

**APPENDIX F:**  
**AESTHETIC RESOURCES SUPPORT INFORMATION**

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## TECHNICAL KOP ANALYSIS

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### PROPOSED PROJECT KOP ANALYSES

Visual impact summary sheets for each of the 15 KOPs are provided below. Ephemeral impacts that may be created from glint and glare are not included in the evaluations. The summary sheets for KOPs #1 through #6, #8, and #10 evaluate the impact of the project after construction and during operation. The summary sheets for KOPs #7, #9, #11, and #13 through #15 evaluate visual impacts at three stages:

1. **Immediately Post-Construction.** Represents the visual conditions immediately after the proposed project is complete and before any vegetation has been planted. Views may include bare ground, geotextile fabrics, and straw wattles placed for erosion control.
2. **Ground Cover Established.** Represents the visual conditions after initial vegetation establishment. Sufficient time has passed for shrubs and grasses to establish, but trees are not mature.
3. **Trees Established (Approximately 5 Years after Construction).** Represents the visual conditions approximately five years after the end of construction when trees are mature.

Baseline condition photos and visual simulations are provided in Figures E-1 through E-15 for each of the KOPs. Figures E-7, E-9, E-11, and E-13 through E-15 provide simulations of the substation after vegetation establishment (approximately five years after construction).

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**KOP #1 Rating after Construction and during Project Operation**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	2.0	2.0
Intactness	1.0	1.0
Unity	1.0	1.0
<b>Visual Quality Total</b>	<b>4.0</b>	<b>4.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>0.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	1.0	
Viewer Exposure	2.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>1.5</b>	
<b>Visual Impact</b>		
Visual Quality Change	0.0	
Viewer Response	1.5	
<b>Visual Impact (VQC x VR)</b>	<b>0.0 (NONE)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #2 Rating after Construction and during Project Operation**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	2.0	2.0
Intactness	1.0	0
Unity	1.0	1.0
<b>Visual Quality Total</b>	<b>4.0</b>	<b>3.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-1.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	1.0	
Viewer Exposure	2.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>1.5</b>	
<b>Visual Impact</b>		
Visual Quality Change	-1.0	
Viewer Response	1.5	
<b>Visual Impact (VQC x VR)</b>	<b>-1.5 (LOW)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #3 Rating after Construction and during Project Operation**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	2.0	2.0
Intactness	2.0	1.5
Unity	1.5	1.0
<b>Visual Quality Total</b>	<b>5.5</b>	<b>4.5</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-1.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	3.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>3.5</b>	
<b>Visual Impact</b>		
Visual Quality Change	-1.0	
Viewer Response	3.5	
<b>Visual Impact (VQC x VR)</b>	<b>-3.5 (LOW)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #4 Rating after Construction and during Project Operation**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	2.0	2.0
Intactness	1.0	0.5
Unity	1.5	1.0
<b>Visual Quality Total</b>	<b>4.5</b>	<b>3.5</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-1.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	2.5	
Viewer Exposure	2.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>2.25</b>	
<b>Visual Impact</b>		
Visual Quality Change	-1.0	
Viewer Response	2.25	
<b>Visual Impact (VQC x VR)</b>	<b>-2.25 (LOW)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 = Neutral visual impact (no impact)	
1 = Low	-1 to -4 = Low; less than significant level of visual impact	
2 = Moderate	-4 to -9 = Moderate visual impact	
3 = Moderately High	-9 to -13 = Moderately high visual impact	
4 = High	-13 or below = High visual impact	

