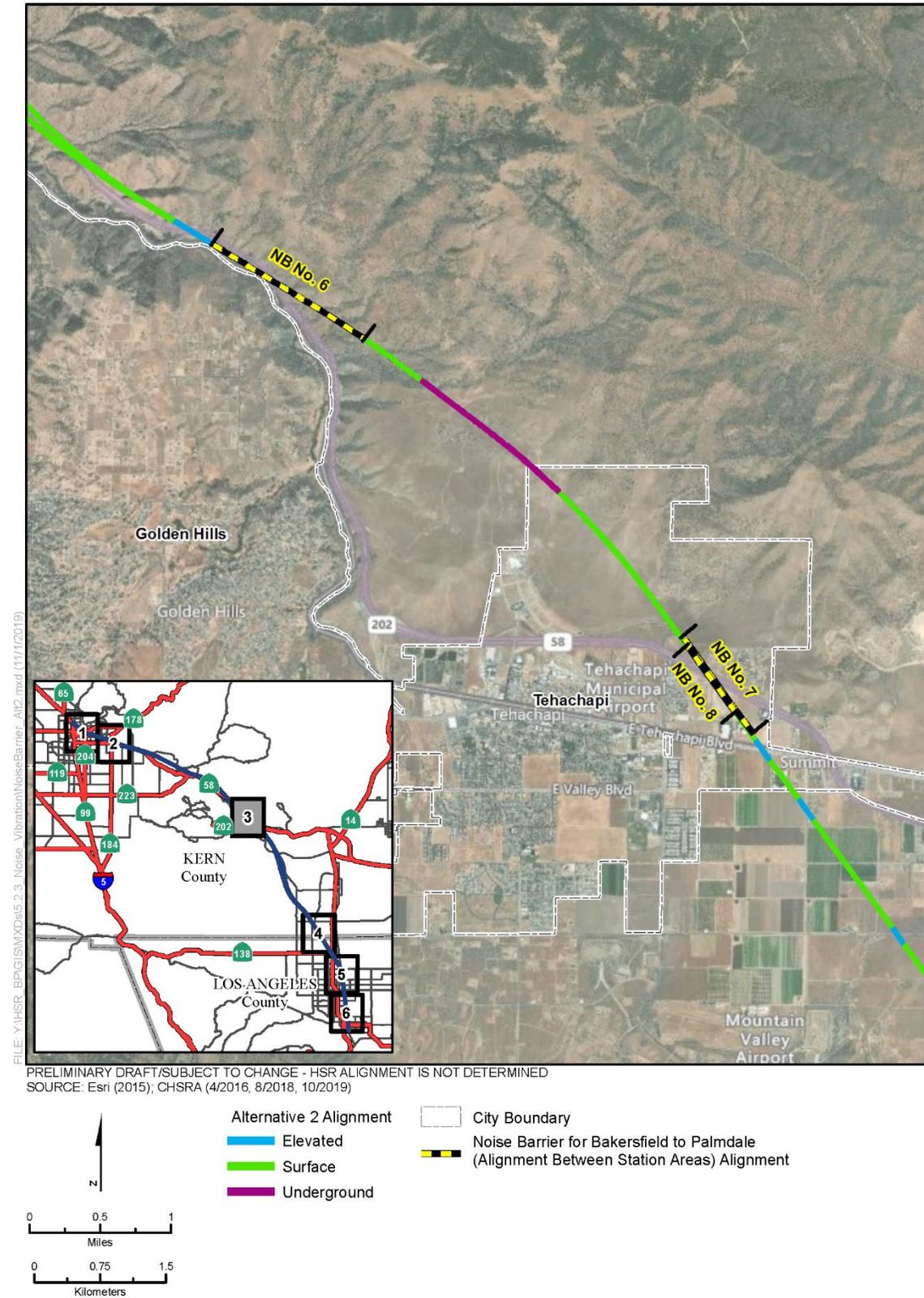


- |   |  |
|---|--|
| Alternative 2 Alignment                           | City Boundary  |
| <span style="color: blue;">—</span> Elevated      | Northeast Bakersfield District   |
| <span style="color: green;">—</span> Surface      | Noise Barrier for Bakersfield to Palmdale (Alignment Between Station Areas) Alignment    |
| <span style="color: purple;">—</span> Underground | Noise Barrier for Bakersfield Station  |
| ○ Proposed Station                                | Noise Barrier for Bakersfield Station F Street (Locally Generated Alternative) Alignment |

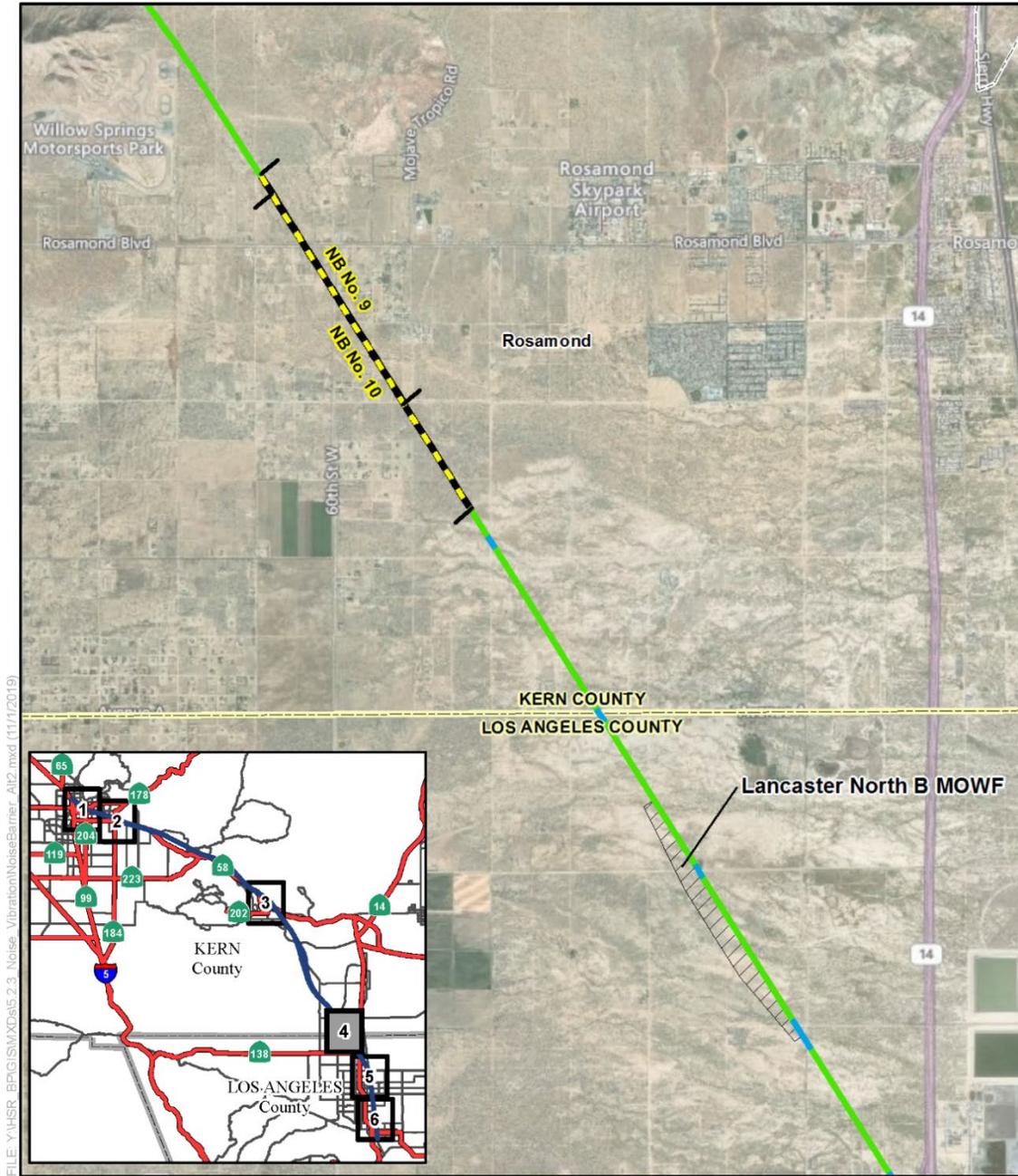
**Figure 3.4.A-11 Noise Barrier—Alternative 2**  
 (Sheet 1 of 6)



