East Bay Municipal Utility District

Sobrante Water Treatment Plant Reliability Improvements Project

Final Environmental Impact Report

SCH # 2022030308

Volume V – Final EIR

May 2025

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East Bay Municipal Utility District

Sobrante Water Treatment Plant Reliability Improvements Project

Draft Environmental Impact Report

SCH # 2022030308

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May 2025

Prepared for:
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7 Introduction to Final EIR

7.1 Project Background

The East Bay Municipal Utility District (EBMUD), as the California Environmental Quality Act (CEQA) lead agency, prepared a Draft Environmental Impact Report (Draft EIR) for the Sobrante Water Treatment Plant Reliability Improvements Project (Project). The Draft EIR was developed to provide the public, responsible agencies, and trustee agencies reviewing the Project with an analysis of the potential effects on the local and regional environment associated with construction and operation of the Project.

The Project includes improvements at the existing Sobrante Water Treatment Plant (SOWTP) and construction of a new transmission pipeline in the cities of Richmond and San Pablo as well as in the unincorporated communities of El Sobrante and Rollingwood in Contra Costa County, California. The SOWTP typically serves customers in Richmond, Pinole, San Pablo, Hercules, and unincorporated Contra Costa County communities of El Sobrante, Rollingwood, Crockett, and Rodeo.

The existing SOWTP has a permitted capacity of 60 million gallons per day (MGD) but is limited to a capacity of approximately 45 MGD because of deficiencies in several treatment processes. In addition, the existing SOWTP does not have the capacity to meet planned future projected water demands that are detailed in EBMUD's *2050 Demand Study* (EBMUD 2020). The purpose of the Project is to restore reliable treatment capacity of SOWTP to the full permitted capacity of 60 MGD, continue to meet drinking water regulations, reduce disinfection byproducts, improve maintenance operations, maintain flexibility to treat water from supplemental supplies, and increase the treatment capacity of the SOWTP as needed to meet future demands.

The Project is divided into three components: Phase 1 improvements to SOWTP, Phase 2 improvements to SOWTP, and Phase 2 new Central North Aqueduct pipeline.

Phase 1 of the Project includes the following improvements at the SOWTP in the city of Richmond and unincorporated Contra Costa County:

- One untreated water control valve and flow meter
- One fifth-stage flocculation for the existing two flocculation basins
- One chlorine contact basin (CCB)
- One new hydraulic weir in the existing clearwell
- One polymer and power building
- Two spent filter backwash water (SFBW) equalization basins
- Two SFBW flocculation and sedimentation basins

- One filter-to-waste (FTW) equalization basin
- Two gravity thickeners
- One consolidated maintenance building that incorporates existing maintenance buildings/shops
- Connecting pipelines
- Site entrance, access road, and paving
- One stormwater retention basin
- Fencing and lighting
- Screening and landscaping
- Demolition of existing facilities

Phase 2 of the Project includes the following improvements at the SOWTP in the city of Richmond and unincorporated Contra Costa County:

- One rapid mixer and extended influent channel
- One flocculation basin
- One sedimentation basin with tube settlers
- One replacement cable-vac pumping plant
- Two ozone contact basins
- Extend ozone destruct room
- Two dual-media filters and associated pipe and operation gallery
- One chemical storage building
- Two gravity thickeners
- Two blending tanks
- One solids dewatering building
- Connecting pipelines
- Demolition of existing facility

Phase 2 of the Project also includes construction of approximately 22,000 feet of transmission pipeline, called the Central North Aqueduct pipeline, in public rights-of-way and a private easement adjacent to San Pablo Creek.

7.2 Draft EIR Public Review Process

On September 12, 2024, EBMUD released the Draft EIR for the Project for public review and filed a Notice of Completion (NOC) with the Governor's Office of Planning and Research to begin a 45-day public review period (Public Resources Code Section 21161). Concurrent with the issuance of the NOC, the Notice of Availability (NOA) was released informing the public that the Draft EIR was available to responsible and trustee agencies, other affected agencies, and interested parties as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code section 21092(b)(3). During the public review period, the Draft EIR was available for review on EBMUD's website (www.ebmud.com/sowtp) and at the following locations:

East Bay Municipal Utility District
375 Eleventh Street
Oakland, CA 94607

Contra Costa County Library
El Sobrante Branch
4191 Appian Way
El Sobrante, CA 94803

Contra Costa County Library
San Pablo Branch
13751 San Pablo Avenue
San Pablo, CA 94806

Richmond Public Library – Main/Civic Center
325 Civic Center Plaza
Richmond, CA 94804

The public notice of the NOA was made in accordance with CEQA Guidelines section 15087 by mailing the notice to the last known name and address of all organizations and individuals who previously requested such notice in writing, publication in the West County Times and Oakland Tribune newspapers, posting at the Contra Costa County clerk office, posting on the EBMUD website and NextDoor, and direct mailings of more than 1,700 postcards to residences and businesses in the vicinity of the SOWTP and along the alignment of the Central North Aqueduct pipeline in the city of Richmond, city of San Pablo, and unincorporated communities of Contra Costa County.

The 45-day public review period began on September 12, 2024, and ended on October 28, 2024. EBMUD staff held a virtual public meeting on October 10, 2024, to receive comments on the Draft EIR. The public meeting was scheduled approximately halfway through the 45-day public review period to provide the public with adequate time to review the Draft EIR to bring any questions and comments to the meeting.

7.3 Purpose of the Final EIR

This Responses to Comments document has been prepared to accompany the Draft EIR and is being issued by EBMUD as part of the Final EIR for the Project. CEQA requires lead agencies that have completed a Draft EIR to consult with and request comments on the environmental document from responsible, trustee, and other agencies with jurisdiction over the resources that could be affected by the Project. The public must also be afforded the opportunity to comment on the Draft EIR. This Final EIR has been prepared to respond to comments on the Draft EIR made by agencies and members of the public.

The Final EIR for the Project consists of the Draft EIR and appendices (Volumes I, II, III, and IV) and this document, which contains Comment Letters and Responses to Comments (Volume V). The EBMUD Board of Directors will consider the Final EIR before deciding whether to approve the Project.

7.4 CEQA Requirements

EBMUD has prepared this document pursuant to section 15132 of the *CEQA Guidelines*, which specifies that "*The Final EIR shall consist of:*

a) *The Draft EIR or a revision of the draft.*
b) *Comments and recommendations received on the Draft EIR either verbatim or in summary.*
c) *A list of persons, organizations, and public agencies commenting on the Draft EIR.*
d) *The responses of the Lead Agency to significant environmental points raised in the review and consultation process.*
e) *Any other information added by the Lead Agency."*

7.5 Consideration of Recirculation

If significant new information is added to an EIR after the release of the Draft EIR for public review, the lead agency is required to recirculate the revised document (CEQA Guidelines section 15088.5). Significant new information includes, for example, a new significant environmental impact or a substantial increase in the severity of an impact. New information is not considered significant unless the document is changed in a way that deprives the public of a meaningful opportunity to comment on a substantial adverse environmental effect of the Project or comment on feasible mitigation that the proponent has declined to implement.

No new impacts or substantial increases in the severity of impacts have been identified because of information presented in the comments on the Draft EIR for the Project. Recirculation of the Draft EIR was thus not deemed to be necessary.

7.6 Future Steps in Project Approval

The Draft EIR was circulated for review, and opportunities for public and agency review and comments were made available in accordance with CEQA. The Final EIR is being made available to commenters for a minimum 10-day period before its consideration for certification. The EBMUD Board of Directors will consider Final EIR certification and Project approval at the regularly scheduled Board Meeting on May 13, 2025. EBMUD public Board meetings are conducted in person at the EBMUD Boardroom at 375 11th Street, Oakland, CA 94607, and accessible via Zoom. The meetings are recorded, live-streamed, and posted on the EBMUD

website. Links to view and participate in EBMUD Board meetings are available at https://www.ebmud.com/index.php/about-us/board-directors/board-meetings.

7.7 Organization of this Document

The Final EIR consists of the Draft EIR and Appendices (Volumes I, II, III, IV, and V). This document is Volume V and includes five chapters: Chapter 7 is the introduction to the Final EIR, Chapter 8 presents the responses to comments on the Draft EIR, Chapter 9 contains the complete comments, Chapter 10 shows revisions to the Draft EIR, and Chapter 11 contains the Final EBMUD Practices and Procedures Monitoring and Reporting Plan and the Mitigation Monitoring and Reporting Program.

Each comment received is listed in Table 7-1 and identified by comment title, comment author, and date. Comments include letters, emails, and materials submitted during the comment period as well as verbal comments provided at the public meeting on October 10, 2024. The full text of all written comments is included in Chapter 9, following the responses to comments. Each submittal is identified by either an acronym of the agency or organization name or the last name of the individual commenter (as listed in Table 7-1), and individual comments are labeled in the margin of each submittal by an alphanumeric code consisting of the submittal code followed by a sequential number; the corresponding responses are labeled with the same code. For example, Comment 1 in the comment letter submitted by the City of San Pablo (CSP) is designated Comment CSP-1 and is addressed in Response to Comment CSP-1. EBMUD staff also noted questions and comments from the El Sobrante Municipal Advisory Council meeting on October 9, 2024, and the public meeting for the Project on October 10, 2024. Two comment letters were received from public agencies after the close of the 45-day comment period and as a courtesy, EBMUD has included responses to these two comment letters.

Table 7-1 Summary of Comments Received on the EBMUD Draft Environment Impact Report

Submittal code prefix	Comment author	Date
Agency comments		
CSP	City of San Pablo	October 17, 2024
CDOT	California Department of Transportation	October 28, 2024
WCCFSC	West Contra Costa Fire Safe Council	September 19, 2024
Tribal comments		
CVLN	Confederated Villages of Lisjan Nation	October 21, 2024
Individual comments		
Savage	George Savage	October 28, 2024

Submittal code prefix	Comment author	Date
Weir	Dawn Weir	September 28, 2024
Dunton	McCrea Dunton	October 7, 2024
Ghiglieri	Stephen and Katrina Ghiglieri	October 10, 2024
Public meeting comments		
MAC Meeting	El Sobrante Municipal Advisory Council (MAC) Meeting	October 9, 2024
PM	Public Meeting	October 10, 2024
Comments Received after the Close of the Public Comment Period		
FC District	Contra Costa County Flood Control and Water Conservation District	November 13, 2024
CCCPWD	Contra Costa County Public Works Department	November 25, 2024

8 Responses to Comments

8.1 Responses to Agency Comments

8.1.1 City of San Pablo (CSP)

Response to Comment CSP-1

The comment states that the City of San Pablo plans to replace the bridge at the intersection of 23rd Street, San Pablo Avenue, and Road 20 as part of the San Pablo Avenue Bridge Replacement and Intersection Improvement Project; the Central North Aqueduct pipeline would be constructed through this intersection. The City of San Pablo requested that EBMUD consider incorporating any design and installation of the Central North Aqueduct pipeline within the utility coordination of the bridge project to minimize construction costs and impact to the community. Per the City of San Pablo website, the San Pablo Avenue Bridge Replacement and Intersection Improvement Project schedule includes design and permitting from 2022 to 2025; however, the construction schedule has yet to be determined.

Construction of the Central North Aqueduct pipeline is currently scheduled to begin in 2055 at the earliest but may be delayed or may not occur if water demands are not realized. EBMUD Standard Construction Specification 01 55 26, Traffic Regulation, Section 3.4, Temporary Traffic Control requires the contractor to prepare a Traffic Control Plan and obtain approval from the local regulatory agency with jurisdiction. Because the Central North Aqueduct pipeline is not anticipated to be needed for 20 years or more, it is unlikely that the Central North Aqueduct pipeline construction schedule would overlap with the construction of the San Pablo Avenue Bridge Replacement and Intersection Improvement Project at the intersection of San Pablo Avenue and Road 20. If the timing of construction of the Central North Aqueduct pipeline at San Pablo Avenue and Road 20 overlaps with the San Pablo Avenue Bridge Replacement and Intersection Improvement Project, EBMUD would coordinate with the City of San Pablo to coordinate the construction schedule at the intersection to avoid construction conflicts consistent with EBMUD Standard Construction Specification 01 55 26, Traffic Regulation, Section 3.4.

Response to Comment CSP-2

The comment states that construction of the Central North Aqueduct pipeline on Road 20 would occur in proximity to the William T. Helms Middle School and the San Pablo Community Center and requests that such construction occur when school is not in session and minimize impacts on the community center. As discussed in Chapter 2, Project Description, of the Draft EIR, Section 2.6.4, "[T]o the extent feasible, construction of the Central North Aqueduct pipeline along Road 20 in proximity to the William T. Helms Middle School would be

scheduled in coordination with the middle school to occur when school is not in session." EBMUD will coordinate with William T. Helms Middle School prior to the construction of the Central North Aqueduct pipeline in Road 20. It is noted that construction of the Central North Aqueduct pipeline is currently scheduled to begin in 2055 at the earliest. As discussed in Section 3.12 of the Draft EIR, Transportation, residents will be notified at least seven days in advance of potentially disruptive construction activities per EBMUD Procedure 600 and the open trench would be plated at the end of each day, and access to any driveways along the pipeline would be maintained per EBMUD Standard Construction Specification 01 55 26, Traffic Regulation.

Response to Comment CSP-3

The comment states the City of San Pablo is initiating revisions to El Portal to add a two-way cycle track to El Portal between San Pablo Avenue and Fordham Street and requests that these features be considered when work between Rollingwood Drive and Road 20 is scheduled. Impacts on bicycle facilities from construction of the Central North Aqueduct pipeline were considered and addressed in the Draft EIR, specifically on pages 3.12-37 and 3.12-38 and states "EBMUD will implement Standard Construction Specification 01 55 26, Traffic Regulation and Standard Construction Specification 01 32 36, Video Monitoring and Documentation, which requires preparation and implementation of a Traffic Control Plan, traffic control devices, and procedures for detours as well as post-construction road repair, and Mitigation Measure TRA-4 which requires advance notification for bicyclists, repair of bicycle facility demarcation, and traffic control to reduce physical conflicts between bicyclists and traffic. Implementation of EBMUD Standard Construction Specifications 01 55 26, Traffic Regulation and Standard Construction Specification 01 32 36, Video Monitoring and Documentation and Mitigation Measure TRA-4 would provide repairs to the future bicycle lane if it is within the area of Central North Aqueduct pipeline construction."

8.1.2 California Department of Transportation (CDOT)

Response to Comment CDOT-1

The comment states that work requiring movement of oversized or excessive load vehicles on State roadways requires a transportation permit. While oversized or excessive loads are not anticipated for the Project, California Department of Transportation (Caltrans) regulations and authorities are recognized. Section 2.10 Permits and Approvals of the Draft EIR summarizes permits and authorizations that could be required for construction of the Project. The Caltrans Transportation Permit has been added to the list of potentially required permits (Table 2-9). In addition, EBMUD Standard Construction Specification 01 55 26, Traffic Regulation includes provisions for the regulation of traffic during construction and compliance with applicable traffic regulations.

Response to Comment CDOT-2

The comment states that if any Caltrans facilities are impacted, those facilities must meet American Disabilities Act (ADA) standards after Project completion. In addition, the comment states that bike and pedestrian access considerations must be included.

Construction of the Central North Aqueduct pipeline within Caltrans right of way (ROW) would require a Caltrans encroachment permit. EBMUD would comply with any encroachment permit requirements. The potential impacts on bicycle and pedestrian circulation from construction of the Central North Aqueduct pipeline are addressed on pages 3.12-37 through 3.12-40 of the Draft EIR. As discussed in the Draft EIR, EBMUD would implement "Standard Construction Specification 01 55 26, Traffic Regulation, and Standard Construction Specification 01 32 36, Video Monitoring and Documentation, which requires preparation and implementation of a Traffic Control Plan, traffic control devices, and procedures for detours as well as post-construction road repair. Mitigation Measure TRA-4 would be required and requires advance notification for bicyclists, repair of bicycle facility demarcation, and traffic control to reduce physical conflicts between bicyclists and traffic". In addition, EBMUD would implement Mitigation Measure TRA-5 which requires a pedestrian access plan to ensure pedestrian access during construction. As described in the Draft EIR, the impacts on bike and pedestrian access would be less than significant with mitigation.

Response to Comment CDOT-3

The comment states that any permanent work or temporary traffic control that encroaches onto Caltrans ROW requires a Caltrans-issued encroachment permit. Section 2.10 Permits and Approvals of the Draft EIR summarizes permits and authorizations that could be required for construction of the Project. The need for a Caltrans encroachment permit for construction of the Central North Aqueduct pipeline within Caltrans' ROW is noted. The Caltrans Encroachment Permit has been added to the list of potentially required permits (Table 2-9).

8.1.3 West Contra Costa Fire Safe Council

Response to Comment WCCFSC-1

The comment requests EBMUD improve its community outreach for the Project. Public outreach and notice for Draft EIR are summarized in Section 7.2 of this Final EIR. The Notice of Availability (NOA) was sent to local officials and public agencies. In addition, postcards containing similar information, but in a more condensed form, were mailed to more than 1,700 residences in the vicinity of the Sobrante Water Treatment Plant (WTP) and along the alignment of the Central North Aqueduct pipeline in the city of Richmond, city of San Pablo, and unincorporated communities of Contra Costa County.

The NOA and postcard included a link to EBMUD's Project webpage (www.ebmud.com/sowtp) where the Draft EIR for the Project can be downloaded and viewed electronically. Hardcopies of the Draft EIR were made available at EBMUD's office in Oakland and at three public libraries (El Sobrante, San Pablo, and Richmond) should the public prefer to view the Draft EIR in paper format.

On October 10, 2024 at 6:00 p.m., EBMUD staff hosted a public meeting on ZOOM, where staff presented a summary of the Project, the environmental analysis performed, and the mitigation measures incorporated into the Project. After the summary, the public were invited to ask questions and provide comments about the Project. The public meeting was scheduled

approximately halfway through the 45-day public review period to provide the public an opportunity and adequate time to review the Draft EIR prior to the public meeting and bring any questions and comments to the public meeting.

8.2 Responses to Tribes

8.2.1 Confederated Villages of Lisjan Nation (CVLN)

Response to Comment CVLN-1
The Confederated Villages of Lisjan Nation requested a copy of the final CHRIS and Draft EIR for the Project along with the sacred lands file from Native American Heritage Commission and any additional archeological reports. EBMUD responded directly to the comment and provided non-confidential versions of the requested reports to the Confederated Villages of Lisjan Nation on October 23, 2024 via e-mail.

The Confederated Villages of Lisjan Nation also requested that if a Tribal representative of Confederated Villages of Lisjan Nation is not selected to serve as the Tribal monitor for the Project, Confederated Villages of Lisjan Nation requests to be informed immediately if any Native American cultural resources are inadvertently discovered during construction.

As discussed in Section 3.13, Tribal Cultural Resources of the Draft EIR, EBMUD Standard Construction Specification 01 35 45, Biological, Cultural, and Paleontological Resource Requirements, Section 3.3, Protection of Cultural and Paleontological Resources requires that in the event that a cultural resource is identified during construction activities, all work within 100 feet of the resource be halted until a qualified archaeologist can review, identify, and evaluate the resource for its significance. Should the archaeologist determine that an archaeological resource has the potential to be a tribal cultural resource, a Native American monitor would be retained by EBMUD to monitor work in the area where the tribal cultural resource was discovered. In addition, Mitigation Measure CR-1 would require a tribal monitor to be present in areas with moderate sensitivity for tribal cultural resources and in proximity to the known pre-contact buried cultural resource to address impacts on tribal cultural resources.

8.3 Responses to Individual Comments

8.3.1 George Savage

Response to Comment Savage-1
The comment states, "[T]he sections related of odors are superficial and lack adequate detail so that the public knows and can understand the location of potential or actual sources of odor within the existing Plant and the planned expansion, and the actual and potential future intensities of odors from the sources."

The Project consists of the expansion of water treatment facilities. The Project is not a wastewater treatment plant. The water treatment plant would handle the same water that occurs at San Pablo Reservoir and is open to the air. The water in open basins at the SOWTP would not be a source of odors. EBMUD's Walnut Creek Water Treatment Plant, located in Walnut Creek, uses spent filter backwash water (SFBW) and filter-to-waste (FTW) equalization basins like those proposed in the Project and have not had odor issues. The solids that would be removed and dewatered during Phase 2 (implemented in 2054 at the earliest) would be contained in covered bins that would not be a source of odor.

Response to Comment Savage-2
The comment states that a lack of odor complaints in the past does not indicate the potential number of complaints in the future given the proposed increase in processing capacity of the SOWTP.

The Bay Area Air Quality Management District (BAAQMD) established a project-level threshold for odors of "five confirmed complaints per year averaged over 3 years" for determining whether odor impacts are significant in their *2022 CEQA Guidelines* (BAAQMD 2022). One odor complaint was reported for the SOWTP to the BAAQMD in the last five years, which indicates that sensitive receptors have not been routinely negatively affected by any odors produced by the SOWTP. As discussed in Response to Comment Savage-1, the Project would not introduce new sources of odors. Additional discussion regarding odors was added to the Section 10, Draft EIR Revisions. Additionally, EBMUD's Walnut Creek Water Treatment Plant, a similar facility located in Walnut Creek, uses spent filter backwash water (SFBW) and filter-to-waste (FTW) equalization basins like those proposed in the Project, and no odor complaints have been filed for that facility.

Response to Comment Savage-3
The comment asks for the names of the entities/agencies responsible for identifying sources of odors at SOWTP in response to odor complaints.

The BAAQMD and EBMUD are the responsible agencies/entities.

Response to Comment Savage-4
The comment asks what agencies/entities have jurisdiction over enforcing mitigation methods and evaluating methods for controlling and reducing odors from confirmed odor complaints. EBMUD has jurisdiction over the Project including implementing any measures to reduce odors should they occur.

Response to Comment Savage-5
The comment requests explanation of how the SOWTP currently measures odors and their intensities within the property and how these will be measured with the proposed expansion.

There is no quantitative method for odor measurement used by any regulatory body. EBMUD does not currently measure odors at its facilities. The Project would not introduce new sources of odors. See also response to comment Savage-2.

Response to Comment Savage-6
The comment asks what the odor sources are and will be at the SOWTP.

See Response to Comment Savage-1 as well as Draft EIR page 3.2-34 for a description of the potential odor sources during construction and operation.

Response to Comment Savage-7
The comment asks if there is an odor risk mitigation and control plan for water treatment systems.

There is no odor risk mitigation and control plan applicable to water treatment systems. As described in response to comment Savage-1, water treatment plants are not a typical source of odors.

Response to Comment Savage-8
The comment requests the total number of odor complaints that have been filed with EBMUD or environmental control agencies over the past 5 years related to SOWTP and the Orinda water treatment facility, respectively.

One odor complaint was reported for SOWTP to the BAAQMD in the last five years, as documented on page 3.2-7 of the Draft EIR. No odors have been reported to BAAQMD for the Orinda Water Treatment Plant.

Response to Comment Savage-9
Regarding sludge storage, the comment asks what the frequency of removal and transport of filled containers from the SOWTP will be and states the containers should be gas-tight or emissions vented, liquid tight, and controlled or treated for odor capture.

As described in Section 2 of the Draft EIR, currently at the existing SOWTP, "Solids and wash water are generated as byproducts of the water treatment process and are treated at the neighboring EBMUD property west of Valley View Road at D Avila Way and La Honda Road. Solids from the sedimentation basin drain by gravity to solids storage basins. Spent filter backwash (SFBW) and filter-to-waste water flows by gravity to reclaim basins. In the solids storage and reclaim basins, solids settle to the bottom of the basin and water is decanted and reclaimed to the head of the treatment process. The remaining solids are sent to the West County Wastewater District sewer line located in Valley View Road." And "With the completion of Phase 1 improvements, settled solids from the sedimentation basin, SFBW equalization basins, and SFBW treatment process would be thickened and discharged to the sewer. After Phase 2 improvements, thickened and dewatered solids would be hauled off site as needed. On peak treatment capacity days, removal of the thickened and dewatered solids is expected to generate approximately 16 truck trips per day." As stated in Response to Comment Savage-1, the solids that would be removed and dewatered during Phase 2 would be contained in covered bins that would not be a source of odor.

Response to Comment Savage-10
The comment requests information regarding the source, cause, and remedy of the one odor complaint sited in the Draft EIR.

The public records request did not specify the source, cause, and remedy of the odor complaint. The record indicated the odor was reported in September 2019.

8.3.2 Dawn Weir

Response to Comment Weir-1
The comment requests consideration of the sewer line on La Honda Road during construction of the Central North Aqueduct pipeline. As described in the Draft EIR, Section 3.8, Hazards and Hazardous Materials, EBMUD Engineering Standard Practice 514 provides guidelines and minimum steps required to identify existing underground utilities and to establish a uniform approach for site reconnaissance of existing buried conflicts, including active and abandoned utilities during the Project design process. In addition, EBMUD Standard Construction Specification 01 35 24, Project Safety Requirements Section 1.3(F), Emergency Action Plan and Section 1.3(N), Submit USA Marking Record, requires marking of utilities prior to construction to avoid contact with buried utilities. Through implementation of EBMUD Engineering Standard Practice 514 and Standard Construction Specification 01 35 24, Project Safety Requirements Section 1.3(F), EBMUD will avoid conflicts with buried utilities including sewer lines in the final design and construction of the Central North Aqueduct pipeline.

8.3.3 McCrea Dunton

Response to Comment Dunton-1
The comment states that the visual points chosen in the Draft EIR do not include any viewpoints higher on Simoni Court or Heavenly Ridge and focus on lower locations. As summarized in Section 3.1, Aesthetics, of the Draft EIR, ten viewpoints were initially considered for their visual sensitivity based on visual quality and viewer exposure. The five key viewpoints with the highest visual sensitivity to changes from the Project were selected for visual rendering and detailed analysis. One key viewpoint (Viewpoint 2) was selected on Heavenly Ridge and Amend Road. Viewpoints further up Heavenly Ridge and Simoni Court were not considered for visual simulation due to the distance between the viewpoints and the Project. With increased distance from the Project, the Project occupies a smaller portion of the total viewshed and the impact on the view decreases proportional to the distance. The viewpoints were selected because they provide an example of the greatest level of visual change and associated impact that would result from the Project.

Response to Comment Dunton-2
The comment requests increasing the height of the planned berm to increase visual screening of the facility. The Aesthetics Conceptual Design Report prepared for the Project (Draft EIR Volume III, Appendix D) documents the aesthetics concept design and refinement. EBMUD revised the site layout and architectural and landscape designs in response to community

feedback in 2022 and 2023. The design refinement included increased setback from Amend Road, increased berm height, changes to the fence design, changes to the site layout, and changes to the architectural style of the buildings on site to blend with the adjacent Fire Station No. 63. As noted in the Aesthetics Conceptual Design Report, the berm height increased between the initial concept and the revised design in 2023. Because the berm was also set back farther from Amend Road, the berm may appear smaller in the visual simulations due to the increased distance between the viewpoint and the berm. No additional increase in the height of the berm would be feasible.

8.3.4 Stephen and Katrina Ghiglieri

Response to Comment Ghiglieri-1
The comment states that the commenter has a line of sight to the Project and asks about how the Project will address visual impacts and the potential for mechanical noise from the water treatment plant. The impacts on the viewshed are addressed in Section 3.1, Aesthetics of the Draft EIR (see visual simulations that represent the change in the viewshed). The impacts from noise during operation are addressed in Section 3.11, Noise under the description of operation for Impact-1.