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**KOP #5 Rating after Construction and during Project Operation**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	2.0	2.0
Intactness	2.5	2.0
Unity	1.5	1.0
<b>Visual Quality Total</b>	<b>6.0</b>	<b>5.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-1.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	4.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>4.0</b>	
<b>Visual Impact</b>		
Visual Quality Change	-1.0	
Viewer Response	4.0	
<b>Visual Impact (VQC x VR)</b>	<b>-4.0 (LOW)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #6 Rating after Construction and during Project Operation**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	3.0
Intactness	1.5	1.0
Unity	1.5	1.0
<b>Visual Quality Total</b>	<b>6.0</b>	<b>5.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-1.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	2.0	
Viewer Exposure	2.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>2.0</b>	
<b>Visual Impact</b>		
Visual Quality Change	-1.0	
Viewer Response	2.0	
<b>Visual Impact (VQC x VR)</b>	<b>-2.0 (LOW)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #7 Rating before Mitigation: Immediately Post-Construction**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	1.0
Intactness	2.5	1.0
Unity	2.5	1.5
<b>Visual Quality Total</b>	<b>8.0</b>	<b>3.5</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-4.5</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	3.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>3.5</b>	
<b>Visual Impact</b>		
Visual Quality Change	-4.5	
Viewer Response	3.5	
<b>Visual Impact (VQC x VR)</b>	<b>-15.75 (HIGH)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #7 Rating before Mitigation: Ground Cover Established**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	1.5
Intactness	2.0	1.0
Unity	3.0	2.0
<b>Visual Quality Total</b>	<b>8.0</b>	<b>4.5</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-3.5</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	2.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>3.0</b>	
<b>Visual Impact</b>		
Visual Quality Change	-3.5	
Viewer Response	3.0	
<b>Visual Impact (VQC x VR)</b>	<b>-10.5 (MODERATELY HIGH)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #7 Rating after Mitigation: Trees Established (Approximately 5 Years after Construction)**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	2.5
Intactness	2.0	2.0
Unity	3.0	2.0
<b>Visual Quality Total</b>	<b>8.0</b>	<b>6.5</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-1.5</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	2.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>3.0</b>	
<b>Visual Impact</b>		
Visual Quality Change	-1.5	
Viewer Response	3.0	
<b>Visual Impact (VQC x VR)</b>	<b>-4.5 (MODERATE)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #8 Rating after Construction and during Project Operation**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	3.0
Intactness	3.0	2.5
Unity	3.0	3.0
<b>Visual Quality Total</b>	<b>9.0</b>	<b>8.5</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-0.5</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	2.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>3.0</b>	
<b>Visual Impact</b>		
Visual Quality Change	-0.5	
Viewer Response	3.0	
<b>Visual Impact (VQC x VR)</b>	<b>-1.5 (LOW)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #9 Rating before Mitigation: Ground Cover Established**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	2.5
Intactness	2.0	0.5
Unity	2.0	1.5
<b>Visual Quality Total</b>	<b>7.0</b>	<b>4.5</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-2.5</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	4.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>4.0</b>	
<b>Visual Impact</b>		
Visual Quality Change	-2.5	
Viewer Response	4.0	
<b>Visual Impact (VQC x VR)</b>	<b>-10.0 (MODERATELY HIGH)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #9 Rating after Mitigation: Trees Established (Approximately 5 Years after Construction)**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	2.0
Intactness	2.0	1.5
Unity	2.0	1.5
<b>Visual Quality Total</b>	<b>7.0</b>	<b>5.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-2.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	4.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>4.0</b>	
<b>Visual Impact</b>		
Visual Quality Change	-2.0	
Viewer Response	4.0	
<b>Visual Impact (VQC x VR)</b>	<b>-8.0 (MODERATE)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #10 Rating after Construction and during Project Operation**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	4.0	4.0
Intactness	2.0	2.0
Unity	2.0	1.5
<b>Visual Quality Total</b>	<b>8.0</b>	<b>7.5</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-0.5</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	4.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>4.0</b>	
<b>Visual Impact</b>		
Visual Quality Change	-0.5	
Viewer Response	4.0	
<b>Visual Impact (VQC x VR)</b>	<b>-2.0 (LOW)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #11 Rating before Mitigation: Ground Cover Established**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	3.0
Intactness	2.0	1.5
Unity	2.0	2.0
<b>Visual Quality Total</b>	<b>7.0</b>	<b>6.5</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-0.5</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	4.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>4.0</b>	
<b>Visual Impact</b>		
Visual Quality Change	-0.5	
Viewer Response	4.0	
<b>Visual Impact (VQC x VR)</b>	<b>-2.0 (LOW)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #12 Rating before Mitigation: Ground Cover Established**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	3.0