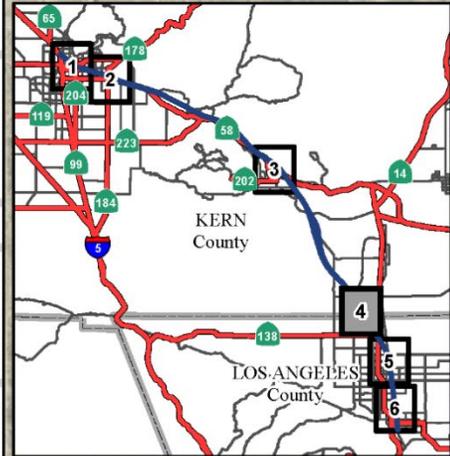
**Figure 3.4-A-11 Noise Barrier—Alternative 2**  
(Sheet 2 of 6)



**Figure 3.4-A-11 Noise Barrier—Alternative 2**  
(Sheet 3 of 6)



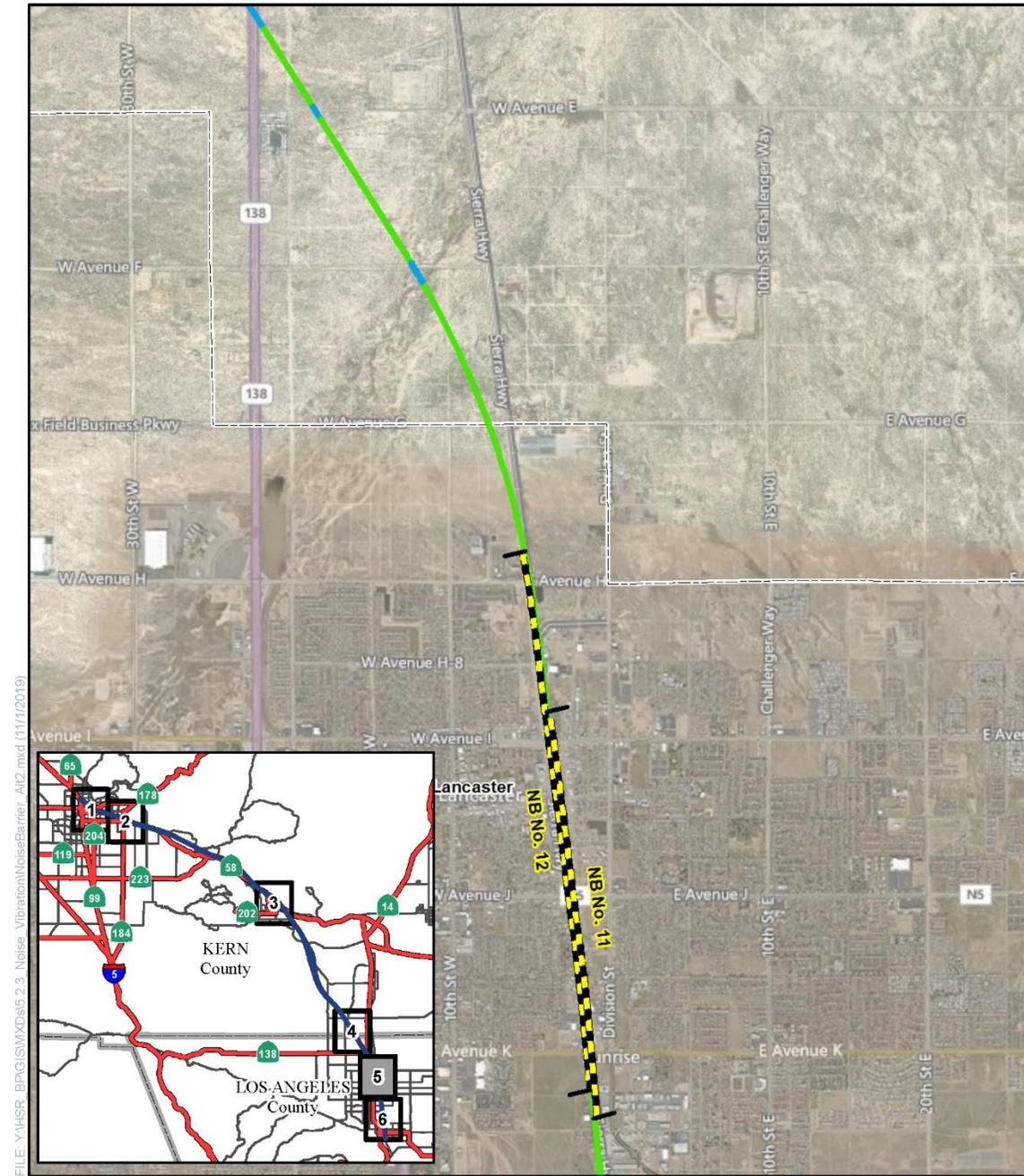
FILE: Y:\HSR\_BPG\GISMXD\5.2.3\_Noise\_Vibration\NoiseBarrier\_Alt2.mxd (11/17/2019)



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

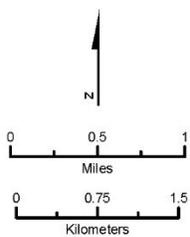


**Figure 3.4-A-11 Noise Barrier—Alternative 2**  
(Sheet 4 of 6)



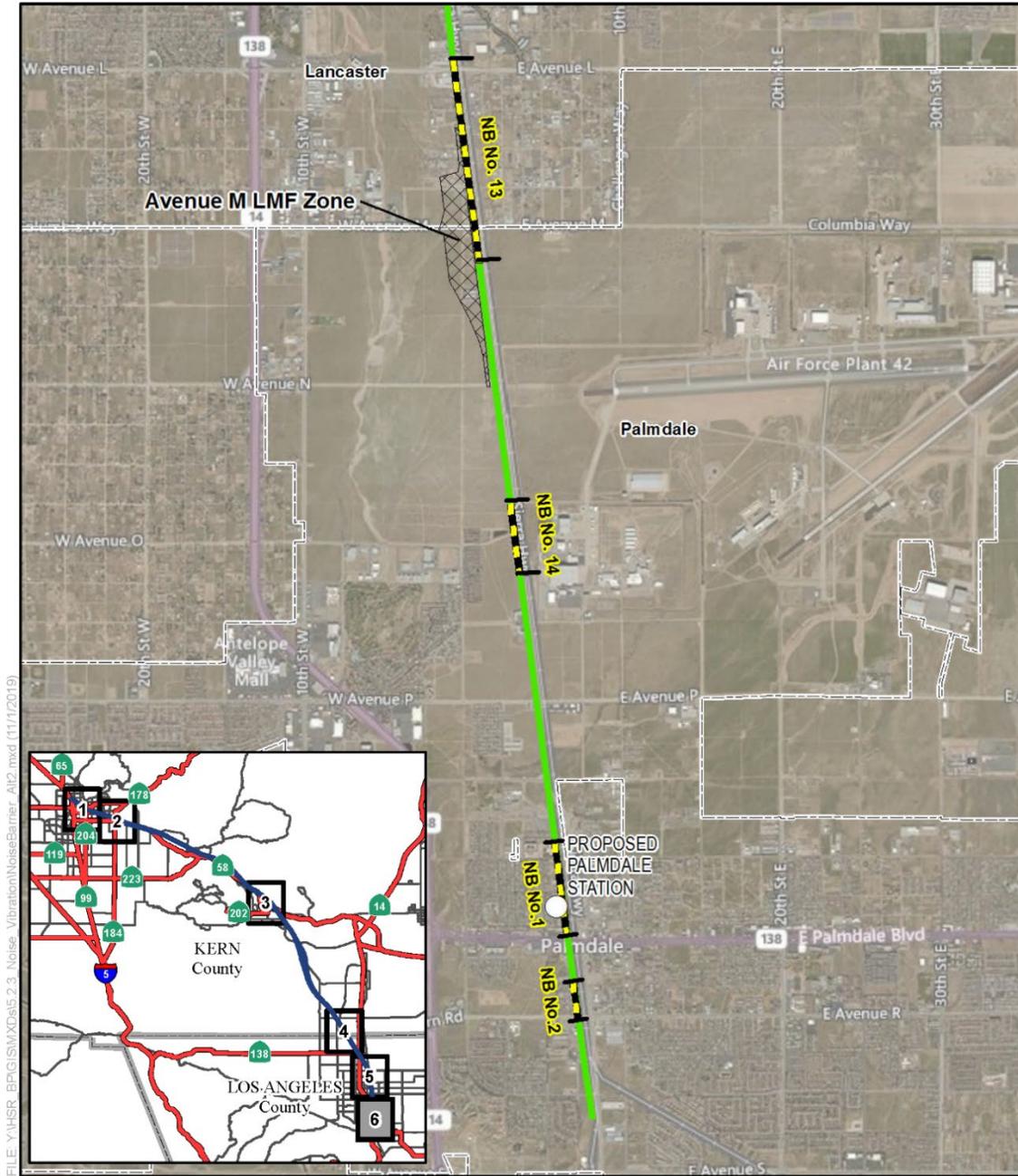
FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3.Noise\_Vibration\NoiseBarrier\_Alt2.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