8.4 Response to Public Comment Meetings

8.4.1 EL Sobrante Municipal Advisory Council (MAC) Meeting – October 9, 2024

Response to Comment MAC Meeting-1
The comment requests that the Draft EIR consider impacts on traffic at Appian Way.

Section 3.12, Transportation, of the Draft EIR summarizes existing traffic operations. Traffic count data was collected at 18 intersections, including the intersection of Appian Way and the east and west-bound I-80 ramps. Traffic counts were collected from 7 a.m. to 9 a.m. and 2 p.m. to 6 p.m. to capture peak commute and traffic periods including periods of school drop off and pickup. Traffic count data is summarized in Table 3.12-2 and Table 3.12-3 and is further summarized in Volume IV of the Draft EIR, Appendix H. Section 3.12.3 Impact Analysis of the Draft EIR discusses traffic impacts from Project construction and operation, and mitigations in detail, including evaluation of construction impacts on vehicle delay at Appian Way.

Response to Comment MAC Meeting-2
The comment requests public notice prior to loud noise construction events. As described in Section 3.11, Noise and Vibration, of the Draft EIR, EBMUD Standard Construction Specification 01 35 44, Environmental Requirements, Sections 1.4 (G and H), 3.7, and 3.8 include practices and procedures for reducing noise and vibration impacts that would be implemented during construction, including restrictions on noise-generating activities and noise and vibration control methods and monitoring. Per this Standard Construction Specification,

neighbors/occupants within 300 feet of Project construction would be notified at least thirty days in advance of extreme noise-generating activities.

Response to Comment MAC Meeting-3
The comment asks if structures that would be torn down would be replaced with new structures. The Draft EIR includes a figure in the Executive Summary (ES-2 Phase 1 and Phase 2 Project Improvements at SOWTP) and several figures in Chapter 2, Project Description, which depict planned improvements in addition to existing facilities and demolition of existing facilities.

A discussed in Section 2.5, Project Characteristics, the Project involves construction and operation of new facilities, replacement of aging infrastructure with new facilities, incorporation of existing uses at the site into a new consolidated maintenance facility, and demolition of facilities. The Project is divided into three components: Phase 1 improvements to SOWTP, Phase 2 improvements to SOWTP, and Phase 2 new Central North Aqueduct pipeline. The demolished facilities west of Valley View Road would be replaced with Phase 1 facilities east of Valley View Road, and no new infrastructure west of Valley View Road is proposed as part of the Project.

Response to Comment MAC Meeting-4
The comment asks if Project operational noise was analyzed. Project operational noise is analyzed on pages 3.11-45 through 3.11-47 of the Draft EIR.

Response to Comment MAC Meeting-5
The comment asks about interruption of water service on San Pablo Dam Road.

Disruption of water service is not expected during construction, except for a short period (i.e., approximately one day) when the new pipeline is tied into the existing system, see Section 10, Draft EIR Revisions.

Response to Comment MAC Meeting-6
The comment states that EBMUD should coordinate with Caltrans for the proposed realignment of the freeway on/off ramps which could affect the Central North Aqueduct pipeline.

Refer to response to CDOT-3 regarding the Caltrans encroachment permit process and future coordination with Caltrans.

Response to Comment MAC Meeting -7
The comment asks about permit requirements for Central North Aqueduct pipeline crossing of San Pablo Creek.

Construction of the Central North Aqueduct pipeline below San Pablo Creek would involve jack and bore construction. The Project would not involve any activities within riparian areas or within the creek. The crossing beneath the creek would not require a permit. Impacts on biological resources from jack and bore construction at San Pablo Creek are addressed in Section 3.3, Biological Resources, pages 3.3-29 and 3.3-30 of the Draft EIR.

8.4.2 Public Meeting – October 10, 2024

Response to Comment PM-1
The comment requests clarification of how noise and visual impacts would be mitigated during construction and operations. See Response to Comment Dunton-2 regarding views of the Project.

Visual resources are analyzed in detail in Section 3.1 of the Draft EIR, which includes EBMUD practices and procedures and one mitigation measure for keeping potential impacts to visual resources to less than significant levels.

Operational and construction noise and vibration are analyzed in detail in Section 3.11 of the Draft EIR, which includes EBMUD practices and procedures and two mitigation measures for keeping potential impacts to noise and vibration to less than significant levels.

Response to Comment PM-2
The comment states that no notification of the Project was received. See the Response to Comment WCCFSC-1 and Section 7.2 regarding public notice for the Draft EIR.

Response to Comment PM-3
The comment asks why the buildings are not situated closer to Amend Road and why the mechanical aspects that are currently 100 feet from Amend Road are not moved further back within the property and buried. EBMUD revised the site layout and architectural and landscape designs in response to community feedback and concerns, which included relocating the consolidated maintenance building. The facilities that are nearest Amend Road consist of water basins that would be partially buried, and the water surface within the basins would be visible for individuals looking down on the site. Larger/taller infrastructure/buildings are set back from the road to reduce visual impacts on the community. See Appendix D of the Draft EIR for the Aesthetic Conceptual Design Report.

Response to Comment PM-4
The comment requests that the City of San Pablo Senior Civil Engineer be included in communication regarding scheduling of the North Central Aqueduct pipeline. The City of San Pablo is in the design phase of the replacement of the San Pablo Avenue Bridge at Road 20 and San Pablo Avenue. See the Response to Comment CSP-1.

Response to Comment PM-5
The comment states that the current facilities shoot water into the air, at an apparent height of several feet, and asks how it will work in the future.

The Project does not involve changes to the aeration process that shoots water into the air which would maintain the current operations.

8.5 Responses to Comments Received After the Close of the Comment Period

8.5.1 Contra Costa County Flood Control and Water Conservation District (FC District)

Response to Comment FC District-1
The comment requests that Section 3.9 Hydrology and Water Quality of the Draft EIR identify and show existing watercourses, tributaries, and man-made drainage facilities within the Project area and requested an analysis of the capacity of the existing watercourses.

Section 3.9 of the Draft EIR discusses the Environmental Setting of the SOWTP, including regional hydrology, local drainage, groundwater, and flood hazards. Potential impacts to existing hydrology and water quality are considered in the analysis. Water courses are shown in Draft EIR Figures 3.9-1, and 3.9-2. Figure 3.9-5 shows proposed drainage facilities.

Response to Comment FC District-2
The comment requests that Section 3.9 Hydrology and Water Quality of the Draft EIR quantify the amount of runoff that would be generated by the Project and how it would be distributed from the site between natural watercourses, the detention basin, and man-made drainage facilities.

The proposed improvements at the SOWTP would increase the impervious surface area by approximately 5 acres. As discussed in Section 3.9 Hydrology and Water Quality of the Draft EIR, the stormwater from the new impervious surfaces would be directed to the stormwater basin. As described on page 2-46 of the Draft EIR, "The stormwater control improvements would be designed consistent with the Contra Costa Clean Water Program Stormwater C.3 Guidebook, which sets standards to prevent increases in run-off flows that are consistent with the requirements of the Municipal Regional Stormwater NPDES Permit. The overall stormwater runoff after the Project would not exceed pre-Project runoff volumes and stormwater would continue to flow into San Pablo Creek."

Response to Comment FC District-3
The comment states that the Draft EIR should discuss the scope of improvements proposed within natural water courses, if any.

No improvements are proposed within natural water courses. The Central North Aqueduct pipeline would cross beneath San Pablo Creek via jack and bore construction methods.

Response to Comment FC District-4
The comment recommends the Draft EIR address storm drain facility design and construction to ensure they adequately convey stormwater from the SOWTP per Title 9 of the County Ordinance Code.

The storm drain facility design is discussed in the Draft EIR. Refer to Response to Comment FC District-2. The improvements would also meet the requirements of Title 9 of the County Ordinance Code.

Response to Comment FC District-5
The comment states that the Draft EIR should discuss adverse impacts of runoff from the Project site to existing drainage facilities and drainage problems in downstream areas, including those outside of the Project site.

Impacts from runoff from the Project site to existing drainage facilities and downstream areas are discussed in detail in Section 3.9.3 of the Draft EIR.

Response to Comment FC District-6
The comment states that Section 3.9 Hydrology and Water Quality of the Draft EIR should include a study that uses Contra Costa County's hydrology method (HYDRO6) as the existing and planned regional drainage facilities affected by development within the Project area have been designed using HYDRO6.

Comment is noted. The Draft EIR explains that the Project would comply with Provision C.3 in the Municipal Regional Stormwater Permit (MRP) for Contra Costa County. EBMUD could consider existing calculations when preparing the stormwater design consistent with C.3 requirements. Upon request, EBMUD will provide information on stormwater design and C.3 design calculations as a courtesy once the final design has been completed.

Response to Comment FC District-7
The comment states that the applicant should be required to submit hydrology and hydraulic calculations to the Engineering Services Division of the Public Works Department to prove the adequacy of the drainage systems.

Under section 53091 of the California Government Code, building and zoning ordinances do not apply to the location or construction of projects involving facilities for production, generation, storage, treatment, or transmission of water. Engineering Services Division of the Public Works Department review of the Project is thus not required. If requested, EBMUD will provide information on the stormwater design and C.3 design calculations as a courtesy once the final design has been completed.

Response to Comment FC District-8
The comment states the applicant should be required to comply with the current National Pollutant Discharge Elimination System (NPDES) requirements under the County and City's Stormwater Management and Discharge Control Ordinances and the C.3 Guidebook.

As discussed in Section 2.7 on page 2-46, Stormwater of the Draft EIR, EBMUD would comply with requirements under the NPDES and the County and City's Stormwater Management and Discharge Control Ordinances and the C.3 Guidebook.

Response to Comment FC District-9
The comment recommends the Draft EIR include a discussion of the stormwater retention basin design (i.e., capacity, sizes of inlet and outlet structures, routing, etc.) and maintenance and recommends the operator prepare/provide an Operations and Maintenance Plan to the Cities/County for review.

The proposed design of the stormwater retention basin is discussed in Section 2.5.1, page2-18 of the Draft EIR. Various plans would be prepared for the Project, including a Stormwater Management Plan, Stormwater Pollution Prevention Plan, Water Control and Disposal Plan, and Spill Response Plan. Final design of the Project will be consistent with the requirements of the most recent Construction Stormwater General Permit (NPDES permit) and C.3 Guidebook as discussed in Section 2.7, page 2-46.

Response to Comment FC District-10
The comment states that the FC District does not recommend the use of bioretention areas (C.3 Facilities) sized to meet Contra Costa Clean Water Program C.3 requirements for mitigating peak flows. Analysis of C.3 Facilities proposed to mitigate peak flows should ignore the above surface storage volume required by C.3 Facilities sizing criteria, and a hydrograph produced or accepted by FC District should be used for the analysis.

The Draft EIR references that stormwater control improvements would be designed consistent with the Contra Costa Clean Water Program Stormwater C.3 Guidebook, which sets standards to prevent increases in run-off flows that are consistent with the requirements of the Municipal Regional Stormwater NPDES Permit. The C.3 Guidebook is the guidance in effect at this time, and the final design of the stormwater basin will meet the most recent design standards at the time of final design.

Response to Comment FC District-11
The comment states that the Draft EIR should address the impacts of the Project's runoff due to the increase in duration of flows and effect on creeks/channels downstream.

The stormwater retention basin discussed in Response to Comment FC District-2 would slow the rate of runoff to the surrounding area and reduce delivery of sediment to San Pablo Creek. Any temporary disturbance in unpaved areas would be landscaped and hydroseeded to further reduce runoff/sediment distribution to surrounding areas. The impacts of runoff during construction and operations are analyzed in detail in Section 3.9.3 of the Draft EIR.

Response to Comment FC District-12
The comment recommends that the Draft EIR include requesting that appropriate regulatory agencies (e.g., State Department of Fish and Game, State Regional Water Quality Control Board) identify permits, special conditions, and mitigations that they may require.

Table 2-9 in Section 2.10 of the Draft EIR includes a list of potentially required permits from several federal, state, and local agencies.

Response to Comment FC District-13
The comment states that the Project is within Drainage Area 73 and that a drainage fee is due in accordance with Flood Control Ordinance Number 88-68 and that the Draft EIR should include a map and calculations for total area of proposed impervious surfaces.

Under section 53091 of the California Government Code, building and zoning ordinances do not apply to the location or construction of projects involving facilities for production, generation, storage, treatment, or transmission of water. There will be no building permit or subdivision map filed for this Project, and the drainage fee ordinance does not apply. Furthermore, division 1010, Drainage, section 2.010, Fees of Contra Costa County Ordinance Code states that no fee shall be required for municipalities or public districts.

Response to Comment FC District-14
The comment states that the FC District is not the approving local agency for the Project. The drainage fees due will be based on the fee in effect when the fee is collected.

See response to Comment FC District-13.

Response to Comment FC District-15
The comment states: "This project lies within the San Pablo Creek Watershed. We recommend the applicant construct creek capacity improvements as called for in the 'San Pablo Creek Watershed Study,' as directed by the Public Works Department, Flood Control Division; or upon written request by the developer, the applicant should contribute $0.25 per square foot of impervious surface area to the San Pablo Creek Watershed Mitigation Fund. The Mitigation Fund is used for creek capacity improvements within the San Pablo Creek Watershed. These fees are in addition to DA 73 fees."

See Response to Comment FC District-13.

8.5.2 Contra Costa County Public Works Department (CCCPWD)

Response to Comment CCCPWD -1
The comment states the Central North Aqueduct pipeline crosses FEMA designated Special Flood Hazard Areas (SFHA) and that the Draft EIR should note a Floodplain Permit from Contra Costa Public Works Department is required for construction within the SFHA. Additionally, activities and improvements within the SFHA are subject to compliance with the County's Floodplain Management Ordinance and FEMA standards.

As discussed on page 3.9-27 of the Draft EIR, "The Central North Aqueduct pipeline would be below ground surface and would not impede or redirect flood flows. Construction of the Central North Aqueduct pipeline within the San Pablo Creek floodplain would be avoided during periods of flooding, for worker safety. Therefore, no structures or equipment would be present within the 100-year floodplain during periods of flooding." Because the Central North Aqueduct pipeline would be located below ground within the floodplain, the pipeline would

not conflict with any FEMA standards or local floodplain policies or ordinances. Therefore, a Floodplain Permit is not required. See also Response to Comment FC District-13.

Response to Comment CCCPWD -2

The comment states construction, especially regarding the Central North Aqueduct pipeline, will require road closures. The comment states that while potential road closures are recognized in the Draft EIR advanced planning and notification is not stressed and will need to be put on the Board's agenda at least three weeks in advance. The commenter recommends EBMUD should apply for road closure at least six weeks in advance.

As described in Section 3.12, Transportation, of the Draft EIR, a number of EBMUD standard practices and procedures, applicable to all EBMUD projects, have been incorporated into the Project, including EBMUD Standard Construction Specification 01 55 26, Traffic Regulation. Standard Construction Specification 01 55 26 requires the contractor to prepare a Traffic Control Plan and obtain approval from all agencies having jurisdiction prior to submission to EBMUD. Note that construction of the Central North Aqueduct pipeline is currently scheduled begin in 2055 at the earliest but may be delayed or may not occur if water demands are not realized.

Response to Comment CCCPWD -3

The comment states street repair/reconstruction related to the Central North Aqueduct pipeline will warrant C.3 compliance under the County's current permit with the Regional Water Quality Control Board. Treatment measures and ownership and maintenance responsibility will need to be identified.

The Central North Aqueduct pipeline will be a buried pipeline located within existing roadways as described in Section 2.5.2 on page 2-26 of the Draft EIR. The Central North Aqueduct pipeline would not introduce any impervious surfaces that would require C.3 compliance due to the location of the pipeline within existing paved roads.

Response to Comment CCCPWD -4

The comment states the mitigation monitoring plan generally cites EBMUD as being responsible for reviewing and approving mitigation measures but does not reference the associated reviewing or permitting agencies.

Both the EBMUD Practices and Procedures Monitoring and Reporting Plan (PPMRP) and the Mitigation Monitoring and Reporting Plan (MMRP) provided in Section 11 of the Draft EIR recognize EBMUD's responsibility under CEQA to verify implementation of the measures contained in PPMRP and MMRP. While other entities may also have regulatory authorities as recognized in Table 2-9 of the Draft EIR, EBMUD with its approval of the Project is responsible for CEQA compliance and ensuring that the applicable EBMUD PPMRP and MMRP are implemented to avoid, reduce, or mitigate environmental effects.

9 Comment Letters

The comment letters and other submittals received regarding the Draft EIR are included in this chapter.

CSP

CITY OF SAN PABLO
Community Development / Planning Services

10/17/2024

Jae Park, MS 701
375 Eleventh Street
Oakland CA 94607-4240

CITY OF SAN PABLO
City of New Directions

San Pablo All-America City NATIONAL CIVIC LEAGUE 2014

Sent via email: sowtp.improvements@ebmud.com

Re: Comments on the Draft Environmental Impact Report for the Sobrante Water Treatment Plant Reliability Improvements Project (State Clearinghouse #2022030308)

Dear Jae Park,

Thank you for inviting the City of San Pablo's comments on the Draft Environmental Impact Report (DEIR) for the Sobrante Water Treatment Plant Reliability Improvements Project to the East Bay Municipal Utility District dated September 12, 2024. This project will benefit San Pablo's residents with greater capacity, reliability, and efficiency of treatment for their drinking water.

The City has the following comments with regard to the Phase 2 – Central North Aqueduct Pipeline:

1. The City of San Pablo is currently working to replace the bridge at the intersection of 23rd St, San Pablo Ave, and Road 20. The pipeline project will be passing through this intersection/project. The City would like to incorporate any design and install of the Central North Aqueduct Pipeline within the utility coordination of the bridge project to minimize construction costs and impact to the community. CSP-1
2. Work on Road 20 is to occur along the frontage of a Middle School and in front of the City's Community Center. This work may be years in the future but consider a timeline for construction that occurs when students are not in session and impact the community center is minimized. CSP-2
3. The City of San Pablo is initiating revisions to El Portal to add a two-way cycle track to El Portal between San Pablo Avenue and Fordham. This feature will need to be considered when work between Rollingwood Drive and Road 20 is scheduled. CSP-3

For any questions related to this comment letter, please contact [redacted] or call [redacted] or contact Matt Brown at [redacted] or call [redacted].

Sincerely,

Mel Mackson

Mel Mackson
Assistant Planner

1000 Gateway Avenue ● San Pablo, CA 94806
Main: 510-215-3030 ● *Fax:* 510-215-3014
www.SanPabloCA.gov

CDOT

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

DISTRICT 4
OFFICE OF REGIONAL AND COMMUNITY PLANNING
P.O. BOX 23660, MS–10D | OAKLAND, CA 94623-0660
www.dot.ca.gov

October 28, 2024

SCH #: 2022030308
GTS #: 04-CC-2022-00904
GTS ID: 25914
Co/Rt/Pm: CC/80/5.3

Jae Park, Associate Civil Engineer
East Bay Municipal Utility District (EBMUD)
375 Eleventh Street
Oakland, CA 94607

Re: Sobrante Water Treatment Plant Reliability Improvements Project – Draft Environmental Impact Report (DEIR)

Dear Jae Park:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Sobrante Water Treatment Plant Reliability Improvements Project. The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities. The following comments are based on our review of the September 2024 DEIR.

Please note this correspondence does not indicate an official position by Caltrans on this project and is for informational purposes only.

Project Understanding
The project proposes to increase the treatment capacity of the Sobrante Water Treatment Plant which contains facilities that run near Interstate (I)-80.

Travel Demand Analysis
The project vehicles miles traveled (VMT) analysis and significance determination are undertaken in a manner consistent with the Office of Planning and Research's (OPR) Technical Advisory. Per the DEIR, this project is found to have a less than significant VMT impact.

Construction-Related Impacts
Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, please visit Caltrans Transportation Permits (*link*). Prior to construction, coordination may be

CDOT-1

required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the State Transportation Network (STN).

Equitable Access
If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

CDOT-2

Encroachment Permit
Please be advised that any permanent work or temporary traffic control that encroaches onto Caltrans' Right of way (ROW) requires a Caltrans-issued encroachment permit. As part of the encroachment permit submittal process, you may be asked by the Office of Encroachment Permits to submit a completed encroachment permit application package, digital set of plans clearly delineating Caltrans' ROW, digital copy of signed, dated and stamped (include stamp expiration date) traffic control plans, this comment letter, your response to the comment letter, and where applicable, the following items: new or amended Maintenance Agreement (MA), approved Design Standard Decision Document (DSDD), airspace lease agreement, and/or approved encroachment exception request.

CDOT-3

The project will likely require an approved encroachment policy exception for the facilities that are planned cross I-80 on El Portal Drive. If the exception is approved, a permit is issued, and the facility is constructed as planned, EBMUD's as-builts must be submitted to Caltrans. EBMUD will need to verify the location of its facilities within Caltrans ROW upon request by Caltrans in the future, without the expectation that Caltrans will provide a non-disclosure agreement.

The Office of Encroachment Permit requires 100% complete design plans and supporting documents to review and circulate the permit application package. To obtain more information and download the permit application, please visit Caltrans Encroachment Permits (*link*). Please note that the checklist TR-0416 is used to determine the appropriate Caltrans review process for encroachment projects. Your application package may be emailed to [redacted].

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Llisel Ayon, Associate Transportation Planner, via [redacted].

For future early coordination opportunities or project referrals, please visit Caltrans LDR website (*link*) or contact [redacted].

"Provide a safe and reliable transportation network that serves all people and respects the environment."

Sincerely,

YUNSHENG LUO
Branch Chief, Local Development Review
Office of Regional and Community Planning

c: State Clearinghouse

WCCFSC

From: Soheila Bana [redacted]
Sent: Thursday, September 19, 2024 8:46 AM
To: Park, Jae [redacted] sowtp.improvements [redacted] Young, Marguerite [redacted] Burrell, Y'Anad [redacted]
Cc: Soheila Bana [redacted]; Chan, Clifford [redacted]
Subject: Request for Improved Community Outreach Regarding the Sobrante Water Treatment Plant Improvement Project

Dear EBMUD Officials,

I am writing to request that EBMUD improve its community outreach for the **Sobrante Water Treatment Plant Improvement Project**. I received the forwarded email below, which has an attachment stating:

Public Meeting: The following public meeting is scheduled to review the Draft EIR and will start at 6:00 p.m.:
• October 10, 2024 - Virtual Meeting - Zoom link to be provided before the meeting date on the Project website: www.ebmud.com/sowtp

Are you expecting the community to visit libraries to read the EIR and then check the website for the Zoom link? I would like to propose a more accessible solution: let's provide a dedicated opportunity for the community to learn about the project and ask questions via Zoom on a weekday evening, where they can also provide feedback if needed.

WCCFSC-1

I'd be happy to host the session, similar to our last collaboration on this project, to ensure that community members feel comfortable sharing their views. Please note that I will be unavailable from **October 7 to 22**, but I any other Wednesday or Thursday evening at **6 or 7 pm** should work. Please let me know your availability.

Thank you for your consideration.

Best regards,

Soheila Bana

Chair, West Contra Costa Fire Safe Council

[redacted]

WCCFireSafe.org

------- Forwarded message -------
From: **Wen, Amy** [redacted]
Date: Thu, Sep 12, 2024 at 1:20 PM
Subject: Sobrante Water Treatment Plant Reliability Improvements Project DEIR
To:
Cc: Wen, Amy [redacted]

Good afternoon,

The Draft Environmental Impact Report (DEIR) for the Sobrante Water Treatment Plant Reliability Improvements Project is available for public review (www.ebmud.com/sowtp). See the attached Notice of Availability for more information.

Thank you,

Amy Wen | Sr Administrative Clerk

Water Distribution Planning Division

EBMUD | 100 FLOWING INTO THE FUTURE

SOWTP Reliability_DEIR NOA.pdf
1254K

Park, Jae [redacted] Tue, Oct 29, 2024 at 7:45 AM
To: "susanne.heim" [redacted]
Cc: Emily Capello [redacted]

Our responses.

From: Soheila Bana [redacted]
Sent: Tuesday, September 24, 2024 11:13 AM
To: Burrell, Y'Anad [redacted]
Cc: Park, Jae [redacted] Young, Marguerite [redacted] Chan, Clifford [redacted] Favorite-Hill, Mona [redacted] Soheila Bana [redacted] James Atencio [redacted] Rehnstrom, David

[redacted]

Subject: Re: Request for Improved Community Outreach Regarding the Sobrante Water Treatment Plant Improvement Project

Hello again,

Thank you for your email. I will share this with the community.

Best,

Soheila Bana

Chair, West Contra Costa Fire Safe Council

[redacted]

WCCFireSafe.org

[redacted]

On Fri, Sep 20, 2024 at 9:22 AM Burrell, Y'Anad [redacted] wrote:

> Dear Councilmember Bana,
>
> Thank you for your continued interest in the Sobrante Water Treatment Plant Improvements Project (Project). I would like to provide clarification on the public review process for the Draft Environmental Impact Report (EIR).
>
> The Noice of Availability (NOA) that was attached to the e-mail sent to you was also sent to other local officials and public agencies. In addition, postcards containing similar information, but in a more condensed form, was mailed to more than 1,700 residences in the vicinity of the Sobrante Water Treatment Plant (WTP) and along the alignment of the Central North Aqueduct Pipeline in the city of Richmond, city of San Pablo, and unincorporated communities of Contra Costa County.
>
> The NOA and postcard include a link to EBMUD's Project webpage (www.ebmud.com/sowtp) where the Draft EIR for the Project can be downloaded and viewed electronically. In addition, hardcopies of the Draft EIR are available at EBMUD's

office in Oakland and at three public libraries (El Sobrante, San Pablo, and Richmond) should the public prefer to view the Draft EIR in paper format.

On October 10, 2024, starting at 6:00 p.m. on a weekday, EBMUD staff will host a public meeting on ZOOM (link to be posted on the Project webpage), where staff will present a summary of the Project, the environmental analysis performed, and the mitigation measures incorporated into the Project. After the summary, the public will be invited to ask questions and provide comments about the Project. The public meeting is scheduled approximately halfway through the 45-day public review period to provide the public an opportunity and adequate time to review the Draft EIR prior to the public meeting and bring any questions and comments to the public meeting.

The public is also welcome and encouraged to provide written comments on the Project at any time during the public review period of the Draft EIR (September 12 to October 28, 2024). Comments may be sent electronically and e-mailed (to sowtp.improvements@ebmud.com) or written and hardcopy mailed to the EBMUD Administration Building (c/o Jae Park, MS 701, 375 11th St, Oakland, CA 94607). Please note that all comments must be received by October 28, 2024, 4:30 p.m.

Please let me know if you have any questions. Thank you.

Y'Anad Burrell (she/her)

Community Affairs Rep. II

[redacted]

East Bay Municipal Utility District, Oakland CA

From: Soheila Bana [redacted]
Sent: Thursday, September 19, 2024 3:47 PM
To: Burrell, Y'Anad [redacted]
Cc: Park, Jae [redacted] Young, Marguerite [redacted] Chan, Clifford [redacted] Favorite-Hill, Mona [redacted] Soheila Bana [redacted] James Atencio [redacted]
Subject: Re: Request for Improved Community Outreach Regarding the Sobrante Water Treatment Plant Improvement Project

Dear Y'Anad,

Please note that while Supervisor Gioia has organized the El Sobrante MAC for the unincorporated El Sobrante residents, many residents near this site, including myself, are Richmond residents. In other words, Richmond residents in the area are being overlooked by EBMUD in practice.

I will be sharing your email with the community.

