

**ADDENDUM NO. 2 TO THE MICHELSON
WATER RECLAMATION PLANT
PHASE 2 & 3 CAPACITY EXPANSION
PROJECT FEBRUARY 2006
FINAL ENVIRONMENTAL IMPACT
REPORT AND THE SAN JOAQUIN
FRESHWATER MARSH ENHANCEMENT
PLAN REVISED SEPTEMBER 1995 FINAL
ENVIRONMENTAL IMPACT REPORT**

Prepared for:

Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, California 92618
Contact: Christian Kessler
949/453-5441

Prepared by:

ICF Jones & Stokes
1 Ada, Suite 100
Irvine, CA 92618-5339
Contact: Aaron Carter
949/333-6600

August 2009

ICF Jones & Stokes. 2009. Addendum No. 2 to the Michelson Water Reclamation Plant Phase 2 & 3 Capacity Expansion Project February 2006 Final Environmental Impact Report and the San Joaquin Freshwater Marsh Enhancement Plan Revised September 1995 Final Environmental Impact Report. August. (ICF J&S 00550.09.) Irvine, CA. Prepared for: Irvine Ranch Water District.

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Acronyms

BMPs	best management practices
CEQA	California Environmental Quality Act
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
IRWD	Irvine Ranch Water District
Msl	mean sea level
MWRP	Michelson Water Reclamation Plant
OCPW	Orange County Public Works
SJMP	San Joaquin Freshwater Marsh Enhancement Plan
SWPPP	Storm Water Pollution Prevention Program

Introduction and Project Overview

The Irvine Ranch Water District (IRWD) proposes minor modifications to the Michelson Water Reclamation Plant (MWRP) Phase 2 and Phase 3 Capacity Expansion Project and the San Joaquin Freshwater Marsh Enhancement Plan (SJMP), including improvements to an access road between Campus Drive and the IRWD San Joaquin Marsh Campus, and the design and alignment of the MWRP Flood Protection Improvements as described in Addendum No. 1 (IRWD 2008). This Addendum No. 2 describes the minor changes to the approved project and documents the changes to the certified Final Environmental Impact Reports for the MWRP and SJMP projects. No substantial changes have occurred that warrant preparation of Subsequent or Supplemental Environmental Impact Reports pursuant to Section 15162 of the California Environmental Quality Act (CEQA) Guidelines.

Project Background

The City of Irvine revised and certified the FEIR for the SJMP in September 1995 (SCH #1994021027). This FEIR analyzed the environmental consequences associated with implementation and construction of improvements included in the SJMP and associated projects, described in the report.

In February 2006, IRWD certified the FEIR for the MWRP Phase 2 and Phase 3 Capacity Expansion Project (SCH #2005051174). This project involved the expansion of the existing MWRP capacity using conventional activated sludge and gravity filtration processes to meet projected future IRWD recycled water needs. The two FEIRs are collectively referred to as the *FEIRs* in this Addendum No. 2.

On March 31, 2008, IRWD adopted Addendum No. 1 to the MWRP Phase 2 and Phase 3 Capacity Expansion Project and the SJMP, addressing construction of permanent flood protection facilities at the MWRP, San Joaquin Marsh, and associated facilities. For the purposes of this Addendum No. 2, the MWRP Phase 2 and Phase 3 Capacity Expansion Project as amended by the adoption of Addendum No. 1 is hereafter referred to as the MWRP Phase 2 and Phase 3 Capacity Expansion and Flood Protection Improvements Project.

This Addendum No. 2, prepared in accordance with CEQA (Public Resources Code Section 21000 et seq.) and its implementing Guidelines (California Code of Regulations Title 14, Chapter 3, Section 15000 et seq.), addresses access road improvements and modifications to the location of permanent flood protection facilities at the MWRP, San Joaquin Marsh, and associated facilities, as approved in Addendum No. 1.

Project Setting

The MWRP is located at 3512 Michelson Drive in the City of Irvine, Orange County, California. The IRWD property, containing both the MWRP site and the San Joaquin Marsh, is bounded by Michelson Drive, the San Diego Creek Channel, Campus Drive, and Carlson Avenue. Figure 1



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SOURCE: ESRI, i-cubed, GeoEye (2009)

Figure 1
Regional Location

shows the regional location, and Figure 2 shows the local vicinity of the project area. The site is generally flat varying between 10 and 15 feet above mean sea level (msl). A 15- to 20-foot-high earthen levee exists along the southeastern border of the plant separating the site from the San Diego Creek Channel. Access to the site is currently provided via Riparian View, IRWD's private drive. The property is located adjacent to a highly developed area characterized by mixed land uses, including recreational, commercial, institutional, and residential uses. The MWRP site is designated Public Facilities by the City of Irvine's General Plan (City of Irvine 2006) and Institutional by the City of Irvine's Zoning Map (City of Irvine 2009).

The MWRP contains office buildings, vehicle garages, and other structures containing treatment plant operational facilities, as well as parking lots and water treatment facilities. The San Joaquin Marsh contains wetland habitats, open water areas, and riparian habitats. Between the IRWD plant, Campus Drive, and the riparian habitat are duck ponds operated and maintained by IRWD. Southwest of the plant, within the marsh, is an interpretive/learning center, which is operated by the Sea and Sage Audubon Society. Collectively, this area is known as the San Joaquin Marsh Campus. The project area is within and surrounding the developed portions of the MWRP.