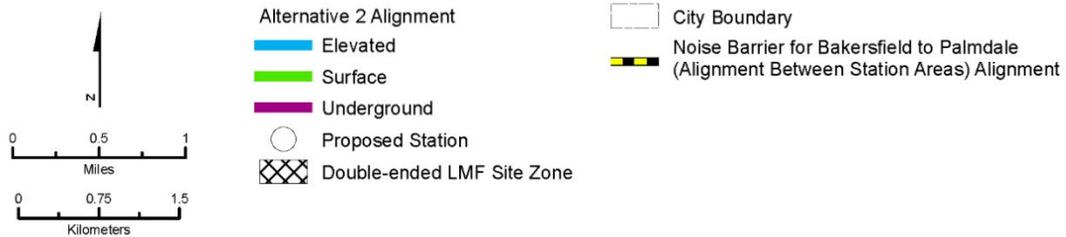


- Alternative 2 Alignment
  - Elevated
  - Surface
  - Underground
- City Boundary
- Noise Barrier for Bakersfield to Palmdale (Alignment Between Station Areas) Alignment

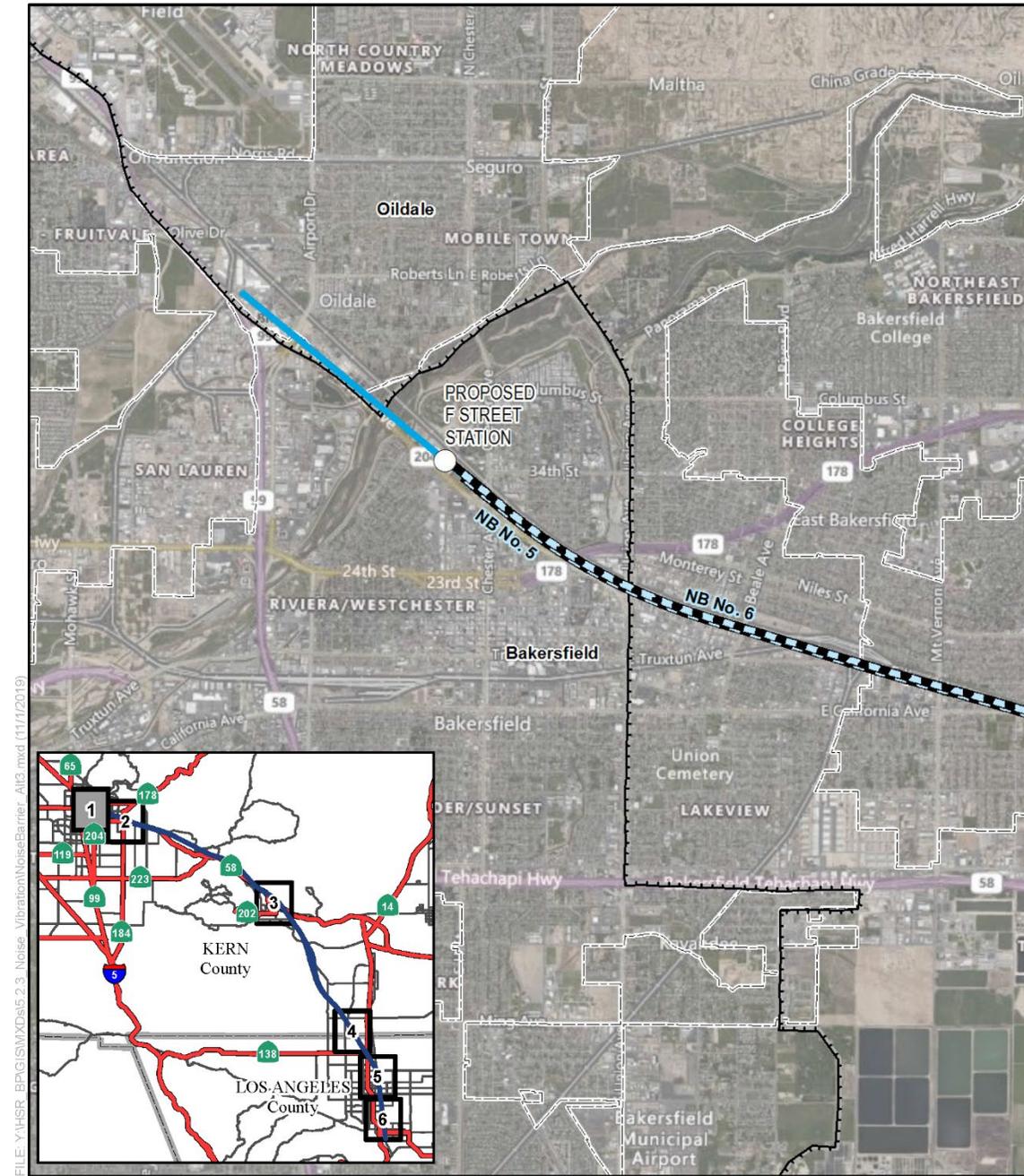
**Figure 3.4-A-11 Noise Barrier—Alternative 2**  
 (Sheet 5 of 6)



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

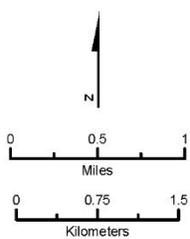


**Figure 3.4-A-11 Noise Barrier—Alternative 2**  
 (Sheet 6 of 6)



FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3.Noise.Vibration\NoiseBarrier\_Alt3.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



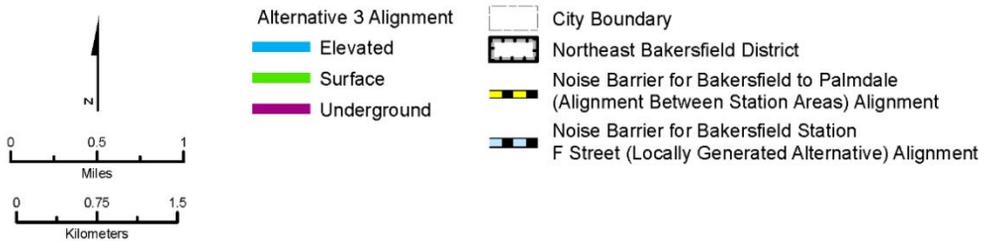
- |   |  |
|---|--|
| Alternative 3 Alignment                           | City Boundary  |
| <span style="color: blue;">—</span> Elevated      | Northeast Bakersfield District   |
| <span style="color: green;">—</span> Surface      | Noise Barrier for Bakersfield to Palmdale (Alignment Between Station Areas) Alignment    |
| <span style="color: purple;">—</span> Underground | Noise Barrier for Bakersfield Station F Street (Locally Generated Alternative) Alignment |
| ○ Proposed Station                                |  |

