

**SECOND ADDENDUM  
PRECISE DEVELOPMENT PLAN AND DESALINATION PLANT PROJECT  
FINAL ENVIRONMENTAL IMPACT REPORT (EIR 03-05)  
CITY OF CARLSBAD, CALIFORNIA**

*State Clearinghouse No. 2004041081  
EIR Certified June 13, 2006*

*Prepared for:*

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## Acronyms and Abbreviations

<b>Acronym/Abbreviation</b>	<b>Definition</b>
AMSL	above mean sea level
BSRA	Biologically Significant Resource Areas
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
dB	decibel
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPS	Encina Power Station
ERP	Emergency Response Plan
FEIR	Final Environmental Impact Report
gal/day	Gallons per day
GHG	greenhouse gas
GHG Plan	Energy Minimization and Greenhouse Gas Reduction Plan
HCP	Habitat Conservation Plan
HMA	Habitat Management Area
MBTA	Migratory Bird Treaty Act
mgd	million gallon per day
MWD	Metropolitan Water District of Southern California
NCCP	Natural Community Conservation Plan
PDP	Precise Development Plan
REC	Renewable Energy Credit
ROW	right-of-way
SDG&E	San Diego Gas and Electric
SWPPP	Stormwater Pollution Prevention Plan
TOVWTP	Twin Oaks Valley Water Treatment Plant
VWD	Vallecitos Water District
USFWS	U.S. Fish and Wildlife Service
Water Authority	San Diego County Water Authority

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## 1.0 INTRODUCTION/PROJECT BACKGROUND

The City of Carlsbad prepared and certified the Carlsbad Precise Development Plan and Desalination Plant Final Environmental Impact Report (FEIR) (City of Carlsbad 2006) and First Addendum (City of Carlsbad 2009) for the Carlsbad Desalination Project (Project). The FEIR analyzed all components of the Project, including a 50 million gallon per day (mgd) seawater desalination plant and off-site water conveyance facilities located within the cities of Carlsbad, Oceanside, and Vista. The First Addendum documented changes to the footprint of the desalination plant and off-site water conveyance facilities. Pursuant to Section 15367 of the California Environmental Quality Act (CEQA), the City of Carlsbad was the lead agency for the preparation of the FEIR. The FEIR documented that agencies other than the City of Carlsbad will use the FEIR when making a decision on aspects of the Project that require their approval. As noted in Section 3.4.2 of the FEIR, the product water created at the seawater desalination plant would be transmitted to local and/or regional storage and distribution systems. The delivery area for the product water was expected to include a number of local water agencies, municipalities, and the San Diego County Water Authority (Water Authority) and its member agencies. The Project described in the FEIR included the construction of new off-site pipelines that would need to be constructed to convey the product water to the City of Carlsbad, neighboring water agencies, and/or the Water Authority. Although multiple alternative pipeline alignments were analyzed by the City of Carlsbad in the FEIR, the analysis did not include potential impacts associated with modifying the Water Authority's facilities that would convey product water to the Water Authority distribution facilities (City of Carlsbad 2006).

In support of its mission, the Water Authority has determined that purchasing product water from the Project would improve long-term water supply reliability for the San Diego region. The Water Authority has been working closely with several of its member agencies and the Project proponent, Poseidon Resources, regarding a water purchase agreement for potential Water Authority-owned local supply (of product water) from the Project.

The Water Authority has determined that minor changes to the previously approved off-site distribution system are necessary to allow for greater operational flexibility and efficiency in receiving and delivering the product water from the Project. Pursuant to Section 15381 of CEQA, the Water Authority is a responsible agency for the preparation of this Second Addendum to the Project's FEIR. The purpose of this Second Addendum is to evaluate the potential for environmental effects of the Water Authority's proposed minor modifications to the approved off-site water conveyance facilities and to determine if these modifications would result in any new significant impacts or any substantial increase in the severity of impacts addressed under the certified FEIR, as amended by the First Addendum.

To enhance the safety and reliability of deliveries from the Project to the Water Authority's aqueduct system, the Water Authority is proposing minor modifications to the Project scope

previously approved in the FEIR. Specifically, these include modifications at the Twin Oaks Valley Water Treatment Plant (TOVWTP), Pipeline 3 relining between San Marcos and the TOVWTP, modifications to the pipeline interconnection facilities at San Marcos, modifications to the Pipeline 4 San Marcos Vent Structure, and an alternative pipeline alignment near Cannon Road and Faraday Avenue. These improvements are under consideration to ensure the desalinated product water can be safely and reliably integrated into the Water Authority's existing regional distribution system. A description and purpose for each of these modifications is further discussed in Section 5.0.

On June 13, 2006, the City of Carlsbad approved the FEIR for the land use approvals to construct and operate the approximately 50 mgd Carlsbad Seawater Desalination Plant (desalination plant) adjacent to the Encina Power Station (EPS). The FEIR also analyzed 17.4 miles of off-site conveyance pipelines, as well as ancillary facilities to carry and store product water from the desalination plant (City of Carlsbad 2006). The FEIR included analysis of multiple options for the water conveyance pipelines, to allow for flexibility in the final design. To ensure that all impacts associated with the ultimate pipeline alignment were addressed, the FEIR considered at an equal level of detail the impacts associated with two primary pipeline alignment options, as well as several sub-alignments, though only one alignment was actually going to be built.

On September 15, 2009, the City of Carlsbad approved an Addendum to the FEIR (First Addendum), which documented changes to the footprint of the desalination plant and off-site water conveyance facilities. The pipeline alignment considered under the First Addendum consisted of approximately 16.2 miles of pipeline (a 7% reduction from the pipeline length analyzed in the FEIR). Additionally, with the pipeline alignment addressed under the First Addendum, environmental impacts associated with several segments of pipeline that were evaluated and mitigated for in the FEIR were avoided. Thus, the proposed project under the First Addendum represented reduced environmental impacts as compared to the impacts covered under the FEIR (City of Carlsbad 2009).

In addition to the FEIR and the First Addendum, one other approved CEQA document is relevant to the currently proposed Project changes. The Water Authority prepared a Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS) for the San Diego County Water Authority Subregional Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) in October 2010 (Water Authority 2010a). This document is relevant in that it addresses potential impacts of Water Authority covered activities on sensitive biological resources and results in issuance of a federal incidental take permit pursuant to Section 10(a)(1)(B) of the Endangered Species Act and State take permit pursuant to Section 2835 of the California Fish and Game Code. The federal and State permits require, and the associated NCCP/HCP implementing agreement contractually binds, the Water Authority to implement applicable project design features and mitigation measures on a project by project basis when conducting covered

activities in or adjacent to covered species habitats. Covered activities include new construction and typical expansion of existing infrastructure, as well as ongoing installation, use maintenance, and repair of aqueduct and water conveyance, treatment, and storage systems. Activities associated with the proposed Project modifications are subject to the biological requirements and mitigation measures in the aforementioned Carlsbad FEIR and the First Addendum, with the exception of the application of biological mitigation to the proposed Twin Oaks Valley Water Treatment Plant Modifications, Pipeline 3 Relining, and Pipeline 4 Vent Replacement and Pipeline Interconnect components. The Water Authority is substituting its NCCP/HCP mitigation measures to address biological impacts for these proposed Project components, because it is contractually obligated to apply NCCP/HCP requirements and mitigation measures where there is the potential to impact biological resources associated with its covered activities. Where such requirements apply and are relevant, they are noted in the discussion below.

## **2.0 CEQA REQUIREMENTS**

California Code of Regulations (CCR), Title 14 (CEQA Guidelines), Sections 15162 through 15164 discuss a lead or responsible agency's responsibilities in handling new information that was not included in a Project's FEIR. The provisions of Section 15164 apply to the Water Authority as the responsible agency under CEQA because the proposed modifications to the Project involve actions that are under the purview of the Water Authority.

Section 15162 of the CEQA Guidelines provides:

- (a) When an EIR has been certified...for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:
  - 1. Substantial changes are proposed in the project which will require major revisions of the previous EIR...due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
  - 2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR ... due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
  - 3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete...shows any of the following:
    - (A) The project will have one or more significant effects not discussed in the previous EIR;

- (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
- (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
- (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Alternatively, where some changes or additions are necessary to the previously approved FEIR, but none of the changes or additions meet the standards as provided for, a subsequent EIR pursuant to CEQA Guidelines, Section 15162, then the lead or responsible agency is directed to prepare an addendum to the FEIR. (CEQA Guidelines, Section 15164). Further, the addendum should include a “brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162,” and that “explanation must be supported by substantial evidence.” (CEQA Guidelines, Section 15164(e)). The addendum need not be circulated for public review, but may simply be attached to the FEIR (CEQA Guidelines, Section 15164(c)).

This Second Addendum to the FEIR fulfills and conforms to the provisions of CEQA (California Public Resources Code, Section 21000 et seq.) and the CEQA Guidelines, Section 15164, providing for the preparation of an addendum. The CEQA Guidelines allow the preparation of an addendum to an EIR under the following circumstances (14 CCR 15000 et seq.):

1. Only minor technical changes or additions are necessary to make the EIR under consideration adequate;
2. The changes and additions to the EIR do not raise important new issues about significant effects on the environment;
3. None of the conditions described in Section 15162, CEQA Guidelines, calling for the preparation of a subsequent EIR have occurred.

### **3.0 PROJECT LOCATION AND REGIONAL SETTING**

The majority of the proposed Project changes are generally located north of the City of San Marcos in the Twin Oaks Valley area in northern San Diego County, California (see Figure 1, Regional Map). Twin Oaks Valley lies between two local coastal mountain ranges: the San Marcos Mountains to the west and the Merriam Mountains to the east. In addition, and as



shown on Figures 1 and 2, several other Project components are located further south in the City of San Marcos, as well as within the City of Carlsbad.

The TOVWTP is located in an unincorporated area of San Diego County at the northern extent of Twin Oaks Valley. The approximately 35-acre site has elevations ranging from 1,050 feet above mean sea level (AMSL) at the northern and eastern boundaries to 1,240 feet AMSL along the western boundary. The San Marcos Mountains are located immediately west of the treatment plant. Residential and agricultural uses are to the north, east, and south.

Pipeline 3 of the Second San Diego Aqueduct is immediately adjacent to the TOVWTP and traverses agricultural, undeveloped land and residential uses, as well as roadways through Twin Oaks Valley for the first approximately 3.5 miles from the treatment plant south. The remaining 2 miles of pipeline are located within developed areas in the City of San Marcos.

The proposed Aqueduct Connection Point Modifications would be installed at an existing approximately 1-acre site located at the northwest corner of the intersection of Pawnee and Cherokee Streets in the City of San Marcos, just southwest of Highway 78. The site is at an elevation of approximately 575 feet AMSL and slopes gently to the south. Surrounding land uses include a shopping plaza and vacant land to the south; an auto parts store to the west; a shopping plaza, some restaurants, and an auto mechanic to the north; and office buildings to the east.

The Pipeline 4 Vent Replacement and Pipeline Interconnect would be located along Water Authority Pipeline 4 in an open space area just north of the San Elijo community within the City of San Marcos.

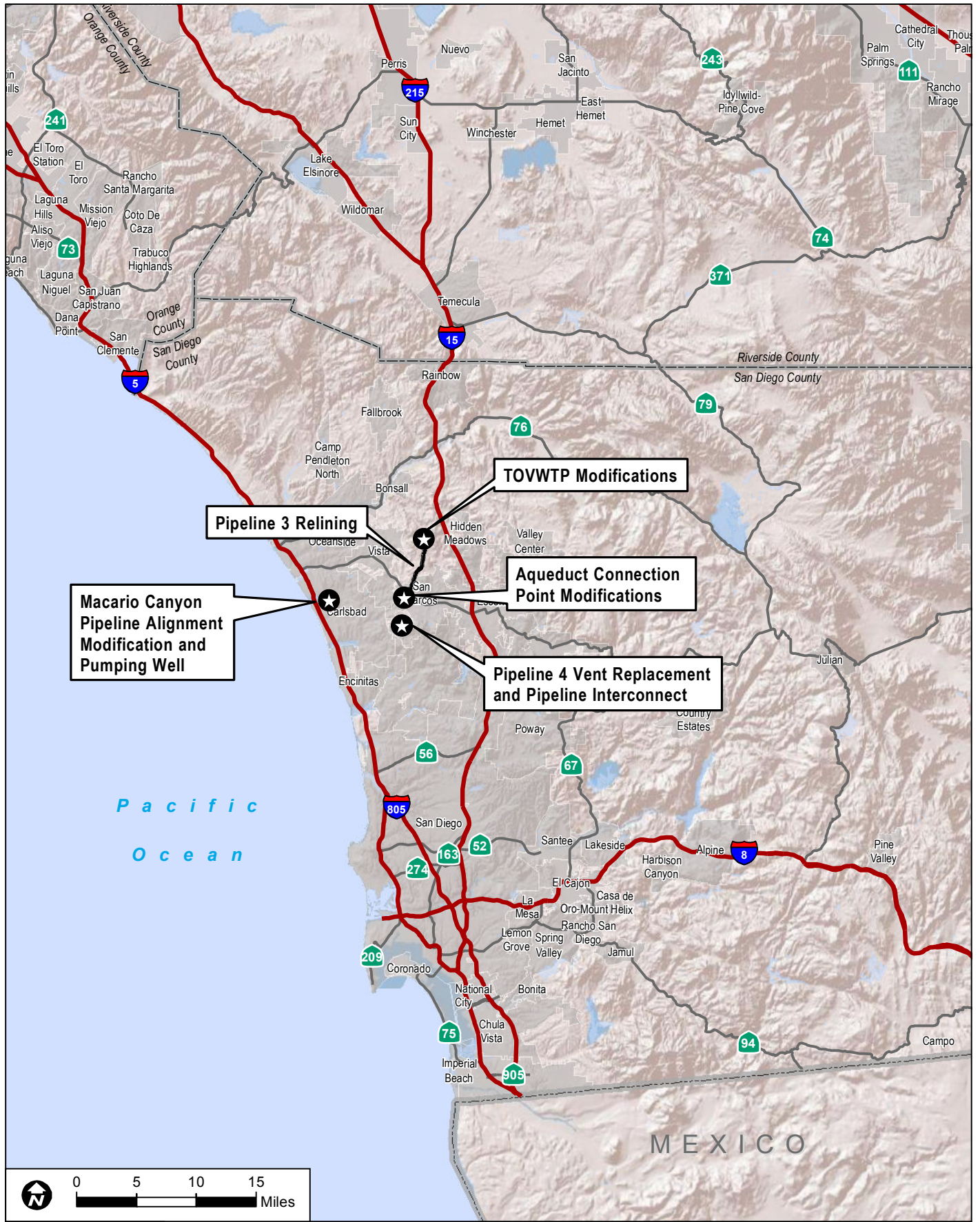
The Macario Canyon Pipeline Alignment Modification and Pumping Well would be installed in an open space area in Macario Canyon near the intersection of Cannon Road and Faraday Avenue in the City of Carlsbad.

