AESTHETICS SUPPORTING INFORMATION

This document provides supplemental information for the Aesthetics impact assessment approach described in Section 3.2.3. The CPUC has not developed its own method for assessing visual character and quality under CEQA. The visual impact assessment follows the CEQA Guidelines and supplements the CEQA Guidelines with guidelines provided in *Visual Impact Assessment for Highway Projects*, which uses a numeric evaluation approach to assess the degree of impact (FHWA 1988). Supplemental information provided in this document includes a detailed description of the analysis methodology and KOP visual impact rating sheets.

METHODOLOGY

The purpose of the analysis was to address the following three questions:

1. What are the visual qualities of the characteristic landscape in the project area?
2. What are the potential effects of the proposed project on the area's visual quality and aesthetics?
3. Who would see the project, and what is their likely level of concern about how the project visually fits within the existing characteristic landscape?

The photograph of existing conditions and visual simulation for each KOP was evaluated quantitatively with a numerical rating system to analyze the Proposed Project's impact on visual quality. The evaluation involved the following steps:

1. **Viewer Response.** Analyze, describe, and define numerical ratings for viewer response using the following criteria:
    a. **Viewer Sensitivity.** The extent to which the viewing public would notice or experience a substantial change in visual quality. Viewer sensitivity is based on several factors that can differ in level of importance from one viewer to another. Because this sensitivity is important to understand, the proposed project was evaluated to consider the visual experience of many different viewers.
    b. **Viewer Exposure.** Typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, the viewing distance to the resource change (foreground, middleground, or background) the duration of their view, the speed at which the viewer moves, and the position of the viewer.
2. **Existing Visual Quality.** Use the baseline photographs to analyze, describe, and assign numerical ratings for existing visual quality using three criteria:

a. **Vividness.** The visual power or memorability of landscape components as they combine in distinctive visual patterns.
b. **Intactness.** The memorability of the visual impression received from contrasting landscape elements as they combine to form a striking and distinctive visual pattern.
c. **Unity.** The degree to which the visual resources of the landscape join to form a coherent, harmonious visual pattern. Unity refers to the compositional harmony or inter-compatibility between landscape elements.

3. **Proposed Visual Quality.** Prepare photo-simulations of the proposed project. Analyze the photo-simulation and assign numerical ratings for the Proposed Project's visual quality using vividness, intactness, and unity.
4. **Visual Quality Change.** Calculate visual change as the difference between existing visual quality and visual quality with presence of the proposed project (numerical assessment). Assess resulting visual quality before and after mitigation, if necessary.

The numerical rating scale presented in Table B-1 was used to determine visual quality and viewer response.

Table B-1 Visual Quality and Viewer Response Rating Scale

Numeric Value	Description
0 = None	No or very low degree of visual change to the existing visual resource.
1 = Low	Minor adverse change to existing visual quality, with low viewer response to change in the visual environment. Impacts would be less than significant.
2 = Moderate	Moderate adverse change to existing visual quality with moderate viewer response. Impact can be reduced within 5 years using conventional visual resource mitigation measures of facilities including landscaping.
3 = Moderately High	Moderate adverse change to existing visual quality with high viewer response; or high adverse visual resource change with moderate viewer response. Conventional visual resource mitigation measures of facilities including landscape treatment practices will generally reduce impacts.
4 = High	A high level of adverse change to the visual quality or a high level of viewer response to visual change such that architectural design and landscape treatment cannot reduce the impacts to below a significant level. Viewer response level is high. An alternative project design or location may be required to avoid highly adverse impacts.

The ratings for viewer response and change in visual quality were multiplied together to produce an overall score (refer to KOP impacts rating sheets below for detailed calculations at each KOP). For example:

Visual Quality Change (VQC)	-3.0
Viewer Response (VR)	3.5
Visual Impact (VQC × VR)	-10.5 (Moderately High)

The composite visual impact score reflects both the degree of visual quality change resulting from the proposed project and the viewer response to the change. The interrelationship of these two factors in determining whether visual impacts would be significant is shown in Table B-2. Overall visual impact scores of moderately high and high are considered significant under CEQA and require mitigation. The scoring relationship between overall visual change or impact and potential need for mitigation is provided in Table B-3.

Table B-2 Guidelines for Determining Significance of Visual Impact

Overall Viewer Sensitivity	Overall Visual Change				
	Low (0 to <1)	Low to Moderate (1 to <2)	Moderate (2 to <3)	Moderate to High (3 to <4)	High (4)
Low (0 to <1)	Not Significant	Not Significant	Adverse, but Not Significant	Adverse, but Not Significant	Adverse, but Not Significant
Low to Moderate (1 to <2)	Not Significant	Adverse, but Not Significant	Adverse, but Not Significant	Adverse, but Not Significant	Adverse, but Not Significant
Moderate (2 to <3)	Adverse, but Not Significant	Adverse, but Not Significant	Adverse, but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant
Moderate to High (3 to <4)	Adverse, but Not Significant	Adverse, but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant	Significant
High (4)	Adverse, but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant	Significant	Significant

No impact visual changes are not perceptible.

Not Significant impacts may or may not be perceptible but are considered minor in the context of existing landscape characteristics and view opportunity.

Adverse but Not Significant impacts are perceived as negative but do not exceed environmental thresholds.