Intactness	2.0	1.5
Unity	2.0	2.0
<b>Visual Quality Total</b>	<b>7.0</b>	<b>6.5</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-0.5</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	4.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>4.0</b>	
<b>Visual Impact</b>		
Visual Quality Change	-0.5	
Viewer Response	4.0	
<b>Visual Impact (VQC x VR)</b>	<b>-2.0 (LOW)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #13 Rating before Mitigation: Immediately Post-Construction**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	2.5	1.0
Intactness	2.5	1.0
Unity	3.0	1.0
<b>Visual Quality Total</b>	<b>8.0</b>	<b>3.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-5.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	1.5	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>2.75</b>	
<b>Visual Impact</b>		
Visual Quality Change	-5.0	
Viewer Response	2.75	
<b>Visual Impact (VQC x VR)</b>	<b>-13.75 (HIGH)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #13 Rating before Mitigation: Ground Cover Established**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	2.5	1.5
Intactness	2.5	1.0
Unity	3.0	2.0
<b>Visual Quality Total</b>	<b>8.0</b>	<b>4.5</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-3.5</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	1.5	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>2.75</b>	
<b>Visual Impact</b>		
Visual Quality Change	-3.5	
Viewer Response	2.75	
<b>Visual Impact (VQC x VR)</b>	<b>-9.6 (MODERATELY HIGH)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #13 Rating after Mitigation: Trees Established (Approximately 5 Years after Construction)**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	2.5	2.5
Intactness	2.5	2.0
Unity	3.0	2.5
<b>Visual Quality Total</b>	<b>8.0</b>	<b>7.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-1.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	1.5	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>2.75</b>	
<b>Visual Impact</b>		
Visual Quality Change	-1.0	
Viewer Response	2.75	
<b>Visual Impact (VQC x VR)</b>	<b>-2.75 (LOW)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #14 Rating before Mitigation: Immediately Post-Construction**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	1.0
Intactness	3.0	1.0
Unity	3.0	1.0
<b>Visual Quality Total</b>	<b>9.0</b>	<b>3.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-6.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	1.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>2.5</b>	
<b>Visual Impact</b>		
Visual Quality Change	-6.0	
Viewer Response	2.5	
<b>Visual Impact (VQC x VR)</b>	<b>-15.0 (HIGH)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #14 Rating before Mitigation: Ground Cover Established**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	3.0
Intactness	3.0	2.0
Unity	3.0	2.0
<b>Visual Quality Total</b>	<b>9.0</b>	<b>7.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-2.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	1.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>2.5</b>	
<b>Visual Impact</b>		
Visual Quality Change	-2.0	
Viewer Response	2.5	
<b>Visual Impact (VQC x VR)</b>	<b>-5.0 (MODERATE)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #14 Rating after Mitigation: Trees Established (Approximately 5 Years after Construction)**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	3.0
Intactness	3.0	2.5
Unity	3.0	3.0
<b>Visual Quality Total</b>	<b>9.0</b>	<b>8.5</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-0.5</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	1.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>2.5</b>	
<b>Visual Impact</b>		
Visual Quality Change	-0.5	
Viewer Response	2.5	
<b>Visual Impact (VQC x VR)</b>	<b>-1.25 (LOW)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #15 Rating before Mitigation: Immediately Post-Construction**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.5	1.0
Intactness	2.0	1.0
Unity	2.5	1.0
<b>Visual Quality Total</b>	<b>8.0</b>	<b>3.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-5.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	1.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>2.5</b>	
<b>Visual Impact</b>		
Visual Quality Change	-5.0	
Viewer Response	2.5	
<b>Visual Impact (VQC x VR)</b>	<b>-12.5 (MODERATELY HIGH)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #15 Rating before Mitigation: Ground Cover Established**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.5	2.5
Intactness	2.0	1.0
Unity	2.5	1.5
<b>Visual Quality Total</b>	<b>8.0</b>	<b>5.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-3.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	1.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>2.5</b>	
<b>Visual Impact</b>		
Visual Quality Change	-3.0	
Viewer Response	2.5	
<b>Visual Impact (VQC x VR)</b>	<b>-7.5 (MODERATE)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #15 Rating after Mitigation: Trees Established (Approximately 5 Years after Construction)**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.5	3.5
Intactness	2.0	1.5
Unity	2.5	2.5
<b>Visual Quality Total</b>	<b>8.0</b>	<b>7.5</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-1.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	1.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>2.5</b>	
<b>Visual Impact</b>		
Visual Quality Change	-1.0	
Viewer Response	2.5	
<b>Visual Impact (VQC x VR)</b>	<b>-2.5 (LOW)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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Figure F-1 KOP #1 – Before Proposed Project (Existing Conditions)



