Stantec Consulting Services Inc.
290 Conejo Ridge Avenue, Thousand Oaks, CA 91361

06 August 2020

Attention: Carrie Poytress, P.E. Engineering Manager

Montecito Sanitary District
1042 Monte Cristo Lane
Santa Barbara, CA 93108

Dear Ms. Poytress,

Reference: Public Comment on Initial Study/ Mitigated Negative Declaration for the Montecito Sanitary District Development Plan Projects

The Montecito Sanitary District (MSD, California Environmental Quality Act [CEQA] Lead Agency, Proponent) is proposing to design, construct, and implement the proposed Development Plan Projects (Project). The proposed Project consists of the construction, operation, and maintenance of: (1) a 1,500 square foot Title 22 compliant tertiary wastewater treatment system including storage tanks and distribution pipelines; (2) Essential Services Building and parking lot with new driveway off Channel Drive; and (3) five solar structures and panels. The recycled water produced from the tertiary wastewater treatment system would be used to help irrigate the adjacent existing 55.63-acre Santa Barbara cemetery. The use of recycled water for the irrigation of the cemetery would allow the cemetery to limit/ reduce use of potable water for irrigation purposes. All Project components would be located within or adjacent to the existing MSD facility in the unincorporated community of Montecito at 1042 Monte Cristo Lane. An Initial Study/ Mitigated Negative Declaration (IS/MND) was posted electronically for public review and comment from May 5, 2020 through June 5, 2020.

In accordance with CEQA Guidelines Section 15074(b), the decision-making body is the Montecito Sanitary District Board of Directors. As such, all comments will be provided to the Montecito Sanitary District Board of Directors prior to any approval associated with the proposed Project. The Board of Directors will consider the proposed IS/MND as well as all comments received.

The following table provides a summary of comments received within the 30-day public review period related to the Project IS/MND and the District's responses. These responses additionally note the minor text edits made in the Final IS/MND to address the comments. The comments received during public review and the minor edits made to the Final IS/MND to address the comments did not result in any new potentially significant environmental impacts, a substantial increase in a previously disclosed impact, or new mitigation measures to reduce potentially significant impacts to less than significant levels.

Should you have any further questions, please contact the undersigned.

Stantec Consulting Services Inc.

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APPENDIX A

Comments and Responses

Comment #	Commenter	Affiliation	Received	Comment Description	District Response
1	Lisa Plowman, Director	County of Santa Barbara Planning and Development	6/4/2020	In Table 2, on page 1.6, it should be noted the following additional permits are required from the County of Santa Barbara: Development Plan Permit, Building Permit(s). Additionally, the proposed 75,000-gallon offsite water tank is within the City of Santa Barbara's jurisdiction.	The County of Santa Barbara permits (e.g. development plan, building permit) and the City of Santa Barbara permits (e.g., building) have been added to Table 2 of the Final IS/MND.
6	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Throughout document: The term Essential Services Building is capitalized in some places and is in lower case in other places. You may want to standardize this.	Capitalization of the "Essential Services Building" is now consistent throughout the Final IS/MND.
7	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 1.1: Please include the City of Santa Barbara and County of Santa Barbara as responsible agencies. The document discloses in Section 3.12 that the off-storage tank, north of the Cemetery, is in the City of Santa Barbara.	The County and City of Santa Barbara have been included as responsible agencies in Section 1.0 of the Final IS/MND.
8	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 1.6: It would be appropriate to list both the zoning and land use designations in this text, as summarized in Table 1, page 1.5.	The intent of Section 1.10 is to discuss the intended uses of the Initial Study and permit requirements applicable to the proposed Project. Land use is discussed in the previous Section 1.9. No changes necessary.
9	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 1.6, Table 2: This should also include a Development Plan from the County of Santa Barbara. Was there also a requirement for a Minor Conditional User Permit? If so, please list in this table. Also in this table, who exactly issues the building permit for the structures at MSD? That permit and agency should also be listed in Table 2. Finally, please include the City of Santa Barbara for its permitting role for the off-site recycled water tank.	Table 2 of the Final IS/MND has been updated to include the additional permits to be issued by the County and the City of Santa Barbara.
10	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 1.7, Section 2.0: 1st paragraph, last line, add "Coastal Development Permit" after Development Plan.	Section 2.0 of the Final IS/MND has been updated accordingly.
11	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 2.1, Section 2.1 (Project Description): Could you include the proposed height of the recycled water tank proposed off-site to serve the Santa Barbara Cemetery here? And include that in subsequent project description discussions?	The height of the proposed recycled water tank is 16 feet. Section 2.0 of the Final IS/MND has been updated accordingly.
12	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 2.2, Section 2.1 (Project Description bullet list): It would be helpful here, at last bullet, to list the NET added square footage, given the proposed 5,085 square foot Essential Services Building, and the demolition of the existing 1,930 square foot existing office building.	Section 2.1 of the Final IS/MND has been updated accordingly.
13	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 2.2, Section 2.1 Table 3: The Recycled Water Distribution Pipelines, alternates 1 thru 3 – where are the Alternates described in the document?	The three proposed recycled water distribution pipeline options are described in Section 2.2.2 (Recycled Water Transmission, Distribution, and Storage) and shown on Figure 2. No changes necessary.
14	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 2.2, Section 2.1.1: Consider listing the existing outfall pipe that the District has already permitted and is operational, as this seems to be the facility to be relied upon for increased outfall of "waste discharge", or clarify if that facility will remain in place and perhaps expect less "waste discharge" upon completion of the recycling line to the Santa Barbara Cemetery.	The outfall is part of the existing treatment facility and is described in Section 2.2.1 of the Final IS/MND. No changes necessary.
15	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 2.2, Section 2.1.2, end of first sentence: After "occur off-site", please add "at Santa Barbara Cemetery property north of Channel Drive, as shown in Figure 2."	The requested statement has been added to Section 2.1.2 of the Final IS/MND.
17	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 2.6, Section 2.2.3., first sentence: The term "essential services building" here is lower case, but it's capitalized in the rest of the document, in case you want to conform this.	The term "Essential Services Building" has now been capitalized consistently throughout the Final IS/MND.
18	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 2.7, Section 2.3. 2nd paragraph: The cut amount here, cited as 4,650 cu. yds, does not agree with Section 3.3.2 (a) on page 3.13, which states 1,550 cu. yds, of cut and 650 cu. yds, of fill.	The correct metrics are 1,550 cubic yards of cut and 650 cubic yards of fill. Section 2.3 of the Final IS/MND has been updated accordingly.
20	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 3.35, Section 3.5.1: Did Stantec or the District conduct an AB52 consultation with Native Tribes as part of the MND preparation? If so, please include that summary here.	Section 3.20 of the IS/MND details the tribal consultation conducted for the Project, and states: No tribes have requested notification from the District for prior CEQA related projects, and no requests for notification specific to the proposed Project have been made. No changes necessary.

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21	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 3.4, Section 3.1.2, 1. (a): In the "Less than Significant" paragraph, clarify in the middle of this paragraph that the "associated piping" refers to the piping proposed to connect from the MSD site to the storage tank on the Cemetery site. This paragraph should also state the height of the off-site storage tank and the general height of the Eucalyptus trees bordering Channel Drive, that screen the tank. Please also clarify who is responsible for maintaining those Eucalyptus trees in the Channel Drive right-of-way, since the document relies on those trees for screening the tank adequately and categorizing this as a less-than significant impact.	The height of the cemetery tank is 16 feet tall. The height of the trees along Channel dive are approximately 18-20 feet tall and the Eucalyptus trees are approximately 25-30 feet tall. The Montecito Sanitary District is responsible for trimming and maintaining those trees. Section 3.1.2 of the Final IS/MND has been updated accordingly. The potential significance of the impact associated with threshold a) does not change as a result of this comment and remains a "less than significant impact."
22	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 3.53, Section 3.10.2.(a): This discussion should include amendment of the District's Safety and Emergency Plans to incorporate the off-site recycled water tank that will be located north of Channel Drive, on Santa Barbara Cemetery property.	Operation and maintenance of the off-site recycled water tank will be the responsibility of the Cemetery. No changes necessary.
23	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 3.54, Section 3.10.2(b): What agency is responsible for monitoring the abatement of asbestos during the demolition phase of the Project? Earlier annotation of the agency responsible for building permit issuance could be cited here to clarify.	The Santa Barbara County Air Pollution Control District is the agency responsible for monitoring the abatement of asbestos during the demolition activities proposed in the IS/MND.
25	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 3.60, Section 3.11.2.(c): The 14,155 square feet for concrete/asphalt associated with the Essential Services Building does not quite match the totals of square footage listed in the Project Description on page 2.2. Should they match?	The 14,155 square feet includes the concrete and asphalt needed to be laid for the building and the parking lot, and all of the additional walkways and paths associated with these areas. The Project Description on page 2.2 includes these areas (5,085 + 6,412 + 2,658 = 14,155) that are associated with the Essential Services Building. No changes necessary.
26	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 3.62, Section 3.12.1, 2nd paragraph: It would be helpful to also note that the Santa Barbara Cemetery operates under a Conditional Use Permit from the County of Santa Barbara.	Section 3.12.1 of the Final IS/MND has been updated accordingly.
27	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 3.62, Section 3.12.1, 3rd paragraph: Please list what type of permit will be required by the City of Santa Barbara for the storage tank. Is it a long-term encroachment permit? Or a Coastal Development Permit?	A building permit, grading permit, coastal development permit and encroachment permit would be required from the City of Santa Barbara for installation of the off-site recycled water storage tank. Table 2 of the Final IS/MND has been updated accordingly.
28	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 3.73, 2nd paragraph: This text should also include the construction of the Essential Services Building, within 1600 feet of the residence and school, as sensitive receptors.	Section 2.0 of the IS/MND, Project Description, formally defines the proposed Projects. The proposed Project includes all three projects: the Essential Servives Building, the Recycled Water Facilties, and the solar panel structures. As such, the reference to "proposed Projects" in this section includes the Essential Services Building. The IS/MND document addresses all of these projects being within that proximity. No changes necessary.
29	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 3.83, 4th paragraph: The first sentence refers to the County's traffic thresholds and the changes to "….the value provided below…". However, that table from the County's thresholds appears missing from this section of the document and should be added.	The referred table from the County of Santa Barbara Thresholds has been added to the section. The impact analysis associated with item a) has been clarified, however, the associated impact conclusion has not changed and remains a "less than significant impact."