**Figure 3.4-A-12 Noise Barrier—Alternative 3**  
 (Sheet 1 of 6)

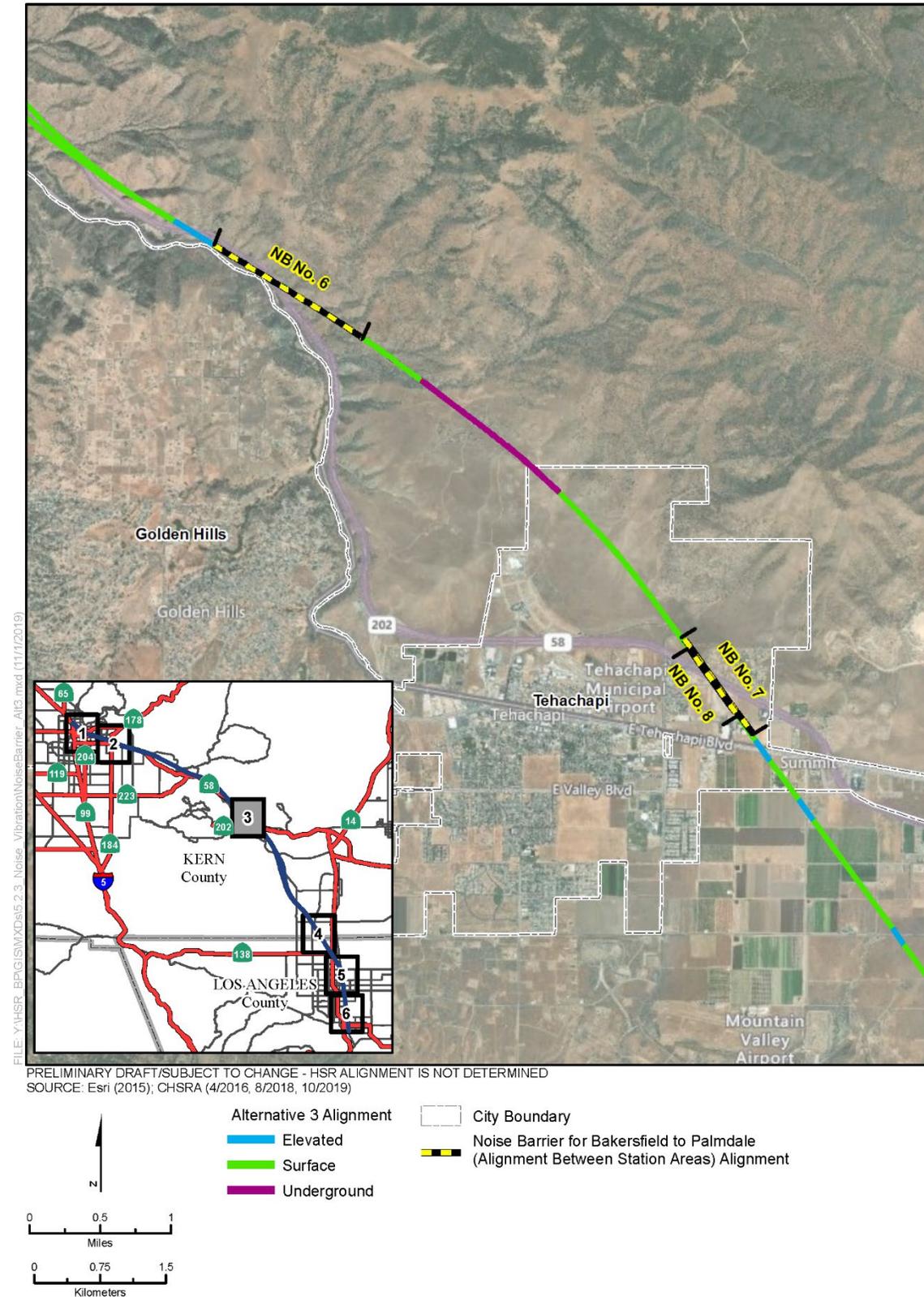


FILE: Y:\HSR\_BPG\GISMXD\5.2.3\_Noise\_Vibration\NoiseBarrier\_Alt3.mxd (11/1/2019)

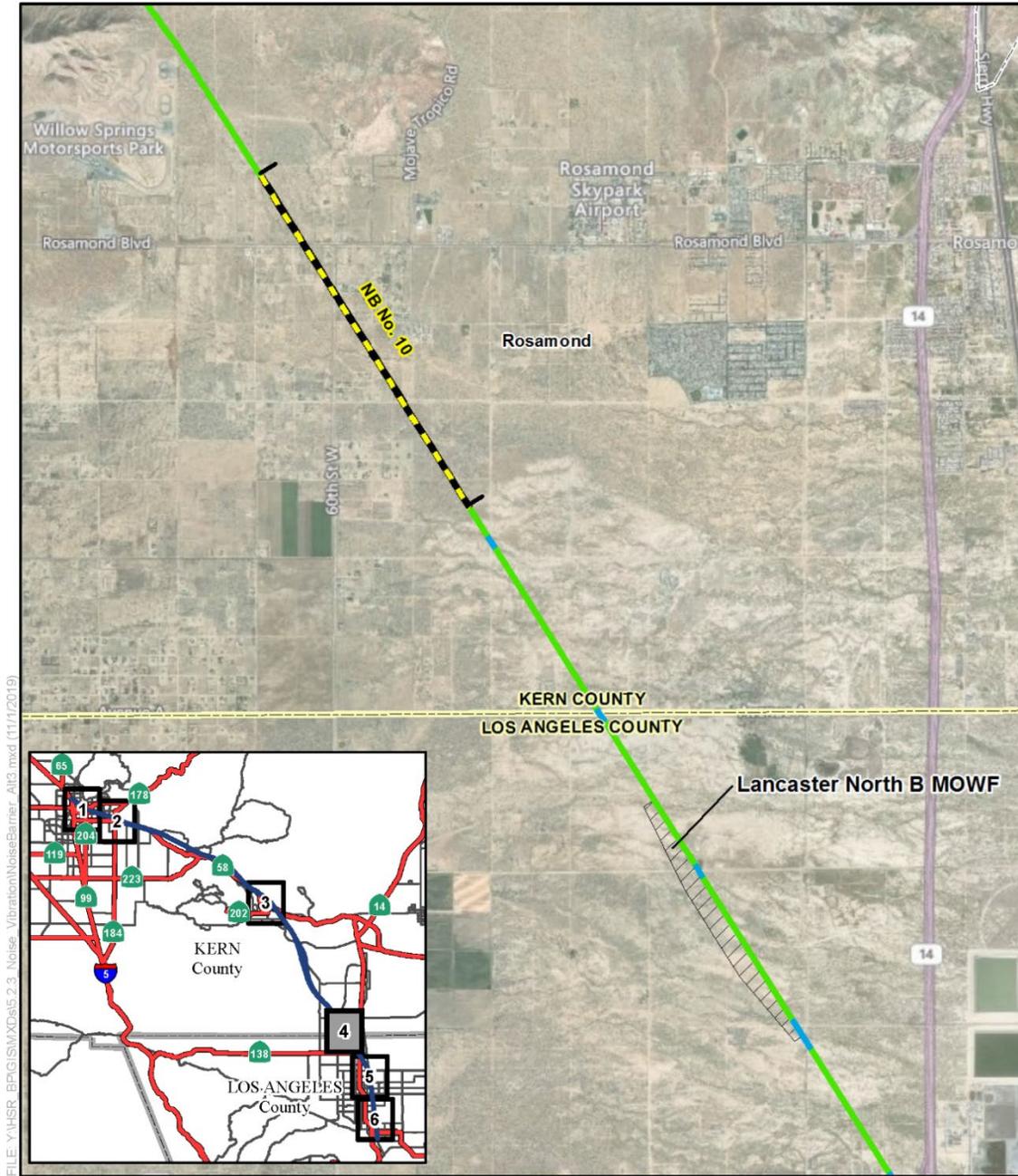
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



