

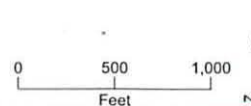
DOCKETED

Docket Number:	07-AFC-06C
Project Title:	Carlsbad Energy Center - Compliance
TN #:	203133
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LEGEND

- Encina Power Station Site
- Amended CECP Project Site
- Poseidon Desalination Site
- Footprint of the Amended Project's Major Features
- KOP
- Southbound I-5 Viewpoint
- Northbound I-5 Viewpoint



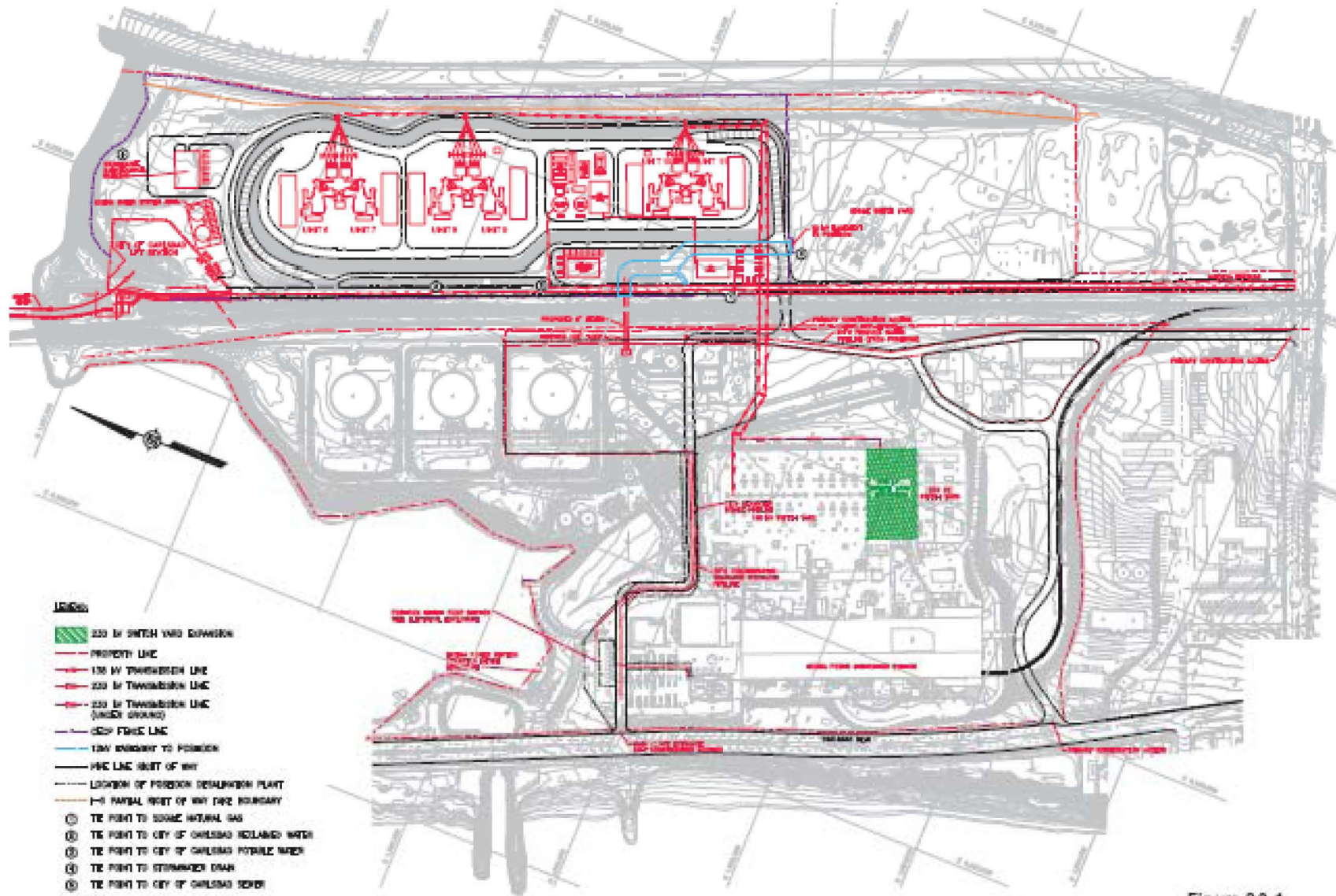
**DR 58-1
Aerial View of Project Site With
Locations of Key Observation Points and
Supplemental Viewpoints**

*Carlsbad Energy Center Project
Carlsbad, California (07-AFC-06)
Petition to Amend*