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16	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 2.3, Section 2.2, maybe 2.2.1, 2nd paragraph: Will the recycling facility infrastructure included in the Project, and described to serve the Santa Barbara Cemetery, be sized to accommodate future application of recycled water to other parts of Montecito, even with a stable land use build out projected? If so, it would be helpful to note in this paragraph.	The extent of the proposed Project is defined in Section 2.0 (Project Description) of the Final IS/MND. No future developments have been identified or planned. Any future developments are speculative at this time and are not a reasonably foreseeable consequence of implementing the proposed Project. Should other projects be proposed in future, separate CEQA analysis and permitting would be conducted. No changes necessary.
19	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 3.3, Section 3.1.1: Somewhere in the background discussion for this Aesthetics section, it would be helpful to cite the reviews this year of the project by the Montecito Association and the Montecito Board of Architectural Review, at least for the Essential Services Building part of the new Project Description. Please note that the Association requested story poles for this building, and we still recommend that the District complete those as this moves through the planning process so that the community can visualize the project.	Story poles will be erected prior to the MBAR site visit. Section 1.10 of the Final IS/MND has been updated to cite/ acknowledge the responsibilities of the Montecito Board of Architectural Review (County of Santa Barbara) in review of the project design related to the Development Plan Permit application process. The proposed Project would be designed in accordance with the County's requirements, pending receipt of all required permits.
24	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 3.57, Section 3.11.1 – NPDES: Please clarify what agency will be reviewing the SWPPP associated with construction of the Projects proposed, as required under the Construction General Permit. For most private developments, we understand this is usually Santa Barbara County, but if the District has this review completed by another agency, please state.	As stated in Section 3.11.2 of the IS/MND, the Project would not involve discharge of stormwater flow off the site; stormwater flow across the site is, and would continue to be, blocked by a wall on the north side of the facility. Furthermore, all stormwater flow onsite is treated through the wastewater treatment process. As such, the Project does not require preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP).
31	Dorinne Lee Johnson, Land Use Chair; and, Megan Orloff, Board President	Montecito Association	6/5/2020	Page 3.92, Section 3.21.2, table item (a): It's not clear why this item was checked as "Less than Significant with Mitigation," with no accompanying mitigation measure. Is this table meant to reference other mitigation measures for other issue areas?	As discussed in detail in item a) the Proposed Project consists of the construction and relocation of new and/or expanded utilities. Thus, the Project as a whole meets the threshold for analysis under item a). Therefore, all potentially significant environmental effects associated with the construction of the Project are also applicable to the significance determination for item a). No additional mitigation measures, outside of those already proposed in the document and detailed in Table 18, are required to reduce potentially significant impacts. However, as there are mitigation measures proposed elsewhere in the document that serve to reduce the significance of the impact analyzed in item a), a less than significant with mitigation conclusion is appropriate.
32	Ellwood T. Barrett II	Member of public	6/5/2020	The Monarch Sanctuary located adjacent to the MSD parcel has not been dissolved, see attached plat with Monarch Sanctuary outlined in two orange areas. If it is still an active Monarch Sanctuary, any nearby construction can only occur at certain times of the year so as not to interrupt the migration and congregation of the butterflies in the eucalyptus trees.	As stated in Section 3.4.1 (under "Habitat Assessment"): …Monarch butterfly (Danaus plexippus) is not included in the potential for occurrence tables presented in Appendix B. The California Natural Diversity Database (CNDDB) does not report any occurrences of this species within 10 miles of the Biological Survey Area [proposed Project site and a 300 buffer]. Additionally, a report done for the nearby Music Academy of the West determined that the ornamental eucalyptus tree groves on the property did not serve as viable habitat for Monarch butterfly autumnal or winter aggregations (Althouse and Meade). Therefore, no avoidance and/or mitigation measures were recommended for Monarch butterfly in undertaking this IS/MND analysis. No changes needed.

Comment #	Commenter	Affiliation	Received	Comment Description	District Response
2	Nick Turner, General Manager	Montecito Water District	6/5/2020	As the Lead Agency, Montecito Sanitary District has prepared this Draft document without input from Responsible Parties, including the Montecito Water District. The Montecito Water District believes it is in the best interest of our shared customers, and the community, for the Montecito Water District and Montecito Sanitary District to collaborate on recycled water projects. Collaboration on recycled water would be consistent with precedent set by other communities in the State of California.	The Montecito Sanitary District shares the Montecito Water District's commitment to serve the best interest of shared customers and community. The Montecito Sanitary District has, and will continue to, collaborate with the Montecito Water District on recycled water project planning and prior to any action on the proposed recycled water project.
3	Nick Turner, General Manager	Montecito Water District	6/5/2020	Montecito Water District will be the distributor of recycled water within its service area, including to the Santa Barbara Cemetery as proposed by the Draft IS/MND document. Montecito Water District is authorized under its organizing statutes to do any act necessary to furnish sufficient water in the district for any present of future beneficial use [Water Code 31020]; to operate works to convey and supply water [Water Code 31022]; and to establish rules and regulations pertaining to the sale, distribution and use of water [Water Code 31024]. Pursuant to that authority, Montecito Water District passed Resolution 2189 on November 19, 2019 memorializing that it is a "retail water supplier" under Water Code 13575(b)(6) and in that role will be the distributor of recycled water to retail customers of any recycled water project located within its service area. Any findings included in the Draft IS/MND that Montecito Sanitary District may be the distributor of recycled water, without the express agreement of Montecito Water District to do so, run counter to the findings of Montecito Water District and California law. The Montecito Water District will be responsible for the design, permitting, environmental review, construction, operation, maintenance, replacement and repairs of all recycled water distribution facilities outside of the Montecito Sanitary District property. Additionally, Montecito Water District will oversee the use of recycled water by end users including backflow prevention, signage, inspections and all other end user requirements.	The comment does not pertain to the CEQA review, however, Montecito Water District concerns regarding distribution of recycled water are acknowledged and will be considered by the Montecito Sanitary District Board of Directors prior to any action on the recycled water project.
4	Nick Turner, General Manager	Montecito Water District	6/5/2020	Montecito Water District does not support the conceptual design of the recycled water distribution system as proposed in the Draft IS/MND. As stated in Comment #2 above, the Montecito Water District will be the Distributor of recycled water within its service territory and will be responsible for the design of all recycled water distribution facilities located outside of the Montecito Sanitary District property. Montecito Sanitary District neglected to consult the Montecito Water District on the proposed conceptual design of the recycled water distribution system included in the IS/MND. The Montecito Water District does not support the Montecito Sanitary District's proposed conceptual design which places undue burden on the Santa Barbara Cemetery to own, operate and maintain its own recycled water storage tank, pumping, and distribution systems, some of which is located in the public right of way. It is the understanding of Montecito Water District that the Santa Barbara Cemetery may not have the personnel, funding or interest to operate and maintain such a system on its property. Additionally, the proposed design is unnecessarily redundant, with storage tanks and pumps on both the Montecito Sanitary District property and the Cemetery property. Distribution of recycled water to the cemetery can be achieved with one storage tank, hydropneumatic tank and pump located on the Montecito Sanitary District property, and a single distribution pipeline to the cemetery.	Montecito Water District concerns regarding the conceptual design of the Project are acknowledged and will be considered by the Montecito Sanitary District Board of Directors prior to any action on the Project.
5	Nick Turner, General Manager	Montecito Water District	6/5/2020	The footprint of the recycled water project as proposed in the IS/MND does not appear to consider potential future expansion of the recycled water system beyond serving the cemetery, contrary to the Montecito Water District's 2018 Recycled Water Feasibility Study. Montecito Sanitary District should confirm that sufficient area is available to accommodate future recycled water treatment expansion outlined in the 2018 Recycled Water Feasibility Study.	The extent of the proposed Project is defined in Section 2.0 (Project Description) of the IS/MND. The area has been confirmed and is in excess of 10,000 square feet compared to what was laid out in the Recycled Water Feasibility Study.

Comment #	Commenter	Affiliation	Received	Comment Description	District Response
33	Ellwood T. Barrett II	Member of public	6/5/2020	I (Barrett) see no discussion whereby all of the heavy equipment operators that performed the non-permitted grading work beginning in December of 2018 were interviewed to see if they observed any human remains in the thousands of tons of soil they moved, hauled and compacted, see attached grading photos (Attachment 1). I believe this activity, which was unsupervised by either the county of tribal representatives since the MSD staff saw fit not to notify anybody nor permit the grading, needs to be researched in great detail and affidavits from every person on site during this un-permitted grading work needs to be as of record. There are remains in the Sea Meadow development only a short distance away which the local tribal council visits every year to perform their ancestral ceremony.	The CEQA analysis included the baseline conditions at the time of preparation of the IS/MND (October/ November 2019). The commenter refers to work conducted by the District prior to analysis. The proposed Project is defined in Section 2.0 (Project Description). Section 3.5 (Cultural Resources) and 3.20 (Tribal Cultural Resources) detail the potential effects of the proposed Project. The following mitigation measures are proposed to prevent significant environmental impacts related to these topics: MM CUL-1 (Cultural Resources Monitoring), CUL-2 (Discovery of Prehistoric or Historic Archaeological Materials), CUL-3 (Discovery of Paleontological Resources) and TCR-1 (Native American Consultation). As such, no changes to the Final IS/MND are required.
34	Ellwood T. Barrett II	Member of public	6/5/2020	I (Barrett) have attached a picture taken on January 17, 2019 during the grading work (Attachment 2). As you can see, there is standing water in the soil compacted area after a rain. The grading work has obviously disturbed the natural drainage in the area. The MND needs to include topography maps constructed of the area prior to any work occurring (from Google Earth or otherwise) and as it is today to determine if the natural drainage has affected offset parcels and possible endangered habitats.	The CEQA analysis included the baseline conditions at the time of preparation of the IS/MND (October/ November 2019). The significance thresholds associated with alteration of existing drainage are analyzed in Section 3.11.2 (Groundwater, Surface, and Stormwater). Significance thresholds for effects on habitats are analyzed in Section 3.4.2 (Biological Resources). Potential drainage impacts were evaluated in the IS/MND against these thresholds and were determined to have no impact, a less than significant impact, or less than significant with mitigation incorporated. No potentially significant environmental impacts were identified associated with Groundwater, Surface, and Stormwater; therefore, no mitigation measures are proposed for that resource topic. The following mitigation measures are proposed to prevent significant environmental impacts related to Biological Resources: BIO-1 (Wildlife Pre-Construction Clearance Surveys and Biological Monitoring), BIO-2 (Environmental Awareness Training), BIO-3 (Implement Best Management Practices), and BIO-4 (Nesting Bird Surveys and Avoidance Measures). As such, no changes to the IS/MND are required.
35	Ellwood T. Barrett II	Member of public	6/5/2020	Any home now constructed in Montecito goes through a rigorous review of the lost area for rainfall absorption. This is determined by the size of the foundation, the driveway, etc. In the calculation by the county, many new rules and guidelines have arisen. The county may require porous pavers be installed in the driveway and parking areas to allow rainfall to percolate through to the underlying soil. In addition, an underground catch basin of some magnitude is usually required to allow for a large area to absorb the rainfall. Grading may be required to direct rainfall runoff to this underground catch basin which is filled with boulders and sand then soil place over the top. In some instances, this debris basin is actually placed under the driveway pavers or parking area pavers, depending on the topography and natural drainage in the area. The MND does not have any information on this rainfall absorption area and the requirements thereof, not any discussion on the impact of these required structures on offset parcels and their natural habitats.	The proposed Project consists of a public utility development located within and nearby the Montecito Sanitary District's Wastewater Treatment Plant. All precipitation which falls on the Plant is treated and discharged via the existing ocean outfall in accordance with existing permits. Construction of the Project will require the permits listed in Table 2 of the IS/MND and include drainage and erosion control requirements. As discussed in the IS/MND, the Project would introduce a small amount of new impervious surface and would not substantially interfere with rainfall absorption. See the County Water Resources Divsion letter dated May 4, 2020 stating that no conditions will be placed on the Projects. As such, no changes to the IS/MND are required.
36	Ellwood T. Barrett II	Member of public	6/5/2020	The MSD's MND states the district intends to produce 60,000-gallons of recycled water every day. It also states there is a limitation on the amount of recycled water that can be applied to the surface so the recycled water does not percolate down into the natural water aquafer and potentially pollute the water aquafer. The MND needs to address whether the amount of daily usage by the cemetery would violate the limitation on the amount of recycled water that can applied in order to protect the subsurface water aquafer.	Recycled Water usage is heavily monitored and over irrigation is not allowed per Tittle 22 requirements. The recycled water would be treated to meet all applicable state regulatory requirements for its intended use as landscape irrigation for the protection of public health and the environment. These concerns are addressed in the Title 22 report and will be included in the User agreements.
37	Ellwood T. Barrett II	Member of public	6/5/2020	During a board meeting in early 2019, I asked what was going to happen to the current office building and board room once the new building had been constructed. General Manager Gabriel said they would be demolished and the area may be used to erect employee housing so somebody could be on-site 24 hours a day. Jeff Kerns said the previous board had considered this option at the recommendation of General Manager Gabriel. I asked him his thoughts and he said it seemed like a good idea to him. If this is the direction the staff is going to recommend to the board, shouldn't this possible future work be addressed by this MND?	The proposed Project is defined in Section 2.0 (Project Description). The District has no approved plan to construct worker housing on site; any consideration of such a plan would be speculative at this time. CEQA analysis is not required to speculate on effects which may or may not occur in the future and are not related to the proposed Project. Furthermore, the CEQA analysis included the baseline conditions at the time of preparation of the IS/MND (October/ November 2019). As such, no changes to the IS/MND are required.