#### **4.0 DESCRIPTION OF APPROVED PROJECT**

In 2006, the City of Carlsbad approved an amendment to the Precise Development Plan (PDP) for the EPS to obtain land use approvals to construct and operate an approximately 50 mgd desalination plant and other appurtenant and ancillary water and support facilities to produce potable water. The Carlsbad Desalination Plant is to be located on the EPS site, adjacent to the existing power plant, located immediately south of the Agua Hedionda Lagoon, within the City of Carlsbad, in northern San Diego County. As approved in 2006, several pipeline routes would distribute product water from the Carlsbad Desalination Plant to the City of Carlsbad and various local and regional water agencies, including the Water Authority.

The FEIR analyzed multiple off-site pipeline alignments through portions of Carlsbad, Oceanside, and Vista. In 2009, Carlsbad approved the First Addendum to document minor modifications to the desalination plant site layout and the off-site product water pipeline routes. Per the currently

approved project, product water will be delivered into existing Vallecitos Water District (VWD) pipelines, regulated and metered through an approved Project flow-control facility to be constructed in the vicinity of Pawnee and Cherokee Streets in the City of San Marcos. The pipeline crossing Macario Canyon was analyzed as two options in the FEIR: one using trenchless construction methods north of Cannon Road, and one laying the pipelines within the existing roadway/bridge. The Coastal Development Permit for the Project went further to indicate that the pipelines would hang underneath the Cannon Road Bridge in the event that the trenchless option was not selected.



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**FIGURE 1  
Regional Map**

Second Addendum to the Carlsbad Desalination Plant Project FEIR

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AERIAL SOURCE: BING Mapping Service

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Second Addendum to the Carlsbad Desalination Plant Project FEIR

**FIGURE 2**  
**Vicinity Map**

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## 5.0 DESCRIPTION OF PROPOSED CHANGES TO THE PROJECT

The goal of the proposed Project changes is to enhance access to the desalination conveyance pipeline for operations and maintenance crews, enhance the pipelines' functional survivability and reliability, allow product water to be stored and blended with potable water at the TOVWTP before distribution, and to allow for greater operational flexibility and efficiency in delivering product water to the Water Authority's member agencies. Under these Project modifications, water from the desalination plant would flow north in Pipeline 3 from the Aqueduct Connection Point to be constructed at Pawnee and Cherokee Streets. At the TOVWTP, new facilities will divert flow from Pipeline 3 to existing treated water storage tanks for blending. In addition, the proposed Project changes include the Pipeline 4 Vent Replacement and Pipeline Interconnect in San Marcos, and the Macario Canyon Pipeline Alignment Modification and Pumping Well for a segment of the pipeline along Cannon Road in Carlsbad. Any vegetated areas disturbed during construction of these proposed Project modifications would be hydroseeded and restored following disturbance.

The location of all proposed Project modifications is shown on Figures 1 and 2. More specifically, the proposed Project changes entail the following improvements:

- ***Twin Oaks Valley Water Treatment Plant (TOVWTP) Modifications:*** Minor modifications to the treatment plant would include:
  - A new valve vault structure on Pipeline 3 to divert flows to the TOVWTP storage tanks
  - A new approximately 1,000-foot-long, 54-inch-diameter pipeline that would connect Pipeline 3 to the existing pipeline inlets of two treated water storage tanks
  - A chemical injection and monitoring station and pump well associated with the new 54-inch-diameter pipeline
  - A third flow-control facility with a 42-inch-diameter pipeline that would be located adjacent to the two existing treated water-flow control facilities (see Figure 3, TOVWTP Modifications).

All construction associated with the proposed 54-inch pipeline connection from Pipeline 3 to the treated water tanks would occur entirely within a Water Authority right-of-way (ROW) and the Water Authority-owned TOVWTP site. Specifically, 700 feet of the proposed pipeline is located on the treatment plant site, and the remaining 300 feet is within ROW that includes an existing road that connects from El Paso Alto Road to the treatment plant. Construction at the TOVWTP would be phased over a period of approximately 7 months, and is anticipated to begin in August 2013. The first phase of construction would consist of establishing connections to the existing pipeline and plant piping at a time when water treatment plant production is low. Construction during this

phase would include excavation, grading and filling, and welding. The second phase of construction would consist of installing the new 54-inch pipeline and installing a third flow-control facility (and associated pipeline) parallel to the existing two flow-control facilities. Construction during this phase would include excavation, grading, filling and welding, and pouring concrete, and would use the following equipment: two excavators, a backhoe, articulated trucks, a dozer, two loaders, a water truck, a compactor, an air compressor, pick-up trucks, a boom truck, a hydro crane, hand compactors, welding machines, and a job trailer. Construction equipment would access the TOVWTP via Twin Oaks Valley Road and local roads previously used for construction of TOVWTP. Construction staging would occur within the grounds of the treatment plant.

- **Pipeline 3 Relining:** Pipeline 3 currently operates as a gravity-flow system from north to south. Under the proposed operating scenario, the pipeline would be operated as a pressurized pipeline with flow from south to north. To safely and reliably operate the pipeline in this scenario, the existing 5.5-mile-long Pipeline 3 segment between the Aqueduct Connection Point and the TOVWTP will be relined. This segment of Pipeline 3 is in need of relining even without the proposed Project modifications, and would need to be relined within the next 12 years to remain in service. It is assumed for the purposes of this analysis that approximately 500 linear feet of Pipeline 3 will need replacing rather than relining. Pipeline 3 would be accessed via 15 portals located approximately 2,000 feet apart along the pipeline (see Figure 4, Pipeline Relining Portal Locations). The 85-foot by 20-foot excavated portals would be used to pull the pipe liner from high points along the pipeline that are generally associated with air vacuum/blow-off locations. Staging areas are anticipated to be approximately 300 feet by 100 feet, or approximately 0.69 acre in size.

Construction activities associated with the relining of Pipeline 3 would include the following phases:

- Portal Development
  - Duration and activities: 2 days at each portal to install fencing, as well as to install piles for shoring
  - Equipment used: two excavators, crane, loader/forklift
- Portal Excavation
  - Duration and activities: 3 days at each portal to install steel shoring plates and excavate portal
  - Equipment used: Excavator, loader, dump truck, water truck
- Existing Pipe Demolition
  - Duration and activities: 3 days at each portal to cut and remove existing pipeline



- Equipment used: Excavator, loader, air compressor, two welding rigs, dump truck
  - Steel Liner Installation
    - Duration and activities: 24 days at each portal to place and weld steel liners
    - Equipment used: Crane, two welding rigs, excavator
  - Grouting
    - Duration and activities: 10 days at each portal to grout annular spacing between new steel liner and existing concrete pipe
    - Equipment used: Grouting pump
  - Interior Mortar Lining
    - Duration and activities: 10 days to install mortar lining
    - Equipment used: Spin lining machine, blower/fan
  - Portal Closure
    - Duration and activities: 14 days at each portal to install new welded steel pipe, install reinforcing steel, pour concrete, and backfill
    - Equipment used: Crane, two welding rigs, excavator, concrete, truck, water truck
  - Site Restoration.
- ***Aqueduct Connection Point Modifications:*** The proposed modifications to the Water Authority's Aqueduct Connection Point in San Marcos to enable northward flow would include installation of valves in Pipelines 3 and 4, a flow meter, and appurtenant piping (see Figure 5, Aqueduct Connection Point Modifications). Construction would take place within the approved construction footprint for the VWD Flow-Control Facility, involving the same area of disturbance, construction time frame, and similar construction techniques to those previously evaluated in the First Addendum (City of Carlsbad 2009). As indicated in the First Addendum, the structures at this location were previously considered with the construction of the off-site product water pipelines in the FEIR (City of Carlsbad 2009).

In very rare circumstances, water from the Carlsbad Desalination Project may be directly delivered south in the Water Authority's aqueduct. If needed in these instances to assure acceptable water quality, a chemical injection facility will be installed at the San Marcos connection point to treat the product water prior to introduction into the Water Authority's aqueduct. These facilities would only be used when the water is routed to the south rather than north to the TOVWTP. This is not a normal operation mode and would only be required in rare circumstances where Pipeline 3 or Pipeline 4 are out of service upstream of the desalination connection facilities. This chemical injection facility would

consist of two 5,000 gallon tanker trucks temporarily parked within secondary containment structures. One truck would contain sodium hypochlorite (11%–14% solution) and one truck would contain aqueous ammonia (17%–20% solution). The sodium hypochlorite would be injected into the product water at a rate of 700 gal/day. The ammonia would be injected at a rate of 350 gal/day. Approximately one sodium hypochlorite truck delivery per week and one aqueous ammonia truck delivery every 2 weeks would be required during periods when chemical injection is in use.

- ***Pipeline 4 Vent Replacement and Pipeline Interconnect:*** The existing vent along Pipeline 4 in San Marcos would be removed and replaced with a new vent structure to allow for an increase in the upstream pressure (hydraulic gradient) in Pipeline 4, which is required to divert water from Pipeline 4 to Pipeline 3 downstream of the San Marcos connection facilities. A new 40-foot-long, 54-inch-diameter, above grade pipeline to connect Pipeline 3 to Pipeline 4 would be located directly upstream and adjacent to the proposed new vent. The new vent would be located on the same site of the existing vent that is located approximately 250 feet west of Schoolhouse Way, and approximately 0.85 mile north of the center of the Community of San Elijo Hills within the City of San Marcos, California (Figure 2). Construction of the new vent would utilize an approximately 1.4-acre temporary work area. A smaller 0.06-acre temporary work area would also be needed (see Figure 6a, Pipeline 4 Vent Replacement and Pipeline Interconnect). A concrete weir vent would be constructed that would extend above grade by approximately 20 feet and cover an approximately 12- by 25-foot area. The top of the weir vent would include a ventilation screen and hatches. The remaining vent mechanisms would either be located inside the weir vent or would be below grade (see Figure 6b, Pipeline 4 Vent Replacement and Pipeline Interconnect Plan and Cross-Section). The existing 19-foot tall vent stack would be removed and capped near ground level.

Construction of the Pipeline 4 Vent Replacement would take place over an approximately 7-month period and consist of two phases: excavation and construction. Activities in the work area would include access improvements for construction equipment; blasting (the new vent is located in an area where there is exposed hard rock); excavation, hauling, and stocking of excavated materials; pipe demolition; concrete cutting; material and equipment delivery and storage; reinforced concrete placement; pipe installation; grading; fence installation; and hydroseeding. Access to the site would be via existing Water Authority dirt roads in the Project area that are accessed via Schoolhouse Way to the south or from La Plaza Drive to the north. The first phase of construction would consist of excavation, would take approximately 3 months to complete and would include use of the following equipment: one hydraulic drill rig, one excavator, one dozer, dump trucks, a water truck, and a blower. The second phase would include construction of the new vent, would take approximately 4 months to complete, and would involve use of the following construction equipment: one concrete pump truck, concrete delivery trucks, flatbed delivery trucks, one

30-ton rubber tire crane, one excavator, one loader, and a blower. Construction staging would occur within areas shown on Figure 6a.

- **Macario Canyon Pipeline Alignment Modification and Pumping Well:** The Macario Canyon Pipeline Alignment Modification involves 1,640 feet of trenchless pipe installation crossing Macario Canyon. The FEIR analyzed this segment of pipeline under two scenarios: open trenching within Cannon Road and trenchless construction just north of Cannon Road across Macario Canyon. Since the installation of this portion of the Faraday Avenue pipeline route was included in the FEIR using trenchless construction, no further analysis of the underground pipeline installation beneath Macario Canyon is required under CEQA. The minor change in alignment (shifted to south of Cannon Road between Cannon and Faraday – see Figures 7a and 7b) and similar construction techniques across sensitive wetland areas would not represent a substantial change in the Project or its effects. The modifications shift the location of the pipeline in this area approximately 1,000 feet to the south and add a pumping well to be installed along the pipeline alignment to allow for maintenance of the pipeline. Construction of this realigned portion of the pipeline would use traditional directional drilling techniques. Due to the topography, which creates a low point in the pipeline, the pipeline in this area would include a pumping well and a drain line (above the pipeline) that connects to a storm drain on Faraday Avenue (Figures 7a and 7b) to allow for drainage of the pipe. The pumping well would be installed approximately mid-way along the pipeline alignment between Cannon Road and Faraday Avenue. The pumping well would be consistent with other Water Authority pumping wells and would be used during infrequent events when the pipeline may need to be taken off-line for maintenance and/or repair. The aboveground physical dimensions of the pumping well are anticipated to consist of an approximately 48-inch-diameter manhole that would be raised approximately 6 inches above ground level.

Construction of the pipeline and pumping well would occur within portions of Cannon Road and Faraday Avenue, as well as within an open space area in Macario Canyon. During construction, the Water Authority would establish an 80-foot-wide temporary work easement in Macario Canyon. The pipeline would be installed in two segments via directional drilling from a construction site located approximately 1,200 feet south of the intersection of Cannon Road and Faraday Avenue and shown on Figure 7a. There would be two receiving pits—one in Cannon Road and one in Faraday Avenue. Impacts to sensitive habitats would be avoided. Access to the site would be via Cannon Road, Faraday Avenue, and existing dirt access roads that extend from Cannon Road to the construction area and pumping well site as shown on Figure 7a. Construction of the pipeline would take approximately 9 months, is anticipated to begin in May 2014, and would require the use of an excavator, mobile crane, front end loader, water truck,

boring machine, and bull dozer. During boring, work trucks would enter the site daily to haul away spoils and deliver pipe.