**Figure 3.4-A-12 Noise Barrier—Alternative 3**  
(Sheet 2 of 6)



**Figure 3.4-A-12 Noise Barrier—Alternative 3**  
(Sheet 3 of 6)

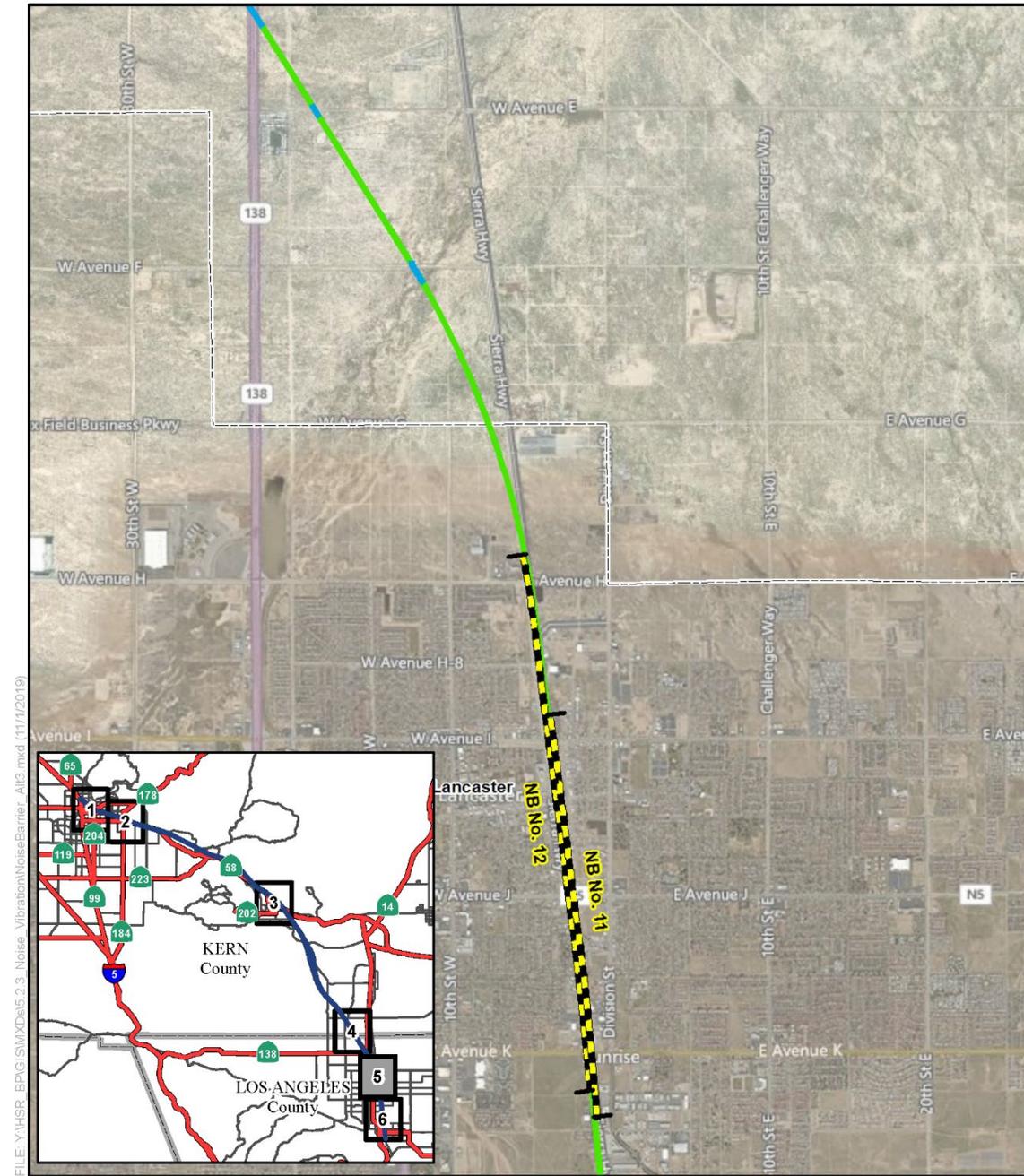


FILE: Y:\HSR\_BPG\GISMXD\5.2.3\_Noise\_Vibration\NoiseBarrier\_Alt3.mxd (11/17/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

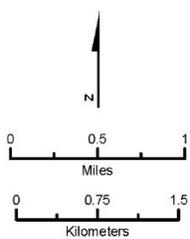


**Figure 3.4-A-12 Noise Barrier—Alternative 3**  
(Sheet 4 of 6)



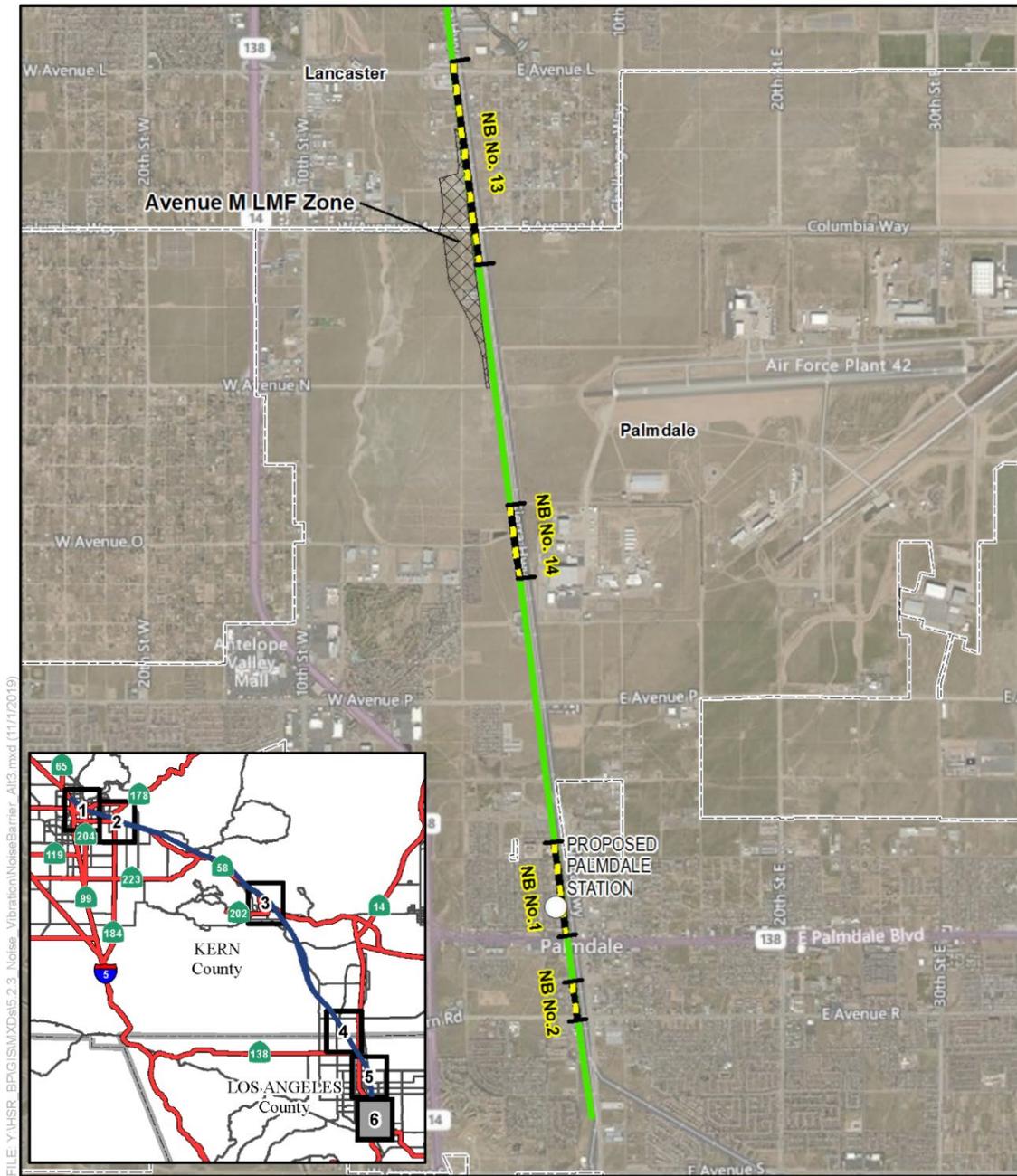
FILE: Y:\HSR\_BP\GIS\MXDs\5.2.3.Noise\_Vibration\NoiseBarrier\_Alt3.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