Comment #	Commenter	Affiliation	Received	Comment Description	District Response
38	Peter L. Candy	Member of public	6/17/2020	The IS/MND provides no analysis or discussion regarding whether the Project has the potential to adversely affect local groundwater supplies. ...Section 3.11 does not identify or discuss any water quality issues affecting the Montecito Groundwater Basin, nor does it identify or discuss any possible effects that operating the recycled water project (i.e., irrigating the cemetery with recycled water) could have on the water quality of the basin. The IS/MND makes no reference to the Santa Barbara Groundwater Basin whatsoever.	Reference to the Santa Barbara and Montecito Groundwater Basins, since the cemetery overlays a portion of both basins, has been added to Section 3.8.1 of the Final IS/MND. The recycled water quality produced by the proposed Project will be confirmed at the final design phase, with oversight from the applicable regulatory agencies, such as the State Water Resources Control Board, Regional Water Quality Control Board, and the Environmental Protection Agency. Refer to response to comment #39 below regarding potential impacts from the proposed Project to local groundwater supplies and water quality considerations.
39	Peter L. Candy	Member of public	6/17/2020	The IS/MND provides no analysis or discussion regarding whether the Project has the potential to cause a violation of Basin Plan requirements. ...The District has responded to CEQA checklist item X(g) without providing any of the necessary discussion or analysis required regarding water quality issues affecting local groundwater supplies. The discussion completely ignores any discussion regarding the potential impacts that irrigating the cemetery with recycled water could have an impact on the water quality of local ground water supplies. There is no information provided anywhere in the IS/MND regarding Basin Plan requirements and/or the constituents expected to be found in the recycled water produced by the proposed project.	As described in Section 3.11 of the IS/MND: “The community of Montecito’s main groundwater source comes from the Montecito groundwater basin, but also utilizes Doulton Tunnel intrusion and water wells in hard rock or alluvial aquifers, north of the main basin, as sources as well. Approximately 10-15% of Montecito’s water supply comes from groundwater (Montecito Water District 2019).” Section 3.8 of the IS/MND also states: “The Santa Barbara cemetery (which includes a portion of the proposed Project) overlays both the Montecito Groundwater Basin and the Santa Barbara Groundwater Basin. The Santa Barbara Groundwater Basin is within the western portion of the Transverse Ranges and is considered part of the coastal plain. Mostly marine, the sedimentary rock comprising the Santa Barbara Groundwater Basin includes shale, mudstone, sandstone, and conglomerate (Paulinski and Nishikawa, 2018).” According to Section 9.4 of the Montecito Groundwater Basin Plan, groundwater contamination may occur as a result of numerous sources but generally stems from the misuse and improper disposal of liquid and solid wastes (Montecito Water District, 1998). Groundwater contamination could also occur from the following wastewater or wastewater byproducts prior to treatment: organic matter, nitrate, inorganic salts, heavy metals, coliform and non-coliform bacteria, nitrates, sludge, or non-hazardous wastes. With respect to potential impacts on water quality of local groundwater supplies, the proposed Project was designed in accordance with the State of California Code of Regulations, Title 22, Division 4, Chapter 3, Sections 60301 through 60355 which governs the recycling of water (also known as "Title 22 Criteria"). This included the selection of appropriate equipment capable of treating the water to meet and/or exceed Title 22 standards. For example, median concentration of total coliform bacteria must not exceed the parameters listed below. Coliform bacteria can indicate the presence of pathogenic (disease-causing) microorganisms that may be transmitted in human feces. Diseases such as typhoid fever, hepatitis, diarrhea, and dysentery can result from sewage contamination of water supplies. • 2.2 most probably number (MPN) total coliform bacteria per 100 milliliter (mL) sample based on the bacteriological results of the last seven days for which analyses have been completed; • 23 MPN total coliform bacteria per 100 ml sample of effluent in more than one sample within any 30-day period; and, • 240 MPN total coliform bacteria per 100 ml sample of effluent at any time. The proposed Project was also designed in accordance with the water quality objectives outlined in Table 3-2 of the “Water Quality Control Plan for the Central Coast Basin” (Regional Water Quality Control Board, 2019). This includes water quality criteria for various elements such as aluminum, arsenic, copper, lead, mercury, zinc, among others. While Table 3-2 refers to “Agricultural Water Use”, these elements and criteria are also applicable to irrigation uses such as the proposed Project. The applicable design criteria and technologies that have been incorporated into the proposed Project to meet the water quality objectives above include: ultrafiltration, reverse osmosis, and sodium hypochlorite for disinfection (refer to Section 2.2 of the Final IS/MND for a description of these technologies). (continued on next page)

Comment #	Commenter	Affiliation	Received	Comment Description	District Response
39 (cont'd)					In addition, the Title 22 Criteria also state that the recycled water treatment process must incorporate a certain level of redundancy/ reliability to ensure the treatment is uninterrupted such as backup equipment and alarms, which was also incorporated into the design of the proposed Project. The Title 22 requirements for landscape irrigation consider the Basin Plan objectives for groundwater quality as detailed above. These regulatory processes (e.g., Montecito Groundwater Basin Plan, Water Quality Control Plan for the Central Coast Basin, and Title 22 Criteria) are in place to ensure that required treatment standards are being met, thereby reducing the potential for adverse water quality impacts associated with the proposed Project to a less than significant level. MSD provided a copy of the proposed Project's Title 22 Engineering Report and design plans to the California State Water Resources Control Board Division of Drinking Water (DDW) who has primary oversight for the production, storage and distribution of recycled water. DDW advised MSD through November 14, 2019 and February 24, 2020 letter correspondence, as well as follow-up verbal communications, that MSD could proceed with the proposed Project CEQA compliance based on the current design. Once the proposed Project is at the final design phase, the DDW will conduct final review and approval to ensure the proposed Project meets applicable state requirements for water quality. Furthermore, during operations and in accordance with MSD's permit requirements, MSD would conduct regular monitoring to ensure no exceedance of water quality standards would occur because of the proposed Project. Section 3.11 of the Final IS/MND has been updated to provide additional details regarding the requirements outlined in the Montecito Groundwater Basin Plan and the Water Quality Control Plan for the Central Coast Basin as described above. The potential significance of the impact associated with threshold g) does not change as a result of this comment and remains a "less than significant impact." Sources: Montecito Water District. 1998. Montecito Groundwater Basin Plan: https://www.montecitowater.com/doc/2574/ Regional Water Quality Control Board. 2019. Water Quality Control Plan for the Central Coastal Basin: https://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin_plan/docs/2019_basin_plan_r3_complete.pdf
40	Peter L. Candy	Member of public	6/17/2020	The IS/MND provides no analysis or discussion regarding whether a Salt and Nutrient Management Plan may be necessary.	The District anticipates relatively low levels of salt and nutrients resulting from the proposed Project's recycled water. Salinity is measured by total dissolved solids (TDS) and electrical conductivity. The TDS of the recycled water would be below the State's Water Reclamation permit requirements. Furthermore, as stated in the State Water Resources Control Board's "Water Quality Control Policy for Recycled Water" (April 2019): The most effective way to address salt and nutrient loading is typically through the development of regional or sub-regional salt and nutrient management plans rather than imposing requirements solely on individual recycled water projects or other individual sources of salts and nutrients. The Montecito Water District, via the Montecito Groundwater Sustainability Agency, manages the Montecito Groundwater Basin. There is currently no salt and nutrient plan for the Montecito Basin at this time; future development of such a plan would be the responsibility of the Montecito Groundwater Sustainability Agency. The District would provide information to the agency to inform this plan upon request. Source: State Water Resources Control Board. 2019. Water Quality Control Policy for Recycled Water: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/20 18/121118_7_final_amendment_oal.pdf
41	Peter L. Candy	Member of public	6/17/2020	The IS/MND provides no analysis or discussion regarding the cemetery's current or future irrigation demand or how much excess recycled water the proposed treatment plant might introduce.	The extent of the proposed Project is defined in Section 2.0 (Project Description) of the Final IS/MND. The proposed volume of recycled water, 60,000 gallons per day, would be consistent with the cemetery's water demands and the Montecito Water District's Recycled Water Facilities Plan (Woodard & Curran 2019). Any future developments are speculative at this time and are not a reasonably foreseeable consequence of implementing the proposed Project. Should other projects be proposed in future, separate CEQA analysis and permitting would be conducted. No changes to the IS/MND are required.

Comment #	Commenter	Affiliation	Received	Comment Description	District Response
42	Peter L. Candy	Member of public	6/17/2020	The IS/MND provides no analysis or discussion regarding whether the cemetery's use of recycled water can be conducted in a manner consistent with the strict use requirements set forth in General Order WQ 2016-0068-DDW. ...This information is critical for two reasons: (1) to establish total current and projected future demand for recycled water by the cemetery; and (2) to determine whether an Implementation of Operations and Management Plan is necessary to specify agronomic rates and nutrient application for the proposed use area to ensure compliance with Order WQ 2016-0068-DDW.	The General Order WQ 2016-0068-DDW (General Order) outlines requirements for recycled water programs including the testing, analysis and reporting of water quality. The Title 22 Criteria, as described in response to comment #39 above, is an important component of the General Order (State Water Resources Control Board, 2016). As part of this regulatory process, MSD developed a Title 22 Engineering Report for the proposed Project which was submitted to the State Water Resources Control Board DDW for review and approval. At the final design phase, the DDW would determine whether the proposed Project was designed in accordance with applicable state requirements and would provide recommendations for water reclamation requirements for the proposed Project. These recommendations would then become requirements of the General Order when specified in the Notice of Applicability. An approved Title 22 Engineering Report addressing protection of public health is also required before authorization to use recycled water is granted by the Regional Water Board Executive Officer (State Water Resources Control Board, 2016). These regulatory processes are in place to ensure that required treatment standards are being met, thereby reducing the potential for adverse water quality impacts associated with the use of recycled water that may result from the proposed Project. With regards to implementation of an Operations and Management Plan, the District will submit this plan to the State Water Resources Control Board for the proposed Project in accordance with its existing permits (General Permit - Water Quality). Source: State Water Resources Control Board. 2016. General Order WQ 2016-0068-DDW: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2016/wqo2016_0068_ddw.pdf
43	Peter L. Candy	Member of public	6/17/2020	The IS/MND provides no analysis or discussion in support of its conclusion that no modifications to the existing NPDES permit would be required. ...because the brine concentrate generated by the recycled water treatment plant will be blended with the secondary effluent that bypasses the recycled treatment plant, the effluent discharged to the Pacific Ocean will contain a higher concentration of waste/contaminants. The IS/MND does not quantify the concentration of wastes expected to exist in the new blended effluent or characterize the anticipated chemical makeup of the new blended effluent once the brine concentrate is added. The IS/MND does not compare the anticipated chemical makeup of new blended effluent (once brine concentrate is added) to the water quality standards set forth in the District's existing NPDES permit.	The District's existing NPDES permit allows for discharge up to 1.5 million gallons/ day of treated wastewater into the Pacific Ocean. In accordance with the existing NPDES permit requirements, the District conducts annual outfall inspections and ocean dilution sampling to monitor discharge. The Regional Water Quality Control Board will determine whether any updates are required to the District's existing NPDES permit limits, once the proposed Project proceeds to the final design phase. MSD is required to meet the NPDES permit requirements regardless if there are any changes to the limits. With respect to the concentration of waste/ contaminants, the amount of recycled water associated with the proposed Project is estimated to be only 10% of the total flow; as such, it is anticipated there would be sufficient secondary flow to blend the RO concentrate.
44	Peter L. Candy	Member of public	6/17/2020	The IS/MND provides no analysis or discussion regarding how the Recycled Water Project will comply with the State Water Board's Antidegradation Policy.	As stated in Section 1.8 of the IS/MND, the proposed Project's recycled water treatment has been designed to be Title 22 compliant in accordance with the State of California Code of Regulations. This includes specific requirements for the production, storage, and distribution of recycled water which are established by the State Water Resources Control Board, including the State's Antidegradation Policy. The recycled water quality produced by the proposed Project will be confirmed at the final design phase, with oversight from the applicable regulatory agencies, such as the State Water Resources Control Board.