## **6.0 SAN DIEGO COUNTY WATER AUTHORITY ACTIONS**

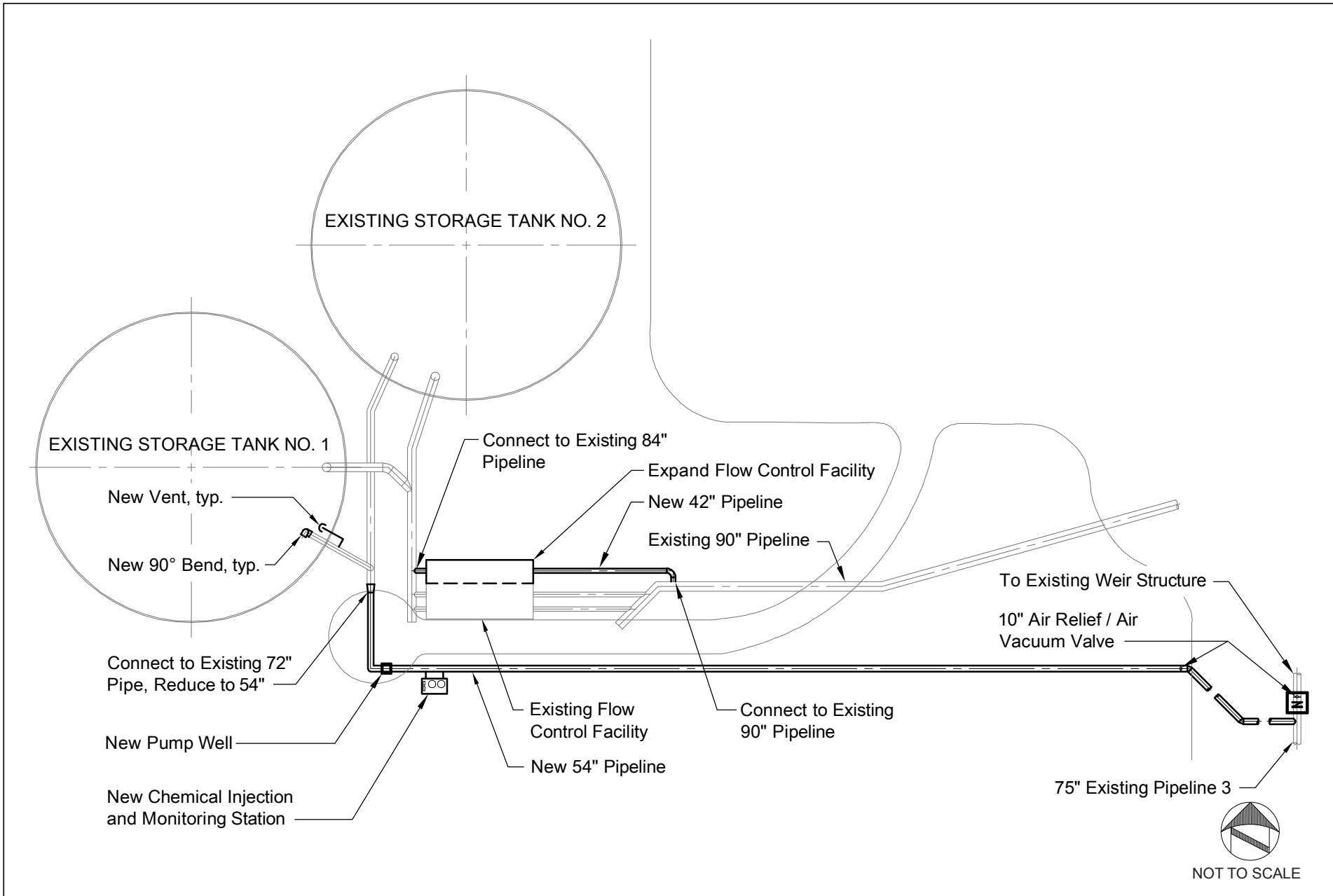
To process the proposed changes, the following Water Authority actions are required:

1. EIR 03-05(B) – Second Addendum to the Project’s certified EIR; as a responsible agency under CEQA, the Water Authority will be accepting the City of Carlsbad’s previously approved FEIR and First Addendum, as well as approving this document, the Second Addendum
2. Approval of various agreements to purchase water and construct facilities.

## **7.0 IDENTIFICATION OF ENVIRONMENTAL EFFECTS**

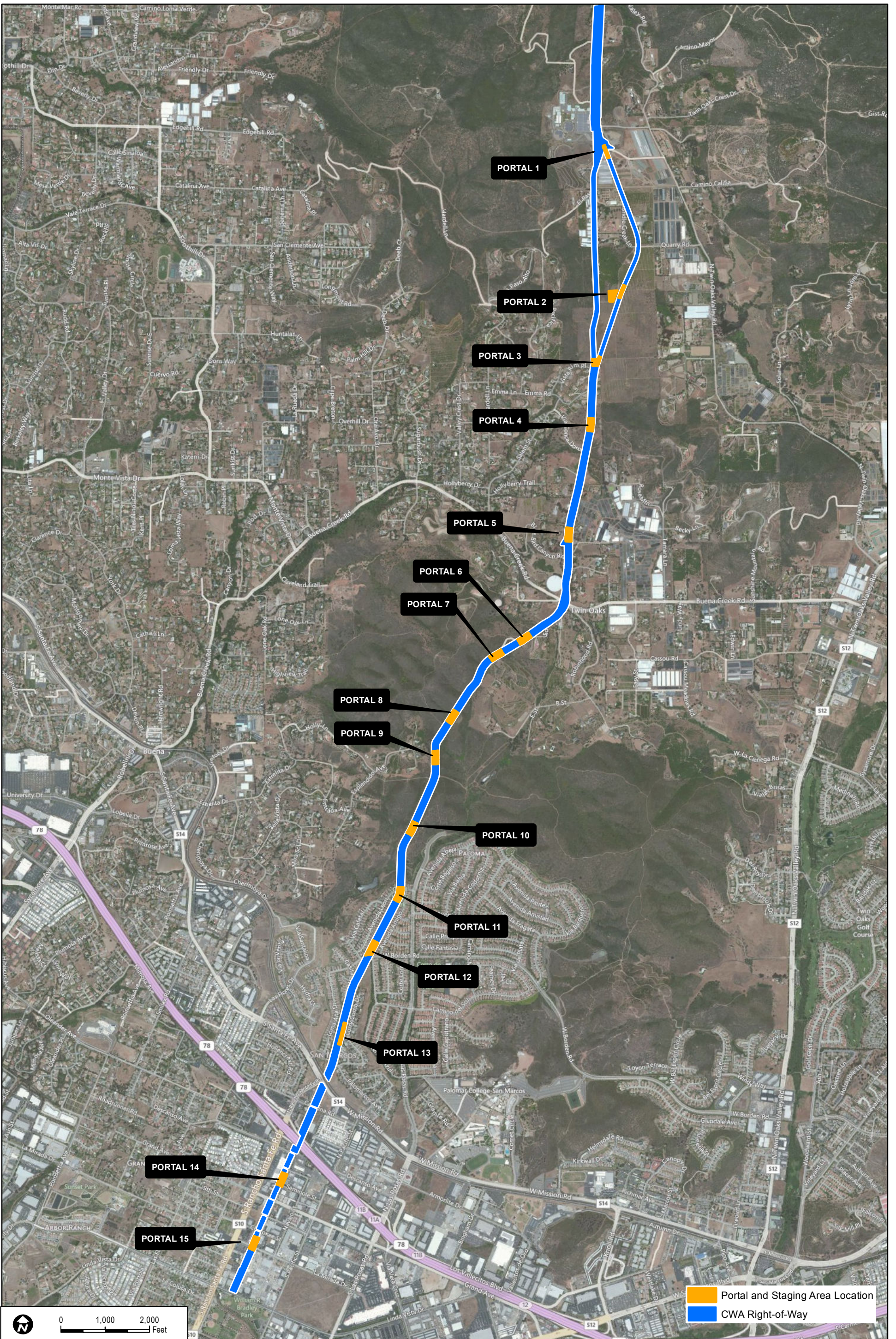
Documents containing the environmental analysis supporting the City of Carlsbad’s action in approving the Project include the FEIR, First Addendum, Mitigation Monitoring and Reporting Program, CEQA Findings, and additional responses provided for comments submitted after publication of the FEIR.

The Second Addendum analyzes all 11 environmental issue areas that were included in the FEIR and First Addendum, and discusses whether the proposed Project modifications described in Section 5.0 would trigger significance criteria identified in the CEQA Guidelines, Section 15162, in each of these areas. For each environmental issue area, a comparative analysis of the impacts presented in the FEIR and First Addendum to the FEIR is provided. The analysis includes a determination regarding the occurrence of any new significant impacts or an increase in the severity of previously identified impacts. Finally, an analysis is presented to determine whether there are any changed circumstances or new information relative to the revised Project.



**FIGURE 3  
TOVWTP Modifications**

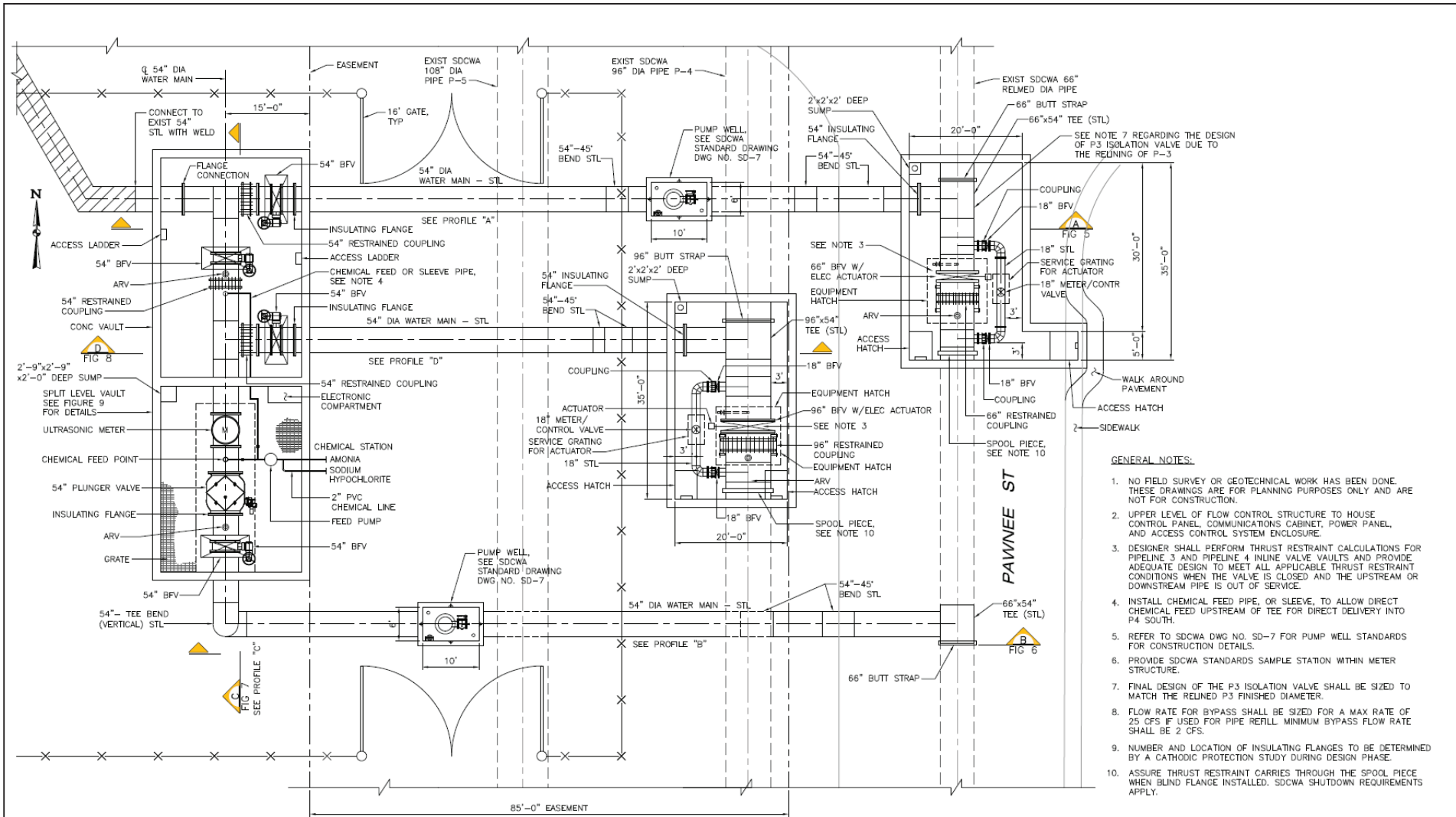
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Portal and Staging Area Location  
 CWA Right-of-Way

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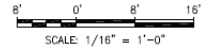




**PARTIAL PLAN**  
SCALE: 1/16" = 1'-0"

NOTE: SEE FIGURE 3 FOR ALTERNATE LOCATION OF CONNECTION FACILITIES TO BE CONSIDERED PENDING NEGOTIATIONS WITH PROPERTY OWNER. FINAL LOCATION OF CONNECTION FACILITIES TO BE DETERMINED DURING DESIGN PHASE.

- GENERAL NOTES:**
1. NO FIELD SURVEY OR GEOTECHNICAL WORK HAS BEEN DONE. THESE DRAWINGS ARE FOR PLANNING PURPOSES ONLY AND ARE NOT FOR CONSTRUCTION.
  2. UPPER LEVEL OF FLOW CONTROL STRUCTURE TO HOUSE CONTROL PANEL, COMMUNICATIONS CABINET, POWER PANEL, AND ACCESS CONTROL SYSTEM ENCLOSURE.
  3. DESIGNER SHALL PERFORM THRUST RESTRAINT CALCULATIONS FOR PIPELINE 3 AND PIPELINE 4 INLINE VALVE VAULTS AND PROVIDE ADEQUATE DESIGN TO MEET ALL APPLICABLE THRUST RESTRAINT CONDITIONS WHEN THE VALVE IS CLOSED AND THE UPSTREAM OR DOWNSTREAM PIPE IS OUT OF SERVICE.
  4. INSTALL CHEMICAL FEED PIPE, OR SLEEVE, TO ALLOW DIRECT CHEMICAL FEED UPSTREAM OF TEE FOR DIRECT DELIVERY INTO P4 SOUTH.
  5. REFER TO SDCWA DWG NO. SD-7 FOR PUMP WELL STANDARDS FOR CONSTRUCTION DETAILS.
  6. PROVIDE SDCWA STANDARDS SAMPLE STATION WITHIN METER STRUCTURE.
  7. FINAL DESIGN OF THE P3 ISOLATION VALVE SHALL BE SIZED TO MATCH THE REINUED P3 FINISHED DIAMETER.
  8. FLOW RATE FOR BYPASS SHALL BE SIZED FOR A MAX RATE OF 25 CFS IF USED FOR PIPE REFILL. MINIMUM BYPASS FLOW RATE SHALL BE 2 CFS.
  9. NUMBER AND LOCATION OF INSULATING FLANGES TO BE DETERMINED BY A CATHODIC PROTECTION STUDY DURING DESIGN PHASE.
  10. ASSURE THRUST RESTRAINT CARRIES THROUGH THE SPOOL PIECE WHEN BLIND FLANGE INSTALLED. SDCWA SHUTDOWN REQUIREMENTS APPLY.