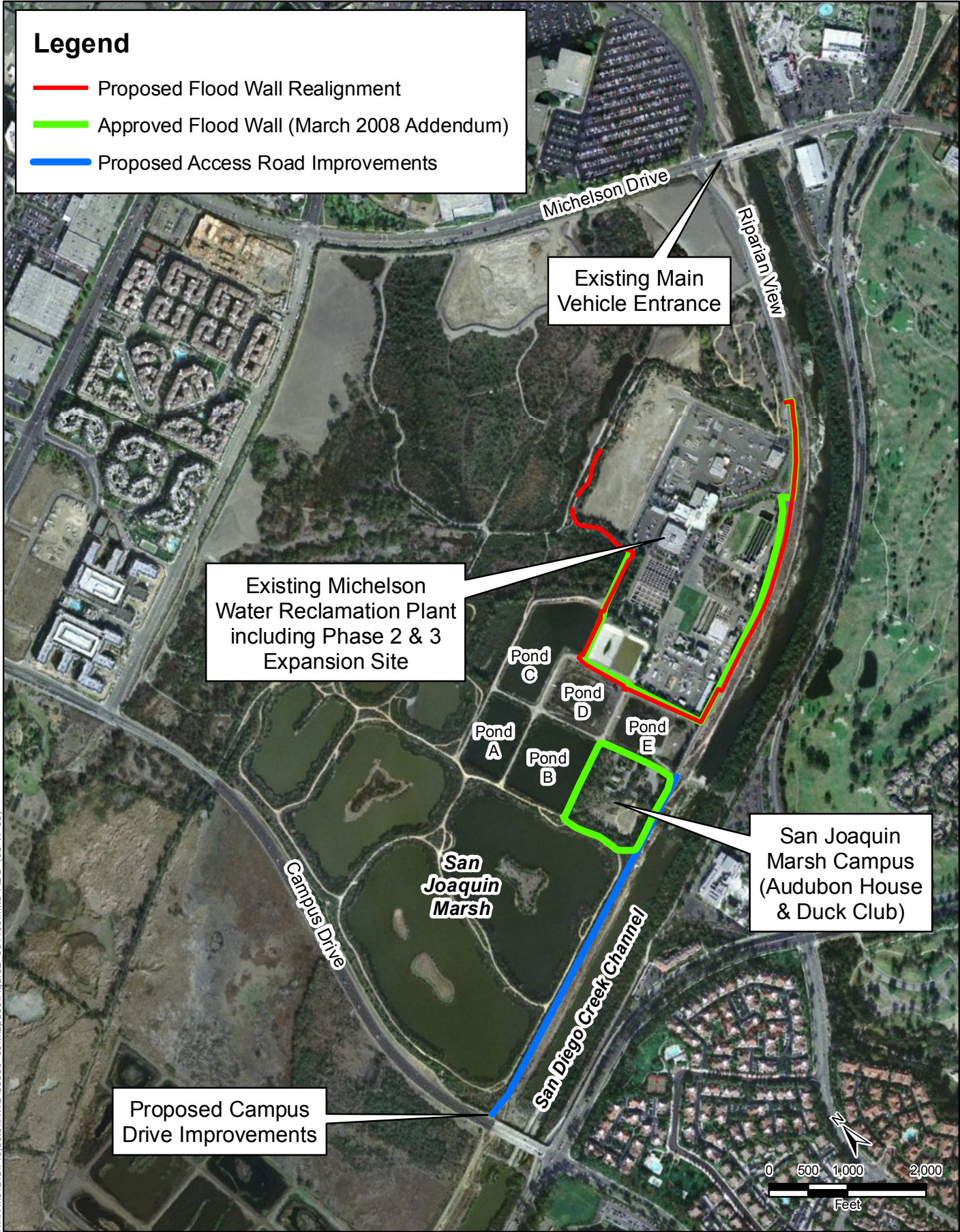
Proposed Modifications to Project

This Addendum No. 2 addresses two components related to the MWRP project and the SJMP: the improvement of the access road between Campus Drive and the San Joaquin Marsh Campus, and minor modifications to the design and alignment of the MWRP Flood Protection Improvements as described in Addendum No. 1 (IRWD 2008). Each of these modifications is described in more detail below. For the purposes of this Addendum No. 2, the area referred to as the "Duck Club" or "San Joaquin Marsh Duck Club Campus" in previous documents related to the MWRP project are now known as the San Joaquin Marsh Campus.

Access Road Improvements

Construction of the MWRP Phase 2 and Phase 3 Capacity Expansion and Flood Protection Improvements Project would involve driving 50 to 70-foot long concrete piles, excavating 25-foot deep trenches, pouring concrete, laying 54-inch diameter pipe, and installing underground vaults. These construction activities and use of large pile driving equipment would conflict with vehicular access along Riparian View, thereby resulting in safety and security concerns along the stretch of Riparian View between the Tree Hill parking stalls and the San Joaquin Marsh Campus. To avoid safety and security concerns associated with public use of Riparian View during construction, IRWD proposes to provide public access to the San Joaquin Marsh Campus by improving the access road atop the levee that separates San Diego Creek from the San Joaquin Marsh between Campus Drive and the San Joaquin Marsh Campus.

The existing unimproved levee access road north of Campus Drive is used primarily by IRWD for emergencies and by Orange County Public Works (OCPW), formerly Orange County Flood Control District, vehicles for maintenance of the San Diego Creek flood channel. The existing access road is currently paved at its junction with Campus Drive, and approximately 10 yards north of Campus Drive up to a gate. North of the gate, the levee access road transitions to hard-packed gravel extending north to the entrance to the San Joaquin Marsh Campus. Improvements to Campus Drive and the access road along the San Diego Creek levee would involve:



SOURCE: ESRI, i-cubed, GeoEye (2009)

Figure 2
Project Location

- Adding right-turn-in and right-turn-out access from Campus Drive, to accommodate vehicle access;
- Restriping the north side of Campus Drive to provide for right-turn-in and right-turn-out lanes;
 - Installing a delineated “porkchop” island with glue down posts or domes between the turn-in and turn-out lanes and westbound traffic to enhance the safety of the turn lanes;
 - Removing the entry gate at the south end of the existing access road north of Campus Drive;
 - Widening the pavement into the bicycle lane on the north side of Campus Drive to provide for an acceleration lane for right-turn-out traffic;
 - Installing a median between eastbound and westbound traffic on Campus Drive to prevent eastbound traffic from making left turns onto the access road;
 - Installing a physical barrier such as K-rail or chain link fence along the top of the levee adjacent to San Diego Creek for safety along the access road;
 - Paving the access road with asphalt to provide all-weather access during the construction of the MWRP Phase 2 and Phase 3 Capacity Expansion and Flood Protection Improvements Project;
 - Potentially removing the paving along the access road after completion of construction at the MWRP; and
 - An encroachment permit from the City of Irvine for work on Campus Drive.

Figure 3 shows the proposed conceptual plans for the proposed access road improvements at the Campus Drive intersection. Upon completion, the improved road is estimated to accommodate the anticipated traffic of approximately 68 vehicle trips per day and approximately 2 bus trips per week. IRWD employees and construction workers accessing the MWRP plant and IRWD Operations Center would continue to utilize the Riparian View entrance via Michelson Drive. Public use of the access road, as opposed to the continued use of Riparian View, would substantially reduce safety hazards to the public from construction activities.

Flood Protection Wall

Addendum No. 1 to the MWRP FEIR and the SJMP FEIR modified the project to include the construction of permanent flood walls and slope reinforcement matting adjacent to the MWRP, the IRWD San Joaquin Marsh Campus, the San Joaquin Marsh pump station, and the University Lift Station, providing 200-year flood protection associated with the potential overtopping of the San Diego Creek channel.