Comment #	Commenter	Affiliation	Received	Comment Description	District Response
45	Peter L. Candy	Member of public	6/17/2020	The IS/MND does not propose mitigation measures adequate to reduce cultural resource impacts to levels that are less than significant. ...Important cultural resources could exist on the Project site and more protective mitigation is required. An archaeologist and Native American monitor should be present to observe all construction, earthwork, and ground disturbing activities related to the Project, including activities that occur both on and off the District's property. The District graded the building pad where the Essential Services Building is proposed to be located in 2019 without conducting environmental review and without obtaining the necessary permits. An additional archaeological field study of the disturbed area should be commissioned by the District.	As stated in Section 3.5 of the IS/MND, an archival records search and archaeological field survey for the proposed Project was conducted in December 2019 by Stantec Consulting Services, Inc. No recorded prehistoric resources were identified specifically within the project footprint; however, one large prehistoric resource was identified within the ½-mile Study Area. The MSD project site has had ground disturbance repeatedly over the decades since the WWTP was built in the 1960's. However, that statement can't been made for the distribution pipe area or the cemetery 75,000 gallon tank site. The following mitigation measures are proposed to prevent significant environmental impacts related to these topics: MM CUL-1 (Cultural Resources Monitoring), CUL-2 (Discovery of Prehistoric or Historic Archaeological Materials), CUL-3 (Discovery of Paleontological Resources) and TCR-1 (Native American Consultation). CUL-1 requires that outside of the existing MSD treatment property, earthwork and ground disturbing activities will be monitored by an archaeologist and Native American monitor. CUL-2 states that a Worker's Environmental Awareness Program training is required and if something is found on the MSD site during construction then an archaeologist and Native American monitor will be notified. As such, no changes to the Final IS/MND are required.
46	Peter L. Candy	Member of public	6/17/2020	The IS/MND lacks the critical details necessary to assess whether the proposed 75,000 gallon storage tank will have a significant impact on visual resources.	The height of the proposed 75,000 storage tank is 16 feet tall and would include a perimeter fence of approximately 6 feet tall. The intervening landscape and bushes and mature trees located in front of the storage tank along Channel Drive are approximately 12-feet tall, thereby obscuring the visibility of the storage tank. An existing cell phone tower is located adjacent to the proposed storage tank area. Photographs of the proposed storage tank area from viewpoints off Channel Drive and Highway 101 (north and south directions) have been added to the Final IS/MND to further describe baseline conditions (refer to Appendix B of this letter). While the proposed storage tank is located adjacent to a Scenic Corridor, the storage tank would be a single structure, the majority of which would be screened with existing mature trees and vegetation, and would only be visible on an intermittent basis by passing motorists along US 101. The proposed Project would not substantially change the existing visual character of the project area and viewshed compared to baseline conditions. Therefore, the potential significance impact associated with threshold a) does not change as a result of this comment and remains “less than significant impact.” As part of the permitting process, the proposed Project would require review by the City of Santa Barbara Architectural Board to determine if additional screening measures are required. Section 3.1.2 of the Final IS/MND has been updated to provide additional details as described above. The potential significance of the impact associated with threshold a) does not change as a result of this comment and remains a "less than significant impact."
47	Peter L. Candy	Member of public	6/17/2020	To the extent additional site access is required from Channel Drive, the IS/MND fails to address any associated impacts.	The District is proposing one new driveway off Channel Drive to provide both employee and public access to the proposed parking lot and Essential Services Building. The Final IS/MND has been updated to include specific reference to this new proposed access in the Project Description (Section 2.0), Figure 2, as well as throughout the impact analysis (Section 3.0), as applicable. This new access would be utilized by the public/ employees in lieu of the current access off Monte Cristo Lane, thereby decreasing noise levels and increasing public safety for those residents located along Monte Cristo Lane.

APPENDIX B

Aesthetics Photo Log

Photo #1 View from southbound Highway 101.

Photo #2 View north on Channel Drive

Photo #3 View from northbound Highway 101.

Montecito Sanitary District

PUBLIC NOTICE

NOTICE OF AVAILABILITY AND NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION – PURSUANT TO CALIFORNIA ENVIRONMENTAL QUALITY ACT GUIDELINES SECTION 15072

NOTICE IS HEREBY GIVEN:

The Montecito Sanitary District (MSD, CEQA Lead Agency, Proponent) is proposing to design, construct, and implement the proposed Development Plan Projects, in coordination with the County of Santa Barbara Department of Public Works. The State of California Code of Regulations (CCR), Title 22, Division 4, Chapter 3, Sections 60301 through 60355 governs the recycling of water. This section of the CCR is typically referred to as the "Title 22" Criteria. Specific requirements for the production, storage, and distribution of recycled water are established by the California State Water Resources Control Board Division of Drinking Water.

The Development Plan Projects consist of the construction, operations, and maintenance of: (1) a 1,500 square foot Title 22 compliant tertiary wastewater treatment system; (2) Essential Services Building and parking lot; and (3) five solar structures and panels. The recycled water produced from the tertiary wastewater treatment system would be used to help irrigate the adjacent existing 55.63-acre Santa Barbara cemetery. The use of recycled water for the irrigation of the cemetery will allow the cemetery to cease use of potable water for irrigation purposes. All project components would be located either within or adjacent to the existing Montecito Sanitary District facility in the unincorporated community of Montecito, at 1042 Monte Cristo Lane.

As the CEQA Lead Agency for the proposed Development Plan Projects, the Montecito Sanitary District has conducted an Initial Study of the potential effects of the proposed Project, and determined, in light of the whole record, the proposed Project would not result in a significant impact on the environment. MSD has determined the following issue areas would require mitigation measures to reduce potential impacts to a less-than-significant level.

- Biological Resources
- Cultural Resources
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

The 30-day period for public review and comment on the proposed Mitigated Negative Declaration begins on **May 5, 2020**. All comments must be submitted by **June 5, 2020**. Please address comments on the proposed Mitigated Negative Declaration as follows:

Development Plan Projects
Attn: Carrie Poytress, P.E., Engineering Manager

Montecito Sanitary District
1042 Monte Cristo Lane
Santa Barbara, CA 93108

Email: cpoytress@montsan.org

A copy of the proposed Mitigated Negative Declaration and all documents referenced therein are available for review on the MSD website.

1.0 MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Lead Agency Department Responsible for Implementation	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
BIOLOGICAL RESOURCES							
BIO-1 Wildlife Pre-Construction Clearance Surveys and Biological Monitoring: Prior to ground disturbance or vegetation clearing within the proposed Project site, a qualified biologist shall conduct pre-construction clearance surveys for wildlife (no more than 7 days prior to site disturbing activities) where suitable habitat is present and directly impacted by construction activities. The qualified biologist must be approved by the District prior to the commencement of surveys. Wildlife found within the proposed Project site or in areas potentially affected by the proposed Project would be relocated to the nearest suitable habitat that would not be affected by the proposed Project prior to the start of construction. Special-status species found within a proposed Project impact area shall be relocated by a qualified biologist to suitable habitat outside the impact area. Nesting birds found within the proposed Project impact areas would be subject to buffer requirements and additional conditions as detailed below in mitigation measure BIO-4. The qualified biologist shall be onsite during initial ground disturbing activities and periodically throughout the construction phase, as needed. The lead biologist(s) shall have the right to halt all activities that may be in violation of mitigation measures or that may impact special-status and/or common plants and wildlife. Work shall proceed only after hazards to special-status species are removed, the species are allowed to leave, or are removed (if allowed), and the species is no longer at risk. The qualified biologist(s) shall have a copy of all the compliance measures in their possession while work is being conducted onsite. Construction activity may also be monitored by biological monitors under the lead biologist's supervision to ensure compliance with mitigation measures. If required during pre-construction clearance surveys or required monitoring efforts, the qualified biologist(s) will relocate common and special-status species that enter the proposed Project site; some special-status species may require specific permits prior to handling or have established protocols for relocation. Records of all detection, capture, and release shall be reported to CDFW.	Montecito Sanitary District	Conduct pre-construction biological surveys.	No more than 7 days prior to start of ground disturbance. Periodically during construction.				

Mitigation Measure	Lead Agency Department Responsible for Implementation	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
BIO-2 Environmental Awareness Training: Prior to ground disturbance or vegetation clearing within the proposed Project site, the District shall ensure that proposed Project personnel have attended an environmental awareness and compliance training program. The training program shall present the environmental regulations and applicable permit conditions that the proposed Project team shall comply with. The training program shall include applicable measures established for the proposed Project to minimize impacts and avoid sensitive resources, habitats, and species. The training program will consist of a 15-20 minute presentation conducted by a qualified biological monitor on the start day of construction in either an office setting or during a tailgate meeting. Subsequent training events shall be scheduled to support the training of new personnel. Dated sign-in sheets for attendees at these meetings shall be maintained and submitted to the District.	Montecito Sanitary District	Conduct environmental trainings for all new personnel.	Prior to ground disturbing activities and/or start of work for new personnel.				
BIO-3 Implement Best Management Practices: As part of Project approvals, the District shall implement the following BMPs during construction activities: • Restrict non-essential equipment to the existing roadways, paved, disturbed, and ruderal areas to avoid disturbance to native vegetation. • All excavation, steep-walled holes or trenches in excess of 6 inches in depth shall be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth dirt fill or wooden planks. Trenches would also be inspected for entrapped wildlife each morning prior to onset of construction activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they would be thoroughly inspected for entrapped wildlife. Any wildlife discovered would be allowed to escape before construction activities are allowed to resume or removed from the trench or hole by a qualified biologist holding the appropriate permits (if required). • Minimize, when possible, mechanical disturbance of soils to reduce impact of habitat manipulation on small mammals, reptiles, and amphibians (e.g., hand tools versus heavy equipment). • Removal or disturbance of vegetation shall be minimized to the greatest extent feasible. • Installation and maintenance of appropriate erosion and sediment control measures as needed throughout the duration of work activities. • Implementation of a 15 miles per hour (MPH) speed limit within all proposed Project areas.	Montecito Sanitary District	Implement and maintain best management practices.	Prior to and during construction activities.				

Mitigation Measure	Lead Agency Department Responsible for Implementation	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
BIO-4 Nesting Bird Surveys and Avoidance Measures: As part of Project approvals, the District shall require and document compliance with the MBTA during construction, as follows. If initial site disturbance is scheduled to begin during the avian nesting season (February 15 through September 15; January 1 through August 15 for raptors), breeding and nesting bird surveys shall be conducted by a qualified biologist no more than 3 days prior to the start of site disturbance. The qualified biologist must be approved by the District prior to the commencement of surveys. If construction activities carry over into a second nesting season(s), the surveys will need to be completed annually until the proposed Project is complete. Surveys shall be conducted within 500 feet of all proposed Project activities. If endangered or threatened species are observed, consultation with USFWS and/or CDFW is required. If breeding birds with active nests are found prior to or during construction, a qualified biological monitor shall establish a 300-foot buffer around the nest, and no activities would be allowed within the buffer(s) until the young have fledged from the nest or the nest fails; initial buffers for nesting raptors shall be 500 feet. The prescribed buffers for common species may be adjusted by the qualified biologist based on existing conditions around the nest, planned construction activities, tolerance of the species, and other pertinent factors; for example, buffers for common passerines, often found to be habituated to human activity, may be adjusted down to 25 - 50 feet depending on the disturbance tolerance of each specific species. Buffer adjustments for listed and/or other special-status species shall be done in coordination with the USFWS and CDFW as applicable. The qualified biologist shall conduct regular monitoring of the nest to determine success or failure and to ensure that proposed Project activities are not conducted within the buffer(s) until the nesting cycle is complete or the nest fails.	Montecito Sanitary District	Conduct breeding and nesting bird surveys by a qualified biologist.	No more than 3 days prior to the start of site disturbance, periodically during construction between January 1 and September 15.				