**DUDEK**

SOURCE: JACOBS 2012

7250


Second Addendum to the Carlsbad Desalination Plant Project FEIR

**FIGURE 5**  
**Aqueduct Connection Point Modifications**

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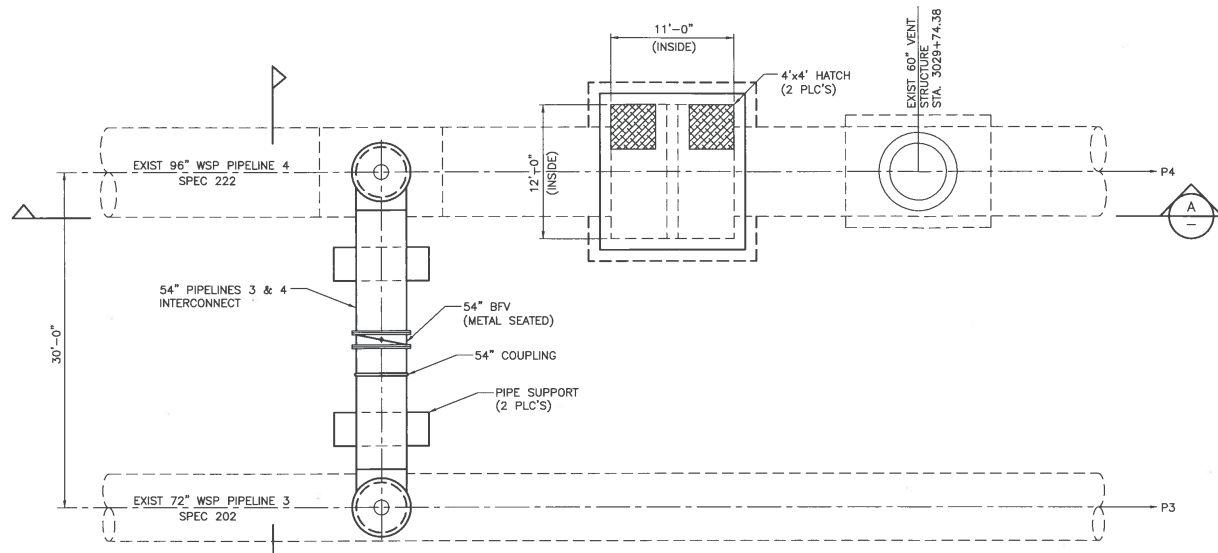


- Pipeline 4 Vent Replacement
- Existing Pipeline 4 Alignment
- Temporary Work Area
- CWA Right-of-Way


0    130    260  
Feet

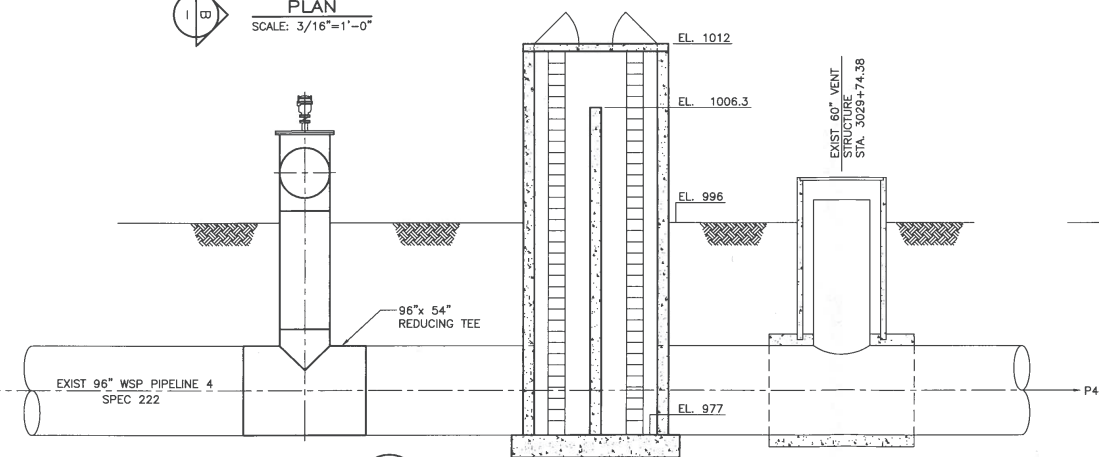
<b>DUDEK</b>	AERIAL SOURCE: BING MAPPING SERVICES  <b>Pipeline 4 Vent Replacement and Pipeline Interconnect</b>	<b>FIGURE 6a</b>
7250	Second Addendum to the Carlsbad Desalination Plant Project FEIR	

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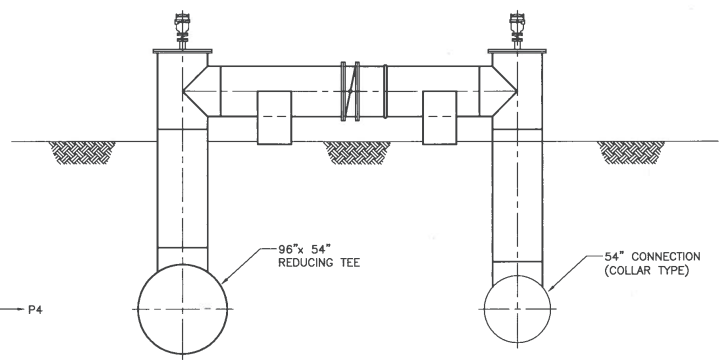


- GENERAL NOTES:**
1. NO FIELD SURVEY OR GEOTECHNICAL WORK HAS BEEN DONE. THESE DRAWINGS ARE FOR PLANNING PURPOSES ONLY AND ARE NOT FOR CONSTRUCTION.
  2. ABOVE GRADE PORTION OF EXISTING VENT TO BE DEMOLISHED AND REMOVED. DEMOLITION PLAN TO BE DEVELOPED DURING DESIGN PHASE.
  3. FINAL SIZE AND LOCATION OF WEIR STRUCTURE TO BE DETERMINED DURING DESIGN PHASE.

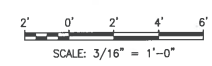
**PLAN**  
SCALE: 3/16"=1'-0"



**SECTION A**  
SCALE: 3/16"=1'-0"



**SECTION B**  
SCALE: 3/16"=1'-0"



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- - - Directional Drilling for Waterline Alignment
- Macario Canyon Pumping Well
- ▭ Temporary Work Area
- Receiving Pit Location

Z:\Projects\72500\MAPDOCS\MAPS\Cbad Desal Addendum 2 Figs\

**DUDEK**

AERIAL SOURCE: BING MAPPING SERVICE

**FIGURE 7a**

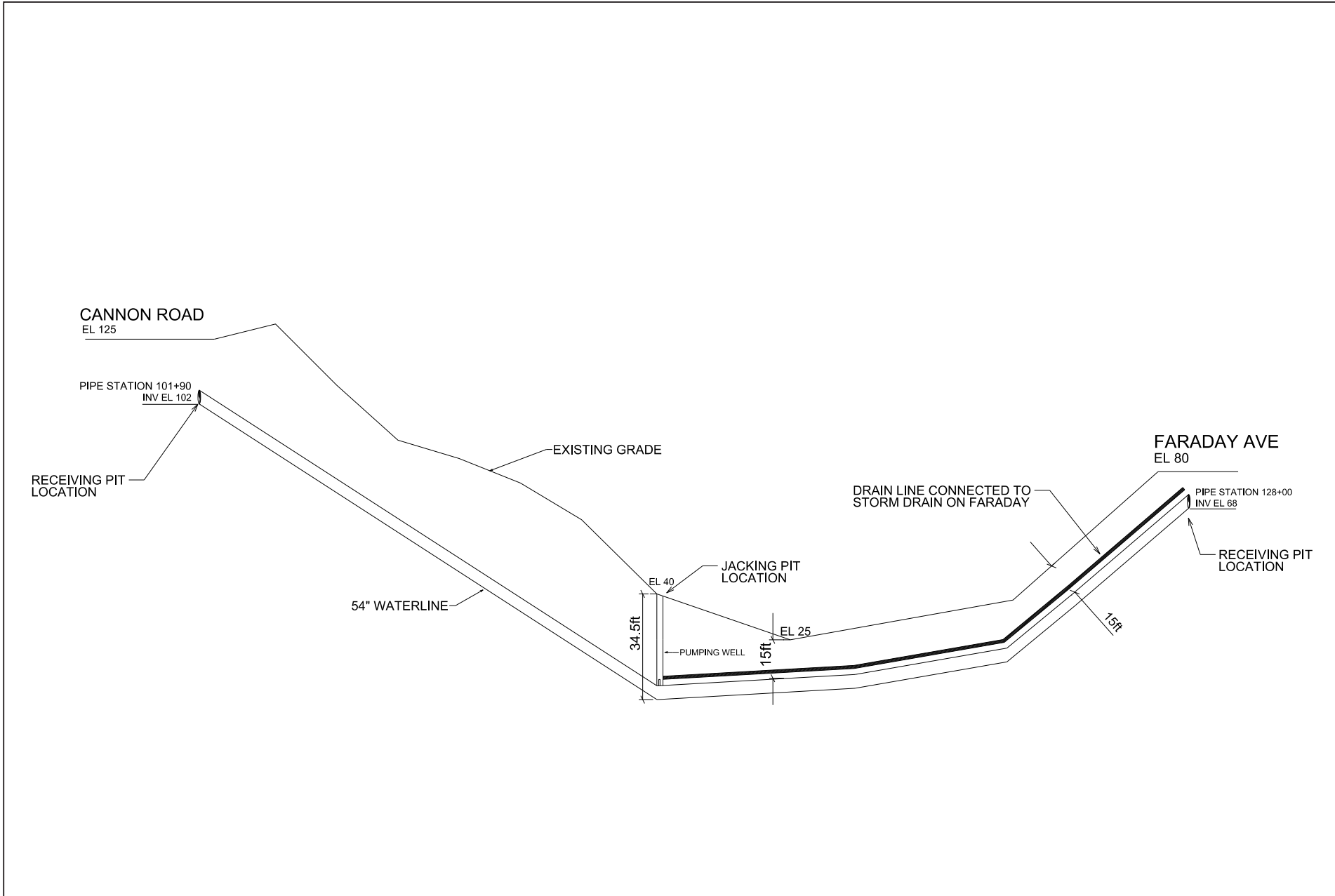
**Macario Canyon Pipeline Alignment Modification and Pumping Well**

7250

Second Addendum to the Carlsbad Desalination Plant Project FEIR

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<b>DUDEK</b>	SOURCE: SDCWA 2012
7250	<b>FIGURE 7b</b> <b>Macario Canyon Pipeline Alignment Modification and Pumping Well Cross Section</b> Second Addendum to the Carlsbad Desalination Plant Project FEIR

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## 8.0 ANALYSIS

The following environmental analysis supports the Water Authority's determination that approval and implementation of the proposed Project modifications would not result in any new significant environmental impacts or a substantial increase in the severity of previously disclosed impacts covered under the FEIR and First Addendum. This environmental analysis is subject to all applicable mitigation measures outlined in the FEIR and Mitigation Monitoring and Reporting Program. In addition, the Water Authority's *General Conditions and Standard Specifications* (2005 edition) have been considered in this environmental analysis, and will also be incorporated into the construction plans and specifications, as appropriate. The Water Authority updates the *General Conditions and Standard Specifications* periodically to reflect changes in law, advancement of construction methods, materials, and standards, and other issues as deemed appropriate for the Water Authority to achieve its mission.

As stated in Section 1.0, activities associated with the proposed modifications are subject to the requirements and mitigation measures identified in the FEIR, and First Addendum, and the NCCP/HCP EIR/EIS and associated NCCP/HCP and implementing agreement. Where such requirements apply and are relevant, they are noted in the discussion below.

The FEIR and First Addendum, the NCCP/HCP EIR/EIS, and the Water Authority's *General Conditions and Standard Specifications* are on file at the Water Authority's office, 4677 Overland Avenue, San Diego, California, 92123,

The following presents the environmental analysis of impacts associated with the proposed Project modifications. In instances where the impacts resulting from several Project components would be similar, their corresponding analyses have been grouped together. In instances where impacts differ by Project component, they are discussed separately.

### **Aesthetics**

Analysis of aesthetic impacts and EIR-identified mitigation measures of the approved Project are contained in the FEIR, Section 4.1, pages 4.1-3 through 4.1-12. See also CEQA Findings, pages 10 and 11.

The Carlsbad Desalination FEIR and First Addendum concluded that because aesthetic impacts from construction activities would be short-term and within limited areas, construction-related impacts to visual resources would be considered less than significant. Similarly, the construction activities associated with the proposed Project modifications would also be temporary and within limited areas and, therefore, would also result in less-than-significant impacts to aesthetics/visual resources.

### Analysis of the Revised Project

### *TOVWTP Modifications*

The proposed modifications to the TOVWTP are evaluated utilizing the same criteria discussed in the Carlsbad FEIR (Section 4.1). Specifically, construction of the TOVWTP modifications will cause short-term, temporary aesthetic impacts, including equipment storage, materials, soil stockpiling and debris exposed to public views. Because these impacts are short-term in nature, and because they affect a limited area already containing similar structures, they are not considered to have a substantial adverse effect on a scenic vista, nor would they substantially damage scenic resources. Likewise, the long-term impacts of these additional facilities are less than significant because the new facilities will be designed with the same aesthetic character as the existing on-site water control and treatment facilities. All new pipelines would either be buried or screened. The third flow-control facility would be located directly adjacent to the existing flow-control facility, and would be designed with the same aesthetic character as the existing facility. These minor modifications to the TOVWTP would not substantially alter the views of the treatment plant facilities. Therefore, the inclusion of these facilities would not result in new impacts or increase the severity of impacts identified in the Carlsbad FEIR, and therefore would not change the FEIR conclusions that the impacts are less than significant.

### *Pipeline 3 Relining*

As discussed in the Carlsbad FEIR and First Addendum, since pipelines are underground, no long-term impacts to aesthetics would occur from pipeline installation. Therefore, the inclusion of the Pipeline 3 Relining effort would not result in new significant impacts or increase the severity of impacts identified in the FEIR, and therefore would not change the FEIR conclusion.