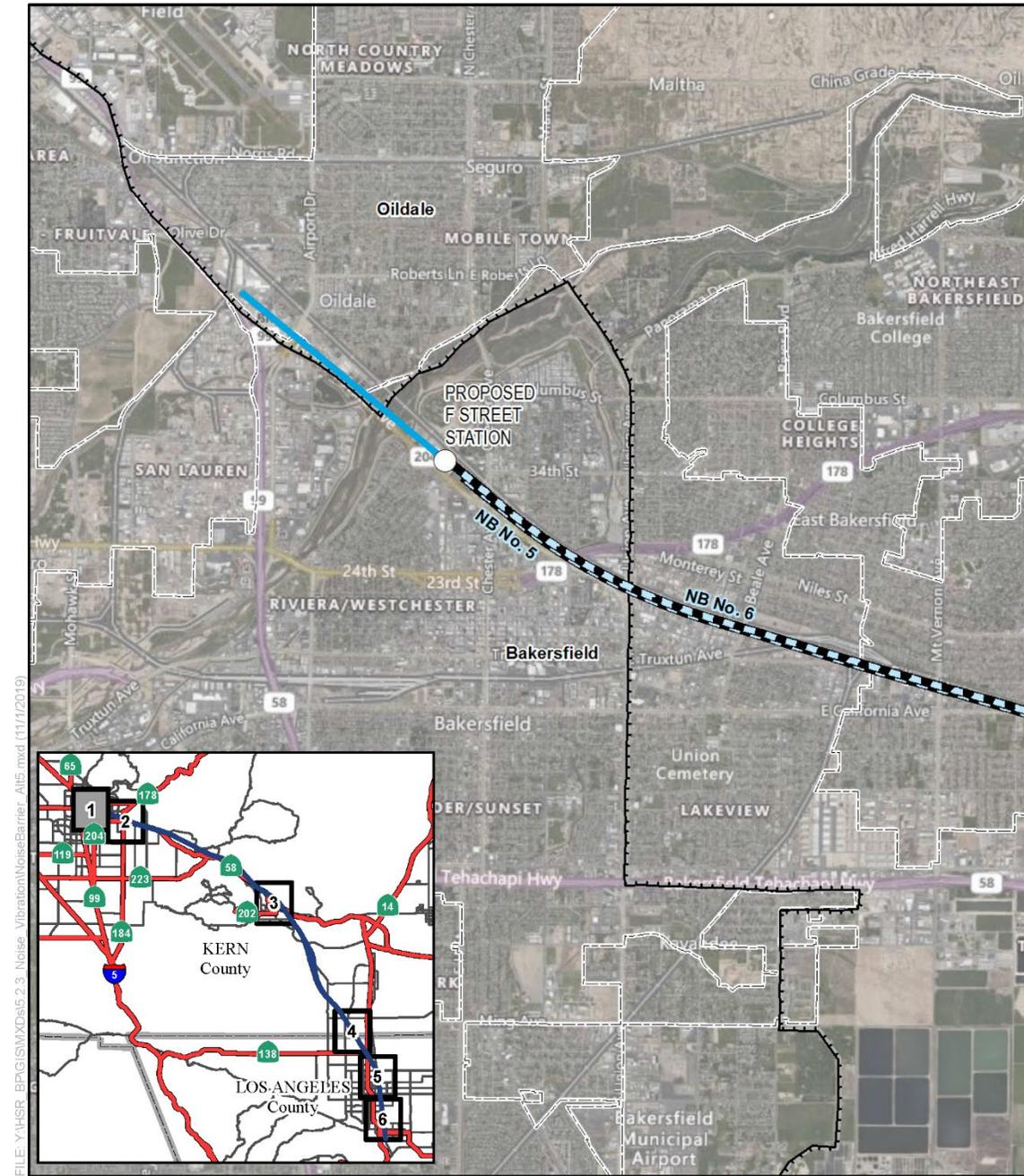
- Alternative 3 Alignment
- Elevated
- Surface
- Underground
- City Boundary
- Noise Barrier for Bakersfield to Palmdale (Alignment Between Station Areas) Alignment

**Figure 3.4-A-12 Noise Barrier—Alternative 3**  
 (Sheet 5 of 6)



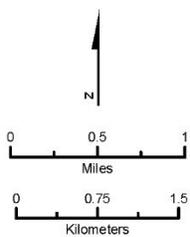
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

**Figure 3.4-A-12 Noise Barrier—Alternative 3**  
 (Sheet 6 of 6)



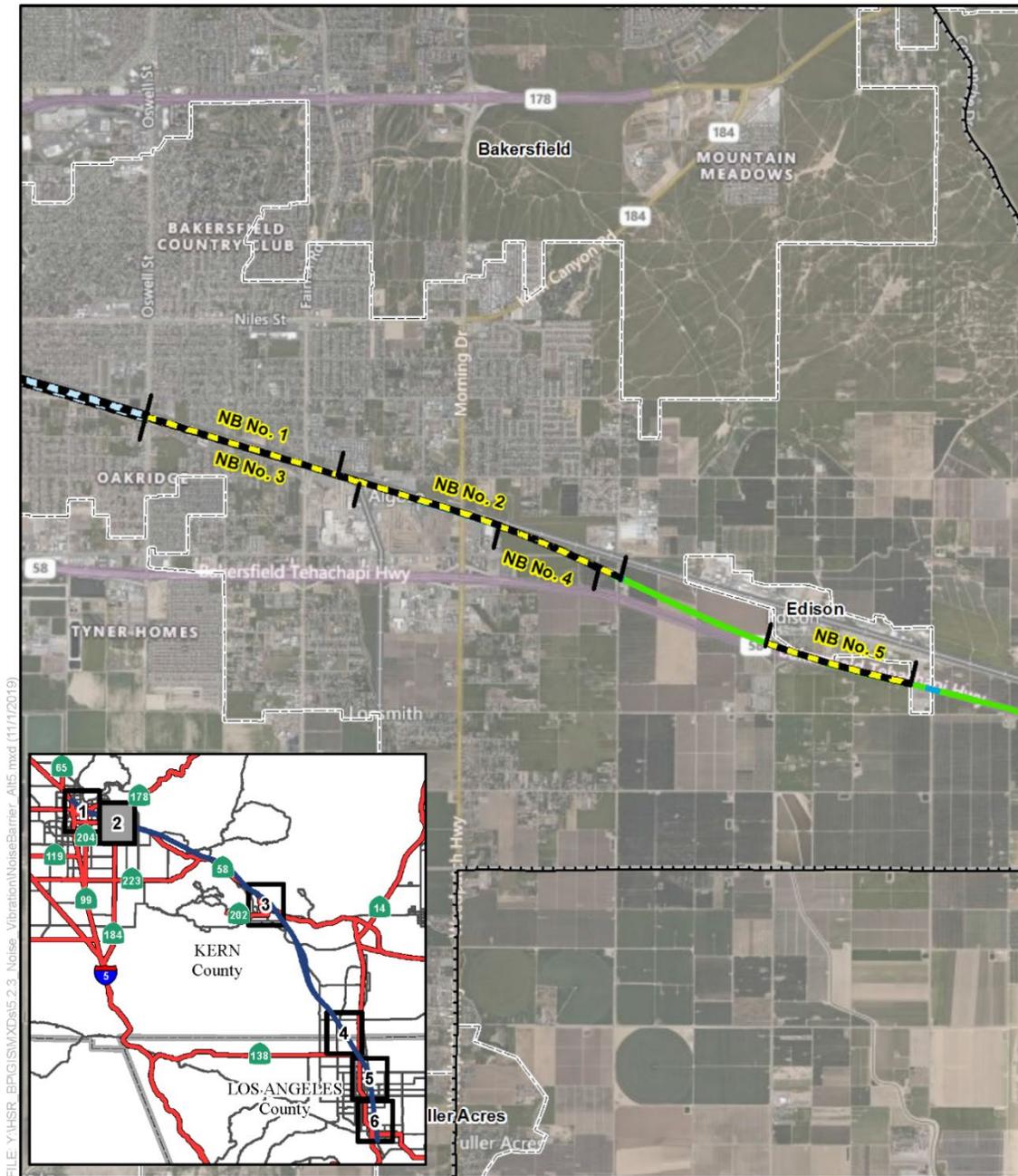
FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3.Noise.Vibration\NoiseBarrier\_Alt5.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



