Appendix B Minimization and Mitigation Summary

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Task and Brief Description	Reference by Section #	Responsible Branch/Staff	Timing / Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
						Initial	Date		Initial	Date
DESIGN KICK-OFF		Proj Eng_____	Design							
ENVIRONMENTAL PS&E REVIEW		Proj Eng_____	Design							
ENVIRONMENTAL COMPLIANCE REVIEW		Envi Plan_____	Design							
CONSTRUCTION KICK-OFF MEETING		Proj Quality Cont_____	Design							
Transfer Resident Engineer Book		Proj Quality Cont_____	Design							
PRECONSTRUCTION MEETING		Res Eng_____	Construction							
Air Quality										
Compliance with the South Coast Air Quality Management District (SCAQMD) Rule 403 including Best Available Control Measures (BACMs) and the California Department of Transportation's (Department) Standard Specifications for construction will reduce the temporary impacts. All disturbed areas, including storage piles that are not being actively used for construction purposes, shall be effectively stabilized for dust emissions using water, chemical stabilizers/suppressants, or vegetative ground cover, as appropriate.		Proj Eng_____ Envi Plan_____ Res Eng_____	Design Construction							
All construction vehicles and construction equipment shall be required to be equipped with the State-mandated emission control devices pursuant to State emission regulations and standard construction practices. Short-term construction particulate matter less than 10 microns in diameter (PM_{10}) emissions shall be further reduced with the implementation of required dust suppression measures outlined within South Coast Air Quality Management District (SCAQMD) Rule 403. Construction of the proposed project shall also adhere to the Caltrans Standard Specifications for construction [Section 10 and 18 (Dust Control) and Section 39-3.06.		Proj Eng_____ Envi Plan_____ Res Eng_____	Design Construction	No						
Climate Change										
Landscaping will use reclaimed water, where possible. Currently 30 percent of the electricity used in California is used for the treatment and delivery of water. Use of reclaimed water helps conserve this energy, which reduces greenhouse gas (GHG) emissions from electricity production. Landscaping reduces surface warming and through photosynthesis decreases Carbon Dioxide (CO_2). During the design phase, the Department will work with the City of San Juan Capistrano and comply with Section 9-2:349 Municipal Code and plant trees above and beyond what the project is impacting. The use of lighter color surfaces such as Portland cement, helps to reduce the albedo effect and cool the surface; in addition, the Department has been a leader in the effort to add fly ash to Portland cement mixes. Adding fly ash reduces the GHG emissions associated with cement production. Use of this would be in accordance with the Department's specifications and design standards and could be used in areas such as curb/gutter, retaining walls, driveways, and sidewalks.		Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction	Yes						

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According to Caltrans Standard Specification Provisions, idling time for lane closure during construction is restricted to 10 minutes in each direction; in addition, the contractor must comply with SCAQMD rules, ordinances, and regulations in regards to air quality restrictions. Caltrans and the California Highway Patrol (CHP) are working with regional agencies to implement Intelligent Transportation Systems (ITS) to help manage the efficiency of the existing highway system. ITS is commonly referred to as electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.										