This Addendum No. 2 proposes to modify the location of the flood walls from the west side of Riparian View to the east side of Riparian View between Tree Hill parking lot and the southeast corner of the plant. An extension of the previously approved permanent flood wall is proposed around a portion of the northwest side of the MWRP in order to meet Federal Emergency Management Agency (FEMA) flood wall length requirements. Figure 4 shows the proposed modification of the alignment of the flood wall. All other portions of the flood walls approved in Addendum No. 1 would remain in the same locations. During construction, IRWD would provide signage directing pedestrian and bicycle traffic to the eastern side of San Diego Creek

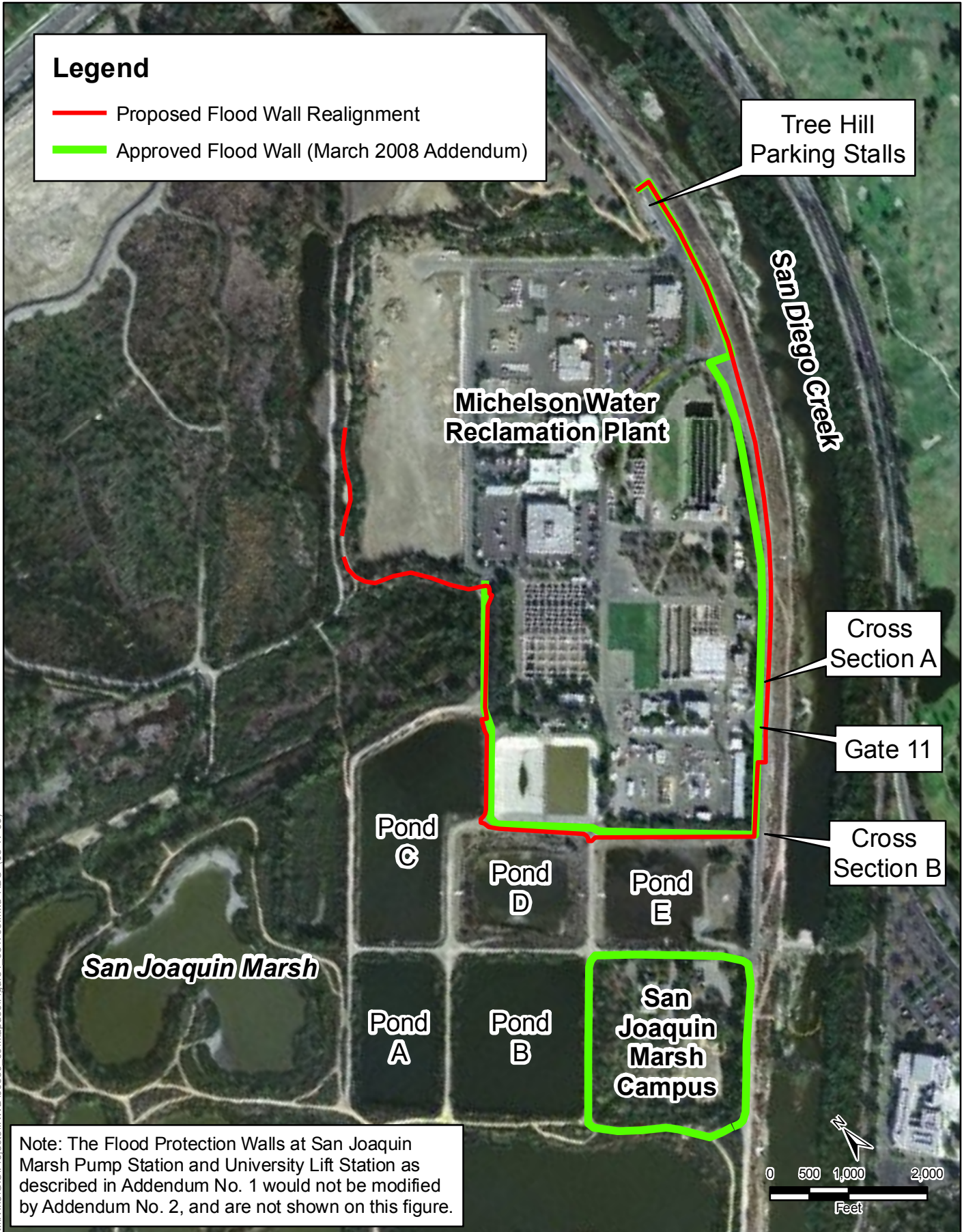


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SOURCE: Terraserver (2009)

Figure 3
Proposed Campus Drive Improvements

Improvements shown are not to scale



SOURCE: ESRI, i-cubed, GeoEye (2009)

Figure 4
Proposed Flood Protection Wall Modifications

channel, which has an existing designated trail, in order to avoid potential safety conflicts with construction equipment.

As with the previously approved flood wall design, the proposed modifications to the flood wall would be designed so that the non-project portions of the channel would not experience adverse flooding effects due to the construction of the floodwall. When complete, the floodwall improvements would allow for continued access to all facilities by means of removable floodwall segments. This Addendum No. 2 also addresses IRWD's proposal to modify the height of the flood wall from that which was proposed in Addendum No. 1 in order to meet FEMA flood wall freeboard requirements. Figure 5 shows cross-sections of the proposed modified flood protection wall in the vicinity of Gate 11 (Figure 4 shows the locations of the cross sections). The proposed flood wall height ranges between approximately 6 and 10 feet above the existing roadway height along Riparian View, between approximately 8.5 and 9 feet above the existing dirt road adjacent to Pond D and E around the southern end of the MWRP, approximately 8.5 feet above the existing dirt road adjacent to Pond C around the western side of the MWRP, and between approximately 4 and 8.5 feet around the northern side of the MWRP (see Figure 4 for location of the ponds). The flood wall surrounding the San Joaquin Marsh Campus would be approximately 3 feet high.