Best,

Soheila Bana

Chair, West Contra Costa Fire Safe Council

[redacted]

WCCFireSafe.org

On Thu, Sep 19, 2024 at 3:33 PM Burrell, Y'Anad <[redacted]> wrote:

> Hello Councilmember Bana.
>
> Thank you for contacting us. We are coordinating outreach on this project with Supervisor John Gioia's office, and on their recommendation we have scheduled two public meetings. Residents will have two opportunities to view the DEIR presentations, ask questions, and share their views.
>
> 1. **Wednesday, October 9, 7 pm via Zoom during the El Sobrante MAC**
> 2. **Thursday, October 10 at 6:00 pm, at a virtual community meeting.**

We have done extensive outreach to the El Sobrante community to alert them to the meetings. Last week we mailed out over 600 postcards to residents, and we will also post the meeting notices on our social media channels as we get closer to the date. We will also record the meeting and post the video on the project webpage.

The Draft Environmental Impact Report (DEIR) for the Sobrante Water Treatment Plant Reliability Improvements Project is available for review both online at www.ebmud.com/sowtp and at the local public library so it is easily accessible for all interested parties.

Again, thank you for your message. Please let me know if you have any questions.

Y'Anad

Y'Anad Burrell (she/her)

Community Affairs Rep. II

[redacted]

East Bay Municipal Utility District, Oakland CA

Subscribe to EBMUD Alerts

Stay informed by email or text about main breaks, upcoming construction, and PSPS events at any address in EBMUD's service area. Subscribe to receive alerts. Visit www.ebmud.com/subscriptions

[Quoted text hidden]

CVLN

From: Wen, Amy [redacted]
Sent: Monday, October 21, 2024 11:58 AM
To: Park, Jae [redacted]
Subject: FW: Sobrante Water Treatment Plant Reliability Improvements Project DEIR

Hi Jae,

Just received this email, thank you.

Amy

From: Lisjan Nation [redacted]
Sent: Monday, October 21, 2024 11:55 AM
To: Wen, Amy [redacted]
Subject: Re: Sobrante Water Treatment Plant Reliability Improvements Project DEIR

You don't often get email from [redacted] Learn why this is important

Hello,

Thank you for your email. The Tribe is requesting a copy of the final CHRIS and EIR for this project, along with the SLF from Native American Heritage Commission and any additional archeological reports.

'Uni (Respectfully),

Cheyenne Zepeda, Cultural Resource Manager I

Confederated Villages of Lisjan Nation

On Thu, Sep 12, 2024 at 1:20 PM Wen, Amy [redacted] wrote:

> Good afternoon,
>
> The Draft Environmental Impact Report (DEIR) for the Sobrante Water Treatment Plant Reliability Improvements Project is available for public review (www.ebmud.com/sowtp). See the attached Notice of Availability for more information.
>
> Thank you,
>
> Amy Wen | Sr Administrative Clerk
>
> Water Distribution Planning Division
>
> EBMUD | 100 FLOWING INTO THE FUTURE

Park, Jae [redacted] Wed, Oct 23, 2024 at 11:33 AM
To: [redacted]
Cc: SOWTPImpPlanning [redacted]

Cheyenne Zepeda,

Thank you for the inquiry on the Sobrante Water Treatment Plan Reliability Improvements Project. The DEIR is available electronically on the Project website at www.ebmud.com/sowtp. In addition, paper copies are available to review at the following locations:

- EBMUD Offices, 375 Eleventh Street, MS 701, Oakland, California 94607
- El Sobrante Public Library, 4191 Appian Way, El Sobrante, CA 94803
- San Pablo Public Library, 13751 San Pablo Avenue, San Pablo, CA 94806
- Richmond Public Library, 325 Civic Center Plaza, Richmond, CA 94804

All comments to the DEIR must be received by 4:30 p.m. on October 28, 2024, which is the end of the public comment period. Written comments must be submitted to Jae Park, 375 11th St, MS 701, Oakland, California 94607, or emailed to sowtp.improvements@ebmud.com.

Section 3.4 Cultural Resources of the DEIR describes the physical, environmental, and regulatory setting for cultural resources, identifies the significance criteria used for determining environmental impacts, and evaluates the potential impacts on cultural resources that could result from implementation of the Project. Cultural resources include architectural resources, prehistoric and historic-era archaeological resources, and human remains. The Cultural Resources section is based on information contained in the Cultural Resources Assessment Report that is attached. But Appendices A and B that contain the CHRIS report and SLF search results for the Project have been omitted from the attachment, because they are confidential and cannot be provided to the Tribe.

Also, please note that the mailing list for the Project has been updated to list you as the contact person for the Confederated Villages of Lisjan Nation.

Jae Park, P.E.

East Bay Municipal Utility District

Water Distribution Planning Division

[redacted]

[Quoted text hidden]

CRAR_FINAL_DRAFT_minus confidential.pdf
9676K

Park, Jae [redacted] Mon, Oct 28, 2024 at 7:35 AM
To: "susanne.heim" [redacted]
Cc: Emily Capello [redacted], "Rehnstrom, David" [redacted], "Mulhauser, Sandra" [redacted]

FYI

From: Lisjan Nation [redacted]
Sent: Friday, October 25, 2024 6:07 PM
To: Park, Jae [redacted]
Cc: SOWTPImpPlanning [redacted]
Subject: Re: FW: Sobrante Water Treatment Plant Reliability Improvements Project DEIR

Jae,

Thank you for this information. If a Tribal representative of Lisjan Nation is not selected to serve as the Tribal monitor for this project, Lisjan Nation requests to be informed immediately if any Native American cultural resources are inadvertently discovered during construction.

CVLN-1

'Uni (Respectfully),

Lucy Gill, Cultural Resource Manager II

Confederated Villages of Lisjan Nation

[Quoted text hidden]

Savage

From: [redacted]
Sent: Monday, October 28, 2024 1:04 AM
To: sowtp.improvements [redacted]
Subject: SCH # 2022030308---SOBRANTE WATER TREATMENT PLANT DEIR, comments due by 4:30 PM PDT, 10-28-24

You don't often get email from [redacted] Learn why this is important

Dear EBMUD,

I have the following comments related to the above-referenced DEIR:

1. The sections related of odors are superficial and lack adequate detail so that the public knows and can understand the location of potential or actual sources of odor within the existing Plant and the planned expansion, and the actual and potential future intensities of odors from the sources. — Savage-1

2. A lack of numerous odor complaints in the past is not an indication of potential number of odor complaints in the future, especially given the substantial percentage increase in the processing capacity of the Plant. — Savage-2

3. What are the names of all agencies and entities that have responsibilities related to identifying sources of odors at the Plant and its expansion in response to an odor complaint from the public? — Savage-3

4. What agency(ies) or entity(ies) has(have) jurisdiction over enforcing mitigation methods and evaluative methods for controlling and reducing odors from confirmed odor complaints? — Savage-4

5. How does the Plant currently measure and record odors and their intensities at its property line and at various odor sources located on its property? If the Plant does not, then please explain the reason(s). How will the Plant measure and record odors and their intensities at its property line and at various odor source located on the property of the expanded facility? If the Plant will not take these actions, then please explain the reason(s). — Savage-5

6. What are odor sources and their odor estimated or measured (state which) intensities on the Plant site?

Savage-6

7. Does EBMUD, Plant, or both have a current odor risk mitigation and control plan for water treatment systems (if so, then what are the title, author, and date)?

Savage-7

8. What is the total number of odor complaints (confirmed or otherwise) that have been filed with EBMUD or an environmental control agency over the past 5 years related to the Plant and to the Orinda water treatment facility, respectively?

Savage-8

9. Regarding sludge storage: The filled containers are a potential source of odor. The containers should be gas-tight or gas emissions vented, controlled or treated for odor capture, and containers should also be liquid-tight. What will be the frequency of removal and transport of a filled container off site?

Savage-9

10. What was the source, cause, and remedy of the one past odor complaint cited in the DEIR? If the source was not identified, then please explain why not.

Savage-10

If you have any questions, please do not hesitate to contact me.

Respectively submitted,

George Savage

Weir

From: Dawn Dial-Weir [redacted]
Sent: Saturday, September 28, 2024 1:46 PM
To: sowtp.improvements [redacted]
Subject: Central North Aqueduct Plans

You don't often get email from [redacted] Learn why this is important

[redacted]

Hello.

I've only recently learned that my sewer line runs from my home at [redacted] to under D Avila Way and maybe a small section of La Honda Road to the clean-out there. I suspect my neighbors' lines are also under these roads.

My sewer line was installed long after construction of my home, so I don't know if this installation is in your records. Please make sure this fact is considered when you plan the installation of the Central North Aqueduct in my neighborhood.

Weir-1

Thank You,

Dawn Weir

[redacted]

https://mail.google.com/mail/u/0/?ik=b941ca32ea&view=pt&search=all&permthid=thread-f:1812268587149748861%7Cmsg-f:1812268587149748861... 1/1

Dunton

From: McCrea Dunton [redacted]
Sent: Monday, October 7, 2024 7:53 PM
To: sowtp.improvements [redacted]
Subject: public comment on draft EIR

You don't often get email from [redacted] Learn why this is important

Hello,

I've recently moved into the neighborhood directly next to the planned treatment plant expansion.

I am in favor of the project and read through the EIR. We'll need good infrastructure ahead and am happy your team is going through with it.

I want to note the change from a higher berm to a lower berm in exchange for moving the buildings back within the Aesthetics section. The current visual screen on Amend that covers the substation works really well (just north of the planned change) and I'd recommend that the berm be raised to that height plus trees on top to shield as much as possible. This seems like a potentially low cost change that will help make the community happier around these improvements. I also want to note that the visual points chosen in the EIR **do not include any points higher up on Simoni Ct or Heavenly Ridge where the viewpoint will be very affected**, and instead focus on lower locations where a smaller berm and shrubs will suffice.

Dunton-1

Please reconsider increasing the planned berm height along with larger vegetation at the top to ensure nature based views from the homes on directly adjacent roads.

Dunton-2

Best,

McCrea Dunton

Ghiglieri

From: Stephen Ghiglieri [redacted]
Sent: Thursday, October 10, 2024 5:43 PM
To: sowtp.improvements [redacted]
Subject: neighbor concerned about this proposed plan

You don't often get email from [redacted] Learn why this is important

My wife and i live on the ridge line on Heavenly Ridge Lane, our address is on [redacted]

We have line of sight vision to the field that you are planning to develop and we are VERY concerned both about how you intend to address site line impact from our elevated position and also the potential for mechanical noise from the plant.

Ghiglieri-1

I see from the website that this plan has been in the works for quite some time but we received our first notice of this a few weeks ago when we were invited to the zoom meeting happening this evening. I will be present on the zoom - but would appreciate your directly addressing the concerns raised above.

This is an rural area and we are very concerned that this project will impact the peacefulness of our valley

Stephen and Katrina Ghiglieri

MAC Meeting

Gmail **Emily Capello** [redacted]

SOWTP, comments from El Sob MAC mtg

2 messages

Park, Jae [redacted] Thu, Oct 10, 2024 at 1:34 PM
To: "susanne.heim" [redacted]
Cc: Emily Capello [redacted] "Mulhauser, Sandra" [redacted]

Susanne,

Below are seven questions/comments that were asked at the El Sobrante MAC meeting that we would like to include and answer in the FEIR.

1. There is heavy morning (i.e., 6:30 am – 9:00/9:30 am) and evening (i.e., 3:30 pm – 6:30/7:00 pm) traffic at Appian Way near the freeway entrance. The EIR needs to evaluate and consider the traffic impacts and identify potential mitigations. — MAC Meeting-1
2. The public should be notified prior to loud noise construction events. — MAC Meeting-2
3. Will the structures that will be torn down replaced with new structures? — MAC Meeting-3
4. Was the operational noise of the new facilities analyzed? — MAC Meeting-4
5. Will residents along San Pablo Dam Road lose water service for extended periods of time during the construction of the Central North Aqueduct? — MAC Meeting-5
6. EBMUD's project should coordinate with Caltrans on the proposed project for realignment of the freeway off/on ramps, which may may affect the alignment of the Central North Aqueduct alignment. — MAC Meeting-6
7. For the pipeline construction that crosses San Pablo Creek, is a permit required? Will construction be limited to certain time periods of the year? Are you evaluating the biological impacts and developing mitigation measures for the construction work? — MAC Meeting-7

Jae Park, P.E.

East Bay Municipal Utility District

Water Distribution Planning Division

[redacted]

Emily Capello [redacted] Thu, Oct 10, 2024 at 4:40 PM
To: "Park, Jae" [redacted]
Cc: "susanne.heim" [redacted] "Mulhauser, Sandra" [redacted]

Thanks Jae - we'll put these in the list of topics to address in the Final EIR.
[Quoted text hidden]
--
Emily Capello, Director
Panorama Environmental, Inc.
https://www.panoramaenv.com/

PM

PANORAMA ENVIRONMENTAL, INC.

Draft EIR Public Meeting Notes

Date: October 10, 2024
Time: 6:00pm
Location: Zoom

Comments

Stephen Ghiglieri:

- I live on the ridge line on heavenly ridge lane and have line of site and sound to the field where you plan this project to be executed. We are VERY concerned that we will be hearing noise - both during construction but also when the plant is operational and also that our site lines will be significantly negatively impacted. Please address how you will mitigate this - for people who are not at ground level but have homes above the site — PM-1
- I also would like you to know that this is the first we have. been formally advised of this project. I see there have been other community events related to this - but we have not received any communication regarding that - which frankly is not acceptable. I would hope that someone from EBMUD would visit our home to observe and address the impact on homes on the ridge line. I can be reached at [redacted] or phone at [redacted] — PM-2
- As mentioned - not invited to past meetings - so this is ALL new. Why would you NOT put the buildings closer to amend and the mechanical aspects that are currently 100 feet off of Amend - to further back - buried in your property - to reduce site and noise issues — PM-3

Matt Brown:

- The City of San Pablo is in the design phase of the replacement of the San Pablo Avenue Bridge at Road 20 and San Pablo Avenue. Although your pipeline schedule at this location may need to be reprioritized. Please include the Senior Civil Engineer, [redacted] for further communication. — PM-4

717 Market Street, Suite 400 San Francisco, CA 94103 650-373-1200
www.panoramaenv.com

Ed and Susanne Taylor

- Regarding the basins, the current basins shoot water into the air - appearing to be several feet high. It can currently be seen from our house on Amend Road and we are wondering how it will work in future.

PM-5

FC District

From: Michael Burger [redacted]
Sent: Wednesday, November 13, 2024 1:55 PM
To: sowtp.improvements [redacted]
Cc: Michelle Cordis [redacted]
Subject: RE: Sobrante Water Treatment Plant Reliability Improvements Project DEIR

You don't often get email from [redacted] Learn why this is important

Hello Mr. Park,

The Contra Costa County Flood Control and Water Conservation District (FC District) has reviewed the Draft Environmental Impact Report (DEIR) for the Sobrante Water Treatment Plant (SOWTP) Reliability Improvements Project located in the in the Communities of El Sobrante and Rollingwood (County) and the Cities of Richmond and San Pablo (Cities) (APNs 433-170-019, 433-170-038, 433-170-058).

We submit the following comments:

1. In the Hydrology Section, please identify and show all existing watercourses, tributaries, and man-made drainage facilities within the project site, and that could be impacted by this project. The discussion should include an analysis of the capacity of the existing watercourses. — FC District-1

2. The Hydrology Section should quantify the amount of runoff that would be generated by the project and discuss how the runoff entering and originating from the site would be distributed between the natural watercourses, the detention basin, and the man-made drainage facilities. — FC District-2

3. If improvements or work within the natural watercourses are proposed, the DEIR should discuss the scope of improvements.

FC District-3

4. We recommend that the DEIR address the design and construction of storm drain facilities to adequately collect and convey stormwater entering or originating within the development to the nearest adequate man-made drainage facility or natural watercourse, without diversion of the watershed, per Title 9 of the County Ordinance Code.

FC District-4

5. The DEIR should discuss the adverse impacts of the runoff from the project site to the existing drainage facilities, and drainage problems in the downstream areas, including those areas outside of the project site.

FC District-5

6. The Hydrology Section of the DEIR should include a study that uses Contra Costa County's hydrology method (HYDRO6). The existing and planned regional drainage facilities that are affected by development within the project area have been designed using HYDRO6, which is the only method the District will accept. Other commonly accepted hydrology methods were developed using runoff patterns of other regions that do not accurately model the Pacific Coast storm patterns experienced in Contra Costa County. The runoff results of other methods have proven to be significantly less than field observations of local storms made by the District and the Army Corps of Engineers.

FC District-6

7. The applicant should be required to submit hydrology and hydraulic calculations to the Engineering Services Division of the Public Works Department that prove the adequacy of the in-tract drainage system and the downstream drainage system. We defer review of the local drainage to Engineering Services.

FC District-7

8. The applicant should be required to comply with the current National Pollutant Discharge Elimination System (NPDES) requirements under the County and Cities' Stormwater Management and Discharge Control Ordinances and the C.3 Guidebook. We support the State's goal of providing best management practices to achieve the permanent reduction or elimination of stormwater pollutants and downstream erosion from new development.

FC District-8

9. The DEIR should include a discussion of the basin design information, (i.e., capacity, sizes of inlet and outlet structures, routing, etc.) A discussion of how maintenance of these facilities would be performed should also be included. We recommend that this developer be required to prepare or provide an Operations and Maintenance Manual for the proposed stormwater retention basin to be submitted to the Cities/County for review.

FC District-9

10. The FC District does not recommend the use of bioretention areas (C.3 facilities) sized to meet Contra Costa Clean Water Program C.3 requirements for mitigating peak flows. These C.3 Facilities have not been proven to perform as peak flow mitigation measures under design storm flow conditions for the 10-year storm and above. They do not account for the saturated condition of soils that could precede a 10-year design storm. They have not been in use long enough to provide operational experience that they will continue to perform as designed and be maintained properly. C.3 facilities that are proposed to be used to mitigate peak flows should be analyzed in a way that ignores the above surface storage volume required by the C.3 facilities sizing criteria. Further, we recommend that C.3 facilities be analyzed using a hydrograph produced by or accepted by the FC District.

FC District-10

11. The DEIR should address the impacts of this project's runoff due to the increase in duration (length of time) of flows and the effect on creeks and channels downstream of the project. Whereas detention basins are capable of mitigating peak flows to pre-project levels, they increase the duration (length of time) of flows in the downstream watercourses, which saturate the channel banks and increase the potential for stream and channel erosion.

FC District-11

12. We recommend that the DEIR request the appropriate environmental regulatory agencies such the State Department of Fish and Game and the State Regional Water Quality Control Board to explore the permits, special conditions, and mitigation that may be necessary for development of the area.

FC District-12

13. This project is located within Drainage Area 73 (DA 73), for which a drainage fee is due in accordance with Flood Control Ordinance Number 88-68. By ordinance, all building permits or subdivision maps filed in this area are subject to the provisions of the drainage fee ordinance. Effective 10/22/1988, the current fee in this drainage area is $0.10 per square foot of newly created impervious surface.

FC District-13

To accurately calculate DA 73 fees, the DEIR should include a map and discussion with calculations for the total area of all proposed impervious surfaces.

This fee is not related to the issuance of a Drainage Permit in accordance with County Ordinance 1010 and, consequently, is not covered by Contra Costa County Ordinance Division 1010-2.010's prohibition of collection of fees for municipalities or public districts.

The drainage area fee for this lot should be collected prior to issuing a building permit for this project.

14. The FC District is not the approving local agency for this project as defined by the Subdivision Map Act. As a special district, the FC District has an independent authority to collect drainage fees that is not restricted by the Subdivision Map Act. The FC District regularly adjusts its drainage fees to reflect increasing construction costs. The drainage fee rate does not vest at the time of tentative map approval. The drainage fees due and payable will be based on the fee in effect at the time of fee collection.

FC District-14

15. This project lies within the San Pablo Creek Watershed. We recommend the applicant construct creek capacity improvements as called for in the "San Pablo Creek Watershed Study," as directed by the Public Works Department, Flood Control Division; or upon written request by the developer, the applicant should contribute $0.25 per square foot of impervious surface area to the San Pablo Creek Watershed Mitigation Fund. The Mitigation Fund is used for creek capacity improvements within the San Pablo Creek Watershed. These fees are in addition to DA 73 fees.

FC District-15

To accurately calculate the San Pablo Creek Watershed Mitigation Fund fees, the DEIR should include a map and discussion with calculations for the total area of all proposed impervious surfaces.

This fee is not related to the issuance of a Drainage Permit in accordance with County Ordinance 1010 and, consequently, is not covered by Contra Costa County Ordinance Division 1010-2.010's prohibition of collection of fees for municipalities or public districts.

We appreciate the opportunity to comment on the SOWTP Reliability Project DEIR and welcome continued coordination. If you should have any questions, please contact me by phone at [redacted] or by email at [redacted]

CCCPWD

Contra Costa County
Public Works
Department

Warren Lai, Director
Deputy Directors
Stephen Kowalewski, Chief
Allison Knapp
Sarah Price
Carrie Ricci
Joe Yee

November 25, 2024

Jae Park
East Bay Municipal Utility District
MS 701
375 Eleventh Street
Oakland, CA 94607-4240

Re: Sobrante Water Treatment Plant Reliability Improvement Project
Draft Environmental Impact Report (DEIR) Comments

Dear Mr. Park:

In response to your Notice of Availability dated September 12, 2024, herein are Contra Costa County Public Works Department's comments related to the subject document. Note the Contra Costa County Flood Control District also functions as the Flood Control Division of the Public Works Department and is forwarding comments under a separate cover. For the most part, their remarks parallel ours relative to drainage and stormwater management issues. The comments herein focus on other matters outside of or expanding on those topics.

CCCPWD - 1

1. Future reconstruction of the aqueduct/pipeline will cross through FEMA designated Special Flood Hazard Areas (SFHA). The DEIR should note that construction activities within the SFHA require a Floodplain Permit from the Public Works Department. All activities and improvements within the SFHA are subject to compliance with the County's Floodplain Management Ordinance and applicable FEMA standards.

CCCPWD - 2

2. Construction traffic and activities, especially with regards to the aqueduct/pipeline improvements, will require road closures which must be approved by the Board of Supervisors. The potential need for these closures is recognized in the DEIR , but the advance planning and notification is not stressed. Board actions must be agendized at least three weeks prior to the hearing. Additionally, the traffic control and detour plans require internal review prior to preparing agenda items. EBMUD or their contractor should apply for road closure at least six weeks in advance of the planned activities to allow for internal review, Board action and public notice.

CCCPWD - 3

3. The street repair/reconstruction related to the aqueduct/pipeline improvements will be significant enough to warrant C3 compliance under the County's current permit with the Regional Water Quality Control Board. Treatment measures will need to be identified as well as ownership and maintenance responsibility.

"Accredited by the American Public Works Association"
255 Glacier Drive Martinez, CA 94553-4825
TEL: (925) 313-2000 • FAX: (925) 313-2333
www.cccpublicworks.org

4. The mitigation monitoring plan generally cites EBMUD as the party responsible for reviewing and approving the various mitigation measures but does not include or reference the associated reviewing or permitting agencies. Examples include an overview of drainage system to verify the design meets required standards; adequacy of traffic control and detour plans; the need and adequacy of preconstruction pavement surveys, etc. The reviewing and permitting entities should be identified in Appendix C.

CCCPWD - 4

If you have questions, please contact me at [redacted]

Sincerely,

Larry Gossett, PE
Senior Engineer/Floodplain Manager
Engineering Services Division

LG:ss
G:\engsvc\Land Dev\Misc\EBMUD Sobrante Water Treatment Plant\DEIR Comments.docx
C: J. LaRocque, Engineering Services

10 Draft EIR Revisions

10.1 Introduction

This chapter presents revisions that have been made to the Draft EIR text. These revisions provide corrections, additions, or clarifications as requested by specific comments. The text revisions are organized by chapter. The underlined text represents language that has been added to the Draft EIR. Revisions were made in response to public comments as well as to address changes to the Project construction schedule.

10.2 Revisions

Section 1.1.1 Overview Revisions

The text on page 1-2 is revised as follows:

> Phase 2 of the Project would also include approximately 22,000 feet of transmission pipeline called the Central North Aqueduct pipeline in public rights-of-way and a private easement adjacent to San Pablo Creek.

Section 2.6.2 Construction Activities in Public Right-of-Way Revisions

The text on page 2-37 is revised as indicated below for clarification.

> A minimum construction corridor width of 35 feet would be needed to accommodate pipeline storage and allow trucks and equipment access along the trench. Other construction activities, such as installation of pipeline connections, could require larger excavations. Open trench construction in public roadways usually would necessitate the closure of at least one travel lane, depending on roadway width and the size of the pipeline and trench. Complete road closures to through traffic are anticipated for La Honda Road, D Avila Way, Glenlock Street, Rollingwood Drive, El Portal Drive from I-80 to Glenlock Street, and Road 20 from San Pablo Avenue to 21st Street where the entire roadway width would be required for construction of the pipeline. Approximately 40 to 120 feet of pipeline would be constructed and installed per day. The open trench construction process is illustrated on Figure 2-18. Disruption of water service is not expected during construction, except for a short period (i.e., approximately one day) when the new pipeline is tied into the existing system.

Section 2.6.3 Construction Equipment and Trips Revisions

Table 2-8 is revised as indicated below to reflect the change in projected construction schedule for Phase 1 to begin in 2039 and Phase 2 to begin in 2054.

Table 2-1 Worker Vehicle Trips and Truck Trips

Year	Maximum Daily Worker Vehicle Trips[a]	Average Daily Worker Vehicle Trips	Maximum Daily Truck Trips	Average Daily Truck Trips
Phase 1				
~~2030~~ 2039[b]	20	10	39	13
~~2031~~ 2040	25	16	116	20
~~2032~~ 2041	26	18	91	21
~~2033~~ 2042	25	18	139	42
~~2034~~2043[c]	23	13	21	11
Phase 2[d]				
Phase 2 SOWTP				
~~2045~~ 2054	11	6	94	6
~~2046~~ 2055	24	16	69	16
~~2047~~ 2056	27	17	103	14
~~2048~~ 2057[e]	24	15	70	22
Phase 2 Central North Aqueduct[e]				
~~2046~~ 2055	52	52	184	151
~~2047~~ 2056	52	52	184	151

Notes:

[a] One trip equals drive in plus drive out.

[b] Construction in ~~2030~~ 2039 would start in July, for a total of 6 months.

[c] Construction in ~~2034~~ 2043 would end in October, for a total of 10 months.

[d] Construction of Phase 2 would begin after ~~2045~~ 2054; For truck and worker trip estimates, Phase 2 construction was conservatively assumed to start in ~~2045~~ 2054 as a placeholder only since the start date of Phase 2 has not yet been determined. Construction in ~~2045~~ 2054 would start in January, for a total of 12 months.

[e] Construction in ~~2048~~ 2057 would end in September, for a total of 9 months.

[f] Assumes concurrent construction by two crews.

Source: (EBMUD, 2022e)

Section 2.6.4 Construction Schedule Revisions

The text on page 2-45 is revised as indicated below to reflect changes in the projected schedule for construction.

As shown in Table 2-8, Phase 1 construction is scheduled to begin in ~~2030~~ 2039 and be completed in ~~2034~~ 2043. Phase 2 construction is expected to begin in ~~2045~~ 2054 at the earliest but may be delayed or may not occur if water demands are not realized.

Section 3.1 Impact Analysis Revisions

The text on page 3.1-43 is revised as indicated below to reflect changes in the projected schedule for construction.

Phase 1 construction would last approximately 5 years and is estimated to commence in ~~2030~~ 2039 and end in ~~2034~~ 2043.

Section 3.2.3 Impact Analysis Revisions

The text on page 3.2-25 is revised as indicated below to reflect changes in the projected schedule for construction.