On-ramp to SR-125 N

KOP 1 baseline visual conditions East H Street west of SR-125 near intersection with northbound on-ramp. View direction northeast.

Figure F-1 (continued) KOP #1 – After Proposed Project (Visual Simulation)



Figure F-2 KOP #2 – Before Proposed Project (Existing Conditions)



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Figure F-2 (continued) KOP #2 – After Proposed Project (Visual Simulation)



Figure F-3 KOP #3 – Before Proposed Project (Existing Conditions)



KOP 3 baseline visual conditions Sunset View Park.  
View direction northeast.

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Figure F-3 (continued) KOP #3 – After Proposed Project(Visual Simulation)



KOP 3 visual simulation of the proposed project.

Figure F-4 KOP #4 – Before Proposed Project (Existing Conditions)

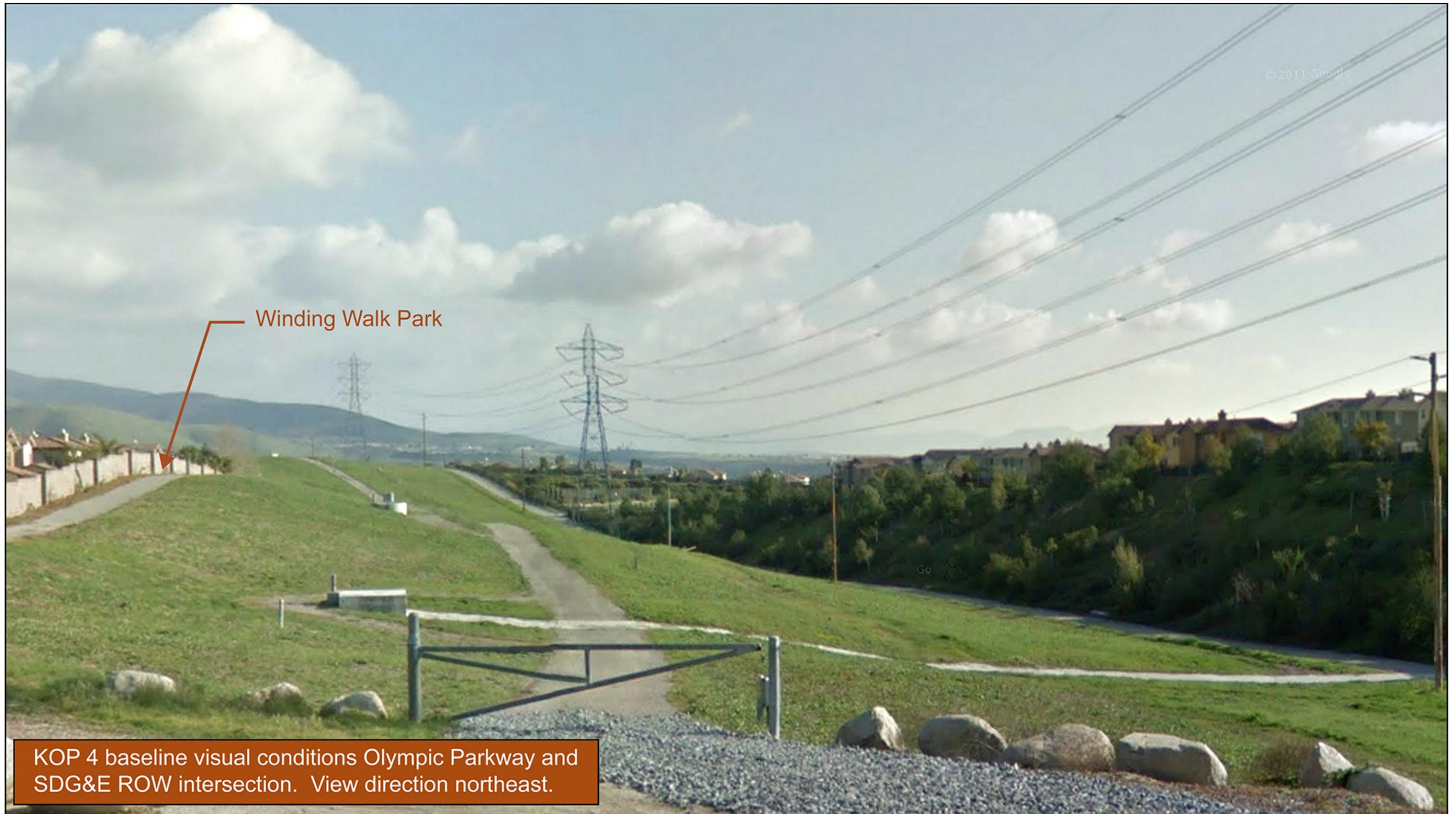


Figure F-4 (continued) KOP #4 – After Proposed Project (Visual Simulation)



Figure F-5 KOP #5 – Before Proposed Project (Existing Conditions)



Figure F-5 (continued) KOP #5 – After Proposed Project (Visual Simulation)



KOP 5 visual simulation of the proposed project.

Figure F-6 KOP #6 – Before Proposed Project (Existing Conditions)



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Figure F-6 (continued) KOP #6 – After Proposed Project (Visual Simulation)



KOP 6 visual simulation of the proposed project.

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Figure F-7 KOP #7 – Before Proposed Project (Existing Conditions)



KOP 7 baseline visual conditions Hunte Parkway Trail southwest of Exploration Falls Drive and northeast of High Tech Elementary School. View direction northeast.