Project Phasing and Schedule

Access Road Improvements

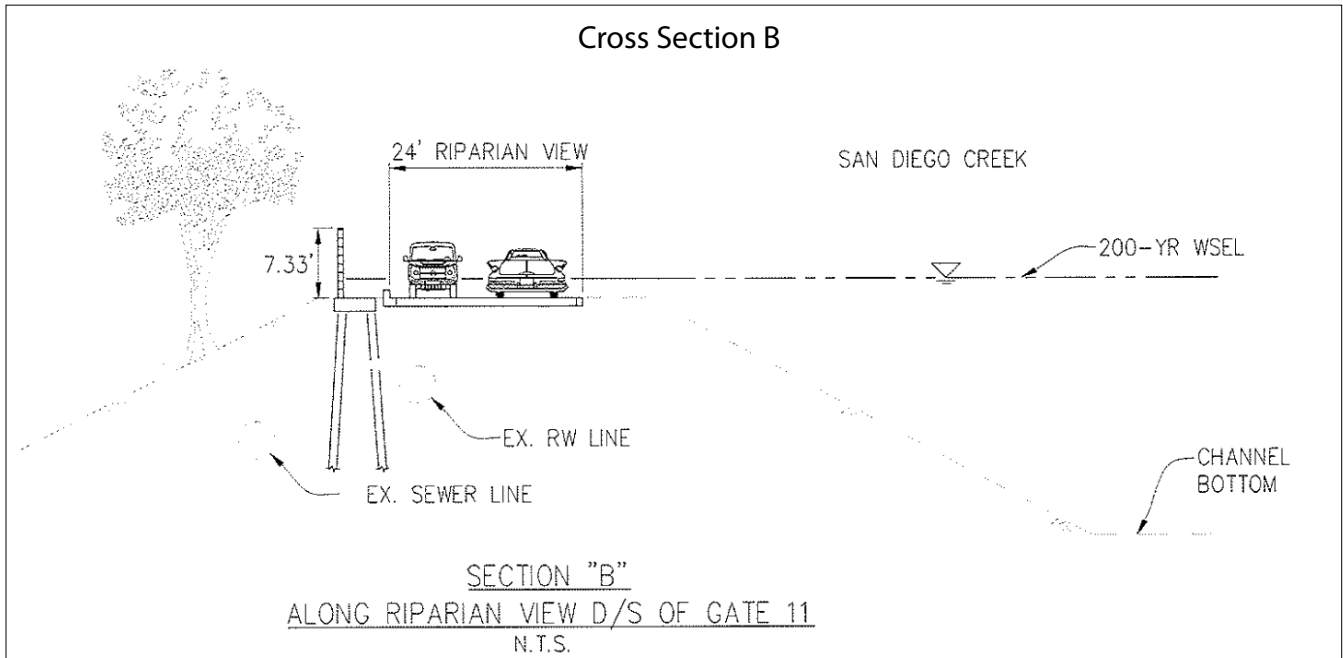
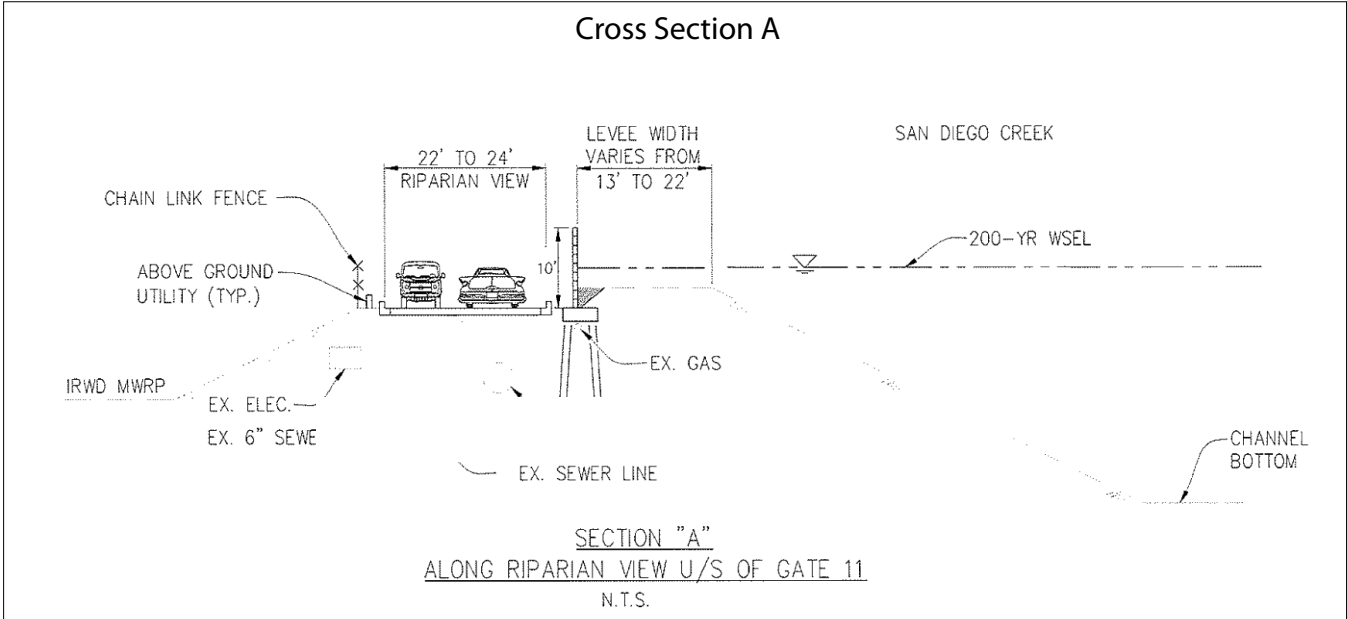
The access road component of the project would be completed in Phase 2 of the MWRP Phase 2 and Phase 3 Capacity Expansion and MWRP Flood Protection Improvements Project. Improvements on Campus Drive and paving of the access road would take approximately one month to complete and are estimated to be completed in 2010.

Riparian View is anticipated to only be closed while the flood protection wall is being constructed. However, IRWD may decide to leave the access road open for the entire duration of construction at the MWRP.

Public access to the San Joaquin Marsh Campus would be diverted from Riparian View to the proposed access road via Campus Drive. Upon completion of the flood protection wall, the improvements may be removed, including the modifications to Campus Drive, and the access along Campus Drive may be closed.

Flood Protection Wall

Construction of the Flood Protection Wall is subject to FEMA project approvals and schedule coordination with other components of the MWRP Phase 2 and 3 Capacity Expansion Project. Phasing of the Flood Protection Wall will be determined during construction of the MWRP Phase 2 and 3 Capacity Expansion Project.



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Figure 5

Proposed Flood Protection Wall Cross-Sections

Environmental Impact Analysis

The proposed access road improvements and floodwall realignment do not modify the conclusions of the impact analysis of the two referenced FEIRs. The modification of the MWRP Phase 2 and Phase 3 Capacity Expansion and Flood Protection Improvements Project to include the access road improvements and floodwall realignment described above would have no new significant adverse environmental impacts.

To ensure that no significant environmental impacts would occur, the access road improvements and floodwall realignment described above would adhere to all applicable environmental commitments and mitigation measures included in the previously certified FEIRs for the MWRP Phase 2 and Phase 3 Capacity Expansion Project and SJMP.

For ease of documentation, the impacts for each of the project components are discussed separately under the respective environmental disciplines.

Aesthetics

Access Road Improvements

The construction of the Campus Drive access road would not result in significant new aesthetic impacts. To the east of the access road is San Diego Creek, and the San Joaquin Marsh is to the west. The marsh consists primarily of a series of diked ponds, upland and riparian zones, and freshwater marsh thick with cattail and bulrush vegetation. San Diego Creek contains riparian vegetation, with the densest vegetation on the eastern side of the channel.

Sensitive views to the access road are predominantly from recreational users that use the existing access road as an informal walking/running trail and from bicyclists across the creek to the east that travel along the San Diego Creek bicycle path. From the viewpoint of the bicycle path on the eastern side of the channel, riparian vegetation obstructs a clear view of the majority of the western side of the channel, on which improvements to the access road would occur.