Project construction activities would occur in two phases. At the SOWTP, Phase 1 construction is scheduled to begin in ~~2030~~ 2039 and be completed in ~~2034~~ 2043, followed by Phase 2 construction from ~~2045~~ 2054 to ~~2048~~ 2057.

The text on page 3.2-29 is revised as indicated below to reflect changes in the projected schedule for construction.

Phase 1 construction activities are anticipated to begin in ~~2030~~ 2039 and be completed in ~~2034~~ 2043. Phase 2 construction would start in ~~2045~~ 2054 at the soonest and take approximately four years.

The text on page 3.2-30 in Table 3.2-5 is revised as follows to reflect changes in the projected schedule for construction.

Table 3.2-2: Estimated Maximum Average Daily Construction Emissions by Phase (pounds per day)

Condition/Year	ROG	NO_X	PM_{10}	$PM_{2.5}$	CO
Phase 1 Uncontrolled	2.47	20.9	1.00	0.44	20.1
Phase 1 Controlled[a]	2.48	19.7	0.97	0.41	30.9[b]
Phase 2 Uncontrolled	5.03	49.1	2.23	1.09	41.5
Phase 2 Controlled[a]	4.10	47.2	2.23	1.08	67.6[b]
Significance Threshold	54	54	82	54	---
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**

Notes:

[a] Amounts are shown in pounds per day.

[b] Controlled emissions assumes implementation of EBMUD Standard Construction Specification 01 35 44, Environmental Requirements.

[c] The control technology and combustion efficiency are focused on reducing NOx emissions and PM emissions because these are tied to health impacts. However, the NOx and PM emission reductions are at the expense of CO increases and minor ROG increases (pollutants for which the Bay Area is in attainment).

[d] Construction emissions calculated were estimated with construction of Phase 1 starting in 2026 and construction of Phase 2 starting in 2035. The current project schedule estimates Phase 1 construction would start in ~~2030~~ 2039 and Phase 2 construction would start in ~~2045~~ 2054 at the soonest. Because equipment and vehicle operational efficiencies increase overtime, the earlier start date for construction conservatively presents a worst-case estimate of construction emissions and actual emissions would be less due to availability of higher efficiency vehicles and equipment in the future.

Source: (RCH Group, 2022).

The text on page 3.2-26 is revised as indicated below to provide additional clarification in response to public comments:

> The use of chlorine at the chlorine contact basin could result in generation of some odor. Chlorine is already in use at the SOWTP and would not be a new source of odors. The increased use of chlorine at the SOWTP would be expected to be minimal and proportional to the increase in water treated at the SOWTP. The water in open basins at the SOWTP would not be a source of odors. EBMUD's Walnut Creek Water Treatment Plant, located in Walnut Creek, uses spent filter backwash water (SFBW) and filter-to-waste (FTW) equalization basins like those proposed in the Project, and no odor complaints have been filed at the Walnut Creek Water Treatment Plant. The Project also would include handling solids that would be removed during the treatment process. As discussed in the Project Description, solids would be contained in covered bins and would be removed from the site. Because the proposed increase in chlorine use would be minimal, and because all solids would be contained in bins and would not be stored in the open air, the impact from odors would be less than significant.

Section 3.2.4 Cumulative Impact Revisions

The text on page 3.2-36 is revised as indicated below to reflect changes in the projected schedule for construction, which does not overlap with any projects identified in the cumulative project table in Section 3.0.

> Projects whose construction could overlap with the Project~~, including the Central Pressure Zone Pipeline, Wildcat Pumping Plant, North Reservoir Replacement, and Pearl Pumping Plant Rehabilitation~~ would contribute emissions to the region's adverse air quality on a cumulative basis and would be expected to include mitigation to reduce the impacts to not exceed the BAAQMD's construction-related criteria air pollutant significance thresholds.

Section 3.3.4 Impact Analysis Revisions

The text on page 3.3-26 is revised as indicated below to reflect changes in the projected schedule for construction.

> Because construction would not begin until ~~2030~~ 2039 for Phase 1 or ~~2045~~ 2054 or later for Phase 2, special-status plant species that were absent during the focused surveys are considered in the impact analysis, as the potential exists for future occurrence.

Section 3.3.5 Impact Analysis and Mitigation Measures Revisions

The text on page 3.3-27 is revised as indicated below to reflect changes in the projected schedule for construction.

> The Project is not expected to affect any population of special-status plants because of their absence during the focused surveys in 2021; however, construction is not scheduled to start until ~~2030~~ 2039 for Phase 1 or ~~2045~~ 2054 for Phase 2, at the soonest. Although unlikely, the possibility exists that a special-status plant could establish in the area before Phase 1 or Phase 2 construction.

Section 3.7.3 Impact Analysis Revisions

The text on page 3.7-18 in Table 3.7-2 is revised as follows to reflect changes in the projected schedule for construction.

Table 3.7-3 Estimated Annual Greenhouse Gas Emissions from Construction

Construction Year	Uncontrolled CO_2e	Controlled CO_2e[a]
Phase 1		
Year 1[b]	217	217
Year 2	697	691
Year 3	746	728
Year 4	1,421	1,407
Year 5	282	279
Phase 2		
Year 1	2,699	2,691
Year 2	1,586	1,576
Year 3	492	475
Year 4	489	488
Total	**8,630**	**8,551**

Notes:

[a] Controlled emissions would include use of renewable energy and electrical vehicles where feasible, per EBMUD's Standard Construction Specification 01 35 44, Environmental Requirements, Section 3.5.

[b] Construction emissions calculated were estimated with construction of Phase 1 starting in 2026 and construction of Phase 2 starting in 2035. The current project schedule estimates Phase 1 construction would start in ~~2030~~ 2039 and Phase 2 construction would start in ~~2045~~ 2054 at the soonest. Because equipment and vehicle operational efficiencies increase overtime, the earlier start date for construction conservatively presents a worst-case estimate of construction GHG emissions and actual GHG emissions would be less due to availability of higher efficiency vehicles and equipment in the future.

Source: (RCH Group, 2022)

Section 2.10 Permits and Approvals Revisions

Two additional permits are listed in Table 10-1 as listed below.

Table 10-4 Potentially Required Permits

Agency/stakeholder	Type of jurisdiction	Type of approval
U.S. Army Corps of Engineers	Federal	Clean Water Act Section 404 permit required for project-related fill within waters of the U.S., including wetlands
U.S. Fish and Wildlife Service	Federal	Section 7 consultation required for potential project effects on threatened, endangered, or candidate plant and wildlife species
State Historic Preservation Office	State	Section 106 consultation required for potential project effects on historic properties
California Department of Fish and Wildlife	State	Streambed Alteration Agreement required for potential project discharge of materials to any river, stream, or lake, including any activity that may substantially affect fish and wildlife resources
State Water Resources Control Board	State	National Pollution Discharge Elimination System (NPDES) Construction General Permit for construction disturbance greater than 1 acre
San Francisco Bay Regional Water Quality Control Board	State	Clean Water Act Section 401 Water Quality Certification for potential project discharge of fill within waters of the U.S. and authorization for discharges to waters of the state, including wetlands, and a General Low-Threat Discharge Permit for dewatering discharge
Bay Area Air Quality Management District	State	Authority to Construct and Permit to Operate an ozone system
California Division of Drinking Water	State	Domestic Water Supply Permit
Contra Costa County	County	Encroachment Permit
City of Richmond	City	Encroachment Permit
City of San Pablo	City	Encroachment Permit

Agency/stakeholder	Type of jurisdiction	Type of approval
California Department of Transportation	State	Caltrans Transportation Permit
California Department of Transportation	State	Caltrans Encroachment Permit

11 EBMUD Practices and Procedures Monitoring and Reporting Plan, Mitigation Monitoring and Reporting Plan

Table 5 EBMUD Practices and Procedures Monitoring and Reporting Plan

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
Aesthetics						
Impact AES-2 Substantially degrade damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	**EBMUD Standard Construction Specification 01 32 36, Video Monitoring and Documentation** Section 1.2, Site Survey Audio-Video Recording Requirements • The Contractor shall employ a qualified videographer, experienced in taking properly documented and annotated video to perform the Pre-Construction Site Survey, which shall be completed within 20 days after the issuance of the Notice to Proceed. The Pre-Construction Site Survey shall be completed and accepted prior to EBMUD issuance of the Notice to Commence Field Work. • Prior to commencement of the Pre-Construction Site Survey recording, the Contractor shall notify EBMUD in writing within 48 hours of the recording. EBMUD will provide a designated representative to accompany and observe audio-video recording operations. Audio-video recording completed without an EBMUD Representative present will be unacceptable unless specifically authorized in writing and in advance by EBMUD. • Provide a copy of the Pre-Construction Site Survey to EBMUD for review and comment. The Survey shall include all audio-video recordings, photography, annotations and all documentation. If EBMUD determines that critical areas are missing from the survey, the Contractor shall provide additional recording and documentation of the requested area and locations. • Post-Construction Site Survey: The Contractor shall perform a Post-Construction Site Survey of the same areas recorded in the Pre-Construction Site Survey following the same path/route of the Pre-Construction Site survey. EBMUD will review post-construction survey findings with the Contractor and develop a complete listing of project site restoration requirements to be accomplished by the Contractor. Prior to commencement of Post-Construction Site Survey recording, the Contractor shall notify EBMUD in writing within 48-hours of the recording. EBMUD will provide a designated representative to accompany and observe audio-video recording operations. Audio-video recording completed without an EBMUD Representative present will be unacceptable unless specifically authorized in writing and in advance by EBMUD. • The Contractor shall be responsible for repairing any damage or defects not documented as existing prior to construction.	• Phase 2	• Central North Aqueduct pipeline	• Contractor is responsible for pre- and post-construction surveys and repairing damage.	• EBMUD Designated Videographer is responsible for video recording. • EBMUD is responsible for verifying repairs.	• Prior to construction • Post-construction
Impact AES-3 In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly	**EBMUD Standard Construction Specification 01 32 36, Video Monitoring and Documentation** *Section 1.1, Summary*	• Phase 1 • Phase 2	• Amend Road adjacent to site and infrastructure within temporary	• Contractor is responsible for documentation and restoring conditions to meet specification.	• EBMUD Designated Videographer (to video).	• Prior to construction • Post-construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
accessible vantage point) or in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.	• Audio-video documentation utilizing digital recording of surface features, supplemented by photography, which may be taken along the entire length of the project and may include work and storage areas, adjacent properties, and/or intersecting roadways. – Prior to audio-video recording of the project, all areas to be inventoried shall be investigated visually with notations made of items not readily visible by audio-video recording or supplemental photographic methods. *Section 1.2, Site Survey Audio-Video Recording Requirements (Details listed under AES-1).* *Section 3.1(C), Views and Narratives Required* • Such coverage may include, but not be limited to, existing driveways, sidewalks, pavement, curbs, gutters, ditches, berms, roadways, landscaping, trees, culverts, headwalls, and retaining walls, fencing, gates, handrails, signage, manholes, vaults, utility boxes, lighting, traffic signals and controls, loop detectors, landscaping, irrigation controllers, street furniture, buildings, equipment, appurtenances, structures, and other existing features etc. located within the work zone.		impact areas at SOWTP	• Contractor is responsible for repairs.	• EBMUD is responsible for verifying implementation and repairs.	
Impact AES-3 In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.1(B), Site Activities* • Following completion of Work, remove ditches, dikes, or other ground alterations made by the Contractor. The ground surfaces shall be returned to their former condition, or as near as practicable, in EBMUD's opinion. • Prevent visible dust emissions from leaving the work areas.	• Phase 1 • Phase 2	• SOWTP site temporary disturbance areas (not subject to grading)	• Contractor is responsible for restoring temporary work areas and preventing emissions.	• Contractor is responsible for monitoring dust emissions. • EBMUD responsible for verifying implementation.	• Construction • Post-Construction
Impact AES-3 In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.	**EBMUD Standard Construction Specification 01 35 45, Biological, Cultural, and Paleontological Resource Requirements** *Section 3.2(B), Tree Protection* • Locations of trees to be removed and protected are shown in the construction drawings. Pruning and trimming shall be completed by the Contractor and approved by EBMUD. Pruning shall adhere to the Tree Pruning Guidelines of the International Society of Arboriculture. • Erect exclusion fencing five feet outside of the drip lines of trees to be protected. Erect and maintain a temporary minimum 3-foot high orange plastic mesh exclusion fence at the locations as shown in the drawings. The fence posts shall be six-foot minimum length steel shapes, installed at 10-feet minimum on center, and be driven into the ground. The Contractor shall be prohibited from entering or disturbing the protected area within the fence except as directed by EBMUD. Exclusion fencing shall remain in place until construction is completed and EBMUD approves its removal. • No grading, construction, demolition, trenching for irrigation, planting or other work, except as specified herein, shall occur within the tree protection zone established by the exclusion fencing installed shown in the drawings. In addition, no excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the tree protection zone.	• Phase 1 • Phase 2	• SOWTP site	• Contractor is responsible for erecting protection fencing around trees to be protected and protecting trees as required in the specification. • EBMUD is responsible for hiring a certified arborist to review tree roots exposed during construction and any injured tree. • Contractor is responsible for replacing injured trees if necessary.	• EBMUD is responsible for verifying implementation.	• Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	• In areas that are within the tree drip line and outside the tree protection zone that are to be traveled over by vehicles and equipment, the areas shall be covered with a protective mat composed of a 12-inch thickness of wood chips or gravel and covered by a minimum ¾-inch-thick steel traffic plate. The protective mat shall remain in place until construction is completed and EBMUD approves its removal. • Tree roots exposed during trench excavation shall be pruned cleanly at the edge of the excavation and treated to the satisfaction of the Certified Arborist. • Any tree injured during construction shall be evaluated as soon as possible by the Certified Arborist, and replaced as deemed necessary by the Certified Arborist.					
Impact AES-3 In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.	**EBMUD Standard Construction Specification 01 74 05, Cleaning** *Section 3.2(B), Cleaning During Construction* • Dispose of all refuse off EBMUD property as often as necessary so that at no time shall there be any unsightly or unsafe accumulation of rubbish. *Section 3.3(K), Final Cleaning* • Remove from EBMUD property all temporary structures and all material, equipment, and appurtenances not required as a part of, or appurtenant to, the completed work.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for cleaning site of trash and removing temporary structures at completion of work.	• EBMUD is responsible for verifying implementation.	• Construction • Post-Construction • Demolition
Impact AES-4: The potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 3.9(A), Lighting Used During Nighttime Work* • Ensure that temporary stationary lighting used during nighttime construction is only used when needed. All lighting used for nighttime construction shall be designed, installed, and operated to minimize glare that affects traffic near the work zone or that causes annoyance or discomfort for residences near the work zone. Lighting fixtures shall be shielded, located, and aimed to provide the required level of illumination and uniformity in the work zone without the creation of unnecessary glare.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for using light during nighttime construction only when needed and that lighting meets the standard.	• EBMUD is responsible for verifying implementation.	• During Nighttime Construction (after dusk or before dawn)
Air Quality						
Impact AQ-1: Conflict with or obstruct implementation of the applicable air quality plan. **Impact AQ-3:** Expose sensitive receptors to substantial pollutant concentrations.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.4(F), Dust Control and Monitoring Plan* • Submit a plan detailing the means and methods for controlling and monitoring dust generated by demolition and other work on the site for EBMUD's acceptance prior to any work at the jobsite. – Identify methods to comply with all applicable regulations including but not limited to the Bay Area Air Quality Management District (BAAQMD) visible emissions regulation and Public Nuisance Rule. – Outline practices for preventing dust emissions and procedures to be used during operations and maintenance activities. – Include measures for the control of paint overspray and abrasive blasting emissions, including, but not limited to containment, ventilation systems and monitoring for damage and leaks.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for implementing all requirements in the specification. • EBMUD is responsible for addressing any dust complaints.	• EBMUD is responsible for verifying implementation.	• Construction • Demolition

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	– Describe equipment and methods used to monitor compliance with the plan. *Section 3.5, Air Quality Control* • Implement all necessary air pollutant construction measures per the BAAQMD "Basic Construction Mitigation Measures" (BAAQMD CEQA Guidelines May 2017), including, but not limited to the following: – All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. – All haul trucks transporting soil, sand, or other loose material off-site shall be covered. – All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. – All vehicle speeds on unpaved roads shall be limited to 15 mph. – All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. – Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. – All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. – The contractor shall post an EBMUD-furnished, publicly visible sign with EBMUD and BAAQMD contact information regarding dust complaints. • Implement all necessary air pollutant construction measures per the BAAQMD "Additional Construction Mitigation Measures" (BAAQMD CEQA Guidelines May 2017) including but not limited to the following: – All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe. – All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph. – Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity. – Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. – The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time. – All trucks and equipment, including their tires, shall be washed off prior to leaving the site.					

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	– Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel. – Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent. – Minimizing the idling time of diesel-powered construction equipment to two minutes. – The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available. – Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings). – Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM. – Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines. • Implement all necessary EBMUD air pollutant construction measures, including but not limited to the following: – Gravel or apply non-toxic soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites. Submit specifications for any dust palliatives applied to unpaved roads to EBMUD. – Water and/or cover soil stockpiles daily. – All transitions from soil to a paved road shall have best management practices applied to prevent drag out of soil. – Water used for dust control shall not run off the job site and cause erosion or other issues. – Use of recycled water for dust control is encouraged. – Use line power instead of diesel generators at all construction sites where line power is available. – Temporary sources of air emissions (such as portable pumps, compressors, generators, etc.) shall be electrically powered unless the use of such equipment is not practical, feasible, or available. – All portable engines and equipment units used as part of construction shall be properly registered with the California Air Resources Board or otherwise permitted by the appropriate local air district, as required. – Minimize the use of diesel generators where possible. – Follow applicable regulations for fuel, fuel additives, and emission standards for stationary, diesel-fueled engines. – Locate generators at least 100 feet away from adjacent homes, schools, and parks.					

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	– Perform regular low-emission tune-ups on all construction equipment, particularly haul trucks and earthwork equipment. – On road and off-road vehicle tire pressures shall be maintained to manufacturer specifications. Tires shall be checked and re-inflated at regular intervals. – Demolition debris shall be recycled for reuse to the extent feasible. See the Construction and Demolition Waste Disposal Plan paragraphs above for requirements for wood treated with preservatives. *Section 3.6, Dust Monitoring During Demolition and Construction* • Provide air monitoring along the perimeter of the job site. A minimum of 4 stations, one on each side of the EBMUD property, shall be established, capable of continuous measurement of total particulate concentration when any dust generating activity is occurring. • Conduct real-time air monitoring at appropriate locations onsite based on wind direction, type of construction activity, and sensitive receptors to ensure dust control measures are effective. • All environmental and personal air sampling equipment shall be in conformance with the Association of Industrial Hygiene and National Institute of Safety and Health (NIOSH) standards. – All analysis shall be completed by an ELAP certified laboratory for the specific parameters of interest. – The Contractor shall provide to EBMUD, within 72 hours of sampling, all test results. • The dust control system shall comply with the requirements of this section and any applicable laws and regulations. Specific limitations that shall be met include the following: – Ringelmann No. 1 Limitation: Contractor shall not emit from any source for a period or periods aggregating more than three minutes in any hour, a visible emission which is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree. – Opacity Limitation: Contractor shall not emit from any source for a period or periods aggregating more than three minutes in an hour an emission equal to or greater than 20% opacity as perceived by an opacity sensing device, where such device is required by BAAQMD regulations.					
Impact AQ-1: Conflict with or obstruct implementation of the applicable air quality plan.	**EBMUD Standard Construction Specification 02 82 13, Asbestos Control Activities** *Section 1.1, Compliance and Intent* • Furnish all labor, materials, facilities, equipment, services, employee training and testing, permits, and agreements necessary to perform the asbestos removal in accordance with these specifications and with the latest regulations from the U.S. Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the Bay Area Air Quality Management District (BAAQMD), the Cal/EPA Department of Toxic Substance Control, the California Department of Occupational Safety and Health (DOSH), and other federal, state, county, and local agencies. Whenever there is a conflict or overlap of the above references, the most stringent provision is applicable.	• Phase 1	• SOWTP site demolition area at reclaim facilities	• Contractor is responsible for providing proper remediation of asbestos during demolition, submitting a detailed plan documenting the quantities of asbestos removed, monitoring air quality during asbestos removal, and proper disposal of asbestos containing materials.	• EBMUD is responsible for verifying implementation.	• Demolition

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	• During demolition procedures, the Contractor shall protect against contamination of soils, water, adjacent residences and properties, and the airborne release of hazardous materials and dusts. The Contractor will incur the costs associated with the implementation of controls and, if necessary, remediation. The Contractor shall be responsible for all necessary cleanup of contaminated areas/properties to pre-work condition and for all associated costs. It is the Contractor's responsibility to confirm and document the quantities of asbestos material to be removed. • Asbestos materials uncovered during the demolition activities shall be disposed of in an approved manner complying with all applicable federal, state, and local regulations. Appropriate waste manifests shall be furnished to EBMUD as per Sections 01 35 24 – Project Safety Requirements, and 01 35 44 – Environmental Requirements. Materials are conveyed to the Contractor "as is," without any warranty, expressed or implied, including but not limited to, any warranty to marketability or fitness for a particular purpose, or any purpose. *Section 1.5, Submittals* • Project Safety and Health Plan: The Contractor shall provide a Project Safety and Health Plan prior to project initiation as specified in Section 01 35 24. • Submit a detailed plan of the procedures proposed for use in complying with the regulations included in this specification. The plan shall include the location and layout of decontamination areas, the sequencing of asbestos work, the interface of trades involved in the performance of work, disposal plan including location of approved disposal site, and a detailed description of the methods to be employed to control pollution. Expand upon the use of portable HEPA ventilation system, method of removal to prohibit visible emissions in work area, and packaging of removed asbestos debris. Include asbestos abatement in the Construction and Demolition Waste Disposal Plan, in accordance with Section 01 35 44. • Certificates of Compliance: Submit certification that equipment required to contain airborne asbestos fibers conform to ANSI Z9.2. *Section 1.6, Submittals (Job in Progress)* • Provide to EBMUD, within 72 hours of sampling, test results of the personal air sampling described in Article 3.2. • Provide to EBMUD, results of required air sampling established at property and project boundaries within 72 hours of sampling, and measures the contractor has taken to improve non-conforming outcomes based on the results. *Section 3.1, Initial Area Isolation* • Demarcate the demolition area and specific hazard zones where asbestos removal occurs. Post warning signs and labels as required by Cal-EPA, BAAQMD, Cal OSHA Section 1529, and additional signs and warnings as directed by EBMUD. • Ensure asbestos hazards remain on site for proper abatement and disposal procedures. Ensure worker activity (access and egress) does not cause asbestos hazards to leave the project boundaries. *Section 3.2, Work Activities*					

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	• General Procedures: Perform all asbestos related work and comply with the general safety and health provisions in conformance with Cal/OSHA Title 8 CCR Section 1529. For asbestos abatement work, use general work practices, work practices for encapsulation as specified in 34 CFR Part 231 Appendix C, applicable CAL OSHA requirements, and other appropriate work procedures approved by the Environmental Protection Agency (EPA). • Suppress air-borne particulates using a minimum of two misting units operated simultaneously from the following product series given below: – Monsoon Atomizing Misting System, Buffalo Turbine, www.buffaloturbine.com – Or equal as approved by EBMUD • Ensure air borne asbestos limits are not exceeded and are compliance with U.S. Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the Bay Area Air Quality Management District (BAAQMD), the Cal/EPA Department of Toxic Substance Control, the California Department of Occupational Safety and Health (DOSH), and other federal, state, county, and local agencies requirements for airborne emissions. • Monitoring: Monitoring of airborne concentrations of asbestos shall be in accordance with Title 8CCR section 1529, and BAAQMD requirements. – Baseline air monitoring shall be conducted prior to demolition work and prior to asbestos related work. Base air measurements shall be established at the property boundary in the east, west, north and south coordinates. – If monitoring shows airborne concentrations greater than regulatory asbestos control limits, stop all work, correct the conditions causing the excessive levels, and notify EBMUD immediately. – Conduct at a minimum one set of post-asbestos removal/demolition air monitoring established at the property boundary and in the same location of baseline monitoring in the east, west, north and south coordinates.					
Impact AQ-1: Conflict with or obstruct implementation of the applicable air quality plan.	**Procedure 600** • Designates a Public Affairs liaison to respond to construction-related issues, including noise. Contact information for the Public Affairs liaison (i.e., phone number, email address) and capital project site address will be provided via conspicuous signage at construction sites, on all advance notifications, and on the District project website. The Public Affairs liaison will coordinate with the construction project manager/engineer and any contractors to resolve any issues. • Notifies residents at least seven days (and preferably fourteen days) in advance of potentially disruptive construction activities (e.g., noise, traffic, parking); notifications will include the activities' geographical extent and estimated duration. The Public Affairs liaison will coordinate with the project manager/engineer and any contractors to provide advance notification via email, mailed notices, door-hangers, social media, or other means, as appropriate	• Phase 1 • Phase 2	• SOWTP Site • Central North Aqueduct pipeline	• EBMUD will designate a Public Affairs liaison who is responsible for responding to any public complaints during construction. • EBMUD will send notices to residents per the procedure.	• EBMUD is responsible for verifying all notices are properly provided.	• Construction
Biological Resources						