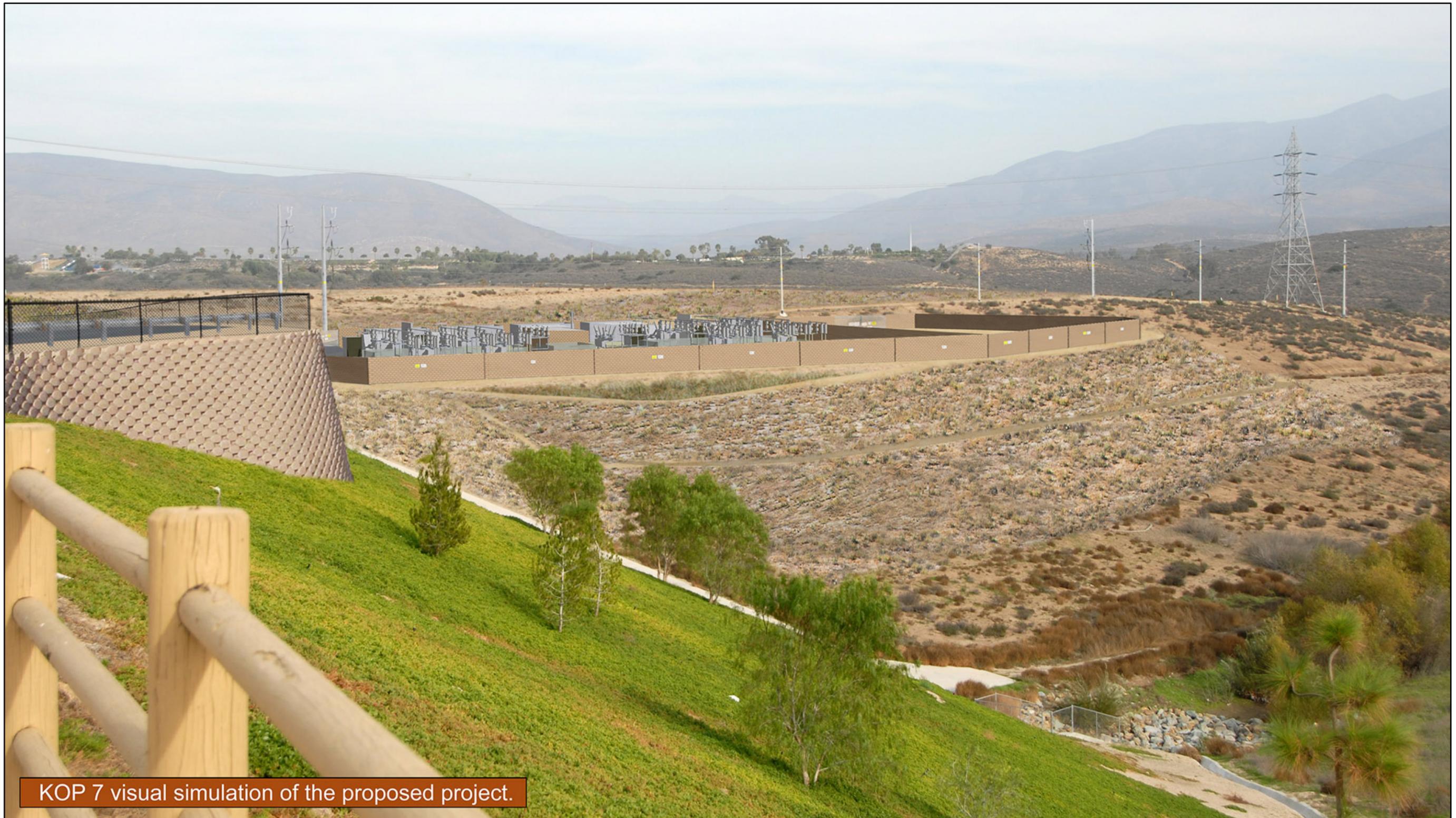
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Figure F-7 (continued) KOP #7 – After Proposed Project, Immediately Post-Construction (Visual Simulation)



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Figure F-7 (continued) KOP #7 – After Proposed Project, Ground Cover Established (Visual Simulation)



KOP 7 visual simulation of the proposed project.

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Figure F-7 (continued) KOP #7 – Approximately 5 Years after Proposed Project (Visual Simulation)



KOP 7 visual simulation of the proposed project.

Figure F-8 KOP #8 – Before Proposed Project (Existing Conditions)



Figure F-8 (continued) KOP #8 – After Proposed Project (Visual Simulation)



KOP 8 visual simulation of the proposed project.