Improvements to the access road would require construction equipment for the duration of approximately one month. In addition, IRWD intends to install a barrier such as, but not limited to, K-rail or chain link fence along the top of the east side of the levee adjacent to San Diego Creek to provide safety for vehicles using the proposed improved access road. K-rail would be approximately 42 inches high when measured from the top of the existing roadway bed, and chain link fence would be approximately 6 feet high when measured from the top of the existing roadway bed. Other types of physical barriers that may be considered would generally fall within the height range of either a K-rail or chain link fence.

No scenic highways are located within the project vicinity. Improvements to the access road would not significantly impede public viewpoints of the San Diego Creek channel or San Joaquin Marsh or otherwise substantially degrade the existing visual character or quality of the site and its surroundings. The proposed access road improvements would generally fall within the scope of

the impacts previously addressed in the FEIRs and Addendum No. 1. Improvements to the access road would not result in significant new impacts on aesthetic resources.

Flood Protection Wall

To the east of the modified flood wall is San Diego Creek, with Riparian View and the MWRP to the west. From the viewpoint of the bicycle path on the eastern side of the channel, riparian vegetation obstructs a clear view of the majority of the western side of the channel, on which the flood protection wall would be constructed. The MWRP contains office buildings, vehicle garages, and other operational structures, as well as parking lots and treatment facilities.

Construction of the modified flood protection wall would involve similar construction equipment as previously envisioned under Addendum No. 1. The modified flood protection wall would continue to be located within the existing boundaries of IRWD's property and on an OCPW easement. The modifications to the flood protection wall would not change impacts to users with narrow views from portions of the bicycle trail.

The flood protection wall would not substantially degrade the existing visual character or quality of the site and its surroundings. The proposed flood wall modifications would generally fall within the scope of the impacts previously addressed in the FEIRs and Addendum No. 1. The modified flood protection wall would not result in new significant impacts on aesthetic resources.

Air Quality

Access Road Improvements

Construction activities required to implement improvements to the access road would involve a small amount of construction equipment for less than one month. These construction activities would result in negligible air quality emissions that are within the context of those previously identified in the MWRP Phase 2 and Phase 3 Capacity Expansion FEIR. Two mitigation measures presented in Section 4.5, "Air Quality," of the MWRP Phase 2 and Phase 3 Capacity Expansion FEIR are applicable to this Addendum No. 2, including Mitigation Measures A-1a and A-1b. Mitigation Measure A-1a prescribes dust control measures to minimize construction impacts, including practices such as watering active construction areas and stabilizing cleared areas with pavement or hydroseed. In addition, Mitigation Measure A-1b prescribes equipment maintenance measures such as requiring tune-ups for off-road equipment and limiting engine idling time. With implementation of Mitigation Measures A-1a and A-1b, any potential air quality effects associated with the proposed access road improvements would be less than significant. The impacts from the proposed access road would generally fall within the scope of the air quality impacts previously addressed in the FEIRs and Addendum No. 1.

Flood Protection Wall

Construction activities related to construction of the modified flood protection walls would result in similar potential air quality effects as those identified in Addendum No. 1, which were

determined to be less than significant. With Mitigation Measures A-1a and A-1b identified in the MWRP Phase 2 and Phase 3 Capacity Expansion FEIR incorporated into this Addendum No. 2, these effects would be less than significant. The impacts from the flood wall modifications would generally fall within the scope of the air quality impacts previously addressed in the FEIRs and Addendum No. 1.

Biological Resources

Access Road Improvements

The potential effects from the proposed construction of the access road would generally fall within the scope of the biological impacts previously addressed in the FEIRs and Addendum No. 1. Proposed construction activities associated with the access road would occur along existing disturbed areas which are devoid of native vegetation and sensitive habitat. No native vegetation removal would occur as part of the project. Improvements to the Campus Drive entrance may involve removal of a small amount of non-native ornamental landscaping as shown on Figure 3. Therefore, no direct or permanent impacts to sensitive plant species, sensitive plant communities, or jurisdictional waters would result from the proposed improvements to the access road. The proposed construction activities could potentially result in indirect nuisance types of impacts to species occupying adjacent habitat in both the marsh and San Diego Creek from storm water erosion and sedimentation as well as potential construction noise and light effects.

Increased storm water runoff and subsequent sedimentation and erosion would have the potential to adversely affect vegetation communities in the vicinity of construction activities. By implementing construction best management practices (BMPs) developed as part of the Storm Water Pollution Prevention Program (SWPPP) for the MWRP Phase 2 and Phase 3 Capacity Expansion Project, impacts from storm water sedimentation and erosion would be less than significant.

Sensitive wildlife that could potentially be impacted by noise and other construction related disturbances include least Bell's vireo and southwestern willow flycatcher. Three mitigation measures presented in Section 4.3, "Biological Resources," of the MWRP Phase 2 and Phase 3 Capacity Expansion FEIR are applicable to this Addendum No. 2. Mitigation Measure BIO-2a addresses indirect impacts to nesting birds by avoiding construction activities during the nesting season or by establishing a buffer around nesting sites. Mitigation Measure BIO-2b addresses indirect noise impacts to nesting birds by avoiding construction activities during the nesting season, establishing a buffer around nesting sites, or using noise barriers to reduce sound levels at nesting sites. Finally, Mitigation Measure BIO-3 addresses construction light impacts by specifying that lighting shall be directed away from San Joaquin Marsh and San Diego Creek. These three mitigation measures will be implemented during all construction activities related to the access road improvements, including the removal of non-native ornamental landscaping described above.

Potential indirect impacts would be less than significant with implementation of construction BMPs and with implementation of Mitigation Measures BIO-2a, BIO-2b, and BIO-3 as identified in the MWRP Phase 2 and Phase 3 Capacity Expansion FEIR. Therefore, impacts resulting from the access road improvements would generally fall within the scope of the biological impacts previously addressed in the FEIRs and Addendum No. 1.

Flood Protection Wall

As identified in Addendum No. 1, the flood protection wall, including those portions proposed to be modified, would be located entirely within the existing footprint of IRWD's property and on an OCPW easement. Construction activities associated with the proposed modification to the location of the flood protection wall would occur along existing disturbed areas which are devoid of native vegetation, or within ornamental landscaped areas. No native vegetation removal would occur as part of the project. Therefore, no direct or permanent impacts to sensitive plant species, sensitive plant communities, or jurisdictional waters would result due to the proposed modification to the design and location of the flood protection wall. As described above, indirect nuisance types of impacts could occur to species occupying adjacent habitat in both the marsh and San Diego Creek during the temporary construction activities from storm water erosion and sedimentation as well as potential construction noise and light effects.