### *Aqueduct Connection Point Modifications*

Similar to the conclusion reached in the Carlsbad FEIR regarding the temporary nature of construction activities for the pipelines and adjunct facilities, temporarily parking two 5,000-gallon chemical tanker trucks at the aqueduct connection point, an existing disturbed/developed area, would not result in new aesthetic impacts, nor increase the severity of impacts identified in the FEIR. They would not constitute a permanent visual impact, and would only be present in very rare circumstances when water from the Carlsbad Desalination Project needs to be delivered directly south, such as when Pipeline 3 or Pipeline 4 are out of service. Additionally, the tanker trucks would be parked in an industrial area, and would be consistent with the surrounding land uses. The inclusion of these chemical tanker trucks in rare circumstances would not result in new impacts or increase the severity of impacts identified in the FEIR, and therefore would not change the FEIR conclusion.

### *Pipeline 4 Vent Replacement and Pipeline Interconnect*

As mentioned earlier, the Pipeline 4 Vent Replacement and Pipeline Interconnect would include a 12-foot by 25-foot weir vent that would extend approximately 20 feet above grade, and a 40-foot length of 54-inch diameter pipeline to interconnect Pipelines 3 and 4. The interconnect pipeline would be approximately six feet above grade. The existing vent is at approximately 1,020 feet AMSL and extends approximately 19 feet above grade. Due to the natural topography of the area, the existing and proposed vent location, and proposed interconnection pipeline location is visible from a limited number of homes located on nearby ridgelines approximately 1/3 of a mile south and southwest of the site in the San Elijo Hills community. Considering low profile of the interconnect pipeline and that the existing vent is similarly visible from existing vantage points of the vent location, the inclusion of the vent replacement and pipeline interconnect would not result in new significant impacts or increase the severity of impacts identified in the FEIR, and therefore would not change the FEIR conclusion.

#### *Macario Canyon Pipeline Alignment Modification and Pumping Well*

Other than the temporary nature of construction-related visual impacts discussed above, and a manhole cover, no other visual impacts will occur as a result of the Macario Canyon Pipeline Alignment Modification and Pumping Well changes. The pumping well would impact a limited area and would not consist of any above-grade structures other than a manhole. The manhole would be visible from a very limited number of vantage points due to its size and the natural topography of the area. Therefore, the inclusion of the pumping well would not result in new impacts or increase the severity of impacts identified in the FEIR, and therefore would not change the FEIR conclusion.

#### Substantial Changes With Respect to the Circumstances Under Which the Project is Undertaken/New Information of Substantial Importance

There are no changes with respect to circumstances under which the Project would be undertaken, and there is no new information of substantial importance that has become available relative to visual or aesthetic resources. No substantial changes in the aesthetic or visual environment have occurred since certification of the FEIR, and no substantial new sensitive receptors or scenic resources have been identified within the vicinity of the proposed Project modifications.

#### Conclusion

Based on the above, no new significant aesthetic impacts or a substantial increase in previously identified aesthetic impacts would occur as a result of the proposed modifications. All mitigation measures previously adopted for the approved Project will apply to the proposed Project described herein, as applicable. Therefore, the impacts to aesthetic resources and the proposed Project modifications do not meet the standards for a subsequent or supplemental EIR as provided pursuant to CEQA Guidelines, Section 15162.

## **Air Quality**

Analysis of air quality impacts of the approved Project are contained in the FEIR, Section 4.2, pages 4.2-10 through 4.2-21. See also CEQA Findings, page 11.

The Carlsbad Desalination FEIR and First Addendum concluded that impacts to air quality as a result of construction and operation of the approved Project were less than significant. The FEIR had originally assumed that seven segments of 1,000 feet of pipeline would be constructed simultaneously. Emission calculations were based on two crews placing base material, four crews laying the pipeline in the trench, and three crews backfilling the trench at any given time.

### Analysis of the Revised Project

Construction of the proposed Project modifications would result in temporary increases in criteria pollutant emissions associated with construction equipment. While the FEIR had assumed that seven segments of 1,000 feet of pipeline would be constructed at any given time, under the new construction schedule there would be no more than two segments of 1,000 feet of pipeline constructed simultaneously. As a result, the disclosed construction emissions in the FEIR associated with the off-site pipelines are substantially overestimated when the revised construction scenario is considered, and it has been determined that the construction activities associated with the proposed Project modifications—in combination with the construction activities associated with pipeline construction—would not exceed the emissions previously disclosed in the FEIR for any criteria pollutant. Similar to the findings of the FEIR and First Addendum, the construction-related air pollution emissions from the proposed Project modifications would be temporary and would not be expected to have a permanent significant impact on ambient air quality.

The Project modifications do not propose any changes to the operational characteristics of the desalination plant; therefore, there are no potential increased direct or indirect emissions associated with operation of the desalination plant that were not discussed in the Carlsbad FEIR.

### Substantial Changes With Respect to the Circumstances Under Which the Project is Undertaken/New Information of Substantial Importance

As discussed in the First Addendum to the FEIR, Assembly Bill 32 (AB 32) requires the California Air Resources Board (CARB), the state agency charged with regulating statewide air quality, to adopt rules and regulations that would achieve greenhouse gas (GHG) emissions equivalent to statewide levels in 1990 by 2020. GHG emissions were addressed in the First Addendum in 2009 through the California Coastal Commission's conditional approval of the Project's Energy Minimization and Greenhouse Gas Reduction Plan (GHG Plan). The GHG Plan provides for the assessment, reduction, and mitigation of GHG emissions, and establishes

a protocol for identifying, securing, monitoring, and updating measures to eliminate the Project's net carbon footprint. Once the Project is operational and all measures to reduce energy use at the site have been taken, the protocol involves the following steps, completed each year:

1. Determine the energy consumed by the Project for the previous year
2. Determine San Diego Gas and Electric (SDG&E) emission factor for delivered electricity from its most recently published Annual Emissions Report
3. Calculate the Project's gross indirect GHG emissions resulting from Project operations by multiplying its electricity use by the emission factor
4. Calculate the Project's net indirect GHG emissions by subtracting emissions avoided as a result of the Project (Avoided Emissions) and any existing offset projects and/or Renewable Energy Credits (RECs)
5. If necessary, purchase carbon offsets or RECs (or pay an in-lieu fee) to zero-out the Project's net indirect GHG emissions.

The following are elements of the plan, based on a draft "Greenhouse Gas Emissions Template" provided by the California Coastal Commission:

- A. Increased Energy Efficiency (such as use of a pressure-exchanger energy recovery system that captures energy from the discharge stream and high-energy efficiency pumps)
- B. GHG Emission Reduction by Green Building Design
- C. On-Site Solar Power Generation
- D. Recovery of CO<sub>2</sub> (carbon dioxide in a gaseous form will be added to the reverse osmosis permeate in combination with calcium hydroxide or calcium carbonate in order to form soluble calcium bicarbonate which adds hardness and alkalinity to the drinking water for distribution system corrosion protection)
- E. Avoided Emissions from Reducing Energy Needs for Water Reclamation (reduced salinity of source water would reduce the need to remove salts from wastewater to meet recycled water requirements)
- F. Avoided Emissions from Displaced Imported Water
- G. Avoided Emissions through Coastal Wetlands (carbon sequestration).

All energy use required to deliver product water would be incurred by pumps at the Carlsbad Desalination Plant, and this energy use was previously analyzed in the FEIR for the Carlsbad Desalination Plant Project. GHG emissions from construction activities associated with the proposed Project modifications would not exceed those identified in the FEIR, and 25,000 tons of carbon offsets as mitigation for construction-related emissions from the construction of the desalination plant will be purchased, which far exceeds the offsets that would actually be needed for construction-related impacts, even with the addition of these modifications.

The proposed Project modifications would not result in an increase in overall GHG emissions. The Project's GHG Plan was approved by the California Coastal Commission in August 2008. With implementation of the GHG Plan, the Project will demonstrate a "net zero" impact on GHG emissions from indirect sources (electrical energy consumption). The Project as revised would, therefore, not increase the severity of previously identified air quality impacts, nor would it result in any new significant effects related to air pollutant emissions that were not previously identified.

### Conclusion

The proposed Project modifications are consistent with the GHG Plan requirement demonstrating a "net zero" impact on GHG emissions from indirect sources (electrical energy consumption). The proposed Project as revised would not increase the severity of previously identified air quality impacts, nor would it result in any new significant effects related to air emissions that were not previously identified in the FEIR. Additionally, in light of the wide range of global warming activity prior to the certification of the FEIR in June 2006, there are no substantial changes to the circumstances under which the Project will be undertaken, and no new information of substantial importance which was not known and could not have been known when the FEIR was certified has since been identified. Therefore, the impacts to air quality and the proposed Project modifications do not meet the standards for a subsequent or supplemental EIR as provided pursuant to CEQA Guidelines, Section 15162.

### **Biological Resources**

Analysis of biological resources impacts and EIR-identified mitigation measures of the approved Project are contained in the FEIR, Section 4.3, pages 4.3-18 through 4.3-54. See also CEQA Findings, pages 12 through 14. The proposed Project modifications are considered to be covered under this analysis with the exception of the TOVWTP Modifications and Aqueduct Connection Modifications, Pipeline 3 Relining, and Pipeline 4 Vent Replacement and Pipeline Interconnect.

In addition to the analysis provided in the Carlsbad EIR and First Addendum, the Water Authority also has the benefit of the approved NCCP/HCP, its implementing agreement, and existing federal Endangered Species Act Section 10(a)(1)(B) incidental take permit and California Fish and Game Code Section 2835 take permit. The NCCP/HCP Final EIR/EIS



(Section 4 and appendices) contains a thorough analysis of biological resources impacts and associated project design features and mitigation measures associated with Covered Activities including minor modifications to existing Water Authority facilities. This analysis and the associated mitigation measures described therein will apply to the proposed modifications associated with the TOVWTP modifications, Pipeline 3 Relining, and the Pipeline 4 Vent Replacement and Pipeline Interconnect.

### Analysis of the Revised Project

#### *TOVWTP Modifications and Aqueduct Connection Point Modifications*

The modifications to the TOVWTP associated with the proposed Project will not result in new significant impacts to Biological Resources. Proposed modifications to the TOVWTP and at the connection point to Pipeline 3 would be within previously developed areas. No direct biological impacts would occur at these sites. Indirect impacts from construction and operation of the proposed treatment plant modifications may include noise, fugitive dust, erosion and sedimentation. Disturbed areas will be restored per Section 6.6.2 of the NCCP/HCP. Additionally, mitigation for indirect impacts will occur pursuant to the NCCP/HCP. Lastly, impacts would also be reduced through incorporation of the Water Authority's *General Conditions and Standard Specifications/Project Design Features* discussed *Biological Resources Technical Report for the Pipeline 3 Relining and Associated Improvements Project (Dudek 2012)*. Therefore, the TOVWTP modifications would not result in new impacts or increase the severity of impacts identified in the NCCP/HCP EIR/EIS, and therefore would not change the NCCP/HCP EIR/EIS conclusion. Therefore, no new significant impacts or substantially more severe impacts would occur during construction at the treatment plant with the proposed modifications.

#### *Pipeline 3 Relining*

In 2010, the Water Authority approved the Final EIR/EIS for the Water Authority Subregional NCCP/HCP (Water Authority 2010a, 2010b). The NCCP/HCP addresses the potential impacts of Water Authority activities on special-status biological resources. These activities include new construction and typical expansion of existing infrastructure, and ongoing installation, use maintenance, and repair of aqueduct and water conveyance, treatment, and storage systems. Impacts to 63 special-status species are covered under the NCCP/HCP through avoidance and minimization requirements, as well as approximately 704 acres of Water Authority mitigation credits (Water Authority et. al. 2010). Relining of Pipeline 3 is a covered activity in the NCCP/HCP. No new impacts would occur due to the proposed Project modifications that were not previously considered in the NCCP/HCP EIR/EIS. As covered activities under the NCCP/HCP, the biological impacts from these activities have been addressed and will be mitigated with implementation of the applicable mitigation measures in the NCCP/HCP Section 6 and Appendix B (Water Authority. 2010b).

The Biological Resources Technical Report for the Pipeline 3 Relining and Associated Improvements Project (Dudek 2012) contains a Project-level analysis of biological impacts resulting from the proposed Project modifications. The findings of that analysis are included below.

Implementation of the Pipeline 3 Relining would result in direct impacts to 3.71 acres of native vegetation that would require mitigation pursuant to the NCCP/HCP, including 3.66 acres of vegetation within the Water Authority ROW and 0.05 acre of vegetation outside the ROW and inside of Biologically Significant Resource Areas (BSRA). The mitigation program for impacts would include using 0.325 acre of mitigation credits within the Crestridge Habitat Management Area (HMA) or San Miguel Conservation Bank, and restoration of impacts per NCCP/HCP Section 6.6.2. Both mitigation sites are identified as BSRAs under the NCCP/HCP.

Although two sensitive plants and four sensitive wildlife species were observed in the Study Area and others have a moderate potential to occur, the Project has been designed to avoid direct impacts to these species and will apply the Special Conditions for avoidance and minimization pursuant to the NCCP/HCP to reduce potential impacts to a level below significant. No significant direct impacts are proposed or anticipated to any sensitive plant or wildlife species or U.S. Fish and Wildlife Service (USFWS)-designated critical habitat for any special-status species. Portal 13 is located adjacent to critical habitat designated for thread-leaved brodiaea (*Brodiaea filifolia*); however, this area consists of ornamental vegetation and a paved access path located between rows of a residential subdivision and supports no primary constituent habitat elements required for the species. Further, focused surveys for rare plants were negative in this area and the Portal 13 impact area has been designed to avoid the thread-leaved brodiaea critical habitat mapped at this location.

Disturbance of vegetation communities could affect native nesting birds if Project activities occur during the nesting season. Pursuant to the NCCP/HCP, the nesting season is defined as January 15 to July 31 for raptor species, March 15 to September 15 for riparian species, and February 15 to August 15 for upland species. Compliance with the federal Migratory Bird Treaty Act (MBTA) and Fish and Game Code Sections 3503.5 and 3513 will be ensured either by removing/modifying potential nesting habitat outside the nesting season, or by having a qualified Environmental Surveyor conduct pre-activity nest surveys to determine the status of nesting birds within and around the impact areas if any vegetation disturbance occurs during the nesting season. If an active nest is detected and construction must proceed, the Environmental Surveyor will establish buffer guidelines (typically 100-foot buffer zone) and nest activity will be monitored to ensure compliance with the MBTA and Fish and Game Code.