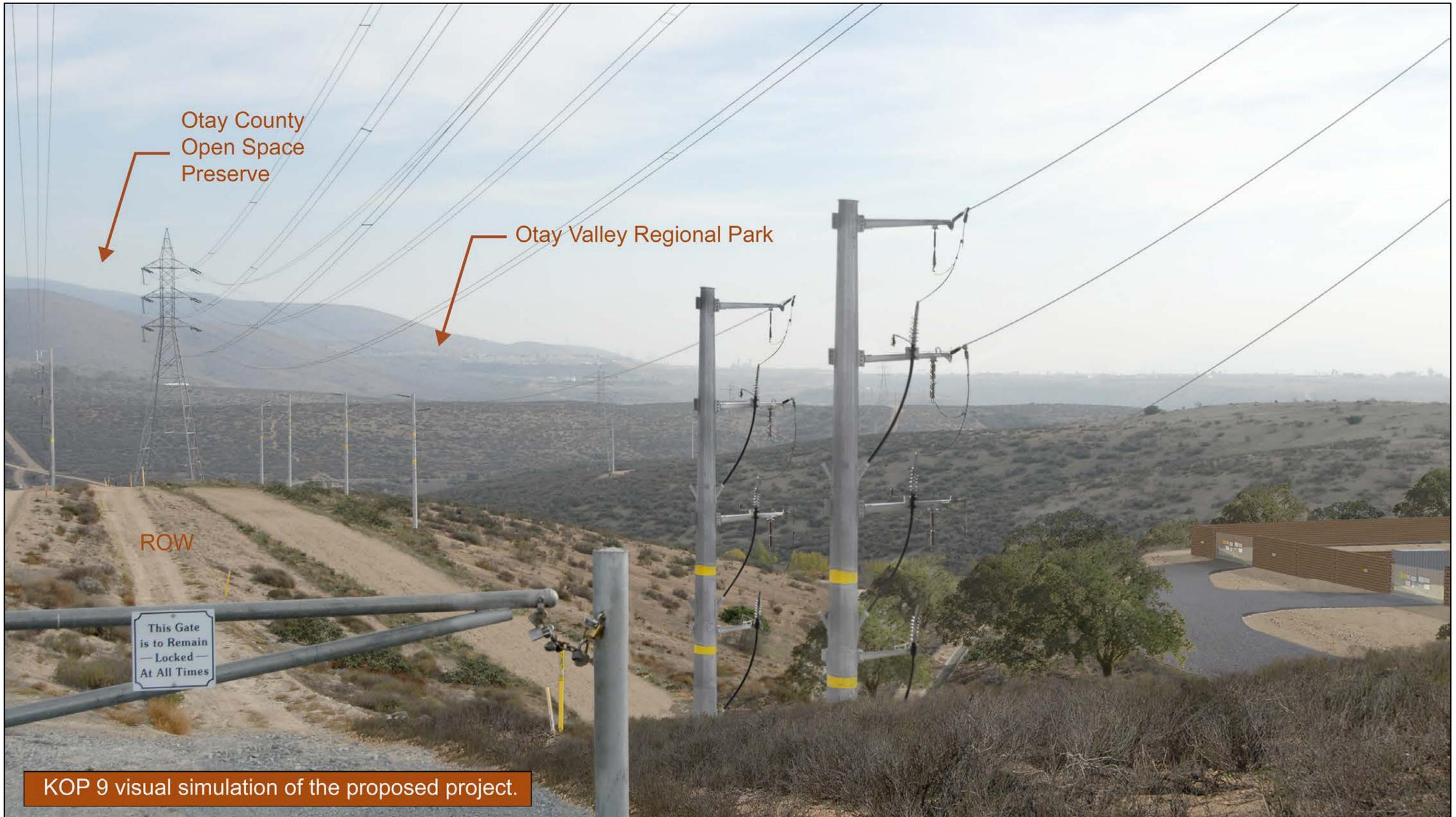
Figure F-9 KOP #9 – Before Proposed Project (Existing Conditions)



Figure F-9 (continued) KOP #9 – After Proposed Project, Ground Cover Established (Visual Simulation)



Figure F-9 (continued) KOP #9 – Approximately 5 Years after Proposed Project (Visual Simulation)



KOP 9 visual simulation of the proposed project.

Figure F-10 KOP #10 – Before Proposed Project (Existing Conditions)