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS). **Impact BIO-4:** Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.1(B), Site Activities* • Protect storm drains and surface waters from impacts of project activity. • Store materials and wastes such as demolition material, soil, sand, asphalt, rubbish, paint, cement, concrete, or washings thereof, oil or petroleum products, or earthen materials in a manner to prevent it from being washed by rainfall or runoff outside the construction limits. • Reuse or dispose of excess material consistent with all applicable legal requirements and disposal facility permits. • Clean up all spills and immediately notify EBMUD in the event of a spill. • Equip stationary equipment such as motors, pumps, and generators with drip pans. • Divert or otherwise control surface water and waters flowing from existing projects, structures, or surrounding areas from coming onto the work and staging areas. The method of diversions or control be adequate to ensure the safety of stored materials and of personnel using these areas. • Following completion of Work, remove ditches, dikes, or other ground alterations made by the Contractor. The ground surfaces shall be returned to their former condition, or as near as practicable, in EBMUD's opinion. • Prevent visible dust emissions from leaving the work area. • Handle, store, apply, and dispose of any chemical or hazardous material used in the performance of the Work in a manner consistent with all applicable federal, state, and local laws and regulations.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for implementing the specification.	• EBMUD is responsible for verifying implementation.	• Construction • Post-construction
Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. **Impact BIO-4:** Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.4(A), Stormwater Management* • Construction General Permit – Submit the Notice of Intent, Storm Water Pollution Prevention Plan (SWPPP), and all other documents prepared for compliance with the General Construction Storm Water Permit (NPDES No. CAS000002) to EBMUD and upload them in the SWRCB's Storm Water Multi-Application & Report Tracking System (SMARTS). ▪ EBMUD will electronically acknowledge appropriate submittals in SMARTS after review. ▪ Contractor shall pay for all registration and annual fees under this permit/program. – Submit a Storm Water Management Plan that describes measures that shall be implemented to prevent the discharge of contaminated storm water runoff from the jobsite. Contaminants to be addressed include, but are not limited to soil, sediment, concrete residue, pH less than 6.5 or greater than 8.5, and any other contaminants known to exist at the jobsite location as described in Document 00 31 24 – Materials Assessment Information	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for preparing a SWPPP and uploading documents to SMARTS as well as preparing a Storm Water Management Plan that meets the requirements in the specification.	• EBMUD is responsible for reviewing and approving the plans.	• Prior to construction.
Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements**	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for preparing a Water Control and Disposal Plan that meets	• EBMUD is responsible for reviewing and approving the plan.	• Prior to construction. • Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. **Impact BIO-4:** Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	*Section 1.4(B), Water Control and Disposal Plan* • Plan shall describe measures for containment, handling, treatment (as necessary), and disposal of discharges such as groundwater (if encountered), runoff of water used for dust control, stockpile leachate, tank heel water, wash water, sawcut slurry, test water and construction water.			the requirements prior to any activity that necessitates the plan.		
Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. **Impact BIO-4:** Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.4(E), Spill Prevention and Response Plan* • Submit plan detailing the means and methods for preventing and controlling the spilling of known hazardous substances used on the jobsite or staging areas. – Include a list of the hazardous substances proposed for use or generated by the Contractor on site, including petroleum products. – Define measures that will be taken to prevent spills, monitor hazardous substances, and provide immediate response to spills. – Include provisions for notification of EBMUD or alternate contact and appropriate agencies including phone numbers; spill-related worker, public health, and safety issues; spill control, and spill cleanup. – Map showing hazardous materials project-related storage locations, names of the hazardous materials, and volumes/quantities. – Submit a Safety Data Sheet (SDS) for each hazardous substance proposed to be used prior to delivery of the material to the jobsite.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for preparing the Spill Prevention and Response Plan in compliance with the requirements in the specification prior to construction.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to construction • Construction
Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. **Impact BIO-4:** Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements,** *Section 3.2, Storm Water* • Conduct all inspections, sampling, reporting, and other required provisions in the SWPPP. • Upload all necessary documents to SMARTS to comply with the Construction General Permit. • Follow all provisions in local storm water permits and/or rules during construction. • Maintain sufficient best management practices or other controls as outlined in the storm water management plan to prevent impacts to storm water from pollution including soil, dust, stored hazardous materials, and construction activities.	Phase 1 Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for conducting inspections, following all stormwater permit requirements, and maintaining BMPs throughout construction.	• EBMUD is responsible for verifying compliance with the permits.	• Construction
Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	**EBMUD Standard Construction Specification 01 35 45, Biological, Cultural, and Paleontological Requirements** *Section 3.1, Training and Certification* • Before beginning construction, all Contractor personnel involved in ground-disturbing activities are required to attend an environmental training program provided by EBMUD, of up to one day for site supervisors, foremen and project managers and up to 30 minutes for non-supervisory Contractor personnel. Contractor general personnel will receive a worker environmental awareness training. • The Contractor is responsible for ensuring that all workers requiring environmental training are identified to EBMUD.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for attending training and maintaining all required documentation of training.	• EBMUD is responsible for verifying workers have received training.	• Prior to construction • Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	• Prior to accessing or performing construction work, the identified Contractor personnel shall: – Sign a wallet card provided by EBMUD verifying that the Contractor personnel has attended the appropriate level of training relative to their position; have understood the contents of the environmental training, and shall comply with all project environmental requirements. – Display an environmental training hard hat decal (provided by EBMUD after completion of the training) at all times.					
Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	**EBMUD Standard Construction Specification 01 35 45, Biological, Cultural, and Paleontological Requirements** *Section 3.2(C), Special-Status Plant Populations* • In addition to the training identified in Article 3.1 above, special-status plant population training will include a description of the sensitive plant species in the Project vicinity, including natural history and habitat, the general protection measures to be implemented to protect the species, and a delineation of the limits of the work areas. Identified Contractor personnel will be required to sign documents stating that they understand that take of special-status plant species and destruction or damage of their habitat would be a violation of state and federal law. • In the spring prior to construction, the Designated Biologist will conduct preconstruction sensitive plant surveys in all areas where ground disturbance will occur. Any observed sensitive plant species will be mapped and flagged for avoidance where feasible. EBMUD will notify CDFW upon discovery of any sensitive plant species during preconstruction surveys. • Sensitive plant species shall be avoided, or impacts shall be minimized by limiting ground disturbance where sensitive plants are present. • To minimize impacts on sensitive vegetation immediately adjacent to designated construction areas, EBMUD will designate areas containing sensitive vegetation as restricted areas.	• Phase 1 • Phase 2	• SOWTP site	• EBMUD is responsible for hiring a qualified botanist to conduct surveys in compliance with the requirements.	• EBMUD is responsible for notifying CDFW and enforcing restrictions on work areas the specification, if needed.	• Prior to construction
Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	**EBMUD Standard Construction Specification 01 35 45, Biological, Cultural, and Paleontological Requirements** *Section 3.2(E), Project-Specific Protected Wildlife Species* • California Red-legged Frog – Seven days prior to construction activities, the Project area will be surveyed for California red-legged frog by the Designated Biologist. Surveys of the Project area will be repeated if a lapse in construction activity of two weeks or greater occurs. – If the California red-legged frog is observed at the construction site at any time during construction, work shall cease immediately until the frog leaves the work area on its own or is relocated outside of the work area by the Designated Biologist. Any sightings and any incidental take will be reported to the USFWS and CDFW immediately by EBMUD.	• Phase 2	• Central North Aqueduct pipeline jack and bore pits	• EBMUD is responsible for hiring a biologist and performing surveys per the specification.	• EBMUD is responsible for verifying implementation.	• Prior to construction
Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	**EBMUD Standard Construction Specification 01 35 45, Biological, Cultural, and Paleontological Requirements** *Section 3.2(E), Project-Specific Protected Wildlife Species* • San Francisco dusky-footed woodrat	• Phase 1 • Phase 2	• SOWTP site	• EBMUD is responsible for hiring a biologist to perform surveys and measures per the specification.	• EBMUD is responsible for verifying implementation.	• Prior to construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	– A preconstruction survey will be performed by the Designated Biologist within seven days prior to the start of ground-disturbing activities to identify the locations of active San Francisco dusky-footed woodrat nests within the project boundary. Any woodrat nests detected will be mapped and flagged for avoidance by the Designated Biologist. – If active nests are determined to be present, avoidance measures will be implemented first. Because San Francisco dusky-footed woodrats are year-round residents, avoidance mitigation is limited to restricting project activities to avoid direct impacts to San Francisco dusky-footed woodrats and their active nests to the extent feasible. A minimum ten-foot buffer should be maintained between project construction activities and each nest to avoid disturbance. In some situations, a smaller buffer may be allowed if, in the opinion of the Designated Biologist, removing the nest would be a greater impact than that anticipated as a result of project activities. – If an unoccupied woodrat nest is found within the site and it cannot be avoided, the nest should be disassembled by hand by the Designated Biologist. The nest materials should be relocated off site outside of the wildlife exclusion fencing to prevent rebuilding. – If occupied nests are found within the site, and a litter of young is found or suspected, the nest shall be left alone for two to three weeks before a recheck to verify that young are capable of independent survival before proceeding with nest dismantling. Dismantling shall be done by hand, allowing any animals to escape either along existing woodrat trails or toward other available habitat. – EBMUD will notify CDFW of any nests, unoccupied or occupied, before they are dismantled.					
Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	**EBMUD Standard Construction Specification 01 35 45, Biological, Cultural, and Paleontological Requirements** *Section 3.2(D), Protection of Birds Protected Under the Migratory Bird Treaty Act and Roosting Bats* • Provide 30 days' written notice to EBMUD prior to ground disturbing activities, pruning, and trimming. – EBMUD will conduct biological reconnaissance in advance of construction and will conduct biologic monitoring during construction as necessary. • Protected Bird or Bat Species: – If protected species or suitable habitat for protected species is found during biological survey, identified Contractor personnel shall complete the training below in addition to the training identified in Article 3.1: ▪ Watch a video at an EBMUD-designated location, conducted by the Designated Biologist. The program will discuss all sensitive habitats and sensitive species that may occur within the project work limits, including the responsibilities of the Contractor's personnel, applicable mitigation measures, and notification requirements. • Birds Protected under the Migratory Bird Treaty Act (MBTA):	• Phase 1 • Phase 2	• SOWTP site	• Contractor is responsible for providing 30 days notice of ground disturbing activities, attending contractor training, and ceasing construction activities if needed per the specification. • EBMUD is responsible for providing contractor training, conducting pre-construction biological surveys, biological monitoring, and coordination with CDFW as required by the specification.	• EBMUD is responsible for verifying implementation.	• Prior to construction • Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	– It is unlawful to pursue, hunt, take, capture, or kill any migratory bird without a permit issued by the U.S. Department of the Interior. – If ground disturbing activities occur between February 1 and August 31, during the nesting season, EBMUD will conduct a preconstruction survey for nesting birds within 7 days prior to construction to ensure that no nest will be disturbed during construction. – If active nests of migratory bird species (listed in the MBTA) are found within the project site, or in areas subject to disturbance from construction activities, an avoidance buffer to avoid nest disturbance shall be constructed. The buffer size shall be determined by EBMUD in consultation with CDFW and is based on the nest location, topography, cover, and species' tolerance to disturbance. – If an avoidance buffer is not achievable, the Designated Biologist will monitor the nest(s) to document that no take of the nest (nest failure) has occurred. Active nests shall not be taken or destroyed under the MBTA and, for raptors, under the CDFW Code. If it is determined that construction activity is resulting in nest disturbance, work should cease immediately, and the Contractor shall notify EBMUD who will consult with the Designated Biologist and appropriate regulatory agencies. – If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further action is required. Trees and shrubs within the construction footprint that have been determined to be unoccupied by special-status birds or that are located outside the avoidance buffer for active nests may be removed. Nests initiated during construction (while significant disturbance from construction activities persist) may be presumed to be unaffected, and only a minimal buffer, determined by the Designated Biologist, would be necessary. • Roosting Bats: – If ground disturbing activities occur between March 1 and July 31, during the bat maternity period, EBMUD will conduct a preconstruction survey for roosting bats within two weeks prior to construction to ensure that no roosting bats will be disturbed during construction. – If roosting surveys indicate potential occupation by a special-status bat species, and/or identify a large day roosting population or maternity roost by any bat species within 200 feet of a construction work area, the Designated Biologist will conduct focused day- and/or night-emergence surveys, as appropriate. – If active maternity roosts or day roosts are found within the project site, or in areas subject to disturbance from construction activities, an avoidance buffers shall be constructed. The buffer size will be determined by EBMUD in consultation with CDFW. – If a non-breeding bat roost is found in a structure scheduled for modification or removal, the bats shall be safely evicted, under the direction of the Designated Biologist in consultation with CDFW to ensure that the bats are not injured. – If preconstruction surveys indicate that no roosting is present, or potential roosting habitat is unoccupied during the construction period, no further action is required. Trees and shrubs within the					

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	construction footprint that have been determined to be unoccupied by roosting bats, or that are located outside the avoidance buffer for active roosting sites may be removed. Roosting initiated during construction is presumed to be unaffected, and no buffer would be necessary.					
Impact BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. **Impact BIO-5**: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	**EBMUD Standard Construction Specification 01 35 45, Biological, Cultural, and Paleontological Requirements** *Section 3.2(B), Tree Protection* • Locations of trees to be removed and protected are shown in the construction drawings. Pruning and trimming shall be completed by the Contractor and approved by EBMUD. Pruning shall adhere to the Tree Pruning Guidelines of the International Society of Arboriculture. • Erect exclusion fencing five feet outside of the drip lines of trees to be protected prior to ground disturbing activities. Erect and maintain a temporary minimum 3-foot high orange plastic mesh exclusion fence at the locations as shown in the drawings prior to ground disturbing activities. The fence posts shall be six-foot minimum length steel shapes, installed at 10-feet minimum on center, and be driven into the ground. The Contractor shall be prohibited from entering or disturbing the protected area within the fence except as directed by EBMUD. Exclusion fencing shall remain in place until construction is completed and EBMUD approves its removal. • No grading, construction, demolition, trenching for irrigation, planting or other work, except as specified herein, shall occur within the tree protection zone established by the exclusion fencing installed shown in the drawings. In addition, no excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the tree protection zone. • In areas that are within the tree dripline and outside the tree protection zone that are to be traveled over by vehicles and equipment, the areas shall be covered with a protective mat composed of a 12-inch thickness of wood chips or gravel and covered by a minimum ¾-inch thick steel traffic plate. The protective mat shall remain in place until construction is completed and EBMUD approves its removal. • Tree roots exposed during trench excavation shall be pruned cleanly at the edge of the excavation and treated to the satisfaction of the Certified Arborist. • Any tree injured during construction shall be evaluated as soon as possible by a certified arborist provided by EBMUD, and replaced as deemed necessary by the Certified Arborist.	• Phase 1 • Phase 2	• SOWTP site	• Contractor is responsible for erecting protection fencing around trees to be protected and protecting trees as required per the specification. • EBMUD is responsible for hiring a certified arborist to review tree roots exposed during construction and any injured tree. • Contractor is responsible for replacing injured trees if necessary.	• EBMUD is responsible for verifying implementation.	• Construction
Cultural Resources						
Impact CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5. **Impact CUL-3:** Disturb any human remains, including those interred outside of formal cemeteries.	**EBMUD Standard Construction Specification 01 35 45, Biological, Cultural, and Paleontological Requirements** *Section 3.1, Training and Certification* • Before beginning construction, all Contractor personnel involved in ground-disturbing activities are required to attend an environmental training program provided by EBMUD, of up to one day for site supervisors, foremen and project managers and up to 30 minutes for	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for attending training and maintaining all required documentation of training.	• EBMUD is responsible for verifying workers have received training.	• Prior to construction • Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	non-supervisory Contractor personnel. Contractor general personnel will receive a worker environmental awareness training. • The Contractor is responsible for ensuring that all workers requiring environmental training are identified to EBMUD. • Prior to accessing or performing construction work, the identified Contractor personnel shall: – Sign a wallet card provided by EBMUD verifying that the Contractor personnel has attended the appropriate level of training relative to their position; have understood the contents of the environmental training, and shall comply with all project environmental requirements. – Display an environmental training hard hat decal (provided by EBMUD after completion of the training) at all times.					
Impact CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5. **Impact CUL-3:** Disturb any human remains, including those interred outside of formal cemeteries.	**EBMUD Standard Construction Specification 01 35 45, Biological, Cultural, and Paleontological Resource Requirements** *Section 3.3, Protection of Cultural and Paleontological Resources* • Confidentiality of Information on Cultural and Paleontological Resources – In conjunction with Contractor's performance under this contract, the Contractor may obtain information as to the location and/or nature of certain cultural or paleontological resources, including Native American artifacts and remains. This information may be provided to the Contractor by EBMUD or a third party, or may be discovered directly by the Contractor through its performance under the contract. All such information shall be considered "Confidential Information" for the purposes of this Article. – Pursuant to California Government Code Section 6254.10, cultural resource information is protected from public disclosure. The Contractor agrees that the Contractor, its subcontractors, and their respective agents and employees shall not publish or disclose any Confidential Information to any person, unless specifically authorized in advance, in writing by EBMUD. • Conform to the requirements of statutes as they relate to the protection and preservation of cultural and paleontological resources. Unauthorized collection of prehistoric or historic artifacts or fossils along the Work Area, or at Work facilities, is strictly prohibited. • In addition to the training identified in Article 3.1.A above, identified Contractor personnel shall attend a cultural and paleontological resources training course provided by EBMUD of up to two hours. The training program will be completed in person or by watching a video, at an EBMUD designated location, conducted or prepared by a Qualified Archaeologist and/or Paleontologist. The program will discuss cultural and paleontological resources awareness within the project work limits, including the responsibilities of Contractor personnel, applicable mitigation measures, confidentiality, and notification requirements. Prior to accessing the construction site, or performing site work, identified Contractor personnel shall: – Sign an attendance sheet provided by EBMUD verifying that all Contractor construction personnel involved in ground disturbing activities have attended the appropriate level of training; have read and understood the contents of the training; have read and understood the contents of the "Confidentiality of Information on Cultural and	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• EBMUD designated archaeologist is responsible for providing training to contractor. • Contractor is responsible for attending training. • Contract is responsible for notifying EBMUD of any potential discovery of cultural resources and halt work per the specification. • EBMUD is responsible for retaining a qualified archaeologist to inspect any finds as needed. • EBMUD is responsible for contacting the County coroner if any human remains are found.	• EBMUD is responsible for verifying implementation.	• Prior to construction • Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	Paleontological Resources" document, and shall comply with all project environmental requirements. • In the event that potential cultural or paleontological resources are discovered at the site of construction, the following procedures shall be instituted: – Discovery of prehistoric or historic-era archaeological resources requires that all construction activities shall immediately cease at the location of discovery and within 100 feet of the discovery. ▪ The Contractor shall immediately allow EBMUD to evaluate the find. The Contractor is responsible for stopping work and notifying EBMUD and shall not recommence work until authorized to do so by EBMUD. ▪ EBMUD will retain a qualified archaeologist to inspect the findings within 24 hours of discovery. If it is determined that the Project could damage a historical resource as defined by CEQA (or a historic property as defined by the National Historic Preservation Act of 1966, as amended), construction shall cease in an area determined by the archaeologist until a management plan has been prepared, approved by EBMUD, and implemented to the satisfaction of the archaeologist (and Native American representative if the resource is prehistoric, who shall be identified by the Native American Heritage Commission [NAHC]). In consultation with EBMUD, the archaeologist (and Native American representative) will determine when construction can resume. – Discovery of human remains requires that all construction activities immediately cease at, and within 100 feet of the location of discovery. ▪ The Contractor shall immediately notify EBMUD who will engage a qualified archaeologist provided by EBMUD to evaluate the find. The Contractor is responsible for stopping work and notifying EBMUD and shall not recommence work until authorized to do so by EBMUD. ▪ EBMUD will contact the County Coroner, who will determine whether or not the remains are Native American. If the remains are determined to be Native American, the Coroner will contact the Native American Heritage Commission (NAHC). The NAHC will then identify the person or persons it believes to be the most likely descendant from the deceased Native American, who in turn would make recommendations to EBMUD for the appropriate means of treating the human remains and any associated funerary objects. Otherwise, the County Coroner shall be allowed to complete their investigation and the Contractor shall not recommence work until authorized to do so by both the Coroner and EBMUD. • If EBMUD determines that the cultural or paleontological resource discovery requires further evaluation, at the direction of EBMUD, the Contractor shall suspend all construction activities at the location of the find and within a larger radius, as required.					
Energy						

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
Impact ENG-1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation	**EBMUD Standard Construction Specification 01 35 44 (Environmental Requirements)** *Section 3.5, Air Quality Control* • Implement all necessary air pollutant construction measures per the Bay Area Air Quality Management District "Basic Construction Mitigation Measures" (BAAQMD CEQA Guidelines May 2017), including, but not limited to the following: – Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. • Implement all necessary air pollutant construction measures per the Bay Area Air Quality Management District "Additional Construction Mitigation Measures" (BAAQMD CEQA Guidelines May 2017) including but not limited to the following: – Minimizing the idling time of diesel-powered construction equipment to two minutes. – Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines. • Implement all necessary EBMUD air pollutant construction measures, including but not limited to the following: – Use line power instead of diesel generators at all construction sites where line power is available. – Temporary sources of air emissions (such as portable pumps, compressors, generators, etc.) shall be electrically powered unless the use of such equipment is not practical, feasible, or available. – Minimize the use of diesel generators where possible. – Perform regular low-emission tune-ups on all construction equipment, particularly haul trucks and earthwork equipment. – On road and off-road vehicle tire pressures shall be maintained to manufacturer specifications. Tires shall be checked and re-inflated at regular intervals. – Demolition debris shall be recycled for reuse to the extent feasible. See the Construction and Demolition Waste Disposal Plan paragraphs above for requirements for wood treated with preservatives.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for implementing all requirements in the specification.	• EBMUD is responsible for verifying implementation.	• Construction
	Geology and Soils					
Impact GEO-1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault; strong seismic ground-shaking; seismic-related ground failure (liquefaction, lateral spreading); or landslides.	**EBMUD Standard Construction Specification 01 35 24, Project Safety Requirements** *Section 1.1(F), Site Activities* • Complete a Safe Work Permit prior to starting work at a Water Treatment Plant.	• Phase 1 • Phase 2	• SOWTP site	• Contractor is responsible for completing a Safe Work Permit.	• EBMUD is responsible for verifying implementation.	• Prior to construction
Impact GEO-1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault; strong seismic ground-shaking;	**EBMUD Standard Construction Specification 01 35 24, Project Safety Requirements** *Section 1.3(M), Excavation Safety Plan* • Submit an Excavation Safety Plan in accordance with Title 8 CCR §1541.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for preparing a plan for worker protection around trenches 5 feet or greater.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to construction • Construction.

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
seismic-related ground failure (liquefaction, lateral spreading); or landslides. **Impact GEO-3:** Be located on a geologic unit or soil that is unstable, or that would become unstable because of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.	• Contractor shall obtain an excavation permit per Title 8, CCR §341(a)(1) when required. • California Government Code §4216 describes the requirements and procedures for excavation notifications and utility excavation					
Impact GEO-1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault; strong seismic ground-shaking; seismic-related ground failure (liquefaction, lateral spreading); or landslides. **Impact GEO-3:** Be located on a geologic unit or soil that is unstable, or that would become unstable because of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. **Impact GEO-4:** Be located on expansive soil creating substantial direct or indirect risks to life or property.	**Engineering Standard Practice 512.1, Water Main Design Criteria** *Purpose:* Establishes criteria for design of water pipelines and establishes minimum requirements for pipeline construction materials.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• EBMUD is responsible for implementing the design criteria specified in Engineering Standard Practice 512.1.	• EBMUD is responsible for verifying implementation.	• Prior to construction
Impact GEO-1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault; strong seismic ground-shaking; seismic-related ground failure (liquefaction, lateral spreading); or landslides. **Impact GEO-3:** Be located on a geologic unit or soil that is unstable, or that would become unstable because of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.	**Engineering Standard Practice 550.1, Seismic Design Requirements** *Purpose:* Establishes minimum criteria for seismic design of all EBMUD facilities, including offices, operating centers, water and wastewater treatment plants, water and other liquids storage structures, pumping plants, retaining walls, underground vaults, pipelines, and other structures.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• EBMUD is responsible for implementing the design criteria specified in Engineering Standard Practice 550.1.	• EBMUD is responsible for verifying implementation.	• Prior to construction
Impact GEO-2: Result in substantial soil erosion or the loss of topsoil.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.1(B), Site Activities* • Divert or otherwise control surface water and waters flowing from existing projects, structures, or surrounding areas from coming onto the work and staging areas. The method of diversions or control shall be adequate to ensure the safety of stored materials and of personnel using these areas. • Following completion of Work, ditches, dikes, or other ground alterations made by the Contractor shall be removed and the ground surfaces shall be returned to their former condition, or as near as practicable, in EBMUD's opinion.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for implementing the specification.	• EBMUD is responsible for verifying implementation.	• During construction
Impact GEO-2: Result in substantial soil erosion or the loss of topsoil.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.4(A), Storm Water Management* • Construction General Permit	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for preparing a SWPPP and uploading documents to SMARTS as well as preparing a Storm Water Management	• EBMUD is responsible for reviewing and approving the plans.	• Prior to construction.

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	– Submit the Notice of Intent, Storm Water Pollution Prevention Plan (SWPPP), and all other documents prepared for compliance with the General Construction Storm Water Permit (NPDES No. CAS000002) to EBMUD and upload them in the SWRCB's Storm Water Multi-Application & Report Tracking System (SMARTS). ▪ EBMUD will electronically acknowledge appropriate submittals in SMARTS after review. ▪ Contractor shall pay for all registration and annual fees under this permit/program. • Storm Water Management Plan – Submit a Storm Water Management Plan that describes measures that shall be implemented to prevent the discharge of contaminated storm water runoff from the jobsite. Contaminants to be addressed include, but are not limited to soil, sediment, concrete residue, pH less than 6.5 or greater than 8.5, and any other contaminants known to exist at the jobsite location as described in Document 00 31 24 – Materials Assessment Information. • Local Storm Water Permits – Obtain any local storm water permits (e.g., city, county, etc.), submit copies, and comply with their requirements. – For jobs in unincorporated Alameda County that are greater than one acre, Contractor shall obtain and comply with Alameda County Public Works Agency's Stormwater Permit to enable the inspection of C.6 construction stormwater BMPs.			Plan that meets the requirements in the specification. • Contractor is responsible for submitting a Stormwater Management Plan per the specification. • Contractor responsible for obtaining local permits and submitting copies to EBMUD.		
Impact GEO-5: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**EBMUD Standard Construction Specification 01 35 45, Biological, Cultural, and Paleontological Requirements** *Section 3.1, Training and Certification* • Before beginning construction, all Contractor personnel involved in ground-disturbing activities are required to attend an environmental training program provided by EBMUD, of up to one day for site supervisors, foremen and project managers and up to 30 minutes for non-supervisory Contractor personnel. Contractor general personnel will receive a worker environmental awareness training. • The Contractor is responsible for ensuring that all workers requiring environmental training are identified to EBMUD. • Prior to accessing or performing construction work, the identified Contractor personnel shall: – Sign a wallet card provided by EBMUD verifying that the Contractor personnel has attended the appropriate level of training relative to their position; have understood the contents of the environmental training, and shall comply with all project environmental requirements. – Display an environmental training hard hat decal (provided by EBMUD after completion of the training) at all times.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for attending training and maintaining all required documentation of training.	• EBMUD is responsible for verifying workers have received training.	• Prior to construction • Construction
Impact GEO-5: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**EBMUD Standard Construction Specification 01 35 45, Biological, Cultural, and Paleontological Requirements** *Section 3.3, Protection of Cultural and Paleontological Resources* • In addition to the training identified in Article 3.1.A above, identified Contractor personnel shall attend a cultural and paleontological resources training course provided by EBMUD of up to two hours. The	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• EBMUD designated archaeologist or paleontologist is responsible for providing contractor training.	• EBMUD is responsible for verifying contractors have received training and for retaining a qualified paleontologist.	• Prior to construction • Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	training program will be completed in person or by watching a video, at an EBMUD designated location, conducted or prepared by a Qualified Archaeologist and/or Paleontologist. The program will discuss cultural and paleontological resources awareness within the project work limits, including the responsibilities of Contractor personnel, applicable mitigation measures, confidentiality, and notification requirements. Prior to accessing the construction site, or performing site work, identified Contractor personnel shall: – Sign an attendance sheet provided by EBMUD verifying that all Contractor construction personnel involved in ground disturbing activities have attended the appropriate level of training; have read and understood the contents of the training; have read and understood the contents of the "Confidentiality of Information on Cultural and Paleontological Resources" document, and shall comply with all project environmental requirements. • In the event that potential cultural or paleontological resources are discovered at the site of construction, the following procedures shall be instituted: – Discovery of paleontological resources requires that all construction activities immediately cease at, and within 100 feet of the location of discovery. ▪ The Contractor shall immediately notify EBMUD who will engage a qualified paleontologist provided by EBMUD to evaluate the find. The Contractor is responsible for stopping work and notifying EBMUD and shall not recommence work until authorized to do so by EBMUD. ▪ EBMUD will retain a Qualified Paleontologist to inspect the findings within 24 hours of discovery. The Qualified Paleontologist, in accordance with Society of Vertebrate Paleontology guidelines (Society of Vertebrate Paleontology 2010), will assess the nature and importance of the find and recommend appropriate salvage, treatment, and future monitoring and management. If it is determined that construction activities could damage a paleontological resource as defined by the Society of Vertebrate Paleontology guidelines (Society of Vertebrate Paleontology 2010), construction shall cease in an area determined by the paleontologist until a salvage, treatment, and future monitoring and management plan has been prepared, approved by EBMUD, and implemented to the satisfaction of the paleontologist. EBMUD, in consultation with the Qualified Paleontologist, will determine when construction can resume. • If EBMUD determines that the cultural and paleontological resource discovery requires further evaluation, at the direction of EBMUD, the Contractor shall suspend all construction activities at the location of the find and within a larger radius, as required.			• Contractor is responsible for attending training. • Contractor is responsible for notifying EBMUD of any potential discovery of paleontological resources and halt work per the measure. • EBMUD is responsible for retaining a qualified paleontologist to inspect any finds as needed.		
Greenhouse Gas Emissions						
Impact GHG-1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 3.5, Air Quality Control*	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for implementing the specification.	• EBMUD is responsible for verifying implementation.	• Construction • Demolition

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	• Implement all necessary air pollutant construction measures per the Bay Area Air Quality Management District "Basic Construction Mitigation Measures" (BAAQMD CEQA Guidelines May 2017), including, but not limited to the following: – Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. – All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. • Implement all necessary air pollutant construction measures per the Bay Area Air Quality Management District "Additional Construction Mitigation Measures" (BAAQMD CEQA Guidelines May 2017) including but not limited to the following: – Minimizing the idling time of diesel-powered construction equipment to two minutes. – The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available. – Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM. – Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines. • Implement all necessary EBMUD air pollutant construction measures, including but not limited to the following: – Use line power instead of diesel generators at all construction sites where line power is available. – All portable engines and equipment units used as part of construction shall be properly registered with the California Air Resources Board or otherwise permitted by the appropriate local air district, as required. – Minimize the use of diesel generators where possible. – Perform regular low-emission tune-ups on all construction equipment, particularly haul trucks and earthwork equipment. – On road and off-road vehicle tire pressures shall be maintained to manufacturer specifications. Tires shall be checked and re-inflated at regular intervals. – Demolition debris shall be recycled for reuse to the extent feasible. See the Construction and Demolition Waste Disposal Plan paragraphs above for requirements for wood treated with preservatives.					