Visual/Landscape										
All landscaping currently maintained by the City of San Juan Capistrano (City) shall be replaced with similar landscaping.		Proj Eng_____ Res Eng_____	Design Construction	No						
The District Landscape Architect shall ensure that the appropriate mix and application strategy for erosion control seed species will be applied for the specific soil composition of the area.		Proj Eng_____	Design	No						
To maintain the context of the adjacent communities (color, form, and texture), the project shall install landscaping along proposed wall features and adjoining hillsides that is compatible with the existing landscaping. Landscape shall include trees (where feasible), shrub/groundcover mass planting, and vines on opaque sound walls and/or retaining walls to soften the hardscape features and reduce the adverse environmental impacts (such as glare and radiant heat). All selected species within California Department of Transportation (Department) right-of-way shall share similar water requirements. The new landscape concept and plant palette shall be determined in consultation with the Department District Landscape Architect during the Project Design Phase.		Proj Eng_____ Res Eng_____	Design Construction	Yes						
All landscaping currently maintained by the City shall be replaced with similar landscaping. Trees that are removed shall be replaced where feasible. Where speeds are posted greater than 35 miles per hour (mph), large trees (trees with trunks over four inches in diameter when mature) shall be placed outside the clear recovery zone (30 feet [ft] from the travel lane). Small trees (trees with trunks four inches in diameter or less when mature) shall be used to replace the trees within the clear recovery zone. Tree spacing for small trees can be adjusted to account for the removal of existing mature trees.		Proj Eng_____ Res Eng_____	Design Construction	No						
All utilities that are to be moved shall be placed underground, where feasible, in coordination with the California Department of Transportation (Department) and the City of San Juan Capistrano (City).		Proj Eng_____ Res Eng_____	Design Construction	Yes						
For trees (including coast live oak trees) that are removed, the California Department of Transportation (Department) will prepare a planting plan for approval by the City of San Juan Capistrano Planning Commission. The planting plan shall be in compliance with Section 9-2:349 of the City of San Juan Capistrano Municipal Code and shall require the replacement of trees at a minimum ratio of 1:1. The plan shall identify trees to be replanted within the State right-of-way (ROW) and those to be planted off site. As part of this planting plan, the Department will recommend that the City of San Juan Capistrano install native tree species. The City Tree Removal Permit process can be referenced in Appendix J of this document.		Proj Eng_____ Res Eng_____	Design Construction	Yes						
To maintain consistency with the existing infrastructure (i.e., walls, sidewalks) in the project area, architectural treatments for the structure elements of the project shall be determined in consultation with the California Department of Transportation (Department) District		Proj Eng_____ Res Eng_____	Design Construction	Yes						

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Landscape Architect and the City of San Juan Capistrano during the Plans, Specifications, and Estimate (PS&E) phase.										
To minimize visual impacts caused by the extensive large-scale walls, wall aesthetic enhancements shall be developed as a theme treatment (i.e., terraced, color treatment, textural treatment, varying materials) for all new retaining walls and sound walls within the proposed project. Structural themes (i.e., walls, sidewalk) shall be similar in character to the surrounding environment. The elements shall be determined in consultation with the Department District Landscape Architect and the City of San Juan Capistrano during the Plans, Specifications, and Estimates (PS&E) phase. The visual simulations included in this Visual Impact Assessment represent standard wall treatments only and are subject to change.	-	Proj Eng_____ Res Eng_____	Design Construction	Yes						
To minimize visual impacts caused by the replacement sidewalk, aesthetic enhancements shall be implemented (i.e., color treatment, textural treatment, varying setbacks from the highway, use of material other than concrete) for the replacement sidewalk.	-	Proj Eng_____ Res Eng_____	Design Construction	Yes						
	-									
Biology	-									
All Best Management Practices (BMPs) would be in place during construction according to the Storm Water Pollution Prevention Plan (SWPPP).	-									
A qualified biologist shall be designated responsible for overseeing biological monitoring, regulatory compliance, and restoration activities associated with the proposed project in accordance with the adopted measures, applicable regulations and laws, and environmental permit conditions.	-	Proj Eng_____ Res Eng_____	Design Construction	Yes						