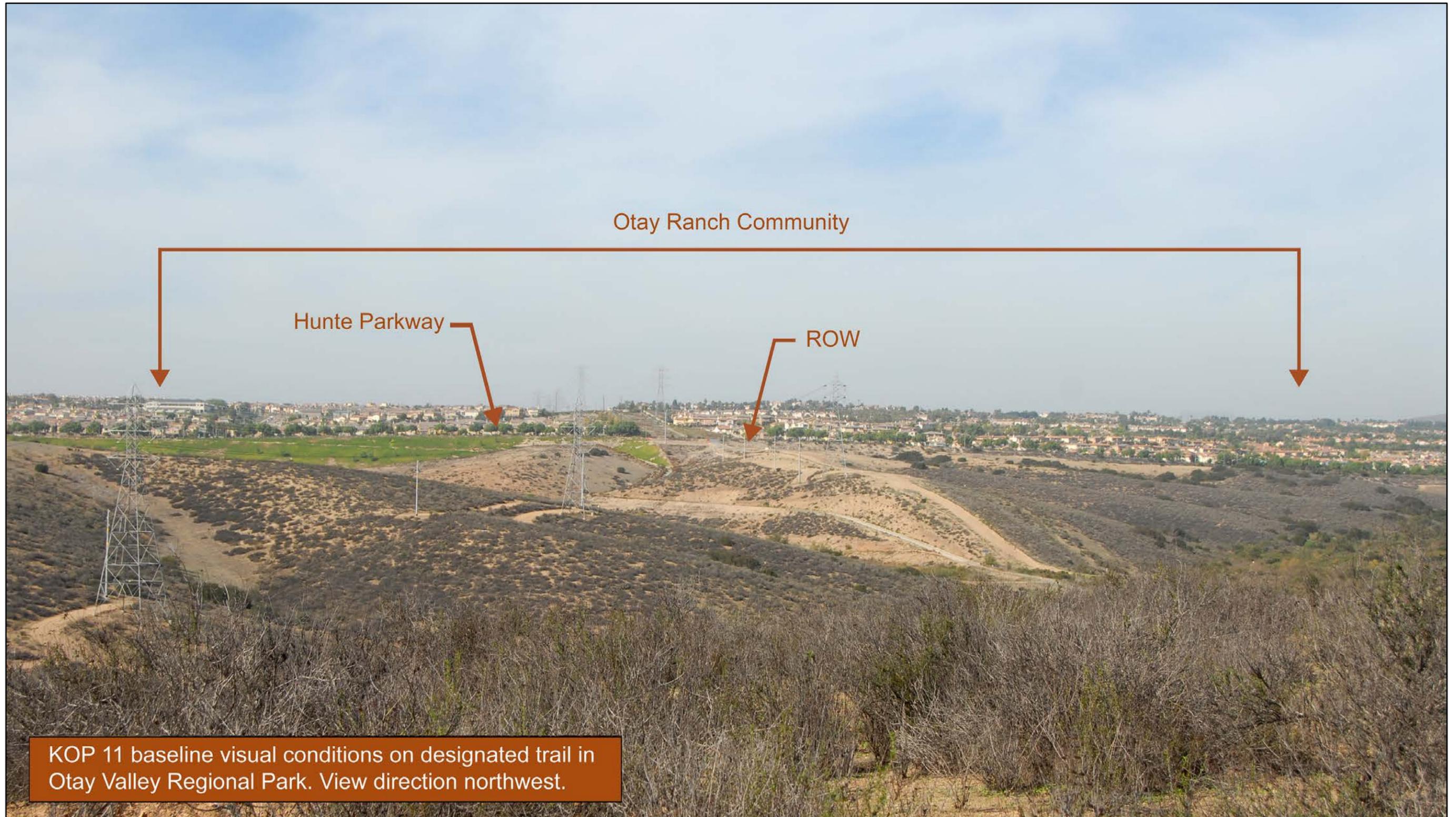
KOP 10 baseline visual conditions Hunte Parkway at the intersection of Hidden Path Drive. View direction south.

Figure F-10 (continued) KOP #10 – After Proposed Project (Visual Simulation)



KOP 10 visual simulation of the proposed project.

Figure F-11 KOP #11 – Before Proposed Project (Existing Conditions)



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Figure F-11 (continued) KOP #11 – After Proposed Project, Ground Cover Established (Visual Simulation)



Figure F-12 KOP #12 – Before Proposed Project (Existing Conditions)



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Figure F-12 (continued) KOP #12 – After Proposed Project, Ground Cover Established (Visual Simulation)



Figure F-13 KOP #13 – Before Proposed Project (Existing Conditions)



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Figure F-13 (continued) KOP #13 – After Proposed Project, Immediately Post-Construction (Visual Simulation)



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Figure F-13 (continued) KOP #13 – After Proposed Project, Ground Cover Established (Visual Simulation)



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Figure F-13 (continued) KOP #13 – Approximately 5 Years after Proposed Project (Visual Simulation)



KOP 13 visual simulation of the proposed project.

Figure F-14 KOP #14 – Before Proposed Project (Existing Conditions)



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Figure F-14 (continued) KOP #14 – After Proposed Project, Immediately Post-Construction (Visual Simulation)



KOP 14 visual simulation of the proposed project.

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Figure F-14 (continued) KOP #14 – After Proposed Project, Ground Cover Established (Visual Simulation)



Figure F-14 (continued) KOP #14 – Approximately 5 Years after Proposed Project (Visual Simulation)



Figure F-15 KOP #15 – Before Proposed Project (Existing Conditions)



KOP 15 baseline conditions at intersection of trail and ROW in Otay Ranch Preserve. View direction northwest.

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Figure F-15 (continued) KOP #15 – After Proposed Project, Immediately Post-Construction (Visual Simulation)



KOP 15 visual simulation of the proposed project.

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Figure F-15 (continued) KOP #15 – After Proposed Project, Ground Cover Established (Visual Simulation)



Figure F-15 (continued) KOP #15 – Approximately 5 Years after Proposed Project (Visual Simulation)



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## APPENDIX F TECHINICAL KOP ANALYSIS

### ALTERNATIVE 1 KOP ANALYSES

Visual impact summary sheets for KOPs #7, #8, and #14 are provided below for Alternative 1. Ephemeral impacts that may be created from glint and glare are not included in the evaluations. The visual simulations and summary sheets for KOPs #7 and #14 evaluate visual impacts at two stages:

1. **Ground Cover Established.** Represents the visual conditions after initial vegetation establishment. Sufficient time has passed for shrubs and grasses to establish, but trees are not mature.
2. **Trees Established (Approximately 5 Years after Construction).** Represents the visual conditions approximately five years after the end of construction when trees are mature.