Visual Resources

CECP Public Workshop

Day 2, Session I



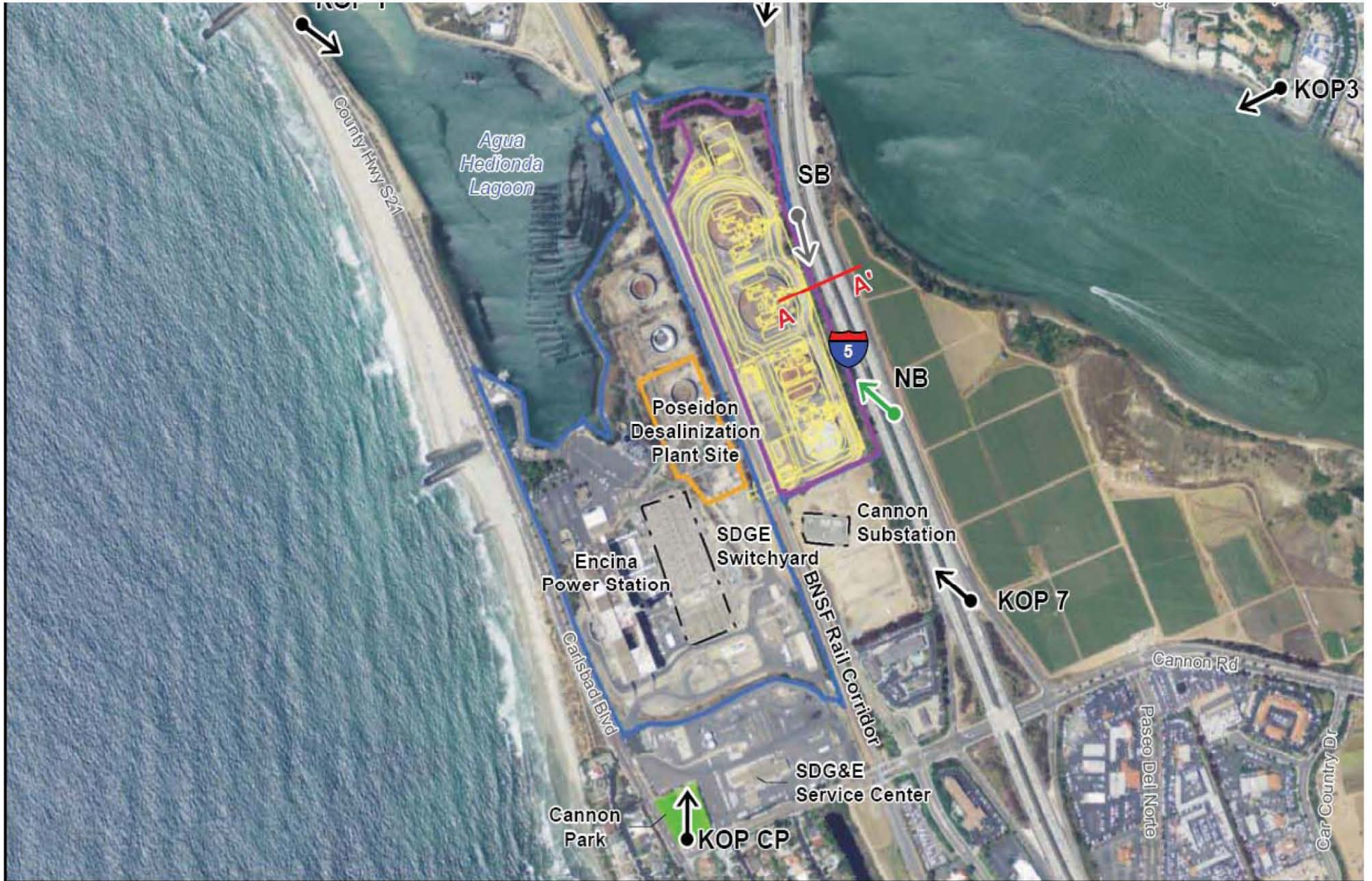
- LEGEND**
- 220 KV SWITCH YARD EXPANSION
 - PROPERTY LINE
 - 138 KV TRANSMISSION LINE
 - 220 KV TRANSMISSION LINE
 - 220 KV TRANSMISSION LINE (UNDERGROUND)
 - 66KV FEEDER LINE
 - 115KV EMERGENCY TO FORDSON
 - 115KV LINE REST OF WAY
 - LOCATION OF FORDSON DETENTION PLANT
 - 115KV PARALLEL REST OF WAY LINE BOUNDARY
 - ① TE POINT TO SOURCE NATURAL GAS
 - ② TE POINT TO CITY OF CHARLESTON RECLAIMED WATER
 - ③ TE POINT TO CITY OF CHARLESTON POTABLE WATER
 - ④ TE POINT TO STORMWATER DRAIN
 - ⑤ TE POINT TO CITY OF CHARLESTON SEWER

NOTE:
 SOME EXISTING SYSTEMS WERE NOT SHOWN FOR CLARITY.