Adverse and Potentially Significant impacts are perceived as negative and may exceed environmental thresholds depending on project and site-specific circumstances.

Significant impacts with feasible mitigation may be reduced to less than significant levels or avoided all together. Without mitigation or avoidance measures, significant impacts would exceed environmental thresholds.

Table B-3 Visual Impact Scoring Scale

Cumulative Score Range	Impact Description
0	**No visual impact.** No mitigation is required.
-1 to -4	**Low/less than significant level of visual impact.** No mitigation is required.
-4 to -9	**Moderate level of visual impact.** Mitigation may be required depending on the level of viewer response to reduce the impact to a less than significant level.
-9 to -13	**Moderately high level of visual impact.** Mitigation would reduce the impact to a less than significant level.
-13 or below	**High level of visual impact.** The project may require design changes along with mitigation measures to reduce the impact.

KOP IMPACT RATING SHEETS

KOP impact rating sheets were used to assess the visual change to the existing visual quality for each KOP during operation of the proposed project. Rating sheets for each KOP are provided below.

APPENDIX B
AESTHETICS SUPPORTING INFORMATION

KOP #1 Visual Impact Rating Sheet

Parameter	Numerical Rating Value	
Visual Quality (VQ)	**Existing**	**Proposed**
Vividness	4.0	4.0
Intactness	2.0	2.0
Unity	2.0	2.0
VQ Total	8.0	8.0
VQ Change (Proposed VQ – Existing VQ)	0.0	
Viewer Response (VR)		
Viewer Sensitivity (S)	2.0	
Viewer Exposure (E)	4.0	
Average VR ([S + E] / 2)	3.0	
Visual Impact		
VQ Change	0.0	
Average VR	3.0	
Visual Impact (VQ Change × Average VR)	**0 (NO IMPACT)**	

KOP #2 Visual Impact Rating Sheet

Parameter	Numerical Rating Value	
Visual Quality (VQ)	**Existing**	**Proposed**
Vividness	4.0	4.0
Intactness	2.0	1.5
Unity	3.0	3.0
VQ Total	9.0	8.5
VQ Change (Proposed VQ – Existing VQ)	-0.5	
Viewer Response (VR)		
Viewer Sensitivity (S)	4.0	
Viewer Exposure (E)	4.0	
Average VR ([S + E] / 2)	4.0	
Visual Impact		
VQ Change	-0.5	
Average VR	4.0	
Visual Impact (VQ Change × Average VR)	**-2.0 (LOW)**	

KOP #3 Visual Impact Rating Sheet

Parameter	Numerical Rating Value	
Visual Quality (VQ)	**Existing**	**Proposed**
Vividness	2.0	2.0
Intactness	2.0	1.0
Unity	2.0	1.5
VQ Total	6.0	4.5
VQ Change (Proposed VQ – Existing VQ)	-1.5	
Viewer Response (VR)		
Viewer Sensitivity (S)	2.0	
Viewer Exposure (E)	2.0	
Average VR ([S + E] / 2)	2.0	
Visual Impact		
VQ Change	-1.5	
Average VR	2.0	
Visual Impact (VQ Change × Average VR)	**-3.0 (LOW)**	

KOP #4 Visual Impact Rating Sheet

Parameter	Numerical Rating Value	
Visual Quality (VQ)	**Existing**	**Proposed**
Vividness	4.0	3.5
Intactness	4.0	3.0
Unity	4.0	3.5
VQ Total	12.0	10.0
VQ Change (Proposed VQ – Existing VQ)	-2.0	
Viewer Response (VR)		
Viewer Sensitivity (S)	4.0	
Viewer Exposure (E)	4.0	
Average VR ([S + E] / 2)	4.0	
Visual Impact		
VQ Change	-2.0	
Average VR	4.0	
Visual Impact (VQ Change × Average VR)	**-8.0 (MODERATE)**	

KOP #5 Visual Impact Rating Sheet

Parameter	Numerical Rating Value	
Visual Quality (VQ)	**Existing**	**Proposed**
Vividness	3.0	3.0
Intactness	1.5	1.0
Unity	1.5	2.0
VQ Total	6.0	6.0
VQ Change (Proposed VQ – Existing VQ)	0.0	
Viewer Response (VR)		
Viewer Sensitivity (S)	2.0	
Viewer Exposure (E)	1.0	
Average VR ([S + E] / 2)	1.5	
Visual Impact		
VQ Change	0.0	
Average VR	1.5	
Visual Impact (VQ Change × Average VR)	**0 (NO IMPACT)**	

KOP #6 Visual Impact Rating Sheet

Parameter	Numerical Rating Value	
Visual Quality (VQ)	**Existing**	**Proposed**
Vividness	3.0	3.0
Intactness	3.5	3.0
Unity	3.5	2.5
VQ Total	10.0	8.5
VQ Change (Proposed VQ – Existing VQ)	-1.5	
Viewer Response (VR)		
Viewer Sensitivity (S)	3.0	
Viewer Exposure (E)	3.0	
Average VR ([S + E] / 2)	3.0	
Visual Impact		
VQ Change	-1.5	
Average VR	3.0	
Visual Impact (VQ Change × Average VR)	**-4.5 (MODERATE)**	

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