The potential effects resulting from the proposed modifications to the floodwall would generally fall within the scope of the biological impacts previously addressed in the FEIRs and Addendum No. 1, which identified impacts as less than significant. With implementation of the construction BMPs and Mitigation Measures BIO-2a, BIO-2b, and BIO-3 discussed above and identified in the MWRP Phase 2 and Phase 3 Capacity Expansion FEIR, these effects would be less than significant. Therefore, the impacts from the access road improvements would generally fall within the scope of the biological impacts previously addressed in the FEIRs and Addendum No. 1.

Cultural Resources

Access Road Improvements

As discussed in the IS/NOP prepared for the MWRP Phase 2 and Phase 3 Capacity Expansion Project, two archaeological sites are known to occur within the project area. CA-ORA-196/H and CA-ORA-197 are located on two low hills within the upper part of San Joaquin Marsh along the west bank of San Diego Creek (specific locations are confidential to avoid disturbance). Improvements to the access road, involving minor grading and paving of the existing road surface along with erection of a K-rail or chain link fence, would occur near where these cultural resources are known to occur. As discussed in Section 2.5, "Cultural Resources," of the IS/NOP prepared for the MWRP Phase 2 and Phase 3 Capacity Expansion Project, the following mitigation measures were incorporated into the MWRP Project to ensure cultural resource impacts would be less than significant (IRWD 2005, p. 18):

MM CUL-1 - All ground disturbing activities within the site boundary and buffer zone for CAORA-196/H and CA-ORA-197 will be monitored by a qualified archaeologist to ensure avoidance.

MM CUL-2 - Any cultural resources discovered during construction will be tested to determine significance and mitigated through avoidance or data recovery. Should data recovery be necessary, it will be done as mandated by the Natural Historic Preservation Act (NHPA) and CEQA.

MM CUL-3 - Any artifacts or fossils impacted during construction will be repaired by the archaeological monitor to a point of identification and IRWD will pay potential curation fees.

The potential for cultural resource impacts from the construction activities associated with improvements to the access road would generally fall within the scope of the cultural resources impacts previously addressed in the FEIRs and Addendum No. 1. With implementation of Mitigation Measures MM CUL-1, MM CUL-2, and MM CUL-3 as identified in the IS/NOP prepared for the MWRP Phase 2 and Phase 3 Capacity Expansion Project, potential impacts to these cultural resources would be less than significant.

Flood Protection Wall

As with improvements to the access road, construction of the flood protection wall would occur in the vicinity in which the two cultural resources discussed above are known to occur. All work related to the flood protection wall would occur along existing disturbed easements and landscaped areas. Impacts related to the construction of the flood walls would generally fall within the scope of the cultural resources impacts previously addressed in the FEIRs and Addendum No. 1, which identified impacts as less than significant. With implementation of Mitigation Measures MM CUL-1, MM CUL-2, and MM CUL-3 as identified in the IS/NOP prepared for the MWRP Phase 2 and Phase 3 Capacity Expansion Project, potential impacts to these cultural resources would be less than significant.

Geology and Soils

Access Road Improvements

Construction activities related to the access road would result in increased storm water runoff and subsequent minimal soil erosion impacts due to ground disturbance. Due to the nature of the access road improvements, which would involve grading and paving of the access road as well as installation of a K-rail or chain link fence, these improvements would not expose persons or structures to seismic hazards. No inhabitable structures are proposed, and the existing levee would be able to structurally accommodate the proposed access road and fencing. Improvement of the access road would take less than one month to complete, and would include erosion control measures to minimize impacts to geology and soils during construction. Construction of the roadway would generally fall within the scope of the geology and soils impacts previously addressed in the FEIRs and Addendum No. 1. By implementing construction BMPs developed as part of the SWPPP for the MWRP Phase 2 and Phase 3 Capacity Expansion Project, impacts from storm water sedimentation and erosion would be less than significant.

Flood Protection Wall

Construction of the flood wall would generally fall within the scope of the geology and soils impacts previously addressed in the FEIRs and Addendum No. 1, which identified impacts as less than significant. The relocation of the wall alignment would not result in any changes to the impacts previously addressed. As discussed in the MWRP Phase 2 and Phase 3 Capacity

Expansion Project FEIR, Mitigation Measure G-4a specifies that Type V cement shall be used for concrete in contact with soil and that adequate concrete cover shall be provided over reinforcing steel to prevent corrosion. This mitigation measure is applicable to the flood protection wall, which has been designed in accordance with the soil types that exist onsite to provide adequate structural support. With implementation of construction BMPs and Mitigation Measure G-4a, impacts would be less than significant.

Growth Inducing

Access Road Improvements

The proposed improvements to the access road would not affect population, employment, or housing. Additionally, the access road would not remove any obstacles to growth or otherwise result in the potential to induce population or economic growth. Growth-inducing impacts related to the expansion of the MWRP have previously been adequately addressed in the FEIRs, and the proposed access road would not affect the operations of the MWRP or otherwise contribute to or increase growth in the County.

Flood Protection Wall

The proposed floodwall would not result in growth of population, employment, or housing. Additionally, the flood protection wall would not remove any obstacles to growth or otherwise result in the potential to induce population or economic growth. Growth-inducing impacts related to the expansion of the MWRP have previously been adequately addressed in the FEIRs and Addendum No. 1, and the proposed flood protection wall would not affect the operations of the MWRP or otherwise contribute to or increase growth in the County. The proposed flood protection wall does not accommodate in itself further expansion of the MWRP treatment capabilities or increase development potential. The flood protection wall is designed to protect the MWRP from potential flooding hazards and would not result in a modification to land use or zoning designations permitting new residential or commercial developments. No impacts to population and housing resources would occur as a result of proposed modifications to the design and location of the flood protection wall.

Hydrology and Water Quality

Access Road Improvements

The proposed access road would not result in significant new hydrology and water quality impacts. An existing drainage conveyance was observed at the southeastern corner of the entrance to the access road from Campus Drive, discharging directly into San Diego Creek. No other drainages were observed along the access road alignment. Construction activities related to the proposed access road improvements could result in stormwater or construction water runoff that could potentially impact water quality.

As discussed in the MWRP Phase 2 and Phase 3 Capacity Expansion Project FEIR, environmental commitments incorporated in the project include compliance with the Construction General Permit, which requires the development and implementation of a SWPPP. The SWPPP will contain a site map which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. In addition, the SWPPP will list BMPs IRWD will use to protect storm water runoff and the placement of those BMPs. General BMPs include erosion controls, sediment controls, tracking controls, wind erosion control, non-storm water management, and materials and water management. The SWPPP will also contain a visual monitoring program; a chemical monitoring program for non-visible pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Construction of the roadway would generally fall within the scope of the hydrology and water quality impacts previously addressed in the FEIRs and Addendum No. 1. The proposed roadway improvements would be included in the overall plans for the MWRP expansion, and any specific controls would be addressed in the SWPPP. Impacts to hydrology and water quality would be less than significant with implementation of these construction BMPs and the SWPPP.