Biological resources shall be protected during construction. To ensure this protection, a Biological Resources Construction Plan that provides for the protection of the resource and establishes the monitoring requirements will be completed to be reviewed and approved by the resource agencies prior to ground disturbance.	-	Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction	No						
The Department shall assume responsibility for compensation of impacts to biological resources. The project would result in permanent impacts to Waters of the United States (waters of the U.S.) requiring a Letter of Permission (LOP) from the United States Army Corps of Engineers (ACOE) to authorize the discharge of dredged and/or fill materials into waters of the U.S., pursuant to Section 404 of the Clean Water Act (CWA).	-	Proj Eng_____ Envi Plan_____	Design							
The drainage features shall be replaced by drainage pipes that tie into the existing storm drain system. Impacts to wetland waters of the United States shall be offset by compensation consisting of wetland creation at a minimum 1:1 ratio.	-	Proj Eng_____ Res Eng_____	Design	No						
If any special-status plants are observed within the Biological Study Area (BSA) during preconstruction surveys, the locations of the populations and an estimation of the population size shall be mapped and shown on construction drawings. This information shall be used for appropriate avoidance during construction. If a species is to be avoided during construction, it shall be shown as an environmentally sensitive area (ESA) on the construction plans. If the population cannot be avoided during construction, this information shall be used for appropriate seed collection and salvage measures.	-	Proj Eng_____ Res Eng_____	Design Construction	No						

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Protective fencing shall be placed around the dripline of oaks not identified for removal to prevent compaction of the root zone and designated as an environmentally sensitive area (ESA). In addition, trees in containers will be relocated prior to the start of construction.	-	Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction	Yes						
Impacts to coast live oak trees will be compensated at a minimum 1:1 ratio. Impacts to all trees will be compensated in accordance with the City of San Juan Capistrano's Tree Preservation Ordinance.	-	Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction	No						
If feasible, vegetation removal will be avoided during the primary nesting season for local birds (February 15 through September 1) and most raptors. If vegetation removal must occur during this period, then pre-construction surveys shall be conducted surveyed by a qualified biologist in the appropriate habitats no more than 7 days prior to clearing within and up to approximately 50 feet (ft) from the project boundary.	-	Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction	Yes						
In order to avoid and minimize the effects of lighting on wildlife, construction lighting shall be shielded away from natural areas as directed by the project engineer.	-	Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction	Yes						
To reduce impacts to wildlife, all construction-related activities shall be confined to the proposed impact boundaries by installing fencing along the boundary in locations where the impact area abuts vegetated areas to prevent any construction activities from encroaching into adjacent habitat areas. In addition, construction access points shall be limited in proximity to the potential habitat for wildlife to the maximum extent feasible as directed by the project engineer.	-	Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction	Yes						
Impacts to coast live oak trees will be compensated at a minimum 1:1 ratio through off-site replacement. Impacts to all trees will be mitigated in accordance with the City of San Juan Capistrano's (City) Tree Preservation Ordinance.	-	Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction	Yes						
Bare soil will be landscaped with California Department of Transportation (Department)-recommended seed mix from locally adopted species to preclude the invasion of noxious weeds. In compliance with the Executive Order on Invasive Species, EO 13112, and subsequent guidance from the Federal Highway Administration (FHWA), the landscaping and erosion control measures included in the project will not use species listed as noxious weeds, and no invasive species will be planted within the state right-of-way or in areas where the species may enter a drainage area.	-	Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction	Yes						
In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or adjacent to the construction areas. These include the inspection and cleaning of construction equipment, and eradication strategies to be implemented should an invasion occur. Before mobilizing to arrive at the site and before leaving the site, construction equipment will be cleaned of mud or debris that may contain invasive plants and/or seeds, and inspected to reduce the potential of spreading noxious weeds. To ensure implementation of these measures, the project contractor shall provide a weed abatement program to be approved by the Department engineer prior to the start of ground disturbance.	-	Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction							