Mitigation Measure	Lead Agency Department Responsible for Implementation	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
CULTURAL RESOURCES							
CUL-1 Cultural Resources Monitoring: During construction, outside of the existing MSD treatment property, earthwork and ground disturbing activities will be monitored by an archaeologist and Native American monitor. The monitors will attend the pre-construction meeting with the construction crew to provide Worker's Environmental Awareness Program (WEAP) training and coordinate requirements and procedures for the inadvertent discovery of cultural materials during construction.	Montecito Sanitary District	Construction monitoring conducted by an archaeologist and Native American monitor.	During ground disturbing activities occurring outside the existing MSD treatment property.				
CUL-2 Discovery of Prehistoric or Historic Archaeological Materials: Prior to any construction activities, a qualified archaeologist shall conduct cultural resources specific Workers Environmental Awareness Program (WEAP) training for construction personnel regarding the types of cultural resources that may be encountered, how to identify them, measures to take to avoid them and procedures following the discovery. Discovery of Prehistoric or Historic Archaeological Materials. If deposits of prehistoric or historical archaeological materials are discovered during non-monitored Project activities, all work within 25 feet of the discovery shall be redirected and a qualified archaeologist contacted, if one is not present, to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. The Sanitary District shall also be notified. Project personnel shall not collect or move any archaeological materials. It is recommended that adverse effects to the finds be avoided by Project activities. If avoidance is not feasible, the archaeological deposits shall be evaluated to determine if they qualify as a historical resource or unique archaeological resource, or as historic property. If the deposits do not qualify, avoidance is not necessary. If the deposits do so qualify, adverse effects on the deposits must be avoided, or such effects must be mitigated. Mitigation may consist of, but is not limited to, recovery and analysis of the archaeological deposit; recording the resource; preparing a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Educational public outreach may also be appropriate. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results and provide recommendations for the treatment of the archaeological deposits discovered. The report shall be submitted to the Sanitary District and the Central Coast Information Center (CCIC).	Montecito Sanitary District	Conduct cultural resources specific Workers Environmental Awareness Program (WEAP) training. Monitor and avoid impacts to paleontological resources.	Prior to and during ground disturbing activities and/or start of work for new personnel.				

Mitigation Measure	Lead Agency Department Responsible for Implementation	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
CUL-3 Discovery of Paleontological Resources: If paleontological resources are encountered during Project subsurface construction, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any paleontological materials. Adverse effects to such deposits shall be avoided by Project activities. Paleontological resources are considered significant if they may provide new information regarding past life forms, paleoecology, stratigraphy, or geological formation processes. If found to be significant, and Project activities cannot avoid the paleontological resources, adverse effects to paleontological resources shall be mitigated. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the Sanitary District, and, if paleontological materials are recovered, a paleontological repository, such as the California Museum of Paleontology.	Montecito Sanitary District	Monitor and avoid impacts to paleontological resources.	During ground disturbing activities.				
Transportation							

Mitigation Measure	Lead Agency Department Responsible for Implementation	Action(s) Required	Required Time of Compliance	Action Taken	Verified By/Dept.	Date	Further Action Needed
TRA-1 Traffic Management Plan: The Applicant shall prepare a Traffic Management Plan prior to construction. The traffic management plan shall be submitted to the County for review and approval prior to the issuance of any construction permits. The traffic management plan shall be implemented during construction related activities. The traffic management plan shall include strategies for minimizing impacts to traffic, effectively managing traffic flow and reducing the number of trips accessing the proposed Project site during the peak hours of 7 AM to 9 AM and 4 PM to 6 PM. These strategies shall include, but not be limited to the following: • Require parking within designated areas on the proposed Project site and prohibit parking along the shoulders of adjacent roadways. • Provide for emergency vehicle movement through the proposed Project site at all times during construction, operation, and decommissioning. • Provide approved offsite parking for workers with shuttle services to transport them onsite when and if onsite parking becomes restricted or unfeasible. • Facilitate materials delivery during off-peak traffic hours and comply with regulations governing oversized loads. • Encourage vanpool and carpool for construction employees commuting to the proposed Project site. • Flaggers shall be posted at each end of the lane closure, who shall be responsible for directing traffic. • Notification to neighborhoods located immediately adjacent to the project area regarding the planned Project construction schedule and a point of contact for project-related inquiries and/or concerns.	Montecito Sanitary District	Implement a County approved traffic management plan	During construction activities				
TRIBAL CULTURAL RESOURCES							
TCR-1 Native American Consultation: The District shall consult with the appropriate Native American tribal representative if potentially significant prehistoric or ethnographic Native American archaeological materials are inadvertently discovered during project construction. Working with the tribal representative the District will develop a mitigation and disposition plan.	Montecito Sanitary District	Consult with tribes if appropriate	During construction activities				

Final Initial Study/ Mitigated Negative Declaration – Development Plan Projects

August 7, 2020

Lead Agency:

Montecito Sanitary District

Proponent:

Montecito Sanitary District

Consultant:

Stantec Consulting Services Inc.
111 East Victoria Street
Santa Barbara CA 93101-2018

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Acronyms and Abbreviations

af	Acre-feet
BD	Beach Development
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CAL FIRE	California Department of Forestry and Fire Protection
CCR	California Code of Regulations
CEC	California Energy Commission
Cemetery	Santa Barbara Cemetery
CFR	Code of Federal Regulations
CCIC	Central Coast Information Center
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
County	Santa Barbara County
CUPA	Certified Unified Program Agency
DDW	California State Water Resources Control Board Division of Drinking Water
District	Montecito Sanitary District
ECAP	County of Santa Barbara's Energy and Climate Action Plan
EMRE	Environmental Resource Management Element
Facility	Montecito Sanitary District Wastewater Treatment Facility
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
ft	foot
GHG	Greenhouse Gases
GWP	Global Warming Potential
HFCs	Hydrofluorocarbon
Hwy	Highway
LRA	Local Responsibility Area
MFD	Montecito Fire Department
mgd	Millions of gallons per day
mg/L	Milligrams per Liter
mL	Milliliters
MPN	Most Probable Number
MRZ	Mineral Resource Zone

$MTCO_2e$	Metric Tons of Carbon Dioxide equivalent
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NO_x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
O_3	Ozone
PCC	Portland Cement Concrete
PFCs	Perfluorinated Chemicals
Projects	Development Plan Projects
PVC	Polyvinyl chloride
RO	Reverse Osmosis
ROC	Reactive Organic Compounds
RWQCB	Regional Water Quality Control Board
SBCAPCD	Santa Barbara County Air Pollution Control District
SBFCD	Santa Barbara Flood Control District
SCCAB	South Central Coast Air Basin
SF_6	Sulfur hexafluoride
SMARA	Surface Mining Reclamation Act of 1975
SRA	State Responsibility Area
SoCal Edison	Southern California Edison
TDS	Total Dissolved Solids
TSS	Total Suspended Solids
UF	Ultrafiltration
ug/m^3	Micrograms per cubic meter
UPRR	Union Pacific Railroad
U.S.	United States
USEPA	United States Environmental Protection Agency
USFS	United States Forest Service
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Travelled
WEAP	Workers Environmental Awareness Program

1.0 INTRODUCTION

1.1 PROJECT TITLE

Development Plan Projects

1.2 LEAD/ RESPONSIBLE AGENCY NAME AND ADDRESS

Lead Agency:

Montecito Sanitary District
1042 Monte Cristo Lane
Santa Barbara, CA 93108

Responsible Agencies:

County of Santa Barbara
123 East Anapamu Street
Santa Barbara, CA 93101

City of Santa Barbara
630 Garden Street
Santa Barbara, CA 93101

Montecito Water District
583 San Ysidro Road
Santa Barbara, CA 93108

1.3 CONTACT PERSON AND PHONE NUMBER

Carrie E. Poytress, P.E., Engineering Manager
Montecito Sanitary District
1042 Monte Cristo Lane
Santa Barbara, CA 93108
805-969-4200

1.4 PROJECT LOCATION

1042 Monte Cristo Lane, Santa Barbara, CA

1.5 PROJECT SPONSOR'S NAME AND ADDRESS

Montecito Sanitary District
1042 Monte Cristo Lane
Santa Barbara, CA 93108

1.6 GENERAL PLAN DESIGNATION

The proposed Project site and surrounding area are within the Coastal Sub-Area of the unincorporated community of Montecito (Figure 1). This main project site is a part of Public Works Utilities and Private Services Facilities land designation of Santa Barbara County. Surrounding land designations include a cemetery, residential, and educational facilities (Figure 2).

1.7 ZONING

Refer to Table 1 for the proposed Project's land use and zoning.

Table 1. Land Use and Zoning

Relationship to Project Site	Land Use	Zoning
Montecito Sanitary District, Main Project Site	UT, Community Facility	PU, Utility
Santa Barbara Cemetery	Cemetery	20 R-1
Cemetery Water Tank Parcel	Recreational / Open Space	R-1, Coastal Overlay

1.8 DESCRIPTION OF PROJECT

The Montecito Sanitary District (District) is pursuing implementation of three projects located at 1042 Mote Cristo Lane (also known as 910 Channel Drive). The first project is a Title 22 compliant recycled water treatment system at their wastewater treatment facility. The State of California Code of Regulations (CCR), Title 22, Division 4, Chapter 3, Sections 60301 through 60355 governs the recycling of water. This section of the CCR is typically referred to as the "Title 22" Criteria. Specific requirements for the production, storage, and distribution of recycled water are established by the California State Water Resources Control Board Division of Drinking Water (DDW). The second project is an Essential Services Building and parking lot with a new driveway off Channel Drive to better serve the community and protect the District workers. The third project includes proposed solar structures with solar panels to provide renewal energy for the recycled water treatment system (proposed Projects).

The District currently operates and maintains a wastewater treatment facility (facility) in Montecito and is proposing to install, operate, and maintain an additional water treatment process to treat some of the wastewater stream for the purposes of reclaiming it for beneficial reuse as irrigation of the adjacent Santa Barbara cemetery property. The distributor of the recycled water will be the Montecito Water District (MWD). Surrounding Land Uses and Setting

At approximately 0.2 miles north east of Butterfly Beach, the proposed Projects would be located on the already developed 6.3-acre facility site. Adjacent to the west of the proposed site is Santa Barbara cemetery, where the recycled water would be pumped underground, across Channel Drive, and used for lawn irrigation. This area of Montecito, near sea level, puts it in the drainage area of Los Padres National Forest.

1.9 INTENDED USES OF THE INITIAL STUDY AND PERMIT REQUIREMENTS

This Initial Study is an informational document intended to inform the lead agency, other responsible or interested agencies, and the general public of potential environmental effects of the proposed Projects shown on the proposed Development Plan. The environmental review process has been established to enable public agencies to evaluate potential environmental consequences and to examine and implement methods of eliminating or reducing any potentially significant adverse impacts. This document is intended to aid the District in determining the appropriate California Environmental Quality Act (CEQA) document needed to support agency discretionary approvals, permits, and consultations. These permits, approvals, and consultations are described in Table 2.

Table 2. Agency Permits and Environmental Review Requirements

Agency	Permits and Other Approvals
California Department of Public Health	• Title 22 Permit
State Water Resources Control Board	• Division of Drinking Water Authorization • General Permit – Water Quality Order No. 2016-0068-DDW (general permit for landscape irrigation uses of municipal recycled water)*
County of Santa Barbara	• Road Encroachment Permit • Coastal Development Permit • Development Plan Permit (including review of the project design by the Montecito Board of Architectural Review) • Grading Permit • Building Permit
City of Santa Barbara	• Grading Permit for cemetery recycled water tank • Building Permit for cemetery recycled water tank for cemetery recycled water tank
Regional Water Quality Control Board	• NPDES Permit Reissuance for Montecito Sanitary District Wastewater Treatment Facility (Order No. R3-20122012-0016, NPDES No. CA0047899)

*Source:
https://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/landscape_irrigation_general_permit.html

Project Location

0 0.5 1 Miles
(At original document size of 8.5x11)
1:63,360

N

Stantec

Project Location	Prepared by DL on 2020-01-07
Santa Barbara, CA	TR by
	IR by
Client/Project	185804581

Montecito Sanitary District
Development Plan Projects

Figure No.