The Project also has been designed to ensure that potential indirect impacts associated with drainage/water quality, lighting, increased human activities during Project construction, and invasive species would be less than significant. Potentially significant indirect impacts to

nesting/breeding least Bell's vireo (*Vireo bellii pusillus*) (if present) due to construction noise could result from implementation of the proposed Project. Implementation of species-specific NCCP/HCP special conditions would ensure that these impacts remain less than significant.

In addition to the incorporation of mitigation measures from the NCCP/HCP, impacts to biological resources resulting from the Pipeline 3 Relining effort would also be reduced through incorporation of the Water Authority's *General Conditions and Standard Specifications*, as outlined in the Biological Resources Technical Report (Dudek 2012). Therefore, the Pipeline 3 relining would not result in new impacts or increase the severity of impacts identified in the NCCP/HCP EIR/EIS, and therefore would not change the NCCP/HCP EIR/EIS conclusion.

#### *Pipeline 4 Vent Replacement and Pipeline Interconnect*

Similar to the Pipeline 3 relining, the Pipeline 4 vent replacement and pipeline interconnect would be a covered activity under the NCCP/HCP. Construction activities at this site would result in approximately 0.62 acre of impact to coastal sage scrub. Mitigation requirements for permanent impacts will be fulfilled using the Crestridge HMA or San Miguel Conservation Bank in accordance with the NCCP/HCP, as well as restoration on site. Disturbed areas will be restored per Section 6.6.2 of the NCCP/HCP. Additionally, mitigation for indirect impacts will occur pursuant to the NCCP/HCP. Lastly, impacts would also be reduced through incorporation of the Water Authority's *General Conditions and Standard Specifications*. Therefore, the Pipeline 4 Vent Replacement and Pipeline Interconnect would not result in new impacts or increase the severity of impacts identified in the NCCP/HCP EIR/EIS, and therefore would not change the NCCP/HCP EIR/EIS conclusion.

#### *Macario Canyon Pipeline Alignment Modification and Pumping Well*

Implementation of the proposed Project modifications would result in temporary impacts to 0.14 acre of non-native annual grassland at the proposed drilling portal location and construction staging area, which are within the temporary work area shown on Figure 7a. The project would also result in 13 square feet of permanent impacts resulting from the placement of the 48-inch-diameter manhole within the non-native annual grassland habitat. Impacts were calculated by overlaying the portal, staging area, and blow-off valve structure locations over a vegetation map. All work will be contained within this temporary work area footprint, which also includes approximately 0.04 acre of developed area. Impacts on developed land are regarded as less than significant. No impacts to wetlands or jurisdictional waters would occur, and all construction activities would occur at least 100 feet away from wetland habitats. The direct impacts to annual grassland are within the scope of the impacts analyzed in the FEIR and the First Addendum. As noted previously, the FEIR addressed a broad scope of impacts on sensitive biological resources to provide for flexibility in final design and alignment of the conveyance pipelines. As a result, impacts reported in the FEIR are greater than what would occur with the proposed Project modifications. Specifically, previously addressed impacts from the Final EIR were

avoided with the alignment and design changes addressed in the First Addendum, as described in more detail below. Thus, the approved Project under the First Addendum would have resulted in reduced impacts to sensitive communities as compared to the impacts that were identified in the FEIR.

Among these impacts addressed in the FEIR were 3.71 acres of impact to annual grassland. The 3.71 acres of impact to annual grassland were mapped along the potential pipeline segments located just north of Palomar Airport and in the Shadowridge area. Since the impacts to annual grassland that would occur as a result of the currently proposed Project modifications in Macario Canyon would be less than the total acres anticipated to be impacted under the FEIR, the impacts associated with the Project modification in Macario Canyon are within the scope of the analysis of the FEIR. With implementation of FEIR Mitigation Measure 4.3-1, impacts to 0.14 acre of annual grassland in Macario Canyon are considered less than significant.

Construction activities in Macario Canyon would also result in indirect impacts to adjacent sensitive habitats and wildlife, including potential impacts from construction-generated dust, siltation, and noise. Implementation of FEIR Mitigation Measures 4.3-3, 4.3-4, and 4.3-5 would ensure that impacts remain below a level of significance. Consistent with the FEIR, with implementation of mitigation, indirect impacts from construction activities would be considered less than significant.

Based on the above analysis, the modifications to the pipeline in Macario Canyon would not result in impacts that were not previously identified and mitigated per the FEIR. With mitigation, impacts to biological resources would be similar to those discussed in the FEIR and would remain less than significant with the proposed Project modifications.

#### Substantial Changes With Respect to the Circumstances Under Which the Project is Undertaken/New Information of Substantial Importance

There are no changes with respect to circumstances under which the Project will be undertaken, and there is no new information of substantial importance that has become available relative to biological resources. The additional mitigation imposed by the California Coastal Commission and the Regional Water Quality Control Board does not constitute a changed circumstance or new information of substantial importance, as indicated in the First Addendum. The mitigation acreage required by these two agencies was imposed pursuant to their respective responsibilities under separate regulatory schemes, i.e., the Coastal Act and the California Water Code, both of which employ different standards of review than CEQA's "significant impact" threshold. Thus, the additional mitigation acreage did not involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

#### Conclusion

None of the proposed Project changes or additions regarding biological resources involve new significant impacts or a substantial increase in previously identified impacts. Additionally, there are no substantial changes to the circumstances under which the Project will be undertaken, and no new information of substantial importance regarding biological resources which was not known and could not have been known when the FEIR was certified has since been identified. Therefore, the biological resources impacts and the proposed Project modifications do not meet the standards for a subsequent or supplemental EIR as provided pursuant to CEQA Guidelines, Section 15162.

## **Cultural Resources**

Analysis of cultural impacts and EIR-identified mitigation measures of the approved Project are contained in the FEIR, Section 4.4, pages 4.4-14 through 4.4-27. See also CEQA Findings, pages 14 and 15.

The FEIR and First Addendum concluded that cultural resource impacts were less than significant with mitigation implemented in previously undisturbed areas near known archaeological and paleontological resources sites.

### Analysis of the Revised Project

With the exception of the Macario Canyon Pumping Well, the proposed Project modifications would occur entirely within existing pipeline ROWs or in areas that have been previously disturbed. Therefore, no new impacts to cultural or paleontological resources would result from the proposed Project modifications in the areas of existing infrastructure, and no cultural resources mitigation beyond that identified in the FEIR would be required for these proposed Project modifications. The Macario Canyon Pumping Well construction area was surveyed and no cultural resources were identified. As a result, implementation of project work at this location would not have an effect on cultural resources. Any work conducted at this site would also be subject to the mitigation in Section 4.4.4 of the FEIR, as applicable. Implementation of these mitigation measures would ensure that impacts remain less than significant. Therefore, the proposed Project modifications would not result in new significant impacts or increase the severity of impacts identified in the FEIR, and therefore would not change the FEIR conclusion.

### Substantial Changes With Respect to the Circumstances Under Which the Project is Undertaken/New Information of Substantial Importance

The potential for significant impacts on cultural or paleontological resources within the area of potential effect of the Project has not changed since the time of certification of the FEIR. Therefore, no changes in circumstances and no new information of substantial importance relative to cultural or paleontological resources have been identified.

## Conclusion

None of the proposed Project modifications involve new significant impacts or a substantial increase in previously identified impacts regarding cultural/paleontological resources. Additionally, there are no substantial changes to the circumstances under which the Project will be undertaken, and no new information of substantial importance regarding cultural/paleontological resources which was not known and could not have been known when the FEIR was certified has since been identified. Therefore, the impacts to cultural/paleontological resources as a result of the proposed Project modifications do not meet the standards for a subsequent or supplemental EIR as provided pursuant to CEQA Guidelines, Section 15162.

## **Geology and Soils**

Analysis of geology/soils impacts and EIR-identified mitigation measures of the approved Project are contained in the FEIR, Section 4.5, pages 4.5-10 through 4.5-17. See also CEQA Findings, pages 15 and 16.

The FEIR and First Addendum found that long-term impacts due to unstable soil types and seismic-related geologic hazards would be less than significant with mitigation measures incorporated. The FEIR and First Addendum also found that during construction activities, erosion could be accelerated, which could undermine slopes, cause siltation of surface waters, and expose and damage underground facilities. This impact was found to be less than significant with implementation of mitigation measures. Additionally, the FEIR and First Addendum found that impacts to mineral resources would be less than significant.

## Analysis of the Revised Project

Geologic impacts of the proposed Project modifications would be mitigated to a less-than-significant level with the implementation of Mitigation Measure 4.5-2, which requires that a pre-construction geotechnical investigation be prepared to address geotechnical considerations. All recommendations of the geotechnical investigation will be implemented.

The erosion potential for the proposed Project modifications would be similar to the approved Project. Impacts would remain less-than-significant with the implementation of Mitigation Measures 4.7-1 and 4.7-2, which require that the Project prepare a SWPPP and a Stormwater Management Plan, respectively.

The footprints for the proposed Project modifications are within developed areas, adjacent to a biological preserve area, or within the existing TOVWTP. These areas are not suitable for mineral extraction. Therefore, the proposed Project modifications would not result in impacts to geology and soils beyond what was originally evaluated in the FEIR and the First Addendum.

## Substantial Changes With Respect to the Circumstances Under Which the Project is Undertaken/New Information of Substantial Importance

There is no potential for significant changes in geological, seismic, soils, or mineral resource conditions within the area of potential effect of the Project since the time of certification of the FEIR, because such resources are relatively static. Additionally, no new information regarding unknown geologic hazards, conditions, or resources has become available. Therefore, no changes in circumstances and no new information of substantial importance relative to geology have been identified.

### Conclusion

None of the changes or additions to the proposed Project modifications involve new significant impacts or a substantial increase in previously identified impacts to geology, soils, or mineral resources. In addition, there are no substantial changes to the circumstances under which the Project will be undertaken and no new information regarding geological resources which was not known and could not have been known when the FEIR was certified has since been identified. Therefore, the geology/soils impacts and the proposed Project modifications do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

### **Hazards and Hazardous Materials**

Analysis of hazards impacts and EIR-identified mitigation measures of the approved Project are contained in the FEIR, Section 4.6, pages 4.6-9 through 4.6-17. See also CEQA Findings, pages 16 and 17.

The FEIR determined that Project construction would require grading and trenching that could potentially disturb and release hazardous materials into the environment from sites located in proximity to the construction areas. Potential for release or exposure of existing subsurface contamination could result during construction. The FEIR included measures to mitigate this potential for exposure to existing contamination sites during construction. Specifically, FEIR Mitigation Measure 4.6-1 would mitigate the potential for exposure of existing contamination by requiring construction monitoring in areas identified as having potential risks, and appropriate actions to be taken if contamination is encountered.

### Analysis of the Revised Project

During construction, ground-disturbing activities such as grading or excavation associated with the proposed Project modifications are not anticipated to encounter contaminated soils. The proposed Project modifications would occur at an existing water treatment facility, along an existing water distribution pipeline, or along a previously approved pipeline alignment adjacent to a biological

preserve. However, to ensure that impacts would remain less than significant, the proposed Project modifications would be subject to FEIR Mitigation Measure 4.6-1 mentioned above.

During construction, gasoline, diesel fuel, lubricating oil, grease, solvents, paint, and welding gases would be used at all proposed Project locations. The Project would implement FEIR Mitigation Measure 4.7-1, which requires that the Project prepare and implement an SWPPP that will include both construction and post-construction pollution prevention and pollution control measures. Additionally, as part of the Water Authority's water treatment and distribution facilities, the proposed facilities that would be owned and operated by the Water Authority would be subject to the Water Authority's Emergency Response Plan (ERP), which requires that the Water Authority, in conjunction with the local fire department, take appropriate response actions in the case of an accidental release of hazardous materials during transportation, use, or disposal of hazardous materials (Water Authority 2003). With the implementation of the Water Authority's ERP and FEIR Mitigation Measure 4.7-1, potential impacts related to hazards and hazardous materials during construction would be similar to the approved Project and would remain less than significant with the proposed Project modifications.

Impacts related to hazards and hazardous materials for each Project modification are discussed below.

#### *TOVWTP Modifications*

The FEIR and First Addendum concluded that with appropriate handling and mitigation for chemicals proposed to be used for treating the product water, potential long-term impacts related to a risk of exposure, including fire or hazardous vapor releases during operations, will be less than significant. The proposed Project modifications at the TOVWTP include a chemical injection and monitoring station, which would inject aqueous ammonia and sodium hypochlorite into the product water to provide disinfection. These chemicals are currently stored and used on site. The proposed additional chemical volumes would be subject to compliance with all applicable hazardous materials storage and handling laws and regulations, and Fire Code requirements, which the current treatment plant is subject to and in compliance with. With the proposed Project modifications, the Water Authority will update all applicable documentation at the site, such as the treatment plant's Hazardous Materials Business Plan. The treatment facility with the proposed Project modifications would also be subject to the Water Authority's ERP, as discussed previously. With compliance with all applicable laws and implementation of the Water Authority's ERP, long-term impacts from hazards and hazardous materials at the treatment plant site would remain less than significant.

#### *Aqueduct Connection Point Modifications*

As mentioned previously, in very rare circumstances, product water from the Carlsbad Desalination Project may be directly delivered south in the Water Authority's aqueduct. If needed in certain instances a chemical injection facility will be installed to assure acceptable



water quality at the San Marcos connection point to treat the product water prior to introduction into the Water Authority's aqueduct. These facilities would only be used when the water is routed to the south rather than north to the TOVWTP. This is not a normal operation mode and would only be required in rare circumstances where Pipeline 3 or Pipeline 4 are out of service upstream of the desalination connection facilities. This chemical injection facility would consist of two 5,000-gallon tanker trucks temporarily parked within secondary containment structures. One truck would contain sodium hypochlorite (11%–14% solution) and one truck would contain aqueous ammonia (17%–20% solution). The sodium hypochlorite would be injected into the product water at a rate of 700 gal/day. The ammonia would be injected at a rate of 350 gal/day. Approximately one sodium hypochlorite truck delivery a week and one aqueous ammonia truck delivery every 2 weeks would be required during periods when chemical injection is in use.