The Department will use site-specific plant materials (e.g., propagules and seed) adapted to local conditions in order to increase the likelihood that revegetation will be successful and to maintain the genetic integrity of the local ecosystem	-	Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction							

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Seed purity will be certified by planting seed labeled under the California Food and Agricultural Code or seed tested within a year by a seed laboratory certified by the Association of Official Seed Analysts or by a seed technologist certified by the Society of Commercial Seed Technologists.	-	Proj Eng_____ Land Arch_____ Res Eng_____	Design Construction	Yes						
Trucks with loads carrying vegetation will be covered, and vegetative materials removed from the site will be disposed of, in accordance with all applicable laws and regulations.	-	Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction							
Cultural Resources	-									
Through establishment of an Environmentally Sensitive Area (ESA) Action Plan, potentially significant subsurface deposits at the Manriquez Adobe site will not be impacted.		Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction	Yes						
If buried cultural materials are discovered during construction, all earth-moving activity in the area will be diverted until a qualified archaeologist can assess the nature and significance of the find.		Proj Eng_____ Envi Plan_____ Res Eng_____	Design Construction	No						
If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities will cease in any area or nearby area suspected to overlie remains, and the County Coroner will be contacted. Pursuant to Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the Coroner will notify the Native American Heritage Commission.		Proj Eng_____ Envi Plan_____ Res Eng_____	Design Construction	No						
Paleontological Resources										
A Paleontological Mitigation Plan (PMP) will be prepared by a qualified Principal Paleontologist.		Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction	Yes						
Pregrade meeting by a qualified paleontologist to explain the likelihood for encountering paleontological resources, what resources may be discovered, and the methods that will be employed if anything is discovered		Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction	Yes						
All employees, subcontractors, and Contractor's representatives on the project site involved in subsurface disturbing activities must receive a one-hour paleontological resource awareness training program provided by the Paleontological Salvage Team prior to performing on-site work.		Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction	Yes						
Monitoring during excavation by a qualified vertebrate paleontologic monitor.		Envi Plan_____	Construction	Yes						
Native sediments occasionally spot-screened through one-eighth to one-twentieth-inch mesh screens to determine whether microfossils are present.		Proj Eng_____ Envi Plan_____ Envi Plan_____ Res Eng_____	Design Construction	No						
Any recovered specimens prepared to the point of identification and permanent preservation.		Envi Plan_____	Construction	No						

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Specimens identified to the lowest taxonomic level possible and curated into an institutional repository with retrievable storage.		Design_____ Envi Plan_____	Design Construction	No						
Preparation of a report of findings with an appended, itemized inventory of specimens is required following construction. When submitted to the Lead Agency, the report and inventory would signify completion of the program to mitigate impacts to paleontological resources. The report should also be submitted to the museum repository along with the fossil specimens.		Envi Plan_____	Construction	No						
Geology and Soils										
During final design, the California Department of Transportation (Department) shall prepare a Final Geotechnical/Structures Design Report for the project, refining the existing Preliminary Design Report.		Proj Eng_____	Design	No						
Implementation of erosion control Best Management Practices (BMPs) in the Storm Water Pollution Prevention Plan (SWPPP), as discussed in Section 2.2.2, Water Quality and Storm Water Runoff.		Proj Eng_____	Design	No						
Hazardous Waste and Materials	-									
Determine whether yellow thermoplastic and yellow paint traffic stripes exceed hazardous waste concentrations.		Proj Eng_____ Res Eng_____	Design Construction	Yes						
If any transformers are proposed to be disturbed or removed during construction activities, testing for potential PCB hazards conducted and handled in accordance with Caltrans SSP XE 15-300.		Proj Eng_____ Res Eng_____	Design Construction	Yes						
To ensure utility owners mark the locations of underground transmission lines and facilities, the Underground Service Alert of Southern California will be alerted at least two working days prior to subsurface excavation.		Proj Eng_____ Res Eng_____	Design Construction	No						