Summary sheets are not provided for visual conditions immediately after construction of Alternative 1 because impacts after ground cover has established are already significant. The increased visual impact of conditions immediately after construction of Alternative 1 would not change the significance conclusion and are thus not necessary to evaluate. Visual simulations are provided in Figures E-16 through E-18 for each of the three KOPs. Baseline conditions are provided in Figures E-7, E-8, and E-14. Figures E-16 and E-18 provide simulations of the substation after vegetation establishment (approximately five years after construction).

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**KOP #7 Alternative 1 – Rating before Mitigation: Ground Cover Established**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	1.0
Intactness	2.5	1.0
Unity	2.5	1.0
<b>Visual Quality Total</b>	<b>8.0</b>	<b>3.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-5.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	3.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>3.5</b>	
<b>Visual Impact</b>		
Visual Quality Change	-5.0	
Viewer Response	3.5	
<b>Visual Impact (VQC x VR)</b>	<b>-17.5 (HIGH)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #7 Alternative 1 – Rating after Mitigation: Trees Established (Approximately 5 Years after Construction)**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	1.0
Intactness	2.5	1.5
Unity	2.5	1.5
<b>Visual Quality Total</b>	<b>8.0</b>	<b>4.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-4.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	3.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>3.5</b>	
<b>Visual Impact</b>		
Visual Quality Change	-4.0	
Viewer Response	3.5	
<b>Visual Impact (VQC x VR)</b>	<b>-14.0 (HIGH)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #8 Alternative 1 – Rating after Construction and during Project Operation**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	2.5
Intactness	3.0	2.0
Unity	3.5	2.5
<b>Visual Quality Total</b>	<b>9.5</b>	<b>7.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-2.5</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	3.5	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>3.75</b>	
<b>Visual Impact</b>		
Visual Quality Change	-2.5	
Viewer Response	3.75	
<b>Visual Impact (VQC x VR)</b>	<b>-9.4 (MODERATELY HIGH)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #14 Alternative 1 – Rating before Mitigation: Ground Cover Established**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	1.0
Intactness	3.0	1.0
Unity	3.0	1.0
<b>Visual Quality Total</b>	<b>9.0</b>	<b>3.0</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-6.0</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	4.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>4.0</b>	
<b>Visual Impact</b>		
Visual Quality Change	-6.0	
Viewer Response	4.0	
<b>Visual Impact (VQC x VR)</b>	<b>-24.0 (HIGH)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 =	Neutral visual impact (no impact)
1 = Low	-1 to -4 =	Low; less than significant level of visual impact
2 = Moderate	-4 to -9 =	Moderate visual impact
3 = Moderately High	-9 to -13 =	Moderately high visual impact
4 = High	-13 or below =	High visual impact

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**KOP #14 Alternative 1 – Rating after Mitigation: Trees Established (Approximately 5 Years after Construction)**

Parameter	Value	
<b>Visual Quality</b>		
<b>Existing or Proposed</b>	<b>Existing</b>	<b>Proposed</b>
Vividness	3.0	1.5
Intactness	3.0	1.5
Unity	3.0	1.5
<b>Visual Quality Total</b>	<b>9.0</b>	<b>4.5</b>
<b>Visual Quality Change (Proposed VQ - Existing VC)</b>	<b>-4.5</b>	
<b>Viewer Response</b>		
Viewer Sensitivity	4.0	
Viewer Exposure	4.0	
<b>Average Viewer Response ((VS+VE)/2)</b>	<b>4.0</b>	
<b>Visual Impact</b>		
Visual Quality Change	-4.5	
Viewer Response	4.0	
<b>Visual Impact (VQC x VR)</b>	<b>-18.0 (HIGH)</b>	
<b>VQ and VR Evaluation Basis</b>	<b>Overall Evaluation Basis</b>	
0 = None	0 = Neutral visual impact (no impact)	
1 = Low	-1 to -4 = Low; less than significant level of visual impact	
2 = Moderate	-4 to -9 = Moderate visual impact	
3 = Moderately High	-9 to -13 = Moderately high visual impact	
4 = High	-13 or below = High visual impact	

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Figure F-16 KOP #7 – After Alternative 1, Ground Cover Established (Visual Simulation)



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Figure F-16 (continued) KOP #7 – Approximately 5 Years after Alternative 1 (Visual Simulation)



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Figure F-17 KOP #8 – After Alternative 1 (Visual Simulation)



KOP 8 visual simulation of Alternative 1.

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Figure F-18 KOP #14 – After Alternative 1, Ground Cover Established (Visual Simulation)



Figure F-18 (continued) KOP #14 – Approximately 5 Years after Alternative 1 (Visual Simulation)



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