As discussed in the FEIR, chlorine does not pose a public health hazard when stored in the form of liquid bleach (sodium hypochlorite), and aqueous ammonia presents a significantly lower risk of toxic plume release when stored in quantities below the Clean Air Regulations threshold of 20,000 gallons at concentrations above 20% (40 CFR 68, Section 130). The proposed additional chemical volumes would be subject to compliance with all applicable hazardous materials storage and handling laws and regulations, as well as Fire Code requirements, per Mitigation Measure 4.6-3 in the FEIR. The proposed Project modifications would not result in new impacts or increased severity of impacts beyond those previously identified in the FEIR.

*Pipeline 3 Relining, Pipeline 4 Vent Replacement and Pipeline Interconnect, and Macario Canyon Pipeline Alignment Modification and Pumping Well*

As concluded in the FEIR, the use of pipelines to distribute potable water would not pose a hazardous risk to the public or the environment. Long-term hazardous risks associated with the Pipeline 3 Relining, the Pipeline 4 Vent Replacement and Pipeline Interconnect, and the Macario Canyon Pipeline Alignment Modification and Pumping Well would be similar to the impacts associated with the off-site pipeline impacts under the approved Project and, therefore, impacts would remain less than significant.

Substantial Changes With Respect to the Circumstances Under Which the Project is Undertaken/New Information of Substantial Importance

There are no substantial changes to the circumstances under which the Project will be undertaken, and there is no new information of substantial importance relative to hazards or hazardous materials that has become available since the certification of the FEIR.

Conclusion

With consideration of the above discussion, the hazards and hazardous materials impacts and the proposed Project modifications do not meet the standards for a subsequent or supplemental EIR as provided pursuant to CEQA Guidelines, Section 15162.

## **Hydrology and Water Quality**

Analysis of hydrology/water quality impacts and EIR-identified mitigation measures of the approved Project are contained in the FEIR, Section 4.7, pages 4.7-10 through 4.7-25. See also CEQA Findings, pages 17 through 20.

The FEIR and First Addendum concluded that construction of the approved Project could result in significant short-term surface water quality impacts associated with exposed soils, fuels, lubricants, and solid and liquid wastes that would be used and stored within active construction areas. Mitigation Measures 4.7-1 and 4.7-2, which require that the Project prepare an SWPPP and, if appropriate, a Stormwater Management Plan (if grading or building permits are determined to be necessary) were found to reduce water quality impacts to less than significant.

### Analysis of the Revised Project

#### *TOVWTP Modifications*

Regional groundwater within the area of the TOVWTP site occurs at depths of approximately 90 feet below the surface. Additionally, localized perched groundwater aquifers are considered possible within the Project site and typically vary in volume and extent based on seasonal precipitation and/or irrigation levels (Water Authority 2005). Groundwater is not anticipated to occur at the relatively shallow depths of disturbance necessary for the proposed Project modifications. As such, impacts to groundwater would be less than significant.

#### *Pipeline 3 Relining, Aqueduct Connection Point Modifications, Pipeline 4 Vent Replacement and Pipeline Interconnect, and Macario Canyon Pipeline Alignment Modification and Pumping Well*

Both the FEIR and First Addendum concluded that impacts to hydrology and water quality due to installation of the off-site pipelines and associated infrastructure would be less than significant. The majority of the proposed Project modifications would be installed or repaired underground and, therefore, similar to the approved Project, would not cause increases in impervious surfaces or runoff. Long-term impacts to hydrology and water quality from the proposed Project modifications would therefore also be less than significant.

Similar to the approved Project, the proposed changes could also result in short-term construction-related surface water impacts that would be reduced to less-than-significant levels with implementation of FEIR Mitigation Measures 4.7-1 and 4.7-2.

The proposed Project modifications located within the City of San Marcos are not located in a flood zone (FEMA 1997, 1999). Portions of the Macario Canyon pipeline modifications are within the flood zone that is a tributary to Aqua Hedionda Creek (FEMA 2012). The FEIR determined that impacts may occur along certain pipeline alignments that are located within a 100-year flood zone. In these areas, implementation of Mitigation Measure 4.7-3, which requires that construction activities occur during the dry months between May 1 and September 30, ensures that impacts would remain below a level of significance. Consistent with the FEIR, the Project with the proposed modifications would also implement Mitigation Measure 4.7-3 and would not result in impacts associated with flood zones.

#### Substantial Changes With Respect to the Circumstances Under Which the Project is Undertaken/New Information of Substantial Importance

There are no substantial changes to the circumstances under which the Project will be undertaken, and there is no new information of substantial importance relative to hydrology or water quality that has become available since the certification of the FEIR.

#### Conclusion

The proposed Project modifications would not result in any new significant hydrologic/water quality impacts, and no substantial increase in previously identified hydrologic/water quality impacts would occur with implementation of applicable laws, regulation, and mitigation as discussed above. Therefore, the impacts from the proposed Project modifications regarding hydrology and water quality do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

#### **Land Use/Planning**

Analysis of land use impacts and EIR-identified mitigation measures of the approved Project are contained in the FEIR, Section 4.8, pages 4.8-10 through 4.8-20. See also CEQA Findings, page 20.

The FEIR and First Addendum concluded that land use impacts would be less than significant.

#### Analysis of the Revised Project

The evaluation and findings from the FEIR and First Addendum do not change with the proposed Project modifications. Modifications at the existing TOVWTP site would involve a new connection from Pipeline 3 to the treated water storage tanks, and would occur entirely within Water Authority's water treatment plant site or existing ROW. A portion of this new connection would occur on the treatment plant site, while a 300-foot-long pipeline segment would be located within an existing road (terminus of El Paso Alto Road). Relining Pipeline 3 and modifications at the Pipeline 4 Vent Replacement and Pipeline Interconnect site would also occur within an existing Water Authority ROW. Construction would result in short-term impacts to surrounding land uses.

Short-term impacts would include traffic delays, noise, visual effects, and dust, all of which are within the scope of the analysis contained in the FEIR, as noted in the appropriate sections of this Addendum. Land use impacts associated with the proposed Project modifications would be similar to the approved Project; these impacts were found to be less than significant.

It is important to note that zoning ordinances do not apply to the location or construction of facilities used for the production, generation, storage, or transmission of water (California Government Code Section 53091). The policies and goals in both the Land Use Element and the Public Facility Element of the County's General Plan promote the efforts of the Water Authority and water districts to provide for storage, treatment, and transmission facilities to meet demand (County of San Diego 2010). Lastly, construction within existing roadways would not preclude future use of roads following construction, as all of these project components would be located underground.

#### Substantial Changes With Respect to the Circumstances Under Which the Project is Undertaken/New Information of Substantial Importance

There are no substantial changes to the circumstances under which the Project will be undertaken, because there are no new land uses or substantial changes in land use policies or requirements that would affect the Project. No new information of substantial importance relative to land use has become available since the certification of the FEIR.

#### Conclusion

Based on the above, no new significant land use impacts or a substantial increase in previously identified land use impacts would occur as a result of the proposed Project modifications. Therefore, the impacts to land use and the proposed Project modifications do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

#### **Noise and Vibration**

An analysis of noise impacts and EIR-identified mitigation measures of the approved Project are contained in the FEIR, Section 4.9, pages 4.9-5 through 4.9-14. See also CEQA Findings, pages 20 and 21. The FEIR analysis indicated that all Project-related construction activities would comply with the local jurisdictions' noise ordinance for allowable construction hours. Due to compliance with construction noise restrictions, it is not anticipated that excavation and installation of the pipelines using open trench installation methods would result in a significant noise impact based on the applicable significance criteria. It was estimated in the FEIR that maximum noise levels would range up to approximately 85 decibels (dB), while the average sound level for an 8-hour work day was expected to range up to approximately 75 dB.

Further, the FEIR indicates that trenchless methods would be used at several areas. Noise impacts associated with trenchless operations are similar to open trench pipeline construction.

However, rather than the construction noise progressing linearly, the noise would be confined to the excavated pits. Thus, noise impacts could last for several weeks rather than a few days at the areas adjacent to the pits. Trenchless equipment would most likely include a microtunneling machine, auger/drill, a crane, front-end loader, ventilation fans, air compressor, pumps, and dump trucks. Excavating the pits would generally be the most intense noise source. Thereafter, the noise impact would be less intense but a persistent noise source. Noise would be generated primarily during the excavation of the launch and receiving pits. The construction specifications will require the contractor to comply with the applicable noise ordinance. Construction noise would not exceed established standards. Therefore, the noise impact is not anticipated to be significant.

### Analysis of the Revised Project

#### *TOVWTP Modifications*

Noise levels resulting from construction activities associated with the proposed modifications at the TOVWTP would be similar to those addressed in the Carlsbad FEIR. The County of San Diego noise ordinance prohibits construction noise that exceeds an average sound level of 75 decibels for an eight-hour period, between 7 a.m. and 7 p.m., when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received. The proposed plant modifications would not result in more severe noise impacts than those previously analyzed in the Carlsbad FEIR. Consistent with the Water Authority's typical construction practices, temporary noise walls would be incorporated into the Project as project design features to reduce construction noise levels at nearby residences. With incorporation of this design feature, noise levels at sensitive receptors are not expected to exceed the 85 dB disclosed in the FEIR, and average sound levels for an 8-hour workday would remain below 75 dB due to the intermittent nature of construction activities on a day-to-day basis.

Once construction activities are complete, the proposed modifications to the treatment plant would include the expansion of the flow control facility, the noise from which would be attenuated with expansion of the noise attenuation features of the existing flow-control facility. The proposed modifications at the treatment plant (pipelines, chemical injection, monitoring station, and pump well) would be subject to the existing TOVWTP operational noise standards that require all facilities on the TOVWTP site to not exceed a 1-hour average noise level of 45 dB at or beyond the property lines. Therefore, the proposed modifications at the TOVWTP would not result in more severe operational noise impacts than those considered in the FEIR, and would not exceed existing TOVWTP operational standards.

#### *Pipeline 3 Relining and Pipeline 4 Vent Replacement and Pipeline Interconnect*

As indicated previously, the FEIR determined that compliance with construction noise restrictions would ensure that temporary noise impacts remain less than significant. Portions of the Pipeline 3 relining would occur in developed areas near sensitive noise receptors, such as

residences, in certain locations along the pipeline alignment. The Pipeline 3 portals located in the County of San Diego would not be located in close proximity to existing noise-sensitive receptors. However, the portals located in the City of San Marcos would be located immediately adjacent to existing residences, specifically at portals 11, 12, and 13 (see Figure 8, Pipeline 3 Relining – Portals Adjacent to Single-Family Homes).

Construction noise in the City of San Marcos is governed by Noise Ordinance Section 10.24.020 (City of San Marcos 2004). As indicated in the Noise Ordinance, construction activity would be in violation of the ordinance if it were to occur at any time other than on weekdays Monday through Friday between the hours of 7:00 a.m. and 6:00 p.m. and on Saturday 8:00 a.m. to 5:00 p.m. The City of San Marcos does not have a numeric threshold for construction-generated noise.

The closest residences would be located adjacent to portals 11, 12, and 13. All construction activity will be limited to the City of San Marcos' permitted hours of construction. Consistent with the Water Authority's typical construction practices for relining projects, temporary noise walls would be incorporated into the Project as project design features to reduce construction noise levels at nearby residences. With incorporation of this design feature, noise levels at sensitive receptors are not expected to exceed the 85 dB disclosed in the FEIR, and average sound levels for an 8-hour workday would remain below 75 dB due to the intermittent nature of construction activities on a day-to-day basis. Lastly, it should be noted that with the forward progression of construction activities, construction would only occur for a limited duration (approximately 2 to 3 months) at any given portal. Therefore, the Pipeline 3 relining would not result in new significant impacts or increase the severity of impacts identified in the FEIR, and would not change the FEIR conclusion that no significant noise impacts would occur.

Ground-borne vibration is typically attenuated over short distances. The closest home to the portal locations would be approximately 25 feet or more from the construction area. The heavier pieces of construction equipment utilized at the portals would have peak particle velocities of approximately 0.089 or less at a distance of 25 feet (FTA 2006). At these distances and with the anticipated construction equipment, the peak particle velocity would be below 0.1 inches/second at the adjacent homes, which is the point at which continuous vibration begins to annoy people (Caltrans 2004). In addition, it would be well below 0.2 inches/second, which is the magnitude typically used for protection of "fragile buildings" (ASCE 1974). As such, even older homes that may exist adjacent to the portal locations would not be impacted by construction. Construction is not anticipated to result in continuous vibration, nor is it expected to exceed the magnitudes listed above. As such, the vibration impact would be less than significant.

Construction associated with the Pipeline 4 Vent Replacement and Pipeline Interconnect would also be limited to the City of San Marcos' permitted hours of construction. In addition, there are no sensitive receptors in the immediate vicinity of the site. Therefore, the Pipeline 4 vent

replacement and pipeline interconnect would not result in new significant impacts or increase the severity of impacts identified in the FEIR, and would not change the FEIR conclusion.

Once construction is complete, no operational noise is anticipated along the pipeline route as a result of the relining or the vent replacement.

#### *Macario Canyon Pipeline Alignment Modification and Pumping Well*

As discussed in the FEIR, trenchless construction activities generate maximum noise levels of 85 dBA at approximately 50 feet. The actual sound level for an eight-hour work day would be substantially less due to the intermittent nature of construction work and would range up to approximately 75 dB at 50 feet. The FEIR concluded that due to the intermittent nature of construction noise and the requirement in the construction specification to comply with all applicable local noise ordinances, impacts to sensitive receptors during construction of the pipelines using trenchless construction methods would be less than significant. The nearest noise sensitive receptor to the proposed Macario Canyon modifications consist of apartments located approximately 1,200 feet to the north, across from Faraday Avenue. At this distance construction noise impacts would be substantially less than those previously analyzed in the FEIR. Therefore, the proposed modifications along the pipeline route would not result in any new significant noise impacts or more severe construction noise impacts than those originally considered in the FEIR.

Additionally, consistent with the FEIR, implementation of Mitigation Measures 4.3-3, 4.3-4, and 4.3-5, would ensure that indirect noise impacts to sensitive habitats and species remain below a level of significance. Therefore, the Macario Canyon pipeline alignment modification and pumping well would not result in new significant indirect noise impacts or increase the severity of impacts identified in the FEIR, and would not change the FEIR conclusion.

Once construction is complete the pumping well would only be used in infrequent circumstances, for limited periods of time and would not generate a substantial amount of noise, and impacts would not be beyond the scope of those addressed in the FEIR. Similar to the approved Project, operational noise impacts of the proposed Project modifications would be less than significant.