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
Hazards and Hazardous Materials						
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. **Impact HAZ-3:** The project has the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.	**EBMUD Standard Construction Specification 01 35 24, Project Safety Requirements and Site Activities** *Section 1.3(B), Project Health and Safety Plan* • Submit a Project Health and Safety Plan for the work to be performed prior to start of the Notice to Commence Field Work and/or prior to any Limited Notice to Commence Field Work. • The Project Health and Safety Plan shall implement applicable Title 8, California Code of Regulations for the work performed. *Section 1.4, Training and Qualifications Requirements* • Ensure that all personnel who, as the result of work on this contract, will likely be exposed to hazardous conditions or hazardous substances at the site have received the appropriate training for the hazards they may encounter. Establish minimum training requirements and do not allow untrained workers to enter or perform work at the site. • Submit certification of current training and qualification for each worker engaged in work with hazardous conditions or hazardous substances.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for preparing the Project Health and Safety Plan and verifying personnel are property training and submitting certification of training and qualifications per the specification.	• EBMUD is responsible for reviewing and approving the plan. • EBMUD is responsible for reviewing certifications.	• Prior to construction • Construction
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.1(A) Work includes:* • Comply with applicable Federal, State and Local environmental regulations in the execution of the Work. *Section 1.1(B) Site activities* • Store materials and wastes such as demolition material, soil, sand, asphalt, rubbish, paint, cement, concrete or washings thereof, oil or petroleum products, or earthen materials in a manner to prevent it from being washed by rainfall or runoff outside the construction limits. • Reuse or dispose of excess material consistent with all applicable legal requirements and disposal facility permits. • Clean up all spills and immediately notify EBMUD in the event of a spill. • Equip stationary equipment such as motors, pumps, and generators with drip pans. • Divert or otherwise control surface water and waters flowing from existing projects, structures, or surrounding areas from coming onto the work and staging areas. The method of diversions or control shall be adequate to ensure the safety of stored materials and of personnel using these areas. • Handle, store, apply, and dispose of any chemical or hazardous material used in the performance of the Work in a manner consistent with all applicable federal, state, and local laws and regulations. *Section 1.4(A), Storm Water Management* • Construction General Permit – Submit the Notice of Intent, Storm Water Pollution Prevention Plan (SWPPP), and all other documents prepared for compliance with the General Construction Storm Water Permit (NPDES No. CAS000002) to EBMUD and upload them in the SWRCB's Storm Water Multi-Application & Report Tracking System (SMARTS).	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for implementing the specification and preparing the required plans.	• EBMUD is responsible for reviewing and approving the plans.	• Prior to construction • Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	▪ EBMUD will electronically acknowledge appropriate submittals in SMARTS after review. ▪ Contractor shall pay for all registration and annual fees under this permit/program. • Storm Water Management Plan – Submit a Storm Water Management Plan that describes measures that shall be implemented to prevent the discharge of contaminated storm water runoff from the jobsite. Contaminants to be addressed include, but are not limited to soil, sediment, concrete residue, pH less than 6.5 or greater than 8.5, and any other contaminants known to exist at the jobsite location as described in Document 00 31 24 – Materials Assessment Information. • Local Storm Water Permits – Obtain any local storm water permits (e.g., city, county, etc.), submit copies, and comply with their requirements. – For jobs in unincorporated Alameda County that are greater than one acre, Contractor shall obtain and comply with Alameda County Public Works Agency's Stormwater Permit to enable the inspection of C.6 construction stormwater BMPs.					
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.4(B), Water Control and Disposal Plan* • Submit a detailed Water Control and Disposal Plan that complies with all requirements of the Specification and includes provisions for the types of discharges and permits in a through c below, if applicable to the project. – Drinking Water System Discharge ▪ Plan shall comply with Drinking Water Systems Discharges Statewide Permit, General Order CAG140001. ▪ Submit all records of actual discharges, monitoring, water quality data, and beneficial reuse described above to EBMUD. – Non-Stormwater Discharges ▪ Plan shall describe measures for containment, handling, treatment (as necessary), and disposal of discharges such as groundwater (if encountered), runoff of water used for dust control, stockpile leachate, tank heel water, wash water, sawcut slurry, test water and construction water.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for preparing a Water Control and Disposal Plan that meets the requirements prior to any activity that necessitates the plan and complying with all specification requirements including submittal or records.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to construction. • Construction
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. **Impact HAZ-3:** The project has the potential to emit hazardous emissions or handle hazardous or acutely	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.4(C), Waste Management* • Prepare a Waste Management Plan and submit a copy of the plan for EBMUD's acceptance prior to start of work (except for water wastes which shall be addressed in the Water Control and Disposal Plan). The Waste Management Plan shall address all Construction and Demolition Waste, universal wastes, Hazardous Wastes, Excavation Soils, and any other solid debris intended to be removed from the project site(s). – Identify how the Contractor will handle, transport, dispose of, or otherwise divert each type of material required to be removed under	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for preparing a Waste Management Plan per the specification.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to construction.

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.	this contract in a safe, appropriate, and lawful manner in compliance with all applicable regulations of local, state, and federal agencies having jurisdiction over the removed materials. – Identify materials that are not recyclable or not recovered which will be disposed of in a landfill (or other means acceptable by the State of California and local ordinance and regulations). List the permitted landfill, or other permitted disposal facilities, which will be accepting the disposed waste materials. All landfills, hazardous waste, and universal waste disposal sites shall be approved for use by EBMUD. – Describe planned sampling and analysis for characterizing wastes or the Sampling and Analysis Plan below in Paragraph 1.4.J.					
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. **Impact HAZ-3:** The project has the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.4(E), Spill Prevention and Response Plan* • Submit a plan detailing the means and methods for preventing and controlling the spilling of known hazardous substances used on the jobsite or staging areas. – Include a list of the hazardous substances proposed for use or generated by the Contractor on site, including petroleum products. – Define measures that will be taken to prevent spills, monitor hazardous substances, and provide immediate response to spills. – Include provisions for notification of EBMUD or alternate contact and appropriate agencies including phone numbers; spill-related worker, public health, and safety issues; spill control, and spill cleanup. – Map showing hazardous materials project-related storage locations, names of the hazardous materials, and volumes/quantities. – Submit a Safety Data Sheet for each hazardous substance proposed to be used before delivery of the material to the worksite.	• Phase 1 • Phase 2	• SOWTP site Central North Aqueduct pipeline	• Contractor is responsible for preparing a Spill Prevention and Response Plan.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to construction
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.4(I), Waste Disposal Records* • Copies of waste management and disposal records including bills of lading, manifests, weight tickets, and receipts from waste management facilities shall be submitted to EBMUD. This provision applies to Hazardous Wastes, universal wastes, treated wood wastes, solid wastes disposed at landfills, and radioactive wastes. • Hazardous Waste Manifests – Use the "Uniform Hazardous Waste Manifest", EPA form 8700-22. Contractor shall prepare and EBMUD will review all hazardous waste manifests for acceptability prior to use. – Submit the "Generator's Initial Copy" and a legible photocopy of the first page of hazardous waste manifests, land disposal restriction forms, or other documentation required by applicable regulations governing transport and disposal of Hazardous Wastes for disposal of hazardous substances within 5 days of off haul.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for submitting Waste Disposal Records per the specification.	• EBMUD is responsible for verifying implementation.	• Construction
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.4(J), Sampling and Analysis Plan*	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for submitting a Sampling and Analysis Plan where sampling and analysis is required.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to construction • Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	• Submit a project-specific Sampling and Analysis Plan (SAP) for projects including but not limited to sanitary sewer discharge samples, waste characterization samples, air samples, and site characterization involving soil, groundwater, and soil gas samples requiring laboratory analysis.					
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 3.4, Waste Management and Disposal* • Segregate, stage, label/mark, and properly manage waste at the jobsite in a manner that complies with applicable regulations and to facilitate proper disposal. • Characterize all liquid wastes, solid wastes, and other wastes prior to removing from the project site. Sampling and analysis shall adhere to the Sampling and Analysis Plan. • EBMUD will review laboratory analysis results for EBMUD acceptance of Contractor Characterization of waste classification. • EBMUD will obtain a Hazardous Waste Generator's EPA ID Number if required for disposal of Hazardous Wastes and treated wood waste. • EBMUD will give Contractor written notice to dispose of all or a portion of the waste material at a Class I disposal site if EBMUD determines that such disposal is required based on review of Contractors waste characterization and the analytical results of samples collected. • Waste materials from different sites shall not be transported or mixed until the material is determined to be non-hazardous. Unless pre-approved by EBMUD for direct hauling, excavation materials shall be stored or stockpiled at each site until classified and accepted for movement by EBMUD. • Transport materials and/or wastes in accordance with all local, state, and federal laws, rules, and regulations. • Contractor shall not assume any soil is approved for offsite reuse. Offsite reuse is only permitted with explicit approval from EBMUD after a careful review of the Contractor's proposed reuse.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for proper waste management per the specification.	• EBMUD is responsible for verifying implementation.	• Construction
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. **Impact HAZ-3:** The project has the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. **Impact HAZ-5:** Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.	**EBMUD Standard Construction Specification 01 35 24, Project Safety Requirements and Site Activities** *Section 1.3(F), Submit an Emergency Action Plan* • Submit an Emergency Action Plan that prepares responses to employee accident/injury events, or any serious unplanned event (e.g.: utility break, fire, structure collapse, etc.) that requires any first aid provider or response agencies (e.g.: fire departments, utility agencies, rescue teams, etc.)	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for submitting an Emergency Action Plan.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. **Impact HAZ-3:** The project has the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.	**EBMUD Standard Construction Specification 01 35 24, Project Safety Requirements and Site Activities** *Section 1.3(N), Submit USA Marking Record* • Submit utility locate and marking number and documents, and verification of markings. • Make available to EBMUD the record of all subsequent utility marking events and meetings on the project.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for marking utilities.	• EBMUD is responsible for verifying implementation.	• Prior to construction
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	**EBMUD Engineering Standard Practice 514 Identifying Buried Conflicts** • EBMUD Engineering Standard Practice 514 provides guidelines and minimum steps required for the investigation needed to identify existing underground utilities, and to establish a uniform approach for site reconnaissance of existing buried conflicts, including active and abandoned utilities (EBMUD, 2008).	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• EBMUD is responsible for incorporating underground utilities into the Project design.	• EBMUD is responsible for verifying implementation.	• During final design
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	**EBMUD Standard Construction Specification 02 82 13, Asbestos Control Activities** *Section 1.1, Compliance and Intent* • Furnish all labor, materials, facilities, equipment, services, employee training and testing, permits, and agreements necessary to perform the asbestos removal in accordance with these specifications and with the latest regulations from the U.S. Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the Bay Area Air Quality Management District (BAAQMD), the Cal/EPA Department of Toxic Substance Control, the California Department of Occupational Safety and Health (DOSH), and other federal, state, county, and local agencies. Whenever there is a conflict or overlap of the above references, the most stringent provision is applicable. • During demolition procedures, the Contractor shall protect against contamination of soils, water, adjacent residences and properties, and the airborne release of hazardous materials and dusts. The Contractor will incur the costs associated with the implementation of controls and, if necessary, remediation. The Contractor shall be responsible for all necessary cleanup of contaminated areas/properties to pre-work condition and for all associated costs. It is the Contractor's responsibility to confirm and document the quantities of asbestos material to be removed. • Asbestos materials uncovered during the demolition activities shall be disposed of in an approved manner complying with all applicable federal, state, and local regulations. Appropriate waste manifests shall be furnished to EBMUD as per Sections 01 35 24 – Project Safety Requirements, and 01 35 44 – Environmental Requirements. Materials are conveyed to the Contractor "as is," without any warranty, expressed or implied, including but not limited to, any warranty to marketability or fitness for a particular purpose, or any purpose.	• Phase 1	• SOWTP site reclaim facility demolition area	• Contractor is responsible for providing proper remediation of asbestos during demolition, preparing a plan for demolition, documenting the quantities of asbestos removed, monitoring during asbestos removal, and proper disposal of asbestos containing materials.	• EBMUD is responsible for verifying implementation.	• Demolition

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	Section 1.5, Submittals • Project Safety and Health Plan: The Contractor shall provide a Project Safety and Health Plan prior to project initiation as specified in Section 01 35 24. • Submit a detailed plan of the procedures proposed for use in complying with the regulations included in this specification. The plan shall include the location and layout of decontamination areas, the sequencing of asbestos work, the interface of trades involved in the performance of work, disposal plan including location of approved disposal site, and a detailed description of the methods to be employed to control pollution. Expand upon the use of portable HEPA ventilation system, method of removal to prohibit visible emissions in work area, and packaging of removed asbestos debris. Include asbestos abatement in the Construction and Demolition Waste Disposal Plan, in accordance with Section 01 35 44. • Certificates of Compliance: Submit certification that equipment required to contain airborne asbestos fibers conform to ANSI Z9.2. *1.6, Submittals (Job in Progress)* • Provide to EBMUD, within 72 hours of sampling, test results of the personal air sampling described in Article 3.2. • Provide to EBMUD, results of required air sampling established at property and project boundaries within 72 hours of sampling, and measures the contractor has taken to improve non-conforming outcomes based on the results. *Section 3.1, Initial Area Isolation* • Demarcate the demolition area and specific hazard zones where asbestos removal occurs. Post warning signs and labels as required by Cal-EPA, BAAQMD, Cal OSHA Section 1529, and additional signs and warnings as directed by EBMUD. • Ensure asbestos hazards remain on site for proper abatement and disposal procedures. Ensure worker activity (access and egress) does not cause asbestos hazards to leave the project boundaries. *3.2, Work Activities* • General Procedures: Perform all asbestos related work and comply with the general safety and health provisions in conformance with Cal/OSHA Title 8 CCR Section 1529. For asbestos abatement work, use general work practices, work practices for encapsulation as specified in 34 CFR Part 231 Appendix C, applicable CAL OSHA requirements, and other appropriate work procedures approved by the Environmental Protection Agency (EPA). • Suppress air-borne particulates using a minimum of two misting units operated simultaneously from the following product series given below: – Monsoon Atomizing Misting System, Buffalo Turbine, www.buffaloturbine.com – Or equal as approved by EBMUD • Ensure air borne asbestos limits are not exceeded and are compliance with U.S. Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the Bay Area Air Quality Management District (BAAQMD), the Cal/EPA Department of Toxic Substance Control, the California Department of Occupational Safety					

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	and Health (DOSH), and other federal, state, county, and local agencies requirements for airborne emissions. • Monitoring: Monitoring of airborne concentrations of asbestos shall be in accordance with Title 8CCR section 1529, and BAAQMD requirements. – Baseline air monitoring shall be conducted prior to demolition work and prior to asbestos related work. Base air measurements shall be established at the property boundary in the east, west, north and south coordinates. – If monitoring shows airborne concentrations greater than regulatory asbestos control limits, stop all work, correct the conditions causing the excessive levels, and notify EBMUD immediately. – Conduct at a minimum one set of post-asbestos removal/demolition air monitoring established at the property boundary and in the same location of baseline monitoring in the east, west, north and south coordinates.					
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	**EBMUD Standard Construction Specification 02 83 13, Lead Hazard Control Activities** *Section 1.4, Submittals* • Lead Demolition Plan: Lead-containing coating handling, engineering control, removal, and disposal procedures • Lead-Containing Coating Demolition Work: All Contractor's supervisors and workers performing lead-containing coating work shall meet the requirements of the California Department of Health Services (DHS) lead-related construction interim certification (17 CCR 350001).	• Phase 1	• SOWTP site	• Contractor is responsible for preparing a lead demolition plan and using workers that have proper certification for lead demolition activities.	• EBMUD is responsible for reviewing and approving the plan and for verifying certification.	• Demolition
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	**EBMUD Standard Construction Specification 02 83 13, Lead Hazard Control Activities** *Section 3.2, Air Monitoring* • The purpose of any air monitoring conducted by EBMUD will be to detect possible release of dusts (lead) emanating from the work area. This testing will be conducted independently of the air monitoring described in Section 01 35 24.	• Phase 1	• SOWTP site	• EBMUD is responsible for determining whether air monitoring is required. • Contractor is responsible for conducting air monitoring if directed by EBMUD based on the specification.	• EBMUD is responsible for verifying implementation.	• Demolition
Impacts HAZ-1 and HAZ-2: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	**EBMUD Procedure 711, Hazardous Waste Removal** • The procedure defines hazardous waste and establishes responsibilities for removal of hazardous wastes from EBMUD facilities. Procedure 711 outlines specific steps and responsibilities for: characterizing the waste and determining what analyses are needed to classify the waste; coordinating waste disposal, re-use or recycling issues; labeling, storing, inspecting, and maintaining inventory records for the waste; and reviewing, signing, and tracking any hazardous waste handling and disposal requirements and hazardous waste manifests.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for following procedures for proper removal of hazardous waste.	• EBMUD is responsible for verifying implementation.	• Construction
Impact HAZ-4: The project has the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	**EBMUD Standard Construction Specification 01 55 26, Traffic Regulation** *Section 1.1, Summary* • All proposed street closures shall be clearly identified in the Traffic Control Plan (TCP) and shall conform to the section "Traffic Control Devices" below. Construction area signs for street closure and detours shall be posted a minimum of forty-eight (48) hours prior to the commencement of street closure. Contractor shall maintain safe access	• Phase 2	• Central North Aqueduct pipeline	• Contractor is responsible for preparing a Traffic Control Plan conforming to the specification and obtain approval from the local jurisdiction.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to construction.

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	around the project limit at all times. Street closures shall be limited to those locations indicated on the construction documents. *Section 1.2, Submittals* • Submit at least 15 calendar days prior to work a detailed Traffic Control Plan, that is approved by all agencies having jurisdiction and that conforms to all requirements of these specifications and the most recently adopted edition of the Manual on Uniform Traffic Control Devices. Traffic Control Plan shall include: – A description of emergency response vehicle access. If the road or area is completely blocked, preventing access by an emergency responder, a contingency plan must be included.					
Impact HAZ-4: The project has the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	**EBMUD Standard Construction Specification 01 55 26, Traffic Regulation** *Section 3.1, General* • For complete road closures, immediate emergency access to be provided if needed to emergency response vehicles.	• Phase 2	• Central North Aqueduct pipeline	• Contractor is responsible for providing access to emergency response vehicles.	• EBMUD is responsible for verifying implementation.	• Construction
Impact HAZ-5: Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.	**EBMUD Standard Construction Specification 01 35 24, Project Safety Requirements and Site Activities** *Section 1.3(F), Submit an Emergency Action Plan* • Submit an Emergency Action Plan that prepares responses to employee accident/injury events, or any serious unplanned event (e.g.: utility break, fire, structure collapse, etc.) that requires any first aid provider or response agencies (e.g.: fire departments, utility agencies, rescue teams, etc.) *Section 3.2(F), Fire Prevention and Protection* • Perform all Work in a fire safe manner and supply and maintain on the site adequate fire-fighting equipment capable of extinguishing incipient fires. Comply with applicable federal, local, and state fire prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standards for Safeguarding Building Construction Operations (NFPA No. 241) shall be followed. • A long-handled, round-point shovel, or a fire extinguisher shall be kept at an accessible (unlocked) location on the construction site at all times. • Earthmoving and portable equipment with internal combustion engines shall be equipped with a spark arrestor to reduce the potential for igniting a wildfire. Such equipment shall be maintained to ensure proper functioning of spark arrestor. • For all work occurring between April 1 and December 1, or any other periods during which a high fire danger has been identified: – Equipment that could produce a spark, fire, or flame shall not be used within 10 feet of any flammable materials. – Portable tools powered by gasoline-fueled internal combustion engines shall not be used within 25 feet of any flammable materials. • Vegetation management for fire prevention and protection – Prior to and during construction: ▪ Create and maintain a defensible space (100 feet or to EBMUD property boundary, whichever is shorter) around construction site, construction ingress and egress sites through landscaping,	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for implementing fire safe prevention practices during construction.	• EBMUD is responsible for verifying implementation.	• Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	mowing, disking, and/or spraying dry brush or native grasses to a height of 4-inches or less. ▪ Remove dead trees within 100 feet of construction site. ▪ Limb up trees within 100 feet of construction site so that no leafy foliage, twigs or branches are within 5-feet of the ground. To maintain tree health, tree limbing shall not remove more than 25 percent of a tree canopy within one growing season. ▪ Ensure and maintain 5-feet of vertical clearance between roof surfaces and portions of trees overhanging all structures within construction site, and keep roofs free of leaves, needles, twigs, and other combustible matter. To maintain tree health, tree limbing shall not remove more than 25 percent of a tree canopy within one growing season. ▪ Keep all overhanging trees, shrubs, and other vegetation, or portions thereof, free of dead limbs, branches, and other combustible matter. – Neatly stack all combustible materials away from structures within construction site and have all combustible growth cleared 15-feet around the stack. • During construction, maintain an unobstructed horizontal clearance at access drives of not less than the required width of the access drives, and an unobstructed vertical clearance of not less than 13 feet 6 inches above all roadways.					
Hydrology						
Impact HYD-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. **Impact HYD-3:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: a. Result in substantial erosion or siltation on or off-site. b. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site. c. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. **Impact HYD-4:** In a flood hazard, tsunami, or seiche zone, risk release of pollutants due to project inundation. **Impact HYD-5:** Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.1(B), Site Activities* • Protect storm drains and surface waters from impacts of project activity. • Store materials and wastes such as demolition material, soil, sand, asphalt, rubbish, paint, cement, concrete or washings thereof, oil or petroleum products, or earthen materials in a manner to prevent it from being washed by rainfall or runoff outside the construction limits. • Reuse or dispose of excess material consistent with all applicable legal requirements and disposal facility permits. • Clean up all spills and immediately notify EBMUD in the event of a spill. • Equip stationary equipment such as motors, pumps, and generators with drip pans. • Divert or otherwise control surface water and waters flowing from existing projects, structures, or surrounding areas from coming onto the work and staging areas. The method of diversions or control shall be adequate to ensure the safety of stored materials and of personnel using these areas. • Following completion of Work, remove ditches, dikes, or other ground alterations made by the Contractor. The ground surfaces shall be returned to their former condition, or as near as practicable, in EBMUD's opinion. • Prevent visible dust emissions from leaving the work area. • Maintain construction equipment in good operating condition to reduce emissions.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for implementing specification requirements.	• EBMUD is responsible for verifying implementation.	• Construction • Post-construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	• Handle, store, apply, and dispose of any chemical or hazardous material used in the performance of the Work in a manner consistent with all applicable federal, state, and local laws and regulations.					
Impact HYD-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. **Impact HYD-3:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: a. Result in substantial erosion or siltation on or off-site. b. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site. c. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. **Impact HYD-4:** In a flood hazard, tsunami, or seiche zone, risk release of pollutants due to project inundation. **Impact HYD-5:** Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.4(A), Stormwater Management* • Submit the Notice of Intent, Storm Water Pollution Prevention Plan (SWPPP), and all other documents prepared for compliance with the General Construction Storm Water Permit (NPDES No. CAS000002) to EBMUD and upload them in the SWRCB's Storm Water Multi-Application & Report Tracking System (SMARTS). – EBMUD will electronically acknowledge appropriate submittals in SMARTS after review. – Contractor shall pay for all registration and annual fees under this permit/program • Submit a Storm Water Management Plan that describes measures that shall be implemented to prevent the discharge of contaminated storm water runoff from the jobsite. Contaminants to be addressed include, but are not limited to soil, sediment, concrete residue, pH less than 6.5 or greater than 8.5, and any other contaminants known to exist at the jobsite location as described in Document 00 31 24 – Materials Assessment Information.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for preparing the required plans.	• EBMUD is responsible for reviewing and approving the plans.	• Prior to construction
Impact HYD-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. **Impact HYD-3:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: a. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. **Impact HYD-5:** Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.4(B), Water Control and Disposal Plan* • Submit a detailed Water Control and Disposal Plan that complies with all requirements of the Specification and includes provisions for the types of discharges and permits in a through c below, if applicable to the project. – Drinking Water System Discharges ▪ Plan shall comply with Drinking Water Systems Discharges Statewide Permit, General Order CAG140001. ▪ Submit all records of actual discharges, monitoring, water quality data, and beneficial reuse described above to EBMUD. – Non-Stormwater Discharges ▪ Plan shall describe measures for containment, handling, treatment (as necessary), and disposal of discharges such as groundwater (if encountered), runoff of water used for dust control, stockpile leachate, tank heel water, wash water, sawcut slurry, test water and construction water.	• Phase 1 • Phase 2	• SOWTP Site • Central North Aqueduct pipeline	• Contractor is responsible for preparing the Water Control and Disposal Plan.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
Impact HYD-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.4(E), Spill Prevention and Response Plan* • Submit plan detailing the means and methods for preventing and controlling the spilling of known hazardous substances used on the jobsite or staging areas. – Include a list of the hazardous substances proposed for use or generated by the Contractor on site, including petroleum products. – Define measures that will be taken to prevent spills, monitor hazardous substances, and provide immediate response to spills. – Include provisions for notification of EBMUD or alternate contact and appropriate agencies including phone numbers; spill-related worker, public health, and safety issues; spill control, and spill cleanup. – Map showing hazardous materials project-related storage locations, names of the hazardous materials, and volumes/quantities. – Submit a Safety Data Sheet (SDS) for each hazardous substance proposed to be used prior to delivery of the material to the jobsite.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for preparing the Spill Prevention and Response Plan.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to construction
Impact HYD-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. **Impact HYD-3:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: a. Result in substantial erosion or siltation on or off-site.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *3.2, Stormwater* • Conduct all inspections, sampling, reporting, and other required provisions in the SWPPP. • Upload all necessary documents to SMARTS to comply with the Construction General Permit. • Follow all provisions in local storm water permits and/or rules during construction. • Maintain sufficient best management practices or other controls as outlined in the storm water management plan to prevent impacts to storm water from pollution including soil, dust, stored hazardous materials, and construction activities.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for permitting, inspections, and uploading documents to SMARTS per the specification.	• EBMUD is responsible for verifying implementation.	• Construction
Impact HYD-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	**EBMUD's Standard Construction Specification 01 74 05, Cleaning** *Section 3.1(B), Cleaning* • Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws. Do not burn or bury rubbish and waste materials on project site. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains. Do not dispose of wastes into streams or waterways.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for compliance with applicable laws and complying with the specification.	• EBMUD is responsible for verifying implementation.	• Construction
Impact HYD-1: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. **Impact HYD-5:** Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	**EBMUD Standard Construction Specification 32 92 19.16, Hydraulic Seeding** • Defines requirements for hydroseeding of areas disturbed during construction. The Standard Construction Specification includes a seed mix composition for pure live seed, requirements for inoculant sources, fertilizer, mulch, and application rates for hydroseeding (EBMUD 2016).	• Phase 1 • Phase 2	• Temporary disturbance areas subject to reseeding	• Contractor is responsible for obtaining the hydroseed mix.	• EBMUD is responsible for verifying implementation.	• Construction
Noise						