Flood Protection Wall

Construction activities related to the proposed improvements would result in stormwater or construction water runoff that could potentially impact water quality. However, the relocation of the flood wall alignment would result in potential effects that are the same as those identified in Addendum No. 1, which identified impacts as less than significant.

As discussed in the MWRP Phase 2 and Phase 3 Capacity Expansion Project FEIR, environmental commitments incorporated in the project include compliance with the Construction General Permit, which requires the development and implementation of a SWPPP. Construction of the flood wall would generally fall within the scope of the hydrology and water quality impacts previously addressed in the FEIRs and Addendum No. 1. The proposed flood wall would be included in the overall plans for the MWRP expansion, and any specific controls would be addressed in the SWPPP. Impacts to hydrology and water quality would be less than significant with implementation of these BMPs and the SWPPP.

Land Use and Planning

Access Road Improvements

The proposed improvements to the access road would have no significant impacts to land use and would be consistent with the City of Irvine General Plan and zoning designations for the site. The proposed improvements to the roadway are designed to allow continued use of and access to the San Joaquin Marsh Campus and San Joaquin Marsh in a safe manner during construction of the MWRP Phase 2 and Phase 3 Capacity Expansion and Flood Protection Improvements Project. No new impacts would occur.

Flood Protection Wall

As identified in Addendum No. 1, the proposed flood protection wall, including those portions proposed to be modified as part of this Addendum No. 2, would have no significant impacts to land use. The flood protection wall is consistent with the City of Irvine General Plan and zoning designations for the site. The proposed wall is intended to minimize flooding hazards for the MWRP and the San Joaquin Marsh Campus, thereby reducing the potential for untreated sewage to overflow into the San Diego Creek and Newport Back Bay. The project would help to protect the environment and would not result in adverse effects on adjacent land uses. The proposed permanent flood protection facilities would have no impact on land use or zoning designations for the site, and no new impacts would occur.

Noise

Access Road Improvements

Improvements to the access road would involve the use of grading and paving equipment for approximately one month during construction. Upon completion of construction activities related to the MWRP Phase 2 and Phase 3 Capacity Expansion and Flood Protection Improvements Project, asphalt on the access road and fencing or K-rail may be removed, and the access along Campus Drive may be closed. As discussed above under Biological Resources, indirect impacts could potentially occur to birds nesting in habitat/vegetation adjacent the work area as a result of noise and other construction related disturbance. Potential indirect noise impacts to nesting birds would be less than significant with implementation of Mitigation Measure BIO-2b as discussed in Section 4.3, "Biological Resources," of the MWRP Phase 2 and Phase 3 Capacity Expansion FEIR, which addresses impacts to nesting birds by avoiding construction activities during the nesting season, establishing a buffer around nesting sites, or using noise barriers to reduce sound levels at nesting sites.

Additionally, for the duration of construction of the MWRP Phase 2 and Phase 3 Capacity Expansion and Flood Protection Improvements Project, approximately 68 daily vehicular trips would occur along the proposed access road, which currently does not carry any vehicles. Vehicles traveling on the proposed access road would travel at a low speed, generating relatively low levels of noise. The nearest residential sensitive receptors are in excess of 300 feet from the access road, at which distance noise generated by use of the access road would attenuate below ambient noise levels. Potential noise impacts resulting from use of the access road would be less than significant. Therefore, the impacts from the access road improvements would generally fall within the scope of the noise impacts previously addressed in the FEIRs and Addendum No. 1.

Flood Protection Wall

As identified in Addendum No. 1, the proposed flood protection wall, including those portions proposed to be modified as part of this Addendum No. 2, could potentially result in indirect impacts to birds nesting in habitat/vegetation adjacent to the work area as a result of noise and other construction related disturbance. Sensitive wildlife that could potentially be impacted by noise and other construction related disturbances include least Bell's vireo and southwestern

willow flycatcher. Construction of the flood wall would generally fall within the scope of the noise impacts previously addressed in the FEIRs and Addendum No. 1. Potential indirect noise impacts to sensitive wildlife would be less than significant with implementation of Mitigation Measure BIO-2b as discussed in Section 4.3, "Biological Resources," of the MWRP Phase 2 and Phase 3 Capacity Expansion FEIR, which would address impacts by avoiding construction activities during the nesting season, establishing a buffer around nesting sites, or using noise barriers to reduce sound levels at nesting sites.

As described in the MWRP Phase 2 and Phase 3 Capacity Expansion Project FEIR, for the duration of construction of the MWRP Phase 2 and Phase 3 Capacity Expansion and Flood Protection Improvements Project, approximately 50 daily construction vehicle trips would occur along Riparian View. The proposed modifications to the location and design of the flood protection wall would not change the projected number of daily construction vehicle trips. Vehicles traveling around the project site would travel at a low speed, generating relatively low levels of noise. Other construction activities that would generate noise include the use of trucks, cranes, and pile-driving equipment. The nearest sensitive receptors are in excess of 600 feet from the proposed flood protection wall, at which distance the noisiest construction phases would be audible above the ambient noise level. However, noise generated by construction of the flood protection wall would result in a less than significant noise impact because of the short-term nature of the construction activities and because the construction activities would occur during the City's allowable construction time periods (7 a.m. to 7 p.m. Monday through Friday and 9 a.m. to 6 p.m. on Saturdays).

Public Health and Safety

Access Road Improvements

Construction activities for the access road may involve use of limited quantities of hazardous materials such as diesel fuel, gasoline, lubricating oil, grease, solvents, and paint. No acutely hazardous materials would be handled on site. These materials would not pose a significant risk to workers or offsite sensitive receptors; however, they pose a risk of soil and water contamination if accidentally released. Therefore, improvements to the access road would result in a minor increase in potential effects identified in the FEIRs due to the additional construction activities.

The SWPPP prepared for the MWRP Phase 2 and Phase 3 Capacity Expansion Project lists BMPs IRWD will use to protect storm water runoff and the placement of those BMPs. General BMPs include erosion controls, sediment controls, tracking controls, wind erosion control, non-storm water management, and materials and water management. The SWPPP also contains a visual monitoring program; a chemical monitoring program for non-visible pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. In addition, the MWRP Phase 2 and Phase 3 Capacity Expansion Project FEIR includes Mitigation Measures HAZ-1a through HAZ-1d, which mitigate hazardous materials impacts. Mitigation Measure HAZ-1a requires all construction personnel to participate in hazardous materials training to comply with environmental and safety regulations. Mitigation Measure HAZ-1b specifies construction refuse containment, and that all hazardous materials generated on site shall be disposed of at a permitted facility. Mitigation Measure HAZ-1c requires preparation and implementation of a hazardous

substance management, handling, storage, disposal, and emergency response plan. Finally, Mitigation Measure HAZ-1d requires that hazardous materials spill kits shall be maintained on site.