1

Title

Regional Location Map

Notes

1. Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
2. Data Sources: Stantec 2019.
3. Background: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the

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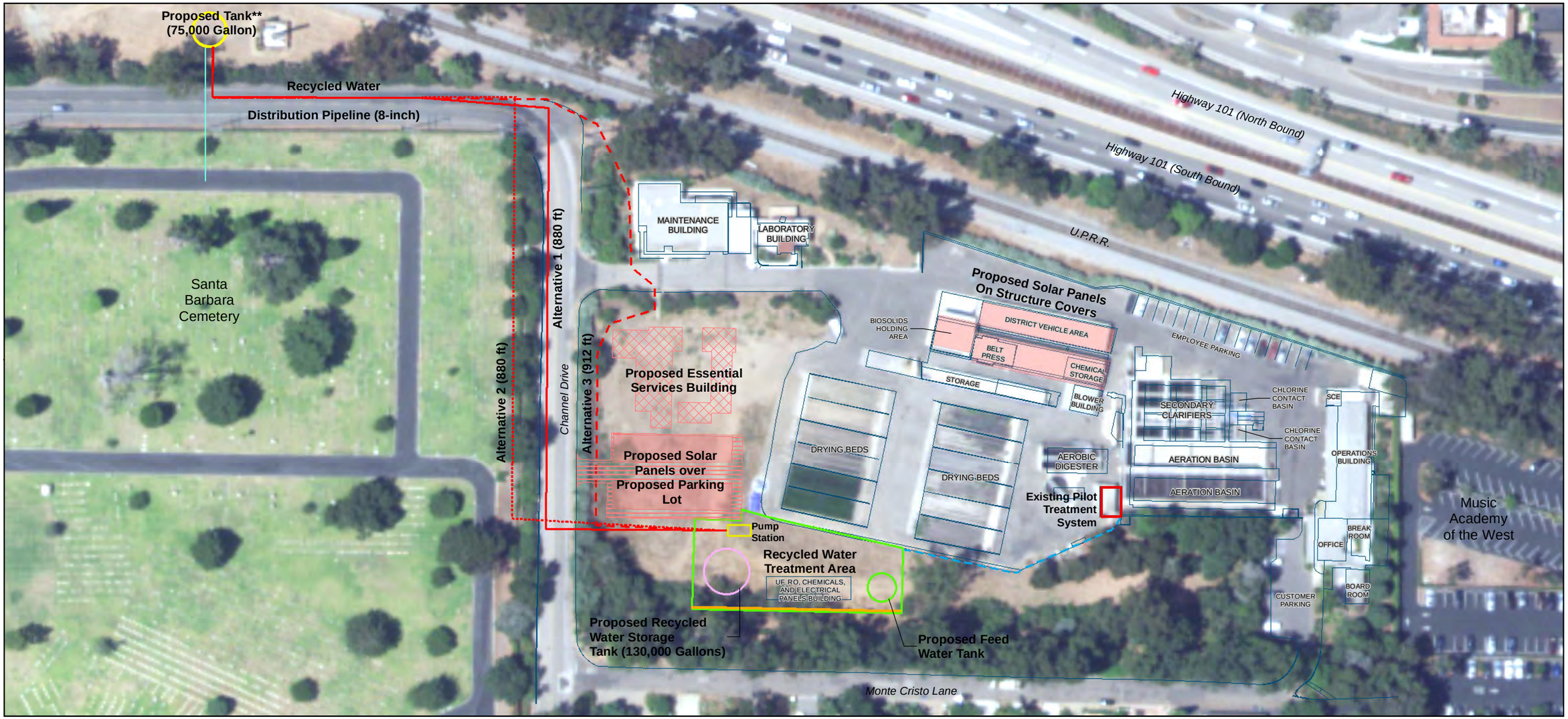

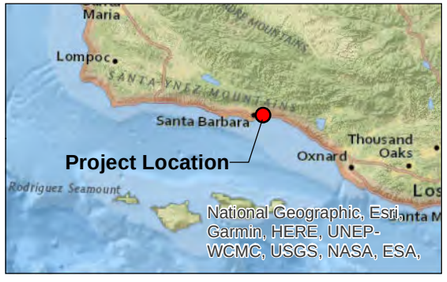

- Existing Feature
- Upgrades to Existing Pilot Treatment System* (In Existing Building)
- Approximate Existing Pipeline Between Proposed Treatment System and Recycled Water Treatment Area
- Proposed Tank** (75,000 Gallon)
- Private Recycled Water Pipeline (120 foot, 8-inch)
- Recycled Water Distribution Pipeline, Alt. 1 (880 foot, 8-inch)
- Recycled Water Distribution Pipeline, Alt. 2 (880 foot, 8-inch)
- Recycled Water Distribution Pipeline, Alt. 3 (912 foot, 8-inch)

- Proposed Recycled Water Storage Tank (130,000 Gallon)
- Proposed Recycled Water Area
- Pump Station (200 sq ft Concrete Pad)
- Retaining wall (6-foot high, 185-foot long)
- Proposed Solar Panel Area
- Proposed Essential Services Building (5,504 sqft)
- Proposed Driveway & Parking Lot

0 75 150 Feet

(At original document size of 11x17)
1:1,080

N

* Pilot Treatment System Consists of
1) Ultrafiltration Filters
2) Reverse Osmosis Membranes
3) Sodium Hypochlorite disinfection

EXISTING LAND DESCRIPTION:
"Public Utility;" Land Use Zoning Distruct "Utility/Community Facility"

** Land Owned by Cemetery

Notes
1. Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
2. Data Sources: Existing and Proposed Features from Santa Barbara County Public Works Department, 2019. Aerial from USDA NAIP, 2018.

Stantec

Project Location	Prepared by SET on 2020-03-30 TR by LM on 2020-03-30 IR by PM on 2020-03-31
Santa Barbara, CA	
Client/Project	185804581

Montecito Sanitary District
Title 22 Recycled Water Project

Figure No.
2

Title
Development Plan Projects

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2.0 PROJECT DESCRIPTION

The Montecito Sanitary District (District) is a locally funded and administered independent special district created by the residents of Montecito, whose mission is to: "protect public health and safety and to preserve the natural environment through the collection, treatment and disposal of wastewater in the most cost-effective way possible" (Montecito Sanitary District, 2009). The District proposes to construct and operate three projects as part of the County of Santa Barbara Development Plan and Coastal Development Permit process:

1. An approximately 60,000 gallons per day production capacity Title 22 compliant tertiary wastewater treatment system at their existing (secondary treatment) facility located at 1042 Monte Cristo Lane. The goal of this project is to utilize the recycled water generated by the treatment system for the irrigation of the adjacent Santa Barbara Cemetery (cemetery). Using recycled water for the irrigation of the 55.63-acre cemetery parcel would allow the cemetery to stop using potable water for irrigation purposes. In addition, this project provides recycled water for the District to use to clean the sewer collection system, process water for the secondary treatment system, and landscape irrigation rather than potable water that is currently used.

2. An Essential Services Building and parking lot located on the existing facility site and one new driveway off Channel Drive to access the facility. The new driveway will replace the existing public access along Monte Cristo Lane. The goal of this project would be to provide additional sanitary facilities including changing rooms, washrooms, shower rooms, designated food preparation facilities, plan room, training room, and individual data entry/mandatory reporting workstations in areas that are conditioned with proper air exchange and safe social distancing. The Essential Services Building will also replace the existing Board room, customer service counter, and public restroom.

3. Carport structures with solar panels. The goal of this project is to provide sufficient energy to operate the recycled water treatment system.

2.1 PROJECT AND SITE DESCRIPTION

The proposed Projects would consist of the following main components:

- 1,500 square foot Treatment System including:
  - Ultrafiltration Filters
  - Reverse Osmosis Membranes
  - Sodium Hypochlorite disinfection
- 6-foot high, 185-foot long retaining wall enclosure
- One 60,000-gallon, 18-foot high feed water tank on concrete pad
- One 130,000-gallon, 15-foot high recycled water storage tank on concrete pad
- 200 square foot concrete pad for pump station

- One 75,000-gallon, 16-foot high, storage tank on a concrete pad with perimeter fencing on cemetery property
- One 120 ft long 8-inch PVC C900 diameter private recycled water pipeline
- One 880-912 ft long 8-inch PVC C900 diameter recycled water distribution pipeline
- Five proposed carport structures with solar panels
- One 5,085 square foot, single-story Essential Services Building[1]
- One 6,412 square foot 17-space parking area and driveway, with an additional 2,658 square feet of hardscape, totaling 9,070 square feet
- Demolition of approximately 1,930 square foot main office building, adjacent 8-space parking area, and existing canopies, totally approximately 3,170 square feet.

A summary of the proposed Projects' components and temporary and permanent disturbance is provided in Table 3 below. While the combined temporary and permanent disturbance of the proposed Projects is approximately 1.50 acres total, all three projects would not be constructed simultaneously.

Table 3: Proposed Project Temporary and Permanent Disturbance

Project Component	Temporary Disturbance (acres)	Permanent Disturbance (acres)
Recycled Water Distribution Pipeline – Alternate 1	0.36	0.00
Recycled Water Distribution Pipeline – Alternate 2	0.35	0.00
Recycled Water Distribution Pipeline – Alternate 3	0.30	0.00
Private Recycled Water Pipeline	0.04	0.00
Concrete Pad (75,000-gallon Tank)	0.04	0.03
Recycled Water Treatment Area	0.08	0.28
Essential Services Building and Parking Lot Area	0.16	0.51
Total Disturbance*	**0.68**	**0.82**
*Note: assumes recycled water distribution pipeline alternate 1 only.		

2.1.1 Current Site Conditions

The majority of the proposed Projects would be constructed within the existing District facility which is predominantly a cleared, disturbed dirt with several buildings, treatment system, parking areas, drainage pipes, and an existing outfall pipe; however, some water conveyance and storage structures would be located outside the facility (Figure 2.). The facility is a public utility; the dominant features of the site

[1] Note: equal to a net gain of 3,155 square feet including demolition of the existing 1,930 square foot existing office building.

include wastewater treatment components, hardscape (including concrete and asphalt), and some vegetation. The cemetery is comprised mainly of non-native lawn grass and ornamental landscaping, with paved roadways and walkways throughout the property. Both sites are bordered by non-native mature Eucalyptus trees.

2.1.2 Surrounding Land Uses

The proposed Project components (listed in Section 2.1 above) are contained within the existing District facility, with the exception of some conveyance and a storage structure which would occur off-site at the Santa Barbara Cemetery property north of Channel Drive, as shown on Figure 2. The northern portion of the facility is bordered by Union Pacific Railroad (UPPR), with residential areas to the south, a parking lot for the Music Academy of the West to the east, and the cemetery to the west. U.S. Highway 101 runs adjacent to the UPRR to the north.

2.2 FACILITY COMPONENTS

The proposed Projects include three separate components: the recycled water treatment facility and the distribution system, the solar panel structures, and the Essential Services Building and parking lot with a new driveway. Each of these components is further described below.

2.2.1 Treatment Facility

Water Supply / Wastewater Characteristics

The source of the recycled water for the proposed Project is the existing facility's secondary clarifier effluent. A "clarifier" is generally used to remove solid particulates or suspended solids from liquid for clarification and/ or thickening; "effluent" is a liquid waste or sewage discharged into a river or the sea (Oxford, 2019). The chemical makeup of the treated wastewater is presented in Table 4.

As the surrounding community of Montecito is already built out and the land use is not changing, the chemical constituent makeup of the treated wastewater is unlikely to change drastically. There are no industrial users located within the community of Montecito and the community does not accept wastewater from outside sources.