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
Impact NOI-1: Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.4(G), Noise Control and Monitoring Plan* • Submit a plan detailing the means and methods for controlling and monitoring noise generated by construction activities, including demolition, alteration, repair, or remodeling of or to existing structures and construction of new structures, as well as by items of machinery, equipment or devices used during construction activities on the site for EBMUD's acceptance prior to any work at the jobsite. The plan shall detail the equipment and methods used to monitor compliance with the plan.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contract is responsible for preparing a Noise Control and Monitoring Plan.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to construction
Impact NOI-1: Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 3.8, Noise Control* • Comply with sound control and noise level rules, regulations, and local ordinances and in the CEQA documents which apply to any work performed pursuant to the contract. Noise-generating activities shall be limited to the hours specified in Section 01 14 00. • Take appropriate measures, including muffling of equipment, selecting quieter equipment, erecting noise barriers, modifying work operations, and other measures as needed to bring construction noise into compliance. • Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. • Use the best available noise control techniques (including mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) for all equipment and trucks, as necessary. • Truck operations (haul trucks and concrete delivery trucks) shall be limited to the daytime hours specified in Section 01 14 00. • Stationary noise sources (e.g., chippers, grinders, compressors) shall be located as far from sensitive receptors as possible. Enclosure opening or venting shall face away from sensitive receptors. Enclosures shall be designed by a registered engineer regularly involved in noise control analysis and design. • If impact equipment (e.g., jack hammers, pavement breakers, rock drills etc.) is used during project construction, Contractor is responsible for taking appropriate measures, including but not limited to the following: – Hydraulically or electric-powered equipment shall be used wherever feasible to avoid the noise associated with compressed-air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed-air exhaust shall be used. External jackets on the tools themselves shall be used, where feasible. Quieter procedures, such as drilling rather than impact equipment, shall be used whenever feasible. It is the Contractor's responsibility to implement any measures necessary to meet applicable noise requirements. – Impact construction including jackhammers, hydraulic backhoe, concrete crushing/recycling activities, vibratory pile drivers etc. shall be limited to the daytime hours specified in Section 01 14 00.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for implementing the noise control measures during construction activities. Contractor will notify neighbors, where required.	• EBMUD is responsible for verifying implementation.	• During construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	– Erect temporary noise barriers or noise control blankets around the construction site, particularly along areas adjacent to residential buildings. – Limit the noisiest phases of construction to 10 workdays at a time, where feasible. – Notify neighbors/occupants within 300 feet of project construction at least thirty days in advance of extreme noise generating activities about the estimated duration of the activity. – Noise Monitoring shall be conducted periodically during noise generating activities. Monitoring shall be conducted using a precision sound-level meter that is in conformance with the American National Standards Institute (ANSI) Standard S1.4, Specification for Sound Level Meters. Monitoring results shall be submitted weekly to EBMUD.					
Impact NOI-1: Conflict with or obstruct implementation of the applicable air quality plan. **Impact NOI-2:** Result in the generation of excessive groundborne vibration or groundborne noise levels.	**Procedure 600** • Designates a Public Affairs liaison to respond to construction-related issues, including noise. Contact information for the Public Affairs liaison (i.e., phone number, email address) and capital project site address will be provided via conspicuous signage at construction sites, on all advance notifications, and on the District project website. The Public Affairs liaison will coordinate with the construction project manager/engineer and any contractors to resolve any issues. • Notifies residents at least seven days (and preferably fourteen days) in advance of potentially disruptive construction activities (e.g., noise, traffic, parking); notifications will include the activities' geographical extent and estimated duration. The Public Affairs liaison will coordinate with the project manager/engineer and any contractors to provide advance notification via email, mailed notices, door-hangers, social media, or other means, as appropriate	• Phase 1 • Phase 2	• SOWTP Site • Central North Aqueduct pipeline	• EBMUD will designate a Public Affairs liaison who is responsible for responding to any public complaints during construction. • EBMUD will send notices to residents per the specification.	• EBMUD is responsible for verifying all notices are properly provided.	• Construction
Impact NOI-2: Result in the generation of excessive groundborne vibration or groundborne noise levels.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 1.4(H), Vibration Control and Monitoring Plan* • Submit a plan detailing the means and methods for controlling and monitoring surface vibration generated by demolition and other work on the site for EBMUD's acceptance prior to any work at the jobsite. The plan shall detail the equipment and methods used to monitor compliance with the plan.	• Phase 1 • Phase 2	• SOWTP site demolition areas • Central North Aqueduct pipeline	• Contractor is responsible for preparing a Vibration Control and Monitoring Plan.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to demolition and Central North Aqueduct pipeline construction
Impact NOI-2: Result in the generation of excessive groundborne vibration or groundborne noise levels.	**EBMUD Standard Construction Specification 01 35 44, Environmental Requirements** *Section 3.7, Vibration Control* • Limit continuous surface vibration to no more than 0.5 in/sec Peak Particle Velocity (PPV), measured at the nearest residence or other sensitive structure.	• Phase 2	• Central North Aqueduct pipeline	• Contractor is responsible for monitoring and limiting vibration per the specification.	• EBMUD is responsible for verifying implementation.	• Construction
	Transportation					
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	**EBMUD Standard Construction Specification 01 32 36, Video Monitoring and Documentation** *Section 1.1, Summary* • Audio-video documentation utilizing digital recording of surface features, supplemented by photography, that may be taken along the	• Phase 2	• Central North Aqueduct pipeline	• Contractor is responsible for pre- and post-construction surveys and repairing damage.	• EBMUD Designated Videographer is responsible for video recording.	• Prior to Construction • Post construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
Impact TRA-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	entire length of the project and may include work and storage areas, adjacent properties, and/or intersecting roadways. – Prior to audio-video recording of the project, all areas to be inventoried shall be investigated visually with notations made of items not readily visible by audio-video recording or supplemental photographic methods. *Section 1.2, Site Survey Audio-Video Recording Requirements* • The Contractor shall employ a qualified videographer, experienced in taking properly documented and annotated video to perform the Pre-Construction Site Survey, which shall be completed within 20 days after the issuance of the Notice to Proceed. The Pre-Construction Site Survey shall be completed and accepted prior to EBMUD issuance of the Notice to Commence Field Work (NTCFW). • Prior to commencement of the Pre-Construction Site Survey recording, the Contractor shall notify EBMUD in writing within 48 hours of the recording. EBMUD will provide a designated representative to accompany and observe audio-video recording operations. Audio-video recording completed without an EBMUD Representative present will be unacceptable unless specifically authorized in writing and in advance by EBMUD. • Provide a copy of the Pre-Construction Site Survey to EBMUD for review and comment. The Survey shall include all audio-video recordings, photography, annotations and all documentation. If EBMUD determines that critical areas are missing from the survey, the Contractor shall provide additional recording and documentation of the requested area and locations. • Post-Construction Site Survey: The Contractor shall perform a Post-Construction Site Survey of the same areas recorded in the Pre-Construction Site Survey following in the same path/route of the Pre-Construction Site Survey. EBMUD will review post-construction survey findings with the Contractor and develop a complete listing of project site restoration requirements to be accomplished by the Contractor. Prior to commencement of Post-Construction Site Survey recording, the Contractor shall notify EBMUD in writing within 48-hours of the recording. EBMUD will provide a designated representative to accompany and observe audio-video recording operations. Audio-video recording completed without an EBMUD Representative present will be unacceptable unless specifically authorized in writing and in advance by EBMUD. • The Contractor shall be responsible for repairing any damage or defects not documented as existing prior to construction.				• EBMUD is responsible for verifying repairs.	
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. **Impact TRA-3:** Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	**EBMUD Standard Construction Specification 01 55 26, Traffic Regulation** *Section 1.1, Summary* • All proposed street closures shall be clearly identified in the Traffic Control Plan (TCP) and shall conform to the section "Traffic Control Devices" below. Construction area signs for street closure and detours shall be posted a minimum of forty-eight (48) hours prior to the commencement of street closure. Contractor shall maintain safe access around the project limit at all times. Street closures shall be limited to those locations indicated on the construction documents.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for preparing and submitting a Traffic Control Plan.	• EBMUD is responsible for reviewing and approving the Traffic Control Plan.	• Prior to Construction • Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
Impact TRA-4: Result in inadequate emergency access.	*Section 1.2(A), Submittals* • Submit at least 15 calendar days prior to work a detailed traffic control plan, that is approved by all agencies having jurisdiction and that conforms to all requirements of these specifications and the most recently adopted edition of the Manual on Uniform Traffic Control Devices (MUTCD). Traffic Control Plan shall include: – Circulation and detour plans to minimize impacts to local street circulation. Use haul routes minimizing truck traffic on local roadways to the extent possible. – A description of emergency response vehicle access. If the road or area is completely blocked, preventing access by an emergency responder, a contingency plan must be included. – Procedures, to the extent feasible, to schedule construction of project elements to minimize overlapping construction phases that require truck hauling. – Designated Contractor staging areas for storage of all equipment and materials, in such a manner to minimize obstruction to traffic. – Locations for parking by construction workers. *Section 1.3, Quality Assurance* • Detailed traffic control plan shall be prepared by a California licensed Traffic Engineer. • The Traffic Engineer who prepares the detailed traffic control plan shall be available at any time during the life of the contract to modify the traffic control plan if and as required by the agency having jurisdiction. • No changes or deviations from the approved detailed traffic control plan shall be made, except temporary changes in emergency situations, without prior approval of the Traffic Engineer, the EBMUD's Engineer, and all agencies having jurisdiction. • Immediately notify the Traffic Engineer, the EBMUD's Engineer, and the agencies having jurisdiction of occurrences that necessitate modification of the approved Traffic Control Plan.					
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. **Impact TRA-3:** Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **Impact TRA-4:** Result in inadequate emergency access.	**EBMUD Standard Construction Specification 01 55 26, Traffic Regulation** *Section 2.1(A) Traffic Control Devices* • Traffic signs, flashing lights, barricades and other traffic safety devices used to control traffic shall conform to the requirements of the most recently adopted edition of the MUTCD and the agency having jurisdiction. – Portable signals shall not be used unless permission is given in writing by the agency having jurisdiction. – Warning signs used for nighttime conditions shall be reflectorized or illuminated. "Reflectorized signs" shall have a reflectorized background and shall conform to the current State of California Department of Transportation specification for reflective sheeting on highway signs.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for implementing traffic control devices.	• EBMUD is responsible for verifying implementation.	• Construction
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	**EBMUD Standard Construction Specification 01 55 26, Traffic Regulation** *3.1, General*	• Phase 2	• Central North Aqueduct pipeline	• Contractor is responsible for implementing traffic controls.	• EBMUD is responsible for verifying implementation.	• Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
Impact TRA-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **Impact TRA-4:** Result in inadequate emergency access.	• Except where public roads have been approved for closure, traffic shall be permitted to pass through designated traffic lanes with as little inconvenience and delay as possible. • Install temporary traffic markings where required to direct the flow of traffic. Maintain the traffic markings for the duration of need and remove by abrasive blasting when no longer required. • Convenient access to driveways and buildings in the vicinity of work shall be maintained as much as possible. Temporary approaches to, and crossing of, intersecting traffic lanes shall be provided and kept in good condition. • When leaving a work area and entering a roadway carrying public traffic, the Contractor's equipment, whether empty or loaded, shall in all cases yield to public traffic. • Provide temporary signs as required by the traffic control plan and remove signs when no longer required. • Haul routes for each construction phase shall be provided to all trucks serving the site during the construction period. • For complete road closures, immediate emergency access to be provided if needed to emergency response vehicles. • A minimum of twelve (12) foot travel lanes must be maintained unless otherwise approved.					
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. **Impact TRA-3:** Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	**EBMUD Standard Construction Specification 01 55 26, Traffic Regulation** *Section 3.2, Alternative One-Way Traffic* • Where alternating one-way traffic has been authorized, the following shall be posted at each end of the one-way traffic section at least one week prior to start of work: – The approximate beginning and ending dates that traffic delays will be encountered. – The maximum time that traffic will be delayed. • The maximum delay time shall be approved by the agency having jurisdiction.	• Phase 2	• Central North Aqueduct pipeline (where alternative one-way traffic is used)	• Contractor is responsible for implementing specification where alternative one-way traffic has been authorized.	• EBMUD is responsible for verifying implementation and agency approval.	• Construction
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. **Impact TRA-3:** Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	**EBMUD Standard Construction Specification 01 55 26, Traffic Regulation** *Section 3.3(A), Flagging* • Provide flaggers to control traffic where required by the approved traffic control plan. – Flaggers shall perform their duties and shall be provided with the necessary equipment in accordance with the current "Instructions to Flaggers" of the California Department of Transportation. – Flaggers shall be employed full time on traffic control and shall have no other duties.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for implementing flaggers.	• EBMUD is responsible for verifying implementation.	• Construction
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. **Impact TRA-3:** Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	**EBMUD Standard Construction Specification 01 55 26, Traffic Regulation** *Section 3.4, Temporary Traffic Control* • All traffic control devices shall conform to the latest edition of the MUTCD, and as amended by the latest edition of the MUTCD California supplement. Electronic signage board with changeable message shall be placed on a street in both directions 2 weeks in advance. • The Contractor shall replace within 72 hours, all traffic signal loop detectors damaged during construction. Any work that disturbs normal	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for implementing temporary traffic controls.	• EBMUD is responsible for verifying implementation.	• Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
Impact TRA-4: Result in inadequate emergency access.	traffic signal operations and ensure proper temporary traffic control (lane shifts, lane closures, detours etc.) shall be coordinated with the agency having jurisdiction, at least 72 hours prior to commencing construction. • A minimum of 12-foot travel lanes must be maintained unless otherwise approved. • Access to driveways will be maintained at all times unless other arrangements are made. • All traffic control devices shall be removed from view when not in use. • Before leaving a work area, ensure the area is left orderly. Trenches must be backfilled or plated during non-working hours. • Sidewalks for pedestrians will remain open if safe for pedestrians. Alternate routes and signing will be provided if pedestrian routes are to be closed.					
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	**Procedure 600** • Designates a Public Affairs liaison to respond to construction-related issues, including noise. Contact information for the Public Affairs liaison (i.e., phone number, email address) and capital project site address will be provided via conspicuous signage at construction sites, on all advance notifications, and on the District project website. The Public Affairs liaison will coordinate with the construction project manager/engineer and any contractors to resolve any issues. • Notifies residents at least seven days (and preferably fourteen days) in advance of potentially disruptive construction activities (e.g., noise, traffic, parking); notifications will include the activities' geographical extent and estimated duration. The Public Affairs liaison will coordinate with the project manager/engineer and any contractors to provide advance notification via email, mailed notices, door-hangers, social media, or other means, as appropriate	• Phase 1 • Phase 2	• SOWTP Site • Central North Aqueduct pipeline	• EBMUD will designate a Public Affairs liaison who is responsible for responding to any public complaints during construction. • EBMUD will send notices to residents per the procedure.	• EBMUD is responsible for verifying all notices are properly provided.	• Construction
Tribal Cultural Resources						
Impact TCR-1: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically define in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe.	**EBMUD Standard Construction Specification 01 35 45, Biological, Cultural, and Paleontological Requirements** *Section 3.1, Training and Certification* • Before beginning construction, all Contractor personnel involved in ground-disturbing activities are required to attend an environmental training program provided by EBMUD, of up to one day for site supervisors, foremen and project managers and up to 30 minutes for non-supervisory Contractor personnel. Contractor general personnel will receive a worker environmental awareness training. • The Contractor is responsible for ensuring that all workers requiring environmental training are identified to EBMUD. • Prior to accessing or performing construction work, the identified Contractor personnel shall: – Sign a wallet card provided by EBMUD verifying that the Contractor personnel has attended the appropriate level of training relative to their position; have understood the contents of the environmental training, and shall comply with all project environmental requirements. – Display an environmental training hard hat decal (provided by EBMUD after completion of the training) at all times.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for attending training and maintaining all required documentation of training.	• EBMUD is responsible for verifying workers have received training.	• Prior to construction • Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
Impact TCR-1: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically define in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe.	**EBMUD Standard Construction Specification 01 35 45, Biological, Cultural, and Paleontological Resource Requirements** *Section 3.3, Protection of Cultural and Paleontological Resources* • Confidentiality of Information on Cultural and Paleontological Resources – In conjunction with Contractor's performance under this contract, the Contractor may obtain information as to the location and/or nature of certain cultural or paleontological resources, including Native American artifacts and remains. This information may be provided to the Contractor by EBMUD or a third party, or may be discovered directly by the Contractor through its performance under the contract. All such information shall be considered "Confidential Information" for the purposes of this Article. – Pursuant to California Government Code Section 6254.10, cultural resource information is protected from public disclosure. The Contractor agrees that the Contractor, its subcontractors, and their respective agents and employees shall not publish or disclose any Confidential Information to any person, unless specifically authorized in advance, in writing by EBMUD. • Conform to the requirements of statutes as they relate to the protection and preservation of cultural and paleontological resources. Unauthorized collection of prehistoric or historic artifacts or fossils along the Work Area, or at Work facilities, is strictly prohibited. • In addition to the training identified in Article 3.1.A above, identified Contractor personnel shall attend a cultural and paleontological resources training course provided by EBMUD of up to two hours. The training program will be completed in person or by watching a video, at an EBMUD designated location, conducted or prepared by a Qualified Archaeologist and/or Paleontologist. The program will discuss cultural and paleontological resources awareness within the project work limits, including the responsibilities of Contractor personnel, applicable mitigation measures, confidentiality, and notification requirements. Prior to accessing the construction site, or performing site work, identified Contractor personnel shall: – Sign an attendance sheet provided by EBMUD verifying that all Contractor construction personnel involved in ground disturbing activities have attended the appropriate level of training; have read and understood the contents of the training; have read and understood the contents of the "Confidentiality of Information on Cultural and Paleontological Resources" document, and shall comply with all project environmental requirements. • In the event that potential cultural or paleontological resources are discovered at the site of construction, the following procedures shall be instituted: – Discovery of prehistoric or historic-era archaeological resources requires that all construction activities shall immediately cease at the location of discovery and within 100 feet of the discovery. ▪ The Contractor shall immediately allow EBMUD to evaluate the find. The Contractor is responsible for stopping work and notifying EBMUD and shall not recommence work until authorized to do so by EBMUD.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• EBMUD designated archaeologist is responsible for providing contractor training. • Contractor is responsible for attending training. • Contract is responsible for notifying EBMUD of any potential discovery of cultural resources and halt work per the specification. • EBMUD is responsible for retaining a qualified archaeologist to inspect any finds as needed. • EBMUD is responsible for contacting the County coroner if any human remains are found.	• EBMUD is responsible for verifying implementation.	• Prior to construction • Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	▪ EBMUD will retain a qualified archaeologist to inspect the findings within 24 hours of discovery. If it is determined that the Project could damage a historical resource as defined by CEQA (or a historic property as defined by the NHPA), construction shall cease in an area determined by the archaeologist until a management plan has been prepared, approved by EBMUD, and implemented to the satisfaction of the archaeologist (and Native American representative if the resource is prehistoric, who shall be identified by the NAHC). In consultation with EBMUD, the archaeologist (and Native American representative) will determine when construction can resume. – Discovery of human remains requires that all construction activities immediately cease at, and within 100 feet of the location of discovery. ▪ The Contractor shall immediately notify EBMUD who will engage a qualified archaeologist provided by EBMUD to evaluate the find. The Contractor is responsible for stopping work and notifying EBMUD and shall not recommence work until authorized to do so by EBMUD. ▪ EBMUD will contact the County Coroner, who will determine whether or not the remains are Native American. If the remains are determined to be Native American, the Coroner will contact the NAHC. The NAHC will then identify the person or persons it believes to be the most likely descendant from the deceased Native American, who in turn would make recommendations to EBMUD for the appropriate means of treating the human remains and any associated funerary objects. ▪ Otherwise, the County Coroner shall be allowed to complete their investigation and the Contractor shall not recommence work until authorized to do so by both the Coroner and EBMUD. • If EBMUD determines that the cultural or paleontological resource discovery requires further evaluation, at the direction of EBMUD, the Contractor shall suspend all construction activities at the location of the find and within a larger radius, as required.					
	Wildfire					
Impact Wildfire-1: Substantially impair an adopted emergency response plan or emergency evacuation plan.	**EBMUD Standard Construction Specification 01 55 26, Traffic Regulation** *Section 1.1, Summary* • All proposed street closures shall be clearly identified in the Traffic Control Plan (TCP) and shall conform to the section "Traffic Control Devices" below. Construction area signs for street closure and detours shall be posted a minimum of forty-eight (48) hours prior to the commencement of street closure. Contractor shall maintain safe access around the project limit at all times. Street closures shall be limited to those locations indicated on the construction documents. *Section 1.2(A), Submittals* • Submit at least 15 calendar days prior to work a detailed traffic control plan, that is approved by all agencies having jurisdiction and that conforms to all requirements of these specifications and the most recently adopted edition of the Manual on Uniform Traffic Control Devices (MUTCD). Traffic Control Plan shall include:	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for preparing and submitting a Traffic Control Plan.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to Construction • Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	– Circulation and detour plans to minimize impacts to local street circulation. Use haul routes minimizing truck traffic on local roadways to the extent possible. – A description of emergency response vehicle access. If the road or area is completely blocked, preventing access by an emergency responder, a contingency plan must be included. – Procedures, to the extent feasible, to schedule construction of project elements to minimize overlapping construction phases that require truck hauling.					
Impact Wildfire-1: Substantially impair an adopted emergency response plan or emergency evacuation plan.	**EBMUD Standard Construction Specification 01 55 26, Traffic Regulation** *Section 3.1, General* • For complete road closures, immediate emergency access to be provided if needed to emergency response vehicles.	• Phase 2	• Central North Aqueduct pipeline	• Contractor is responsible for implementing the measure	• EBMUD is responsible for verifying implementation.	• Construction
Impact Wildfire-2: Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	**EBMUD Standard Construction Specification 01 35 24, Project Safety Requirements and Site Activities** *Section 1.3(F), Submit an Emergency Action Plan* • Prepare responses to employee accident/injury events, or any serious unplanned event (e.g.: utility break, fire, structure collapse, etc.) that requires any first aid provider or response agencies (e.g.: fire departments, utility agencies, rescue teams, etc.)	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for submitting an Emergency Action Plan.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to construction
Impact Wildfire-2: Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	**EBMUD Standard Construction Specification 01 35 24, Project Safety Requirements and Site Activities** *Section 3.2(F), Fire Prevention and Protection* • Perform all work in a fire safe manner and supply and maintain on the site adequate fire fighting equipment capable of extinguishing incipient fires. Comply with applicable federal, local, and state fire prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standards for Safeguarding Building Construction Operations (NFPA No. 241) shall be followed. • A long-handled, round-point shovel, or a fire extinguisher shall be kept at an accessible (unlocked) location on the construction site at all times. • Earthmoving and portable equipment with internal combustion engines shall be equipped with a spark arrestor to reduce the potential for igniting a wildfire. Such equipment shall be maintained to ensure proper functioning of spark arrestor. • For all work occurring between April 1 and December 1, or any other periods during which a high fire danger has been identified: – Equipment that could produce a spark, fire, or flame shall not be used within 10 feet of any flammable materials. – Portable tools powered by gasoline-fueled internal combustion engines shall not be used within 25 feet of any flammable materials. • Vegetation management for fire prevention and protection • Prior to and during construction: – Create and maintain a defensible space (100 feet or to EBMUD property boundary, whichever is shorter) around construction site, construction ingress and egress sites through landscaping, mowing, disking, and/or spraying dry brush or native grasses to a height of 4 inches or less.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• Contractor is responsible for implementing the specification.	• EBMUD is responsible for verifying implementation.	• Prior to construction • Construction

Impact Area	EBMUD Practices and Procedures	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	– Remove dead trees within 100 feet of construction site. – Limb up trees within 100 feet of construction site so that no leafy foliage, twigs or branches are within 5-feet of the ground. To maintain tree health, tree limbing shall not remove more than 25 percent of a tree canopy within one growing season. – Ensure and maintain 5-feet of vertical clearance between roof surfaces and portions of trees overhanging all structures within construction site, and keep roofs free of leaves, needles, twigs, and other combustible matter. To maintain tree health, tree limbing shall not remove more than 25 percent of a tree canopy within one growing season. – Keep all overhanging trees, shrubs, and other vegetation, or portions thereof, free of dead limbs, branches, and other combustible matter. – Neatly stack all combustible materials away from structures within construction site and have all combustible growth cleared 15-feet around the stack. • During construction, maintain an unobstructed horizontal clearance at access drives of not less than the required width of the access drives, and an unobstructed vertical clearance of not less than 13 feet 6 inches above all roadways.					
Impact Wildfire-3: Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	**Engineering Standard Practice 512.1, Water Main Design Criteria** • *Purpose:* Establishes criteria for design of water mains including pipeline replacements, improvements, relocations or new extensions in the distribution and transmission systems.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• EBMUD is responsible for implementing the design criteria.	• EBMUD is responsible for verifying implementation.	• Prior to construction
Impact Wildfire-3: Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	**Engineering Standard Practice 550.1, Seismic Design Requirements** • *Purpose:* Establishes minimum criteria for seismic design of new and existing EBMUD facilities which include (but are not limited to) offices, operating centers, water and wastewater treatment plants, water and other liquids storage structures, pumping plants, retaining walls, underground vaults, pipelines, and other structures.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• EBMUD is responsible for implementing the design criteria.	• EBMUD is responsible for verifying implementation.	• Prior to construction