- Alternative 5 Alignment
  - Elevated
  - Surface
  - Underground
  - Proposed Station
- City Boundary
- Northeast Bakersfield District
- Noise Barrier for Bakersfield Station F Street (Locally Generated Alternative) Alignment

**Figure 3.4-A-13 Noise Barrier—Alternative 5**  
 (Sheet 1 of 6)

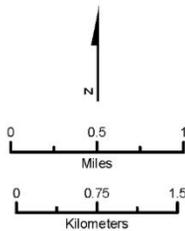


FILE: Y:\HSR\_BPG\GISMXD\5.2.3\_Noise\_Vibration\NoiseBarrier\_Alt5.mxd (11/17/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

Alternative 5 Alignment  
— Elevated  
— Surface  
— Underground

City Boundary  
 Northeast Bakersfield District  
 Noise Barrier for Bakersfield to Palmdale (Alignment Between Station Areas) Alignment  
 Noise Barrier for Bakersfield Station F Street (Locally Generated Alternative) Alignment



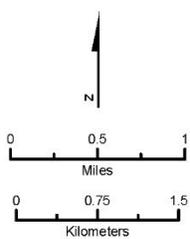
**Figure 3.4-A-13 Noise Barrier—Alternative 5**

(Sheet 2 of 6)



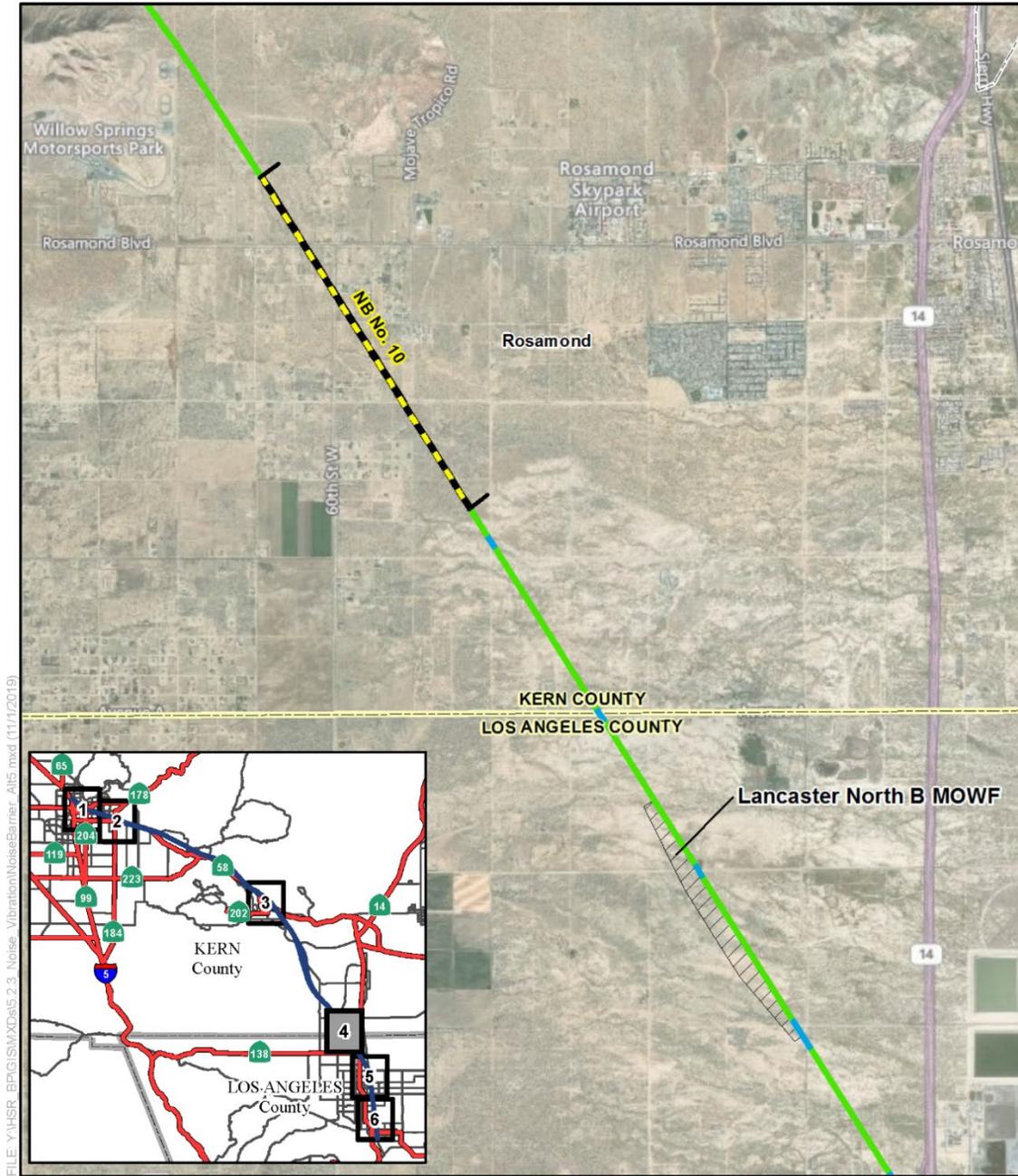
FILE: Y:\HSR\_BP\GIS\WXDs\5.2.3\_Noise\_Vibration\NoiseBarrier\_Alt5.mxd (11/1/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



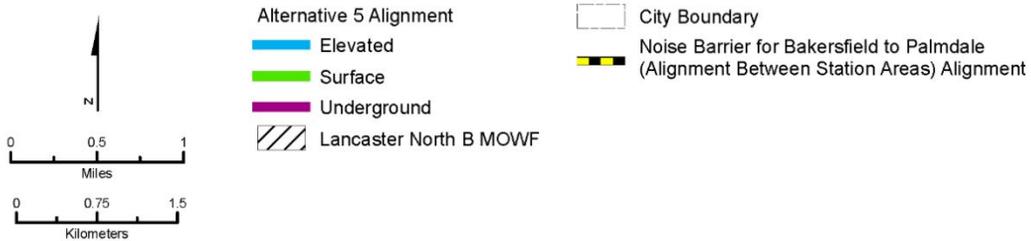
- Alternative 5 Alignment
  - Elevated
  - Surface
  - Underground
- City Boundary
- Noise Barrier for Bakersfield to Palmdale (Alignment Between Station Areas) Alignment