Table 4. Existing Wastewater Treatment Facility Secondary Clarifier Effluent Characteristics

Description	Value	Unit
Average Daily Flow	0.594	Million gallons per day (mgd)
Alkalinity	130	Milligrams per Liter (mg/L)
Boron	0.80	Milligrams per Liter (mg/L)

Description	Value	Unit
Nitrate-Nitrogen	28	Milligrams per Liter (mg/L)
pH	6.5 - 7.7	(Range)
Oil and Grease	4	Milligrams per Liter (mg/L)
Total Suspended solids (TSS)	8.4	Milligrams per Liter (mg/L)
Total Dissolved Solids (TDS)	1750	Milligrams per Liter (mg/L)
Total Chlorine Residual	0	Milligrams per Liter (mg/L)

Source: Phoenix Civil Engineering, August 2019 and MSD 2019 Annual Report
Table Notes:
1. Average dry weather flow is from the period of January to December 2019. Maximum day dry weather flow occurred in October 2018.
2. Constituents within the table are from the irrigation suitability study performed by Montecito Sanitary District 2017.
3. Oil and grease value is the typical maximum value from 2017 to 2019. However, higher values are possible.
4. Secondary Clarifier Effluent is the intake water for the proposed UF/RO treatment train.

Treatment and Purification Process

The proposed Project would utilize Ultrafiltration (UF) and Reverse Osmosis (RO) along with sodium hypochlorite disinfection for the production of the Title 22 compliant recycled water. The proposed Project's treatment process would generally consist of the following steps:

- The secondary clarifier effluent (influent feed water) is pumped to a feed water tank where the UF draws water from.
- It is then pressurized with a booster pump and the water is processed through a disc filter.
- After the disc filter, the water is filtered through the ultrafiltration step.
- One UF membrane unit is located on the skid.
- A backwash system is included on the skid.
- The filtered water is then sent from the UF product water tank and forwarded to the RO treatment skid.
- Once the RO system has further refined the water, the RO permeate water is sent to a small holding tank to blend with the ultrafiltration water then pumped to the aboveground coated steel tank prior to distribution.
- The UF skid pumps water from the UF product water tank for backwashing.

- Sodium hypochlorite, for disinfection, is added to the permeate tank (either the small blending tank or the aboveground steel tank).
- Drain lines from the tanks lead to a common discharge point where it is returned to the existing treatment plant headworks and processed.

Ultrafiltration is a type of membrane filtration in which hydrostatic pressure forces a liquid against a semipermeable membrane. Ultrafiltration is commonly employed to remove colloids, proteins, bacteria, pyrogens, and macromolecules from water. Reverse osmosis is a membrane separation water purification process in which feed water flows along the membrane surface under pressure. Filtrate water permeates the membrane and is collected, while the concentrated water, containing dissolved and undissolved material that does not flow through the membrane, is discharged from the system. Sodium hypochlorite is a common disinfection product that is used by the water and wastewater industries and is used commonly within the existing facility (Montecito Sanitary District, 2019).

Waste Discharge

Concentrate generated from the treatment system would be blended with secondary treatment water and discharged into the existing District's discharge point No. 001 under the existing Order No. R3-20122012-0016 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0047899. Under these authorizations, the District is permitted to discharge up to 1.5 million gallons per day of dry weather average monthly rate of treated wastewater. From discharge point No. 001, concentrate would pass through an existing 16-inch diameter, short and shallow outfall pipe that terminates 1,500 feet offshore in a water depth of 35 feet in the Pacific Ocean. The last 100 feet of the outfall pipe is equipped with ten alternating lateral diffuser ports with Tideflex rubber valves. The proposed Project does not include any modifications to the existing outfall infrastructure.

2.2.2 Recycled Water Transmission, Distribution, and Storage

The distribution system would connect the new treatment facility and to the new cemetery storage tank via a new 880-912 foot 8-inch PVC C900 underground recycled water pipeline. Three location options are being considered for installation of this pipeline: (1) beneath Channel Drive; (2) parallel to Channel Drive on the cemetery property; and (3) parallel to Channel Drive on the treatment facility property (Figure 2). No tree removal is required for any of the three pipeline installation options. The distribution system would also include a 75,000-gallon, 16-foot high, storage tank adjacent to an existing cellular tower on a property north of the main cemetery property. The tank would be placed on a concrete pad with perimeter fencing surrounding the tank. A private recycled water pipeline (120 ft long, 8-inch PCV C900 pipe) would be installed from the cemetery's storage tank to the cemetery property (Figure 2). The treatment portion of the proposed Project is wholly contained within the existing wastewater treatment plant facility and no additional fencing, security, or lighting would be used. Each of these components are further described below.

Once water has been treated at the new treatment facility and meets the criteria for its intended use, a pump system would send the tertiary treated water through a distribution pipeline that would be

connected to the cemetery tank on the cemetery parcel. Routine monitoring, as specified in the facility NPDES permit, would be required to ensure the recycled water continues to stay within use limitations. The cemetery parcel is located approximately 60 feet west of the existing facility. The potable water system would also require a backflow prevention device on its connection to the Montecito Water District system. Potable water pipelines within the cemetery would require physical separation from the irrigation system by cutting and capping the potable water lines that were used for the irrigation system when it was using potable water.

The proposed recycled water distribution pipeline would be 8 inches in diameter and approximately 880-912 feet in length. It would be buried for its full alignment and would be installed in one of three locations near Channel Drive (i.e., beneath or adjacent to the road that separates the treatment facility from the cemetery). Once on the cemetery parcel north of Channel Drive, a 75,000-gallon, 16-foot high, steel storage tank would contain the recycled water. This tank would be located aboveground and adjacent to an existing cellular tower. A second 120 foot 8-inch pipeline would then distribute the water to the adjacent cemetery property. The existing hose bibs on the cemetery property would be exempt from conversion to quick couplers in accordance with State Health and Safety Code Section 8118. The required signs would be posted onsite to notify the public that recycled water is in use in accordance with State Regulations.

2.2.3 Essential Services Building, Parking Area and Driveway

The proposed Essential Services Building would include a 5,085-square foot, single-story building which would contain a new public meeting room, public permit counter, several offices, breakroom, restrooms, women's locker room with showers, storage room, and mechanical equipment room. The building would be utilized by existing District employees and would be constructed approximately 20 feet from the Channel Drive property line in compliance with applicable property setbacks. The building structure would be a maximum height of approximately 19 ft. An existing dirt pad would need to be cleared of weeds and a concrete pad installed prior to construction of the building. Power supply for the proposed Essential Service Building would be electricity acquired from Southern California (SoCal) Edison with secondary power source from existing generators. All landscaping in and around the Essential Services Building would be irrigated with recycled water.

A new 6,412 square foot 17-space parking area and additional bicycle parking spaces would be installed immediately south of the proposed Essential Services Building. Additionally, a new driveway is proposed to provide public access to the Essential Services Building site. Currently, public access is provided via Monte Cristo Lane and employee-only access is provided by the maintenance gate from Channel Drive near the proposed Essential Services Building. Access from Monte Cristo Lane would be discontinued, and new public access would be provided by Channel Drive.

2.2.4 Solar Panel Structures

Five new proposed carport structures would be constructed with roof-mounted solar panels. Each carport would be approximately a maximum of 18-feet in height including solar panels and would cover an area of approximately 2,783 square feet.

2.3 PROJECT CONSTRUCTION

Project construction would consist of three phases:

1. Recycled water facility and pipeline including tanks, installation, startup and testing;
2. Essential Services Building and parking lot; and,
3. Solar structures and panels.

The majority of the existing site is graded. The Essential Services Building would be constructed on a 6,110 square-foot concrete pad in a previously graded area. However, grading will be required for the recycled water area. Surrounding this area will be a 6-foot high, 185-foot long concrete retaining wall. This wall would be located on the south side of the recycled water area. The estimated cut would be approximately 1,550 cubic yards (yds^3) and the majority of the cut material would need to be hauled off-site and disposed of at an approved facility. Construction of the distribution system would involve the trenching and burial of the pipelines, and no site preparation would be required. According to the County of Santa Barbara Grading Code, the trenching necessary for the installation of the proposed Project would qualify as “grading”. Therefore, the proposed Project will seek and obtain a Grading permit from the County of Santa Barbara.

2.3.1 System Installation, Testing, and Startup

The components of the new tertiary treatment system would be shipped to the existing facility site. Installation of the tertiary treatment system as well as the one 120-foot long 8-inch pipeline, one 880 to 912-foot long 8-inch pipeline, and one 75,000-gallon, 16-foot high, storage tank for distribution would be completed by a small team of local construction workers, District staff, and manufacturing representatives.

2.3.2 Construction Workers, Hours, and Equipment

Construction of the proposed Projects is expected to be completed in approximately 9-12 months. The onsite workforce would consist of laborers, skilled trades, supervisory, support, and construction management personnel. The proposed Project would generate approximately ten local jobs during the construction phase.

Construction activities would be conducted consistent with the County of Santa Barbara Montecito Community Plan regulations regarding hours of construction. These regulations limit noise generating construction activities to the hours between 7:30 am and 4:30 pm, Monday through Friday.

2.3.3 Construction Traffic

All materials for Project construction would be delivered by truck. All deliveries would be made via Channel Drive. Construction of the proposed Project would require approximately 3,004 trips total.

2.3.4 Construction Water Use

The proposed Projects are anticipated to require approximately 0.25 acre-feet (af) of water during construction for dust suppression, construction of concrete pads, flushing pipes during start up, and potentially drilling fluid if horizontal directional drilling is used for the pipeline installation. Water, including for construction, would be obtained from the District or the existing recycled water project.

2.3.5 Essential Services Building, Solar Panel Structures, and Parking Area Construction

To accommodate the energy usage of the proposed Project, 256 solar panels are proposed to be constructed on carport structures over the proposed parking area. The electrical output of the panels would approximately be 290 watts per panel per hour of direct sunlight. There would be two separate structures for the parking lot, each approximately 101 ft long. 23 ft wide, and a maximum of 18 feet tall. In addition, as detailed in Section 2.2.3 above, a new Essential Services Building would also be constructed including site preparation (e.g., weed removal) and installation of a concrete pad.

Demolition activities are also proposed for the following: existing approximately 3,170 square foot main office building, adjacent 8-space parking area, existing shade and carport structures over the District vehicles and equipment, chemical storage areas, and solids handling area.

There would be three separate structures proposed to replace the existing shade and carport structures with a total of 644 panels The first structure, the farthest north over the District vehicles and equipment, would be approximately 121 feet long, 26 feet wide, and a maximum of 18 feet tall. The second structure, located over the chemical storage area and belt press, would be approximately 121 feet long, 26 feet wide, and a maximum of 18 feet tall. The third and final structure, over the solids handling bins, would approximately be 36 feet long, 33 feet wide, and a maximum of 18 feet tall.

In total, five structures would be constructed for the solar panels.

2.4 PROJECT OPERATION AND MAINTENANCE

Upon commissioning, the proposed Projects would be fully operational. During operation, the proposed recycled water Project would generate Title 22 compliant recycled water for irrigation of the cemetery and other approved District purposes. Operation of the proposed recycled water Project would provide approximately one additional full-time position.

2.4.1 Operation

During operation of the proposed Projects, the District would undertake the following:

- Check status of system
- Clean pump wye screens
- Fill chemical tanks if needed
- Collect samples at designated sample locations

- Analyze data for trends to determine if additional cleaning or maintenance is required
- Verify accuracy of analytic instruments
- Confirm water quality meets permit requirements

The proposed recycled water Project would have continuous monitoring of the treatment system influent and treated effluent through the use of a turbidity meter and recorder. The operator would check the recycled water treatment system daily upon arrival at the treatment facility. The constituent sampling and testing would be performed for the treatment system as identified in the Title 22 Water Recycling Criteria parameters. Compliance testing would occur at the piping downstream of the recycled water storage tank for total coliform, turbidity, and priority pollutants per the State Water Resources Control Board Order WQ 2016-0068-DDW. The reverse osmosis concentrate would be tested in the effluent channel after blending with secondary effluent per the NPDES waste discharge requirements. The compliance sampling would be performed anytime the system is operated, recycled water is sent to the distribution system, and concentrate is blended with secondary effluent. The compliance sampling would not occur when the system is discharging back to the main wastewater treatment facility.