SOURCE:
 CH2M HILL
 ENVIRONMENTAL & INFRASTRUCTURE



Figure 2.0-1
 Plot Plan
 Amended Castbed Energy Center Project
 Charleston, California (07-AFC-08C)
 Petition to Amend



LEGEND

- Encina Power Station Site
- Amended CECP Project Site

KOP

Southbound I-5 Viewpoint

A—A' Cross-Section

**Figure DR POV 5-1
Aerial View of Project
Observation Points**



Baseline view from the end of Hoover Street toward the project site with the licensed CECP in place.

Figure 5.13-6A
KOP 4 – View from the End of Hoover
Street – Baseline Conditions

Carlsbad Energy Center Project
Carlsbad, California (07-AFC-06)
Petition to Amend – Amendment No. 2

CH2MHILL.



View from the end of Hoover Street toward the project site with the Amended Project power generation and transmission facilities in place, before removal of the Encina Power Station.

Figure 5.13-6B
KOP 4 – View from the End of Hoover
Street – Amended Project before
Removal of the Encina Power Station
Carlsbad Energy Center Project
Carlsbad, California (07-AFC-06)
Petition to Amend – Amendment No. 2



View from the end of Hoover Street toward the project site with the Amended Project in place, including removal of the Encina Power Station.

Figure 5.13-6C
KOP 5 – View from the End of Hoover Street – Amended Project with Removal of the Encina Power Station
Carlsbad Energy Center Project
Carlsbad, California (07-AFC-06)
Petition to Amend – Amendment No. 2

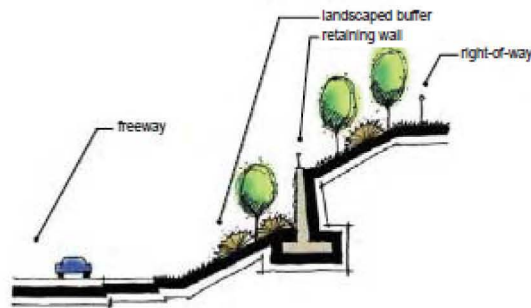
Prioritize Spatial Quality

A. Separate Walls from Viewers

The use of mid slope cut retaining, mid slope fill retaining, noise berm/wall combo, and transparent noise walls should be encouraged.

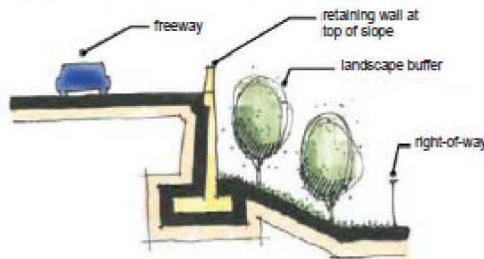
Mid-slope Retaining Walls in Cut Sections

Retaining walls should be located at mid slope wherever possible in cut sections to provide a buffer area for landscape screening between the wall and freeway.



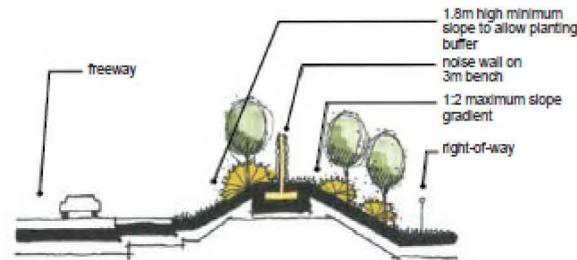
Top-of-slope Retaining Walls in Fill Sections

Retaining walls should be located at the top of slope wherever possible in fill sections to provide a buffer area for landscape screening between the wall and the community.