**Figure 3.4-A-13 Noise Barrier—Alternative 5**  
 (Sheet 3 of 6)



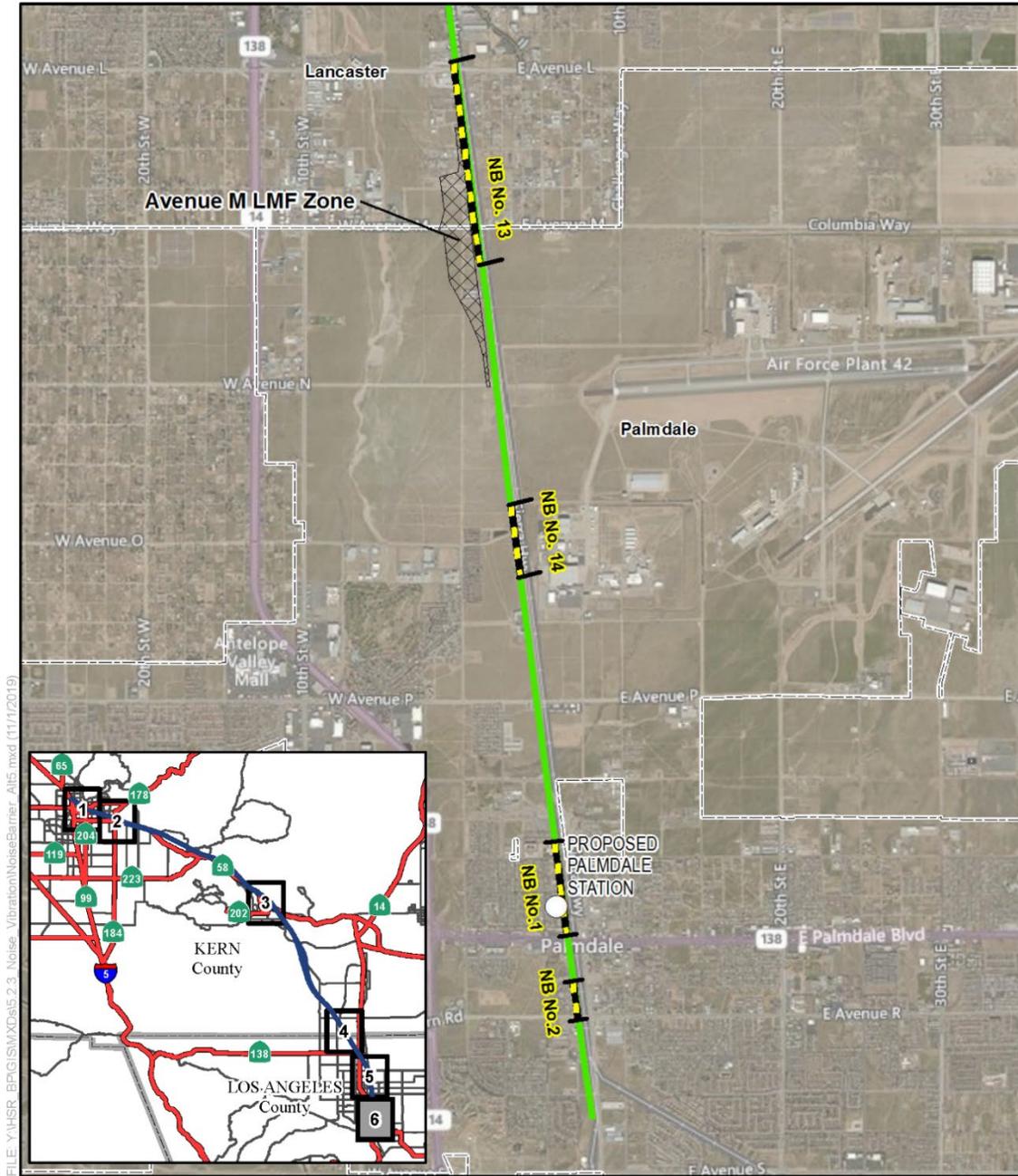
FILE: Y:\HSR\_BPG\GISMXD\5.2.3\_Noise\_Vibration\NoiseBarrier\_Alt5.mxd (11/17/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)



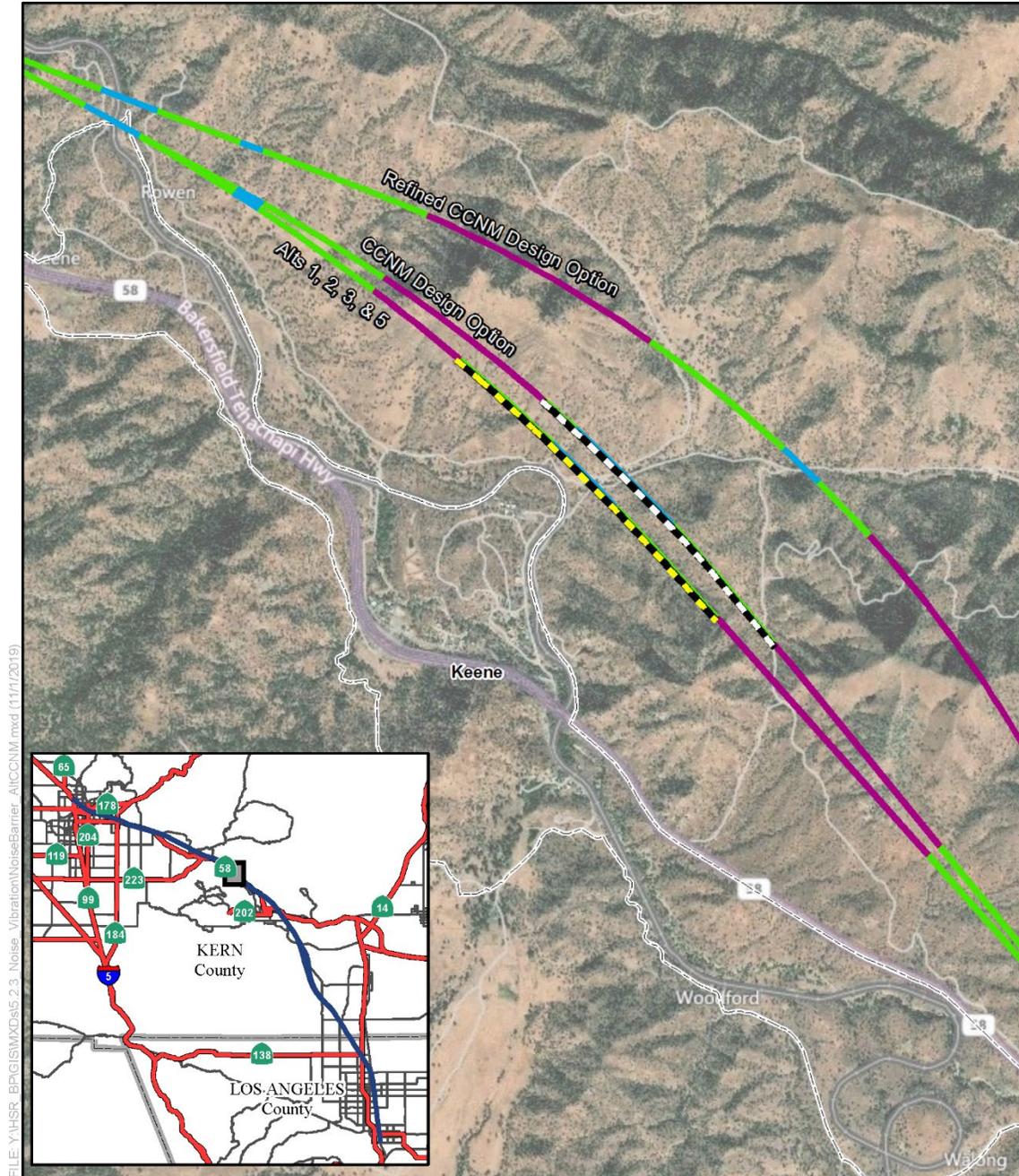
**Figure 3.4-A-13 Noise Barrier—Alternative 5**  
 (Sheet 4 of 6)





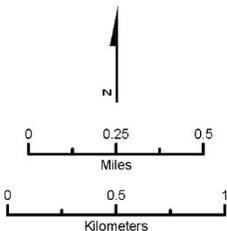
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Esri (2015); CHSRA (4/2016, 8/2018, 10/2019)

**Figure 3.4-A-13 Noise Barrier—Alternative 5**  
 (Sheet 6 of 6)



FILE: Y:\HSR\_BPG\ISM\XDs\5.2.3.Noise-Vibration\NoiseBarrier\_AltCCNM.mxd (1/11/2019)

PRELIMINARY DRAFT/SUBJECT TO CHANGE - HSR ALIGNMENT IS NOT DETERMINED  
 SOURCE: Bing Maps (2015); CHSRA (4/2016, 8/2018, 10/2018)



- |  |   |
|--|---|
| <p><b>HSR Alignments under Consideration</b></p> <ul style="list-style-type: none"> <li><span style="color: blue;">—</span> Elevated</li> <li><span style="color: green;">—</span> Surface</li> <li><span style="color: purple;">—</span> Underground</li> <li><span style="border: 1px dashed gray; display: inline-block; width: 10px; height: 10px;"></span> City Boundary</li> </ul> | <p><b>12-foot High Noise Barrier Locations</b></p> <ul style="list-style-type: none"> <li><span style="border-bottom: 2px dashed black; width: 20px; display: inline-block;"></span> CCNM Design Option – Project Design Feature</li> <li><span style="border-bottom: 2px dashed yellow; width: 20px; display: inline-block;"></span> CCNM Noise Barrier (Alternatives 1, 2, 3, &amp; 5)</li> </ul> |
|--|---|

**Figure 3.4-A-14: Noise Barrier – CCNM**