Table 6 Mitigation Monitoring and Reporting Program

Impact Area	Mitigation Measure	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
Aesthetics						
Impact AES-3 In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.	**Mitigation Measure AES-1: Landscape Maintenance** • The contractor shall inspect all tree materials that are used for Project landscaping to ensure the health of trees and shrubs prior to planting. Any root bound, diseased, or otherwise unhealthy trees or shrubs shall be replaced prior to planting. • EBMUD will provide supplemental irrigation of all landscaped areas for a period of five (5) years following landscaping. Damage to the irrigation lines shall be repaired to ensure the irrigation is properly functioning during the dry season (April to October). EBMUD will conduct monitoring of all Project landscaping one year after planting and will replace in-kind any trees that are damaged, diseased, or failing to grow. All replaced, shrubs and trees shall be inspected for health prior to planting.	• Phase 1	• SOWTP Site	• Contractor is responsible for inspecting trees and providing supplemental irrigation.	• EBMUD is responsible for verifying implementation.	• Prior to landscaping • 1 year after landscaping • 5 years after landscaping
	Biological Resources					
Impact BIO-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	**Mitigation Measure BIO-1: California Red-Legged Frog and Western Pond Turtle** • No more than 24 hours before the date of initial ground disturbance and exclusion fence installation for the Central North Aqueduct pipeline jack and bore pits, a preconstruction survey for California red-legged frog and western pond turtle shall be conducted by a Designated biologist within the jack and bore pit disturbance areas. • If any California red-legged frog or potential burrows, or western pond turtle are found, the contractor shall allow the California red-legged frog or western pond turtle to leave the work area on its own or adjust the work area limits to avoid the California red-legged frog or western pond turtle. If avoidance is infeasible, EBMUD shall obtain any required USFWS permit/approval required to relocate the individual(s). • Temporary exclusion fencing shall be installed around the limits of the Central North Aqueduct pipeline northern jack and bore work area, so that special-status amphibians, reptiles, and mammals cannot enter the work area. Installation of exclusion fencing shall occur under the supervision of the Designated biologist and immediately following a clearance survey of the area. The exclusion fencing shall have a minimum aboveground height of 30 inches, and the bottom of the fence shall be keyed in at least 4 inches deep and backfilled with soil, sandbags, gravel, or other means to prevent wildlife from passing under the fencing. Exclusion fencing shall be installed to prevent species entry into active work areas, and to mark the limits of construction disturbance at equipment staging areas, site access routes, construction equipment and personnel parking areas, debris storage areas, and any other areas that may be disturbed. • The exclusion fencing shall be installed in a manner that reduces the potential for trapping migrating wildlife and for wildlife climbing over the fence, such as having the top of the fencing curved over on the outside of the fence. The exclusion fencing shall remain in place and be maintained for the duration of construction activities at the Central North Aqueduct pipeline northern jack and bore pit. Any damage to the exclusion fence shall be repaired within 48 hours of the observed damage.	• Phase 2	• Central North Aqueduct pipeline jack and bore pits	• EBMUD is responsible for hiring a qualified biologist to conduct surveys • Contractor is responsible for installing exclusion fence per the measure.	• EBMUD is responsible for verifying implementation.	• Prior to construction.
Impact BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.	**Mitigation Measure BIO-2: Willow Riparian and Seasonal Wetland Habitat Protection and Restoration** • To the extent feasible, all areas of willow riparian habitat and seasonal wetlands shall be avoided during final Project design and construction. Construction limit fencing shall be used to limit the extent of construction to approved work areas. Construction mats shall be applied to the ground surface in areas of temporary disturbance within willow riparian and seasonal wetland habitats. Mats shall be applied before any vehicle activity in the area, to avoid rutting in wetland and willow riparian habitat.	• Phase 1 • Phase 2	• SOWTP site	• EBMUD is responsible for designing to minimize impacts, completing pre-construction surveys, and completing compensatory	• EBMUD is responsible for monitoring.	• Detailed design • Prior to construction. • Construction. • Post-construction

Impact Area	Mitigation Measure	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	• A preconstruction survey, including photos at five photo points that are representative of the temporarily impacted sensitive natural communities and transect monitoring, shall be conducted in the areas of temporary willow riparian and seasonal wetland impacts to document the following immediately before construction: – Species composition and percentage cover of each dominant and subdominant species; and – Relative cover of non-native species within each sensitive natural community. • All areas of temporary impact within willow riparian and seasonal wetland habitats shall be restored to pre-project conditions. The seasonal wetland and willow riparian area shall be planted with a native vegetation mix that is characteristic of the vegetation community. The planting palette for the seasonal wetland and willow riparian area shall be provided by a restoration specialist to EBMUD for submittal to CDFW for review and approval before construction. Temporarily disturbed areas shall be monitored annually for up to five years and maintained until the following success criteria have been met: – The area has a minimum of 80 percent vegetative cover with native willows and associated species in willow riparian areas and native hydrophytic vegetation typical of seasonal wetlands in the seasonal wetland areas. – Non-native species cover shall not exceed pre-project conditions/cover. • EBMUD will cause an annual monitoring report to be completed and submitted to EBMUD and CDFW for up to five years and until success criteria are met. The annual monitoring report shall include the results of photo documentation at the defined preconstruction photo points as well as document performance of the restoration relative to the success criteria. Any corrective actions needed to meet the success criteria shall be documented in the annual report and shall be implemented within the following year. Any areas that fail to meet the success criteria after five years of monitoring shall be treated as permanent impacts and require compensatory mitigation, in compliance with Mitigation Measure BIO-3.			mitigation and monitoring post-construction. • Contractor is responsible for minimizing impacts during construction and restoring areas of temporary impact.		
Impact BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.	**Mitigation Measure BIO-3: Sensitive Natural Community Compensatory Mitigation** • Permanent impacts on willow riparian habitat and seasonal wetlands shall be compensated through on-site or off-site enhancement or creation of willow riparian habitat and seasonal wetland habitat. Permanent impacts on willow riparian and seasonal wetland habitat shall be compensated through enhancement of willow riparian habitat/seasonal wetlands at a minimum 2:1 ratio (enhancement: impact) or creation of willow riparian habitat/seasonal wetlands at a minimum 1:1 ratio. Mitigation credits may be purchased from a CDFW and Regional Water Quality Control Board-approved mitigation bank if on-site mitigation is not feasible. • If EBMUD conducts mitigation through habitat enhancement or creation, a riparian and wetland mitigation plan shall be prepared that address the following parameters: – Baseline conditions within the mitigation site – Proposed mitigation site conditions – Mitigation methods (e.g., habitat creation or enhancement) – Planting plan – Methods for invasive weed control – Methods to establish the desired mitigation site conditions – Maintenance, including trash removal, invasive weed removal, and repair of any damage to the mitigation site – Adaptive management procedures – Monitoring methods	• Phase 1 • Phase 2	• SOWTP site	• EBMUD is responsible for defining and completing compensatory mitigation.	• EBMUD is responsible for verifying implementation.	• Prior to construction • Post-construction

Impact Area	Mitigation Measure	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	• The enhanced or created riparian and wetland habitat shall meet the following success criteria: – Minimum of 70 percent vegetated cover with native willow riparian vegetation for willow riparian mitigation and native wetland vegetation for seasonal wetland mitigation – Less than 3 percent invasive weed cover – Wetland hydrology and soil conditions in the compensatory wetland mitigation areas • Annual monitoring shall be conducted for the mitigation habitats and shall include surveys for native vegetation cover, photo documentation at defined photo-monitoring locations, and monitoring for invasive species and any other habitat stressors. Monitoring will be conducted for the first five years or until success criteria are met. • An annual report shall be submitted to CDFW by January 31st following the reporting year. The annual report shall provide the results of annual habitat monitoring, recommendations for any corrective actions needed to meet success criteria, and a description of any corrective actions taken in the previous reporting year.					
Impact BIO-3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means	**Mitigation Measure BIO-2: Willow Riparian and Seasonal Wetland Habitat Protection and Restoration** • (Details listed in Impact BIO-2)	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2
Impact BIO-3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	**Mitigation Measure BIO-3: Sensitive Natural Community Compensatory Mitigation** • (Details listed in Impact BIO-2)	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2
Impact BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	**Mitigation Measure BIO-2: Willow Riparian and Seasonal Wetland Habitat Protection and Restoration** • (Details listed in Impact BIO-2)	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2
Impact BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	**Mitigation Measure BIO-3: Sensitive Natural Community Compensatory Mitigation** • (Details listed in Impact BIO-2)	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2	• Details listed in Impact BIO-2
	Cultural Resources					
Impact CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	**Mitigation Measure CR-1: Archaeological and Tribal Monitoring** • During ground-disturbing construction activities of the Central North Aqueduct pipeline at the previously recorded site P-07-000068 and a 250-foot buffer from the site, a qualified archaeological and tribal monitor shall be present to inspect unexcavated sediments and soils for any sign of site P-07-000068 or other potential archaeological deposit. The archaeologist and tribal monitor shall notify EBMUD and its contractor of a discovery and EBMUD will direct its contractor to stop work in the vicinity of a discovery. The archaeologist will follow all regulations for the identification, evaluation, and recovery of any archaeological resources that cannot be avoided. • During ground-disturbing construction activities of the Central North Aqueduct pipeline in areas with moderate sensitivity for deeply buried pre-contact archaeological resources (e.g., Bay Terrace alluvium), a qualified archaeological and tribal monitor shall be present to inspect unexcavated sediments and soils for any sign of potential archaeological deposits bi-weekly (two times per week). The archaeologist and tribal monitor shall notify EBMUD and its contractor of a discovery and EBMUD will direct its contractor to stop work in the vicinity of a discovery. If the archaeologist has observed excavation to final depth in sufficient areas to adequately characterize that the Project area and the underlying sediments appear disturbed or other evidence to suggest that	• Phase 2	• Central North Aqueduct pipeline	• EBMUD is responsible for hiring a qualified archaeologist and tribal monitor to conduct monitoring per the measure.	• EBMUD is responsible for verifying implementation.	• Construction

Impact Area	Mitigation Measure	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	archaeological and tribal cultural deposits are highly unlikely, the qualified archaeologist may recommend, in consultation with EBMUD, a switch to periodic (spot-check) monitoring or cease inspections entirely. • If during bi-weekly inspections, the archaeologist identifies sensitive intact sediments that are likely to contain archaeological deposits, ground-disturbing activities shall be halted, and the qualified archaeologist shall develop an appropriate Archaeological Monitoring Plan in consultation with EBMUD. The Archaeological Monitoring Plan may include increased frequency of periodic archaeological inspections, full-time archaeological construction monitoring, or presence/absence testing in areas of heightened archaeological sensitivity. The archaeologist will follow all regulations for the identification, evaluation, and recovery of any archaeological resources that cannot be avoided.					
	Geology and Soils					
Impact GEO-5: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**Mitigation Measure GEO-1: Paleontological Resource Monitoring Plan** • During detailed design of the facilities, a professional paleontologist will be retained to prepare and implement a paleontological resource monitoring plan (PRMP), which will define paleontological resource monitoring locations, timing, and methodology. The location and extent of paleontological resource monitoring will reflect the locations where Project excavations are anticipated to impact the Orinda Formation based on design drawings, depth to bedrock, and locations of historic fills, as interpreted from geotechnical data. The PRMP will include procedures to adjust paleontological monitoring frequency and locations based on field monitoring results. The PRMP will also define protocols for any discoveries of paleontological resources including: 1. Notification procedures. 2. Procedures for temporarily diverting or halting construction to salvage fossils. 3. Methods to salvage fossils. 4. Methods to prepare the fossils for curation. 5. Locations of approved repositories where fossil discoveries will be offered for curation. • Before the start of ground-disturbing activities, a professional paleontologist will be retained to implement the PRMP.	• Phase 1 • Phase 2	• SOWTP site • Central North Aqueduct pipeline	• EBMUD is responsible for hiring a qualified paleontologist to prepare a PRMP and conducting monitoring.	• EBMUD is responsible for reviewing and approving the plan.	• Prior to construction • Construction
	Noise					
Impact NOI-1: Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	**Mitigation Measure NOI-1. Phase 1 Temporary Noise Barriers.** • EBMUD shall erect a 16-foot-tall temporary noise barrier on EBMUD property between the active Phase 1 construction area and residential receptors on Amend Road throughout the duration of Phase 1 construction. The noise barrier will be STC rated 25 or higher and specific to sound attenuation applications. During some periods of construction, the noise barrier may be moved or dismantled temporarily to accommodate the Project construction area, and EBMUD shall schedule only mobile equipment activities to occur during periods when the noise barrier is being moved. EBMUD shall also erect a 12-foot tall noise barrier with an STC rating of 25 or higher between the Phase 1 demolition area and adjacent residents north of the demolition area.	• Phase 1	• SOWTP site (see Figure 1)	• Contractor is responsible for installing noise barriers.	• EBMUD is responsible for verifying implementation.	• Construction
Impact NOI-1: Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	**Mitigation Measure NOI-2. Phase 2 Temporary Noise Barriers.** • EBMUD shall erect a 12-foot-tall temporary noise barrier between the Phase 2 gravity thickeners and sensitive receptors on Amend Road and a separate 12-foot-tall temporary noise barrier between the Central North Aqueduct pipeline jack and bore location and the D'Avila Woods Apartment buildings. The temporary noise barrier will be	• Phase 2	• SOWTP site • Central North Aqueduct jack and bore location (See Figure 1)	• Contractor is responsible for installing noise barriers.	• EBMUD is responsible for verifying implementation.	• Construction

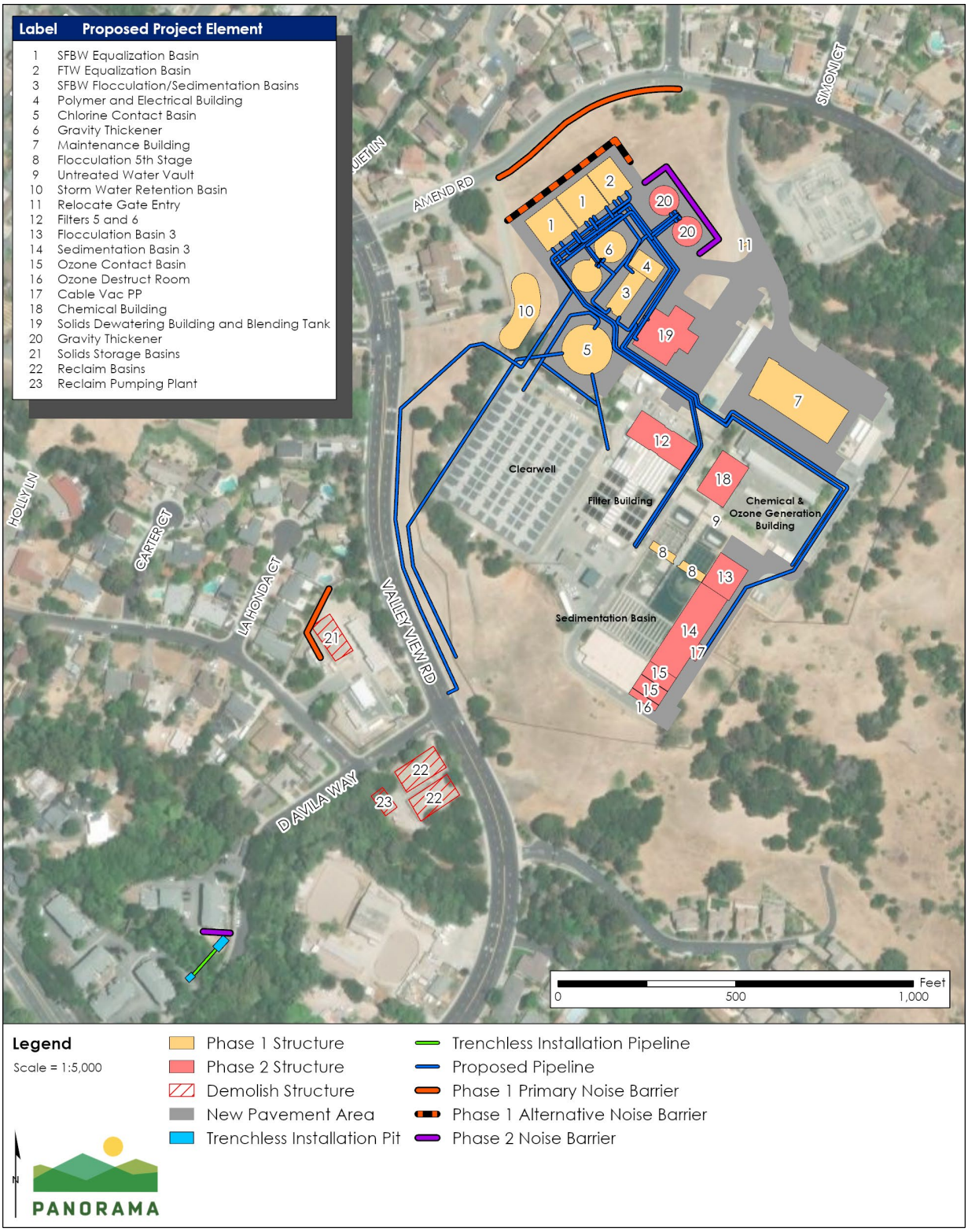
Impact Area	Mitigation Measure	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	STC rated 25 or higher and specific to sound attenuation applications. To be effective, the noise barriers will be installed to block the line of sight between the construction activity and residential receptors.					
Impact NOI-1: Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	**Mitigation Measure NOI-3. Limit Construction Hours in Contra Costa County.** • Where feasible, EBMUD shall limit excavation and grading activities within 500 feet of residential and commercial occupancies within Contra Costa County to weekdays within the County approved construction hours of 7:30 a.m. to 5:30 p.m.	• Phase 2	• Central North Aqueduct pipeline	• Contractor is responsible for implementing the measure.	• EBMUD is responsible for verifying implementation.	• Construction
Impact NOI-1: Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	**Mitigation Measure NOI-4. Off-site Accommodation for Affected Nighttime Receptors.** • EBMUD shall notify residents, who could be affected by nighttime (10 p.m. to 7 a.m.) construction of the Central North Aqueduct pipeline at busy intersections or at tie-in locations, at least 10 days in advance. Residences within 660 feet of these nighttime construction work areas may request alternative lodging for the night(s) of the potential nighttime construction from EBMUD; alternative lodging to be provided will consist of a standard room at a hotel within 5 miles of the affected residence or as close as feasible. Alternative lodging will be provided and approved by EBMUD the day before the known nighttime pipeline construction is planned, or earlier, based on the types of construction activities that may occur during the nighttime hours (10 p.m. to 7 a.m.). This measure will be implemented only if nighttime construction at busy intersections or at tie-ins is to occur for the Central North Aqueduct pipeline.	• Phase 2	• Central North Aqueduct pipeline nighttime construction locations	• EBMUD is responsible for notifying property owners and providing alternative lodging if needed.	• EBMUD is responsible for verifying implementation.	• Prior to nighttime construction
	Transportation					
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	**Mitigation Measure TRA-1. Minimize Impacts on Transit Service** • At least 60 days prior to construction activities involving temporary roadway centerline adjustment, rerouting of any bus line(s), or temporary closure and relocation of any bus stop, EBMUD shall coordinate with AC Transit. Roadway centerline adjustment and transit rerouting plans shall be reviewed and approved by the relevant city or county and reviewed by AC Transit prior to construction and included in the Project's Traffic Control Plan. EBMUD shall coordinate with AC Transit, to temporarily relocate any bus stops that are affected by construction of the Central North Aqueduct pipeline. Any parking obstruction, sidewalk obstruction, travel lane obstruction, or other accommodation required for the temporary bus stop shall be reviewed and approved by AC Transit prior to construction and included in the Project's Traffic Control Plan.	• Phase 2	• Central North Aqueduct pipeline	• EBMUD is responsible for coordinating with AC Transit and implementing the measure.	• EBMUD is responsible for verifying implementation.	• Prior to transit stop relocation or rerouting of bus lines
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	**Mitigation Measure TRA-2: Minimize Impacts of Heavy Truck Traffic at SOWTP** • Use of soil and demolition off-haul trucks to and from the SOWTP will be restricted to between the hours of 9:00 a.m. to 4:00 p.m. • Soil and demolition off-haul and large equipment delivery trucks on Valley View Road and Camino Pablo in front of schools will be limited to the hours of 9:00 a.m. to 3:00 p.m. • Concrete deliveries may begin as early as 6:00 a.m. • The required Traffic Control Plan shall include the following measures: – EBMUD's Contractor shall distribute written traffic safety requirements to all Contractor heavy construction vehicle drivers. All drivers shall provide signed acknowledgement of having read and understood all traffic safety requirements and consequences of non-compliance. – Written traffic safety requirements shall include: ▪ Construction work hours specifying when construction traffic would be allowed to access the SOWTP and staging areas. ▪ Construction haul routes and associated speed limits. ▪ Designated parking locations.	• Phase 1 • Phase 2	• SOWTP site	• Contractor is responsible for incorporating the measure into the Traffic Control Plan and implementing the measure.	• EBMUD is responsible for verifying implementation.	• Prior to Construction • Construction

Impact Area	Mitigation Measure	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	– Contractor shall provide Project sticker or equivalent to drivers who have provided written acknowledgement of traffic safety requirements. – Project sticker shall be made available upon request by EBMUD during the construction contract period. – Contractor heavy construction vehicle drivers shall conform to designated construction hours, including no driving, queuing, idling or parking on local roadways outside of designated construction hours as outlined in written traffic safety requirements. – Contractor heavy construction vehicle drivers shall use only designated construction traffic haul routes. – Contractor shall provide Radar Speed Feedback Signs along Valley View Road and Amend Road for the entire Project duration (two, one in each direction of traffic on Valley View Road and Amend Road) to deter speeding by heavy construction vehicles on construction traffic routes. – Contractor heavy construction vehicle drivers shall comply with roadway traffic safety rules as outlined in written traffic safety requirements, including, but not limited to: ▪ Stoplight signals and stop signs. ▪ Roadway speed limits (reduced speeds in construction zones and near schools).					
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	**Mitigation Measure TRA-3. Minimize Impacts of Heavy Traffic at Road 20** • Use of soil and demolition off-haul and large equipment delivery trucks on Road 20 in front of Helms Middle School will be limited to the hours of 9:00 a.m. to 3:00 p.m. • The required Traffic Control Plan shall include the following measures: – EBMUD's Contractor shall distribute written traffic safety requirements to all Contractor heavy construction vehicle drivers. All drivers shall provide signed acknowledgement of having read and understood all traffic safety requirements and consequences of non-compliance. – Written traffic safety requirements shall include: ▪ Construction work hours specifying when construction traffic would be allowed to access the work area at Road 20 ▪ Construction haul routes and associated speed limits. ▪ Designated parking locations. – Contractor shall provide a Project sticker or equivalent to drivers who have provided written acknowledgement of traffic safety requirements. – Project sticker shall be made available upon request by EBMUD during the construction contract period. – Contractor heavy construction vehicle drivers shall conform to designated construction hours, including no driving, queuing, idling or parking on local roadways outside of designated construction hours as outlined in written traffic safety requirements. – Contractor heavy construction vehicle drivers shall use only designated construction traffic haul routes. – Contractor shall provide Radar Speed Feedback Signs along Road 20 during construction on Road 20 (two, one in each direction of traffic on Road 20) to deter speeding by heavy construction vehicles on construction traffic routes. – Contractor heavy construction vehicle drivers shall comply with roadway traffic safety rules as outlined in written traffic safety requirements, including, but not limited to: ▪ Stoplight signals and stop signs.	• Phase 2 Construction • Construction	• Central North Aqueduct	• Contractor is responsible for incorporating the measure into the Traffic Control Plan and implementing the measure.	• EBMUD is responsible for verifying implementation.	• Prior to Construction • Construction

Impact Area	Mitigation Measure	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	▪ Roadway speed limits (reduced speeds in construction zones and near schools).					
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	**Mitigation Measure TRA-4. Bicycle Safety** The following protocols shall be implemented to protect bicyclist safety during open trench construction in roadways: • Striped/designated bikeways (Class II) shall be avoided by construction staging and activities to the extent feasible. • Notices shall be posted 14 days prior to construction along roadways where open trench construction will occur. Notices shall include the following information: – Location of construction within the roadway. – Timing of construction in the area. – Detour routes for bicyclists where designated bike lanes will be impacted by construction. • Flaggers shall be trained to safely direct bicyclists around the work area without creating conflicts with pedestrians or vehicle traffic. • Any impacted bikeway shall be restriped and any physical demarcation of bikeways shall be replaced within 14 days following installation of permanent or temporary asphalt within the impacted roadways.	• Phase 2	• Central North Aqueduct pipeline	• EBMUD is responsible for designing the pipeline to avoid impacts on bikeways where feasible. • Contractor is responsible for posting notices, using flaggers, and repairs.	• EBMUD is responsible for verifying implementation.	• Detailed design • Construction • Post-construction
Impact TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	**Mitigation Measure TRA-5: Pedestrian Access** • Construction of the Central North Aqueduct pipeline shall be phased such that at least one crosswalk at each of the affected signalized intersections on San Pablo Dam Road, Valley View Road, El Portal, and Road 20 is accessible at any given time to the extent feasible. Pedestrian access plans shall be included in the Traffic Control Plan and reviewed and approved by the local agency with jurisdiction over the roadway.	• Phase 2	• Central North Aqueduct pipeline	• Contractor is responsible for including pedestrian access in the Traffic Control Plan and implementing the measure.	• EBMUD is responsible for verifying implementation.	• Prior to construction • Construction
Impact TRA-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	**Mitigation Measure TRA-2: Minimize Impacts of Heavy Truck Traffic at the SOWTP** • Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.
Impact TRA-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	**Mitigation Measure TRA-3: Minimize Impacts of Heavy Truck Traffic at Road 20** • Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.
Impact TRA-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	**Mitigation Measure TRA-4. Bicycle Safety** • Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.
Impact TRA-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	**Mitigation Measure TRA-5: Pedestrian Access** • Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.	• Details listed in Impact TRA-1.
	Tribal Cultural Resources					
Impact TCR-1: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically define in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe.	**Mitigation Measure CR-1: Archaeological and Tribal Monitoring** • During ground-disturbing construction activities of the Central North Aqueduct pipeline at the previously recorded site P-07-000068 and a 250-foot buffer from the site, a qualified archaeological and tribal monitor shall be present to inspect unexcavated sediments and soils for any sign of site P-07-000068 or other potential archaeological deposit. The archaeologist and tribal monitor shall notify EBMUD and its contractor of a discovery and EBMUD will direct its contractor to stop work in the vicinity of a	• Phase 2	• Central North Aqueduct pipeline	• EBMUD is responsible for hiring a qualified archaeologist and tribal monitor to conduct monitoring.	• EBMUD is responsible for verifying implementation.	• Construction

Impact Area	Mitigation Measure	Project Phase	Location	Responsibility for Implementation	Responsibility for Monitoring and/or Enforcement	Timing of Implementation
	discovery. The archaeologist will follow all regulations for the identification, evaluation, and recovery of any archaeological resources that cannot be avoided. • During ground-disturbing construction activities of the Central North Aqueduct pipeline in areas with moderate sensitivity for deeply buried pre-contact archaeological resources (e.g., Bay Terrace alluvium), a qualified archaeological and tribal monitor shall be present to inspect unexcavated sediments and soils for any sign of potential archaeological deposits bi-weekly (two times per week). The archaeologist and tribal monitor shall notify EBMUD and its contractor of a discovery and EBMUD will direct its contractor to stop work in the vicinity of a discovery. If the archaeologist has observed excavation to final depth in sufficient areas to adequately characterize that the Project area and the underlying sediments appear disturbed or other evidence to suggest that archaeological and tribal cultural deposits are highly unlikely, the qualified archaeologist may recommend, in consultation with EBMUD, a switch to periodic (spot-check) monitoring or cease inspections entirely. • If during bi-weekly inspections, the archaeologist identifies sensitive intact sediments that are likely to contain archaeological deposits, ground-disturbing activities shall be halted, and the qualified archaeologist shall develop an appropriate Archaeological Monitoring Plan in consultation with EBMUD. The Archaeological Monitoring Plan may include increased frequency of periodic archaeological inspections, full-time archaeological construction monitoring, or presence/absence testing in areas of heightened archaeological sensitivity. The archaeologist will follow all regulations for the identification, evaluation, and recovery of any archaeological resources that cannot be avoided.					

Figure 1 Location of Phase 1 and Phase 2 Noise Barriers



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