#### Substantial Changes With Respect to the Circumstances Under Which the Project is Undertaken/New Information of Substantial Importance

There are no substantial changes to the circumstances under which the proposed Project modifications will be undertaken, because there are no new substantial changes in noise or vibration policies or requirements that would affect the Project. No new substantial sources of noise or vibration would be introduced within the area, and no new information of substantial importance relative to noise and vibration has become available since the certification of the FEIR.

#### Conclusion

Based on the above, no new significant noise or vibration impacts or a substantial increase in previously identified noise impacts would occur as a result of the proposed Project modifications. Therefore, noise and vibration impacts and the proposed Project modifications do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.





- Portal Impact
- Staging Area Impact
- CWA Right-of-Way
- Study Area

**FIGURE 8**  
**Pipeline 3 Relining - Portals Adjacent to Single Family Homes**

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## **Transportation and Traffic**

Analysis of traffic impacts and EIR-identified mitigation measures of the approved Project are contained in the FEIR, Section 4.10, pages 4.10-4 through 4.10-13. See also CEQA Findings, pages 21 and 22.

The FEIR and First Addendum concluded that the approved Project would result in short-term construction traffic impacts associated with the portions of the off-site pipeline that is to be located within existing roadways. Temporary construction traffic trips include crew vehicles and deliveries of pipeline and other materials. The FEIR and First Addendum included Mitigation Measures 4.10-1 and 4.10-2 that require that construction will not result in unacceptable levels of service during peak hour periods on any affected roadways, and that specific traffic control measures as set forth within an approved traffic control plan are implemented. With implementation of these mitigation measures, traffic impacts were considered less than significant.

The FEIR and First Addendum also concluded that long-term traffic impacts from inspection and monitoring activities would be less than significant.

### Analysis of the Revised Project

The proposed Project modifications would have similar short-term construction related impacts as those disclosed in the FEIR and First Addendum. Since the proposed Project modifications would add a connecting pipeline to an existing treatment plant, reline an existing pipeline, replace an existing vent and add an interconnection pipeline, and add a pumping well to an approved pipeline, trips associated with inspection of these facilities are considered previously approved and are not considered new traffic trips. Following construction, the proposed Project modifications at the TOVWTP would not result in an increase in staffing at the facility and no additional trips would occur. As discussed above, during periods when the water is sent south from the Aqueduct Connection Point, approximately one or two truck deliveries a week would be required to supply the chemical injection tankers. The proposed Project modifications would not result in a substantial increase in traffic on local roadways. Therefore, long-term impacts to transportation and traffic would be similar to the approved Project and impacts would remain less than significant.

### Substantial Changes With Respect to the Circumstances Under Which the Project is Undertaken/New Information of Substantial Importance

There are no substantial changes under which the Project will be undertaken, because there are no substantial changes in traffic characteristics or requirements from what was in place at the time that the FEIR was certified. No new information of substantial importance relative to traffic has become available since the certification of the FEIR.

## Conclusion

Based on the above, no new significant traffic impacts or a substantial increase in previously identified traffic impacts would occur as a result of the proposed Project modifications. Therefore, the traffic impacts and the proposed Project modifications do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

## **Public Utilities and Service Systems**

Analysis of public utilities and service impacts and EIR-identified mitigation measures of the approved Project are contained in the FEIR, Section 4.11, pages 4.11-6 through 4.11-22. See also CEQA Findings, pages 23 through 25.

The analysis of public services and utilities in the Carlsbad Desalination FEIR and First Addendum concluded that the water treatment plant and associated infrastructure would not result in significant impacts to fire protection services, schools, wastewater treatment facilities, landfills, stormwater drainage facilities, or electric power services.

## Analysis of the Revised Project

The proposed Project modifications would not result in residential, commercial, or industrial growth, and therefore, similar to the approved Project, would not require additional services or utilities. The revised Project would not result in an increase in the maximum energy use that was contemplated in the FEIR. All energy use required to deliver product water to the components of the proposed Project modifications would be incurred by pumps at the Carlsbad Desalination Plant, and this energy use was previously analyzed in the FEIR.

## Substantial Changes With Respect to the Circumstances Under Which the Project is Undertaken/New Information of Substantial Importance

There are no substantial changes under which the Project will be undertaken, because there are no substantial changes in public utilities or services, or to the requirements of agencies that provide such services, from what was in place at the time that the FEIR was certified. No new information of substantial importance relative to public utilities or services has become available since the certification of the FEIR.

## Conclusion

Based on the above, no new significant public utilities and service system impacts or a substantial increase in previously identified public utilities and service system impacts would occur as a result of the proposed Project modifications. Therefore, the public utilities and service system impacts and proposed Project modifications do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

## 9.0 CUMULATIVE IMPACTS

Analysis of cumulative impacts and EIR-identified mitigation measures of the approved Project are contained in the FEIR, Section 5.0, pages 5-1 through 5-13. See also CEQA Findings, pages 25 through 27.

### Analysis of the Revised Project

The type and extent of construction activities and the operational characteristics of the proposed Project modifications would not be substantially different from what was evaluated in the FEIR for the approved Project. Therefore, no changes relative to the analysis or conclusions regarding cumulative impacts would occur with the proposed Project modifications, and the findings of the FEIR and First Addendum remain the same for the revised Project.

### Substantial Changes With Respect to the Circumstances Under Which the Project is Undertaken/New Information of Substantial Importance

Since certification of the FEIR and adoption of the First Addendum, minor additional cumulative development may have been proposed and/or constructed. However, the analysis contained in the First Addendum occurred during a severe economic downturn, which has resulted in a virtual curtailment of development activities within the Project area. The minor amount of land development projects that have been proposed and/or developed in the intervening time since the preparation of the First Addendum is not considered to be substantial. The following provides a cumulative analysis of the proposed Project modifications.

#### *Aesthetics*

Because the proposed Project modifications are minor and they have been designed to have minimal visual impacts, the incremental effect of the proposed Project modifications on any potential significant cumulative impact would not be cumulatively considerable.

There are no substantial changes to the circumstances under which the Project will be undertaken and no new information of substantial importance relative to cumulative aesthetic impacts which was not known and could not have been known when the FEIR was certified and First Addendum adopted that has since been identified. Therefore, the effects of additional cumulative development regarding cumulative aesthetic impacts do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

#### *Air Quality*

The Project's contribution to temporary regional air quality impacts is not considered to be significant. In addition, because Project construction occupies a relatively small area at any

given time, it is not anticipated that any significant localized cumulative impacts will result. This is primarily due to the short-term nature of cumulative effects within any given location along the Project construction route. Any additional cumulative development would not change these conclusions because the scope of the cumulative development is relatively small within the context of the air basin, and because as noted in the FEIR, construction-related emissions would be short-term in nature. There would be no new operational air pollutant emissions not already considered in the FEIR or First Addendum.

There are no substantial changes to the circumstances under which the Project will be undertaken and no new information of substantial importance relative to cumulative air quality impacts which was not known and could not have been known when the FEIR was certified that has since been identified. Therefore, the effects of additional cumulative development regarding cumulative air quality impacts do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

### *Biological Resources*

As noted in this Addendum, the proposed Project modifications do not involve new significant impacts or a substantial increase in previously identified impacts. This conclusion would not be changed with additional cumulative development due to the limited scope of cumulative development.

There are no substantial changes to the circumstances under which the Project will be undertaken and no new information of substantial importance relative to cumulative biological impacts which was not known and could not have been known when the FEIR was certified that has since been identified. Therefore, the effects of additional cumulative development regarding cumulative biological impacts do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

### *Cultural Resources*

The FEIR cumulative impacts analysis for cultural resources concluded that impacts on cultural resources related to cumulative development could be significant if important cultural resources are destroyed as a result of development. The mitigation measures required for the proposed Project provides for avoidance, documentation, and/or recovery of important cultural resources, and as a result, all impacts related to cultural resources are reduced to less-than-significant levels. These same measures would apply to any additional cumulative development, and therefore the level of cumulative impact and required mitigation measures would not change.

There are no substantial changes to the circumstances under which the Project will be undertaken and no new information of substantial importance relative to cumulative cultural

resource impacts which was not known and could not have been known when the FEIR was certified that has since been identified. Therefore, the effects of additional cumulative development regarding cumulative cultural resource impacts do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

### *Geology and Soils*

The FEIR concluded that the desalination plant site and off-site facilities will require relatively minor site preparation and excavation of soils. Project mitigation to control and address erosion and seismic and soils hazards, in conjunction with similar standard measures required of cumulative development, would reduce cumulative impacts to less-than-significant levels. Any additional cumulative development would have similar levels of impact on geology and soils and would be subject to similar requirements and mitigation measures.

There are no substantial changes to the circumstances under which the Project will be undertaken and no new information of substantial importance relative to cumulative geology/soils impacts which were not known and could not have been known when the FEIR was certified that has since been identified. Therefore, the effects of additional cumulative development regarding cumulative geology/soils impacts do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

### *Hazards and Hazardous Materials*

The Project, as well as other cumulative development, would be subject to regulatory controls that would result in minimization of hazards, and therefore the FEIR concluded that the Project would not contribute to cumulative considerable increases in hazards or hazardous materials. Any additional cumulative development would have similar regulatory controls.

There are no substantial changes to the circumstances under which the Project will be undertaken and no new information of substantial importance relative to cumulative hazard impacts which was not known and could not have been known when the FEIR was certified that has since been identified. Therefore, the effects of additional cumulative development regarding cumulative hazards impacts do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

### *Hydrology and Water Quality*

The FEIR concluded that water quality and hydrology issues would be temporary (construction-related) in nature and would not contribute to cumulatively significant impacts. Impacts of any additional cumulative development would be similar, and in fact would be subject to newer more stringent regulatory control measures.

There are no substantial changes to the circumstances under which the Project will be undertaken and no new information of substantial importance relative to cumulative hydrology/water quality impacts which was not known and could not have been known when the FEIR was certified that has since been identified. Therefore, the effects of additional cumulative development regarding cumulative hydrology/water quality impacts do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

### *Land Use and Planning*

The FEIR concluded that the Project would not contribute to significant impacts resulting from cumulative development that may have the effect of dividing an established community or conflicting with land use or environmental policies. Therefore, the incremental effect of the Project on any potential significant cumulative impact would not be cumulatively considerable. This conclusion would also apply to any additional cumulative development.

There are no substantial changes to the circumstances under which the Project will be undertaken and no new information of substantial importance relative to cumulative land use impacts which was not known and could not have been known when the FEIR was certified that has since been identified. Therefore, the effects of additional cumulative development regarding cumulative land use impacts do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

### *Noise and Vibration*

The FEIR identified cumulative noise and vibration impacts to be primarily related to construction noise. However, within the time frame of Project construction, it is not anticipated that those cumulative effects would reach a level of significance because of noise restrictions required for construction projects, and because the time frame for construction of the proposed Project is relatively short. Any additional cumulative development would not change these conclusions because of the short duration for construction of the proposed Project modifications.

There are no substantial changes to the circumstances under which the Project will be undertaken and no new information of substantial importance relative to cumulative noise and vibration impacts which was not known and could not have been known when the FEIR was certified that has since been identified. Therefore, the effects of additional cumulative development regarding cumulative noise and vibration impacts do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.



### *Transportation and Traffic*

The cumulative impacts analysis for transportation and traffic considered the intersections and road segments to which the desalination plant and off-site facilities could contribute to a cumulative impact. Similar to noise impacts, Project traffic impacts are primarily associated with construction. Since the time frame for construction is relatively short and traffic control plans to minimize traffic impacts are required, it is not anticipated that a substantial increase in current traffic levels resulting from cumulative development will occur prior to completion of Project construction. Therefore, temporary traffic impacts associated with the Project will cease prior to any substantial cumulative traffic impacts being realized on local roadways. Any additional cumulative development would not change these conclusions because the construction travel routes for the additional projects are not anticipated to substantially conflict with cumulative construction traffic of the proposed Project.

There are no substantial changes to the circumstances under which the Project will be undertaken and no new information of substantial importance relative to cumulative traffic impacts which was not known and could not have been known when the FEIR was certified that has since been identified. Therefore, the effects of additional cumulative development regarding cumulative traffic impacts do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

### *Public Utilities and Service Systems*

The cumulative impacts analysis for energy and wastewater were considered to be less than significant, primarily based on capacity and reliability features built into existing systems. The additional cumulative development would not change the analysis or conclusions of the FEIR because they would not result in substantial additional demand on such systems.

There are no substantial changes to the circumstances under which the Project will be undertaken and no new information of substantial importance relative to cumulative utilities/services impacts which were not known and could not have been known when the FEIR was certified that has since been identified. Therefore, the effects of additional cumulative development regarding cumulative utilities/services impacts do not meet the standards for a subsequent or supplemental EIR pursuant to CEQA Guidelines, Section 15162.

## 10.0 GROWTH-INDUCING IMPACTS

Analysis of growth-inducing impacts of the approved Project are contained in the FEIR, Section 9.0, pages 9-1 through 9-7. See also CEQA Findings, pages 54 and 55.

### Analysis of the Revised Project

The proposed Project changes consist of minor modifications to the distribution system of the Project, and necessary modifications to existing Water Authority facilities in order to accept, store and distribute the Project water. The operation of the facility and its potable water-producing capacity will not change from what was evaluated in the FEIR for the approved Project. Therefore, no changes relative to the analysis or conclusions related to growth inducement would occur with the proposed Project revisions.

### Substantial Changes With Respect to the Circumstances Under Which the Project is Undertaken/New Information of Substantial Importance

There are no substantial changes under which the Project will be undertaken, because there are no substantial changes in growth potential or growth planning that would affect the analysis contained in the FEIR. No new information of substantial importance relative to growth inducement has become available since the certification of the FEIR.

## 11.0 CONCLUSION

Impacts associated with the proposed Project modifications would not result in a new significant impact or substantial increase in the severity of previously identified impacts per the Carlsbad Desalination Plant 2006 FEIR or the First Addendum. Additionally, where applicable (as indicated in this Addendum), the proposed Project modifications would also not result in an increase in the severity of previously identified impacts per the NCCP/HCP EIR/EIS. There are no substantial changes to the circumstances under which the Project will be undertaken, and no new information of substantial importance which was not known and could not have been known when the FEIR was certified and the First Addendum was approved, and that have since been identified. Therefore, the proposed Project modifications do not meet the standards for a subsequent or supplemental EIR as provided pursuant to CEQA Guidelines, Section 15162. As such, this Second Addendum to the FEIR satisfies CEQA requirements for the proposed Project modifications.

## 12.0 REFERENCES

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