Noise Berm/Wall Combinations

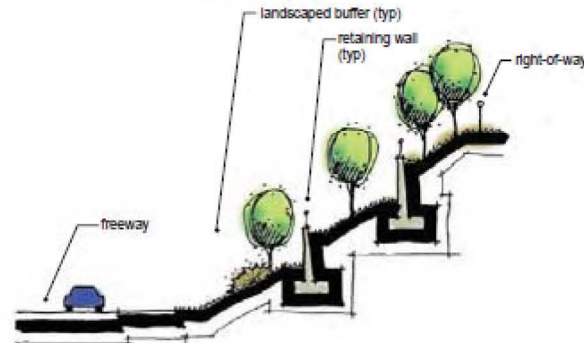
This barrier configuration is preferable in situations where a tall retaining wall at the toe of slope would create a visual impact to an adjacent property. To be effective, this option should incorporate a berm with a 1:2 slope on the freeway side that is 1.8m (6 ft.) high (minimum). This size berm should allow enough space to provide screening shrubs in front of the wall.



B. Create Buffers and Planting Strips

Terraced Retaining Walls

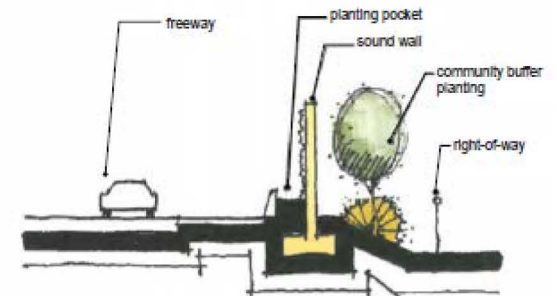
Where site conditions are favorable, retaining walls over 6m (20 ft.) in height should be divided into separate structures sufficiently offset from one another to create a planting area between the two.



These walls should not be constructed in one vertical plane. The use of terracing forms that curve with the landform and disappear into the slope help accentuate the smooth flowing rhythms of the corridor and avoid abrupt conflicts with the contours. This is keeping with the overall theme of blending in with the unique natural environment of the I-5 corridor. Retaining walls and sound walls are the most important elements that will establish what a traveler within the corridor experiences and remembers.

Noise Wall Planting Pockets

Where right-of-way is too narrow to employ the configurations listed above, a minimum 1.5m (5 ft.) wide planting area should be provided between the back of the barrier and the face of the wall.



VIS-5 Cumulative Impact Buffer Zone, Coordination with Caltrans, and Mitigation Plan:

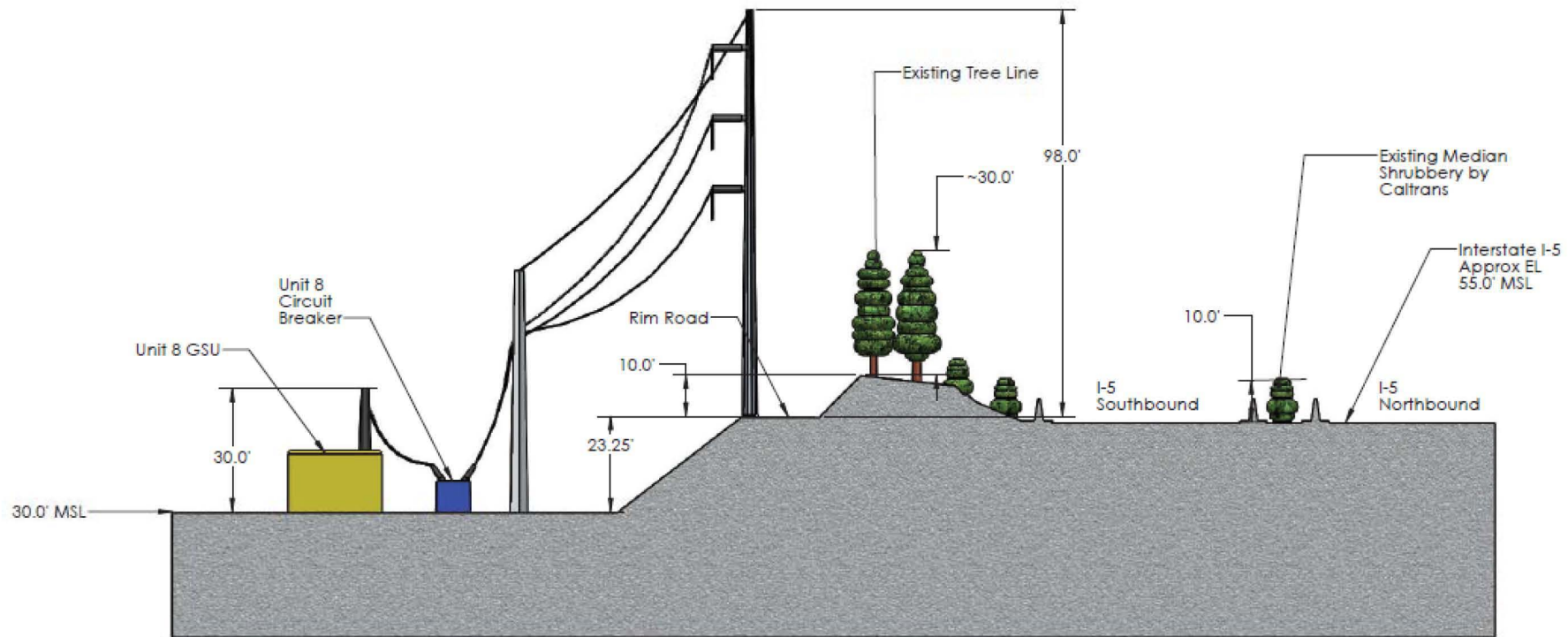
In order to address potential cumulative visual impacts resulting from I-5 widening, the Applicant shall maintain a permanent buffer zone, including the existing vegetative visual screening, on the eastern portion of the CECP site, between the existing NRG fence line and storage tank perimeter road. This measure shall be coordinated with Conditions of Certification LAND-1 and HAZ-8. The existing landscape screening within the buffer zone shall be maintained and enhanced per Condition of Certification VIS-2 after start of project construction. The buffer zone shall be kept available to maintain existing visual screening, accommodate future possible I-5 widening to the extent necessary, and to accommodate both future hazard protection features and visual screening.

In addition, the Applicant shall work with Caltrans to develop a Mitigation Plan for accommodating the widening project while maintaining visual screening of the CECP to acceptable levels. This plan could include complete or partial avoidance of the CECP site, complete or partial berm retention or replacement, complete or partial retention of existing landscape screening, and replacement screening as needed. The objective of the plan shall be to accommodate the I-5 widening within the designated buffer zone to the extent that encroachment is unavoidable, while providing needed hazard protection and acceptable levels of visual screening of the power plant.

If construction of a new landscaped berm west of the existing berm and proposed future Caltrans right-of-way (ROW) is determined to be the most feasible measure to address potential cumulative impacts of the I-5 Widening Project, then design and construction of the new berm shall be implemented at the earliest feasible time, in order to maximize growing time for trees planted on the new berm. Landscaping of a replacement berm shall include installation of large-container (24-inch box or larger, as needed), fast growing evergreen trees in sufficient density to provide comparable or better visual screening of the CECP site than currently exists, within the shortest feasible period. Trees shall be selected and located so as to achieve substantial screening within a period of five years from start of project operation. The plan shall, at a minimum, include the following components:

- A. A record of discussions, meetings and planning activities conducted with Caltrans;
- B. The conclusions of these coordination activities;
- C. A detailed Mitigation Plan providing plans, elevations, cross-sections or other details;
- D. Including a detailed list of plants and container size, sufficient to fully convey how the objectives of effective visual screening of the CECP are met;
- E. A proposed construction schedule.

Verification: At the earliest feasible time, Applicant shall coordinate with Caltrans to discuss specific hazard and visual mitigation strategies. Following publication of the I-5 Widening DEIS, Applicant shall work with Caltrans to devise a specific Cumulative Impact Mitigation Plan for accommodating hazard protection and visual screening. Following coordination and plan development with Caltrans, the project owner shall submit a draft of the Cumulative Impact Mitigation Plan to the City of Carlsbad for review and comment and to the CPM for review and approval. The project owner shall submit any required revisions within 30 days of notification by the CPM. The project owner shall not implement the plan until receiving approval from the CPM. After receiving approval, the project owner shall commence implementation of the Mitigation Plan at the earliest feasible opportunity, and shall commence implementation not later than 180 days after plan approval. The project owner shall notify the CPM .



Section View
Looking North(plant)

Cross Section Prepared by CB&I
Layout Shown is Preliminary
Scale: 1:1024

VIS-5 and HAZ-8: Importance of “buffer zone” between the eastern edge of the amended CECP and the western edge of the expanded I-5



Aqueous Ammonia Tank

Dr. Alvin Greenberg participated in the initial discussion and collaborations during the licensed CECP proceeding in 2009 that ultimately resulted in the “buffer zone” concept embodied in Condition of Certification **VIS-5** and **HAZ-8**; namely that adequate space be afforded between the eastern CECP edge and the western expanded I-5 edge for the specific purpose of planting fast-growing trees and shrubs to mature and provide visual screening once Caltrans removes the existing berm and foliage along the existing right-of-way when the I-5 expands to an 8+4 preferred alternative at some point in the future.

Additionally, the berm would provide essential perimeter security for the amended CECP from vehicles and site incursions that could possibly result in power production interruption, damage to facility equipment, and most important, health and safety risks to on-site personnel