Develop appropriate health/safety plan to address contact with hazardous waste/materials		Proj Eng_____ Res Eng_____	Design Construction	No						
The procedures outlined in the Department's Unknown Hazards Procedures will be followed.		Proj Eng_____ Res Eng_____	Design Construction	No						
Hydrology and Floodplain										
Maintenance BMPs (Category IA), Design Pollution BMPs (Category IB), and Treatment BMPs (Category III)		Proj Eng_____ Envi Plan_____ Res Eng_____	Design Construction	No						
Water Quality										
National Pollutant Discharge Elimination System (NPDES) Permit for *General Waste Discharge Requirements for Groundwater Extraction Waste Discharges from Construction, Remediation, and Permanent Groundwater Extraction Projects to Surface Waters within the San Diego Region except for San Diego Bay* (Order No. 2001-96, NPDES No. CAG919002).		Proj Eng_____ Envi Plan_____ Res Eng_____	Design Construction	No						
Storm Water Pollution Prevention Plan (SWPPP) will be prepared		Proj Eng_____ Envi Plan_____ Res Eng_____	Design Construction	No						

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Construction Site Best Management Practices (BMPs) (Category II) requirements		Proj Eng_____ Envi Plan_____ Res Eng_____	Design Construction	No						
The completed project plans would incorporate all necessary Maintenance BMPs (Category IA), Design Pollution BMPs (Category IB), and Treatment BMPs (Category III) to meet the Maximum Extent Practical (MEP) requirements.		Proj Eng_____ Envi Plan_____ Res Eng_____	Design Construction	No						
Community Impact	-									
Coordination with property owners regarding the construction schedule and phasing shall be included in the TMP.		Proj Eng_____ Res Eng_____	Design Construction	No						
Compliance with the Department's Right of Way Manual, which requires compensation at fair market value for property acquisitions.		Proj Eng_____ ROW_____	Design	No						
Implementation of Mitigation Measures V-1 through V-4 would reduce impacts (Key Views 2 and 3) due to vegetation/tree removal and construction of walls as a result of both Build Alternatives.		Proj Eng_____	Design	No						
Noise and Vibration	-									
Compliance with the California Department of Transportation's (Department) Standard Specifications, "Sound Control Requirements" will reduce the temporary impacts.		Proj Eng_____ Res Eng_____	Design Construction	No						
Interior noise mitigation measures shall be offered to the property owner of the Receptor 31 K5, such as installation of double-paned windows and a mechanical heating and cooling system (air conditioning).		Proj Eng_____ Res Eng_____	Design Construction	Yes						
Utilities and Emergency Services										
Design, construction, and inspection of utilities that would need to be relocated for the project would be done in accordance with Department requirements. These requirements include coordination with the affected service provider in each instance to ensure that work is during times of low demand and in accordance with the appropriate requirements and criteria. This coordination would be initiated during the preliminary engineering phase of the project and would continue through final design and construction		Proj Eng_____ Res Eng_____	Design Construction	No						
Coordination efforts would include planning utility rerouting, identifying potential conflicts, ensuring that construction of the proposed project minimizes disruption to utility operations, and formulating strategies for any unanticipated problems that may arise during construction.		Proj Eng_____ Res Eng_____	Design Construction	No						
The Department would also coordinate with emergency service providers to avoid emergency service delays by ensuring that all providers are aware well in advance of temporary road closures and detours. Please see Chapter 1, Project Description for details on the TMP.		Proj Eng_____ Res Eng_____	Design Construction	No						
Transportation/Traffic										
The Traffic Management Plan (TMP) will be implemented.		Proj Eng_____ Res Eng_____	Design Construction	Yes						
The project will provide eastbound left-turn lanes at the unsignalized intersections and allow U-turns at these locations to alleviate side street delays. This would facilitate the movement of minor street traffic onto the State Route 74 (SR-74) via a right turn and then a U-turn at the next available intersection.		Proj Eng_____	Design	Yes						

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						Initial	Date		Initial	Date
Permits and Approvals	-									
United States Army Corps of Engineers	-									
Section 404 – Letter of Permission or Nationwide Permit 14		Proj Eng_____ Envi Plan_____ Res Eng_____	Design Construction	Yes						
	-									
CA Department of Fish and Game										
Section 1602		Proj Eng_____ Envi Plan_____ Res Eng_____	Design Construction	No						
Regional Water Quality Control Board										
Section 401 Water Quality Certification		Proj Eng_____ Envi Plan_____ Res Eng_____	Design Construction	No						