As part of operations, various system alarms would monitor the ongoing processes and conditions of the proposed Project Permit compliance alarms are triggered by the following: RW product high Turbidity, high electrical conductivity, and low sodium hypochlorite. Alarms for process control/equipment protection during UF are triggered by feed pump thermal overload, high/low inlet pressure, low air pressure, low ferric chloride, and low -level backwash tank. During RO, the alarms for process control/equipment protection are triggered by low suction pressure, high feed pressure, high permeate tank, low permeate flow, low level in permeate tank, low level in feed tank, high permeate conductivity, high/low feed flow, low brine flow, Hydrochloric acid low level, Sodium Hydroxide low level, high feed pH, and antiscalant low level. These alarms would be independent of the existing wastewater treatment system and would alarm locally. The alarms would always be monitored by certified District facility staff. If an alarm is triggered the Operators would review the alarm to determine the appropriate action.

Water treatment would occur 24 hours per day, seven days per week. Recycled water would be produced overnight, however, it would have an overflow pipe connected to the storage tank so when the tank is full, the recycled water would be discharged back to the facility process. Even though recycled water is being produced overnight, it would only be distributed during the District working hours to allow the certified District Operator to verify it is in compliance with the treatment regulations prior to distribution. The RO concentrate (brine) would be discharged with the existing secondary effluent into the discharge channel that flows out to the districts existing outfall.

2.4.2 Maintenance

Maintenance activities would be typical to those which occur within the existing facility. Repairs, cleaning, and ongoing maintenance to the treatment system and internal wastewater treatment piping and storage tanks would be performed by District staff. Pipeline repairs to the distribution system located outside of the District parcel but prior to the cemetery storage tank would be performed by the District. Pipeline repairs to the distribution system on the cemetery property is the responsibility of the cemetery.

2.4.3 Signage

Permanent signage would be installed at the cemetery and is required wherever recycled water is used. Temporary signage would be used for traffic control, as required, for construction of the distribution pipeline under Channel Drive.

2.4.4 Water Use

During operations and maintenance, the proposed Projects are anticipated to generate approximately 60,000 gallons per day of Title 22 compliant recycled water for irrigation of the cemetery.

Supplemental water for the irrigation system on the cemetery would be supplied through an approved air gap to augment with potable water at the permanent recycled water storage tank at the cemetery. That distribution pipeline would be installed and connected to the existing potable water system by the cemetery's contractor or the contractor installing the permanent storage tank. The existing irrigation system piping would be used to distribute the recycled water to all the existing irrigation sites on the parcel.

2.4.5 Power Sources

Primary power for the proposed recycled water Project would be supplied by the newly installed solar panels on the District's facility site. Secondary power sources would be supplied through Southern California Edison (SoCal Edison). SoCal Edison would provide the primary power source to the new Essential Services Building. If power supply is interrupted from the solar panels and SoCal Edison, then the existing emergency diesel-powered generator would be on used. The proposed Projects are anticipated to use 215.35 Megawatt hours per year.

3.0 ENVIRONMENTAL SETTING AND IMPACT ANALYSIS

The proposed Projects are herein evaluated for its potential to affect 22 environmental resource areas. These resource areas are presented in the model Environmental Checklist Form found in Appendix G of the CEQA Guidelines Section 15063(f) as well as the County of Santa Barbara's Environmental Thresholds and Guidelines Manual (Santa Barbara County, 2008). The County is the responsible agency for issuing certain permits for the proposed Projects (refer to Table 2) and will have an opportunity to review and comment on the adequacy of this analysis.

The environmental factors checked below would be potentially affected by the proposed Projects. Four of these environmental factors (Biological Resources; Cultural Resources; Tribal Cultural Resources; and Utilities and Service Systems) may be impacted significantly by the Project; however, as indicated in the analyses on the following pages, no substantial adverse changes in the environment would occur because appropriate mitigation measures would be successfully implemented by the Applicant to reduce effects to a less than significant level.

☒	Aesthetics	☐	Land Use and Planning
☐	Agricultural Resources	☐	Mineral Resources
☒	Air Quality	☒	Noise
☒	Biological Resources	☐	Population and Housing
☒	Cultural Resources	☒	Public Services
☐	Electromagnetic Fields	☒	Quality of Life
☐	Energy	☒	Recreation
☒	Geology and Soils	☒	Transportation and Traffic
☒	Greenhouse Gas Emissions	☒	Tribal Cultural Resources
☒	Hazards and Hazardous Materials	☒	Utilities and Service Systems
☒	Groundwater, Surface, and Stormwater	☒	Wildfire
		☒	Mandatory Findings of Significance

Impacts to the environment from construction and operation of the proposed Projects are herein described and analyzed to determine the level of significance under CEQA using criteria that have been

established by regulations, accepted standards, or other definable criteria. Each environmental resource area is reviewed by analyzing a series of questions (i.e., Initial Study Checklist) pertaining to potential project impacts. Based on the substantiated analysis in each answer, one of four conclusions have been made regarding an impact's significance determination under CEQA (see below).

No Impact. A finding of no impact is made when it is clear from the analysis that the proposed Project would not affect the environment.

Less Than Significant Impact. A finding of a less than significant impact is made when it is clear from the analysis that the proposed Project would cause no substantial adverse change in the environment, and no mitigation is required.

Less Than Significant Impact with Mitigation Incorporated. A finding of a less than significant impact with mitigation incorporated is made when it is clear from the analysis that the proposed Project would cause no substantial adverse change in the environment when mitigation measures are successfully implemented by the District. In this case, the District is the Proponent and would be responsible for implementing measures identified in a Mitigation Monitoring and Reporting Program.

Potentially Significant Impact. A finding of a potentially significant impact is made when the analysis concludes that the proposed Project could have a substantially adverse change in the environment for one or more of the environmental resources assessed in the checklist that the implementation of mitigation measures would not sufficiently reduce, avoid, or alleviate. In this case, preparation of an Environmental Impact Report (EIR) would be required.

3.1 AESTHETICS

3.1.1 Setting

Santa Barbara County's Visual Aesthetic Impact Guidelines (Santa Barbara County Thresholds Manual 2002) provides guidance in determining the importance of visual resources. Key factors in characterizing the importance of visual resources associated with the Project site include the following:

- Physical attributes such as undulating topography; character and type of vegetation (native or non-native); proximity to or presence of water bodies such as ponds, lakes, creeks, or streams; and extent of open space. The presence of these attributes enhances visual importance.
- Relative visibility: the more conspicuous the project site and physical attributes are as viewed from public viewpoints, the greater the importance of the visual resource.
- Relative uniqueness: the rarity of a particular type of view due to its natural character or the loss of similar types of visual resources from previous development increases the potential importance of the visual resource.

Views that combine the three characteristics defined above are considered especially important. Santa Barbara County's most important visual resources include coastal views; mountain views; the urban fringe; and travel corridors (Santa Barbara County Thresholds Manual 2002).

As the proposed Projects are located in the Coastal Zone, approval from the Montecito Board of Architectural Review is required.

Visual Character of the Project Vicinity

The proposed Projects are located within both the Coastal Zone and an Environmental Resource Management Element (EMRE) Scenic Corridor for US 101 (Montecito-Rincon Point). The majority of the proposed Projects would be constructed within the existing Montecito Sanitary District facility. This is predominantly a cleared, graded, and paved area with several buildings, treatment systems, parking areas, and other industrial features. The dominant features of the site include wastewater treatment components, hardscape (including concrete and asphalt), and some ornamental vegetation. The cemetery is comprised mainly of non-native lawn grass and ornamental landscaping, with paved roadways and walkways throughout the property. Both sites are bordered by non-native mature Eucalyptus trees.

The proposed Project components, as described above in Section 2.1, are proposed within the existing District facility, with the exception of some conveyance and a storage structure which would be located off-site. The northern portion of the facility is bordered by Union Pacific Railroad (UPPR), with residential areas to the south, a parking lot for the Music Academy of the West to the east, and the cemetery to the west. The U.S. Highway 101 runs adjacent to the UPRR to the north.

3.1.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS —Would the project:				
a) Have significant visual resources by virtue of surface waters, vegetation, elevation, slope, or other natural or man-made features which a publicly visible?	☐	☐	☒	☐
b) Have the potential to degrade of significantly interfere with the public's enjoyment of the site's existing visual resources?	☐	☐	☒	☐
c) Have the potential to impact visual resources of the Coastal Zone other visually important areas (i.e. mountainous area, public park, urban fringe, or scenic travel corridor)?	☐	☐	☒	☐
d) Have potential to conflict with the policies set forth in the Coastal Land Use Plan, the Comprehensive or any applicable community plan to protect the identified views?	☐	☐	☐	☒
e) Have the potential to create a significantly adverse aesthetic impact through obstruction of public views, incompatibility with surrounding uses, structures, or intensity of development, removal of significant amounts of vegetation, loss of important open space substantial alteration of natural character, lack of adequate landscaping, or extensive grading visible from public areas?	☐	☐	☐	☒

Discussion of Impacts

a) Have significant visual resources by virtue of surface waters, vegetation, elevation, slope, or other natural or man-made features which are publicly visible?

Less Than Significant Impact. The County of Santa Barbara defines significant visual resources as scenic highway corridors, parks and recreational areas, views of coastal bluffs, streams, lakes, estuaries, rivers, watersheds, mountains, and cultural resource sites, as well as scenic areas. The proposed Projects are located within both the Coastal Zone and an EMRE Scenic Corridor for US 101 (Montecito-Rincon Point). As described above in Section 2.1, the proposed Project components (with the exception of the proposed water storage tank and associated piping to connect from the existing facility to the proposed tank) would be located within an existing facility. The facility itself is currently screened from view with trees and other foliage from neighboring residential uses. As the distribution piping would be constructed underground, no visual resources would be impacted. The height of the proposed 75,000-gallon storage tank across from the cemetery site is 16-feet tall and would include 6-foot tall perimeter fencing. The intervening landscape of bushes and mature trees located in front of the storage tank along Channel Drive are approximately 12-feet tall, thereby obscuring the visibility of the storage tank. An existing cell phone tower is located adjacent to the proposed storage tank area. While the proposed

storage tank is located within a Scenic Corridor, the storage tank would be a single structure, the majority of which would be screened with existing mature trees and vegetation, and would only be visible on an intermittent basis by passing motorists along US 101. Photographs of the proposed storage tank area and existing cell phone tower from viewpoints off Channel Drive and Highway 101 (north and south directions) are provided below. Therefore, impacts would be less than significant.

Photo #1 View from southbound Highway 101.

Photo #2 View north on Channel Drive

Photo #3 View from northbound Highway 101.

b) Have the potential to degrade or significantly interfere with the public's enjoyment of the site's existing visual resources?

Less Than Significant Impact. The proposed Project treatment system upgrades would be installed within an existing facility. Other components include one 75,000-gallon tank, one 120 foot long underground recycled water pipeline, one 880 to 912 foot long underground recycled water distribution pipeline, a 5,085 square-foot Essential Services Building, new 17-space parking area and five proposed carport structures with 256 solar panels. These components, with the exception of the storage tank, would be located within the existing facility and are not publicly accessible. Furthermore, the facility is composed of one-story structures already screened from view of the cemetery with trees and other foliage. The storage tank, located outside of this facility, would also be screened from view with existing vegetation and new fencing and would be located on private property. Therefore, impacts would be less than significant.

c) Have the potential to impact visual resources of the Coastal Zone or other visually important areas (i.e. mountainous area, public park, urban fringe, or scenic travel corridor)?

Less Than Significant Impact. The proposed Projects are located within both the Coastal Zone and an Environmental Resource Management Element (EMRE) Scenic Corridor for US 