Construction of the access road would generally fall within the scope of the public health and safety impacts previously addressed in the FEIRs and Addendum No. 1. Impacts would be less than significant with implementation of construction BMPs and Mitigation Measures HAZ-1a through HAZ-1d as identified in the MWRP Phase 2 and Phase 3 Capacity Expansion Project FEIR.

Flood Protection Wall

As identified in Addendum No. 1, the proposed flood protection wall, including those portions proposed to be modified as part of this Addendum No. 2, would have a minor increase in potential effects identified in the FEIRs due to the additional construction activities related to the construction of the flood protection walls. As discussed above, construction of the flood protection wall may involve use of limited quantities of hazardous materials such as diesel fuel, gasoline, lubricating oil, grease, solvents, and paint, and would not involve the use of acutely hazardous materials. These materials would not pose a significant risk to workers or offsite sensitive receptors; however, they pose a risk of soil and water contamination if accidentally released. It should be noted that these potential effects are the same as those identified in Addendum No. 1, which identified impacts as less than significant. Construction of the flood protection wall would generally fall within the scope of the public health and safety impacts previously addressed in the FEIRs and Addendum No. 1. Impacts would be less than significant with implementation of construction BMPs and Mitigation Measures HAZ-1a through HAZ-1d as identified in the MWRP Phase 2 and Phase 3 Capacity Expansion Project FEIR.

Recreation

Access Road Improvements

Existing recreational resources in the project area include a bicycle trail along the east side of San Diego Creek and a hiking and riding trail along the west side of the creek south of Campus Drive. The west side of San Diego Creek Channel, on which the access road improvements are proposed, is designated as a “proposed” riding and hiking trail by the County of Orange. (County of Orange 2008) While this is not an official existing trail, it is currently used for walking, hiking, horseback riding, and mountain biking. Construction activities on the access road itself would have the potential to disrupt use of this designated future trail. The construction of an access road in this area would result in temporary access limitations for users of this trail for the period during which the access road would be graded and paved.

In order to protect the safety of trail users, IRWD would provide signage directing pedestrian and bicycle traffic to the eastern side of San Diego Creek channel, which has an existing designated trail, for the duration of improvements to the access road. In addition, if IRWD chooses to remove the pavement upon completion of the flood protection walls, these activities would result in additional access limitations for users of this trail while the pavement is removed. After the improvements have been made to the access road and construction activities related to the flood

protection wall have ceased, pedestrian and bicycle users would again have full use of the trail as with existing conditions. With implementation of appropriate signage during construction activities, impacts would be less than significant.

Campus Drive currently contains a westbound bicycle lane initiating west of the proposed access location (shown on Figure 3). Therefore, re-striping Campus Drive to allow for a right-turn in and right-turn out lane for the access road would not impact this bicycle lane.

Flood Protection Wall

Like the proposed access road improvements, a portion of the flood protection wall is proposed on the east side of Riparian View adjacent to San Diego Creek, which is designated as a “proposed” riding and hiking trail by the County of Orange. (County of Orange 2008) In addition to the period during which the access road would be constructed, construction of the flood protection wall around the MWRP and San Joaquin Marsh Campus would result in temporary access limitations for users of this trail. In order to protect the safety of trail users, IRWD would provide signage directing pedestrian and bicycle traffic to the eastern side of San Diego Creek channel, which has an existing designated trail, for the duration of construction of the flood protection wall around the MWRP and San Joaquin Marsh Campus. With implementation of this project design feature, impacts would be less than significant.

When complete, the floodwall improvements would allow for continued access to all facilities by means of removable floodwall segments. The permanent flood protection facilities would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

Transportation and Circulation

Access Road Improvements

Improvements on Campus Drive, including the addition of the right-turn-in and right-turn-out lanes and a raised median, would be conducted without requiring the closure of Campus Drive. Improvements to the access road would include paving and striping the access road for two full-size vehicle lanes. The existing access road is wide enough to safely accommodate two full-size vehicle lanes without expanding pavement beyond the current roadbed.

Once constructed, operation of the access road would divert vehicular traffic destined to the San Joaquin Marsh Campus from Riparian View via Michelson Drive, to the access road via Campus Drive. Construction of the improvements related to the access road as well as public use of the access road itself would increase the number of vehicles on Campus Drive. IRWD estimates that the new access from Campus Drive would accommodate approximately 68 vehicles per day that are destined for the San Joaquin Marsh Campus and approximately 2 bus trips per week. IRWD employees and construction workers accessing the MWRP plant and IRWD Operations Center would continue to utilize the Michelson Drive entrance to Riparian View. The negligible volume of vehicles diverted to the Campus Drive entrance would be insignificant compared to the total carrying capacity of Campus Drive. In addition, the design of the entrance on Campus Drive to

include right-turn-in and right-turn-out lanes would provide for safe and efficient ingress and egress for vehicles accessing the access road without impacting existing traffic flow.

Construction of the access road would generally fall within the scope of the transportation and circulation impacts previously addressed in the FEIRs and Addendum No. 1. Impacts would be less than significant.

Flood Protection Wall

Construction of the flood wall would generally fall within the scope of the transportation and circulation impacts previously addressed in the FEIRs and Addendum No. 1. Construction of the flood protection wall would require backhoes, cranes, pile-drivers, and other similar truck equipment which would be present on site for the duration of construction activities. This equipment would access the project site from the Michelson Drive entrance to Riparian View. The access road described above is designed to alleviate potential traffic and safety hazards associated with the use of Riparian View by construction equipment. Construction of the floodwalls is anticipated to occur over two intervals of six months each for a total of approximately one year.

As identified in Addendum No. 1, construction activities related to the flood protection wall, which include those portions proposed to be modified as part of this Addendum No. 2, would be located within the existing boundaries of IRWD's property and on an OCPW easement. There would be a minor increase in vehicle trips identified in the FEIRs due to the additional construction required to construct the flood protection wall. However, it should be noted that these potential effects are the same as those identified in Addendum No. 1, which identified impacts as less than significant. Therefore, impacts would be less than significant.

Determination

Based on the information and analysis in this Addendum No. 2, and pursuant to Section 15162 of the State CEQA Guidelines, the District has determined that:

1. There are no substantial changes to the project that would require major revisions to either FEIR due to new, significant environmental effects or a substantial increase in the severity of impacts identified in the FEIRs;
2. Substantial changes have not occurred in the circumstances under which the project is being undertaken that would require major revisions to either FEIR to disclose new, significant environmental effects or a substantial increase in the severity of the impacts identified in the FEIRs; and
3. There is no new information of substantial importance not known at the time either FEIR was certified that shows that the project would have any new significant effects not discussed in either certified FEIR or a substantial increase in the severity of the impacts identified in either FEIR, or that mitigation measures or alternatives previously found not feasible, or that are considerably different from those analyzed in either FEIR, would substantially reduce one or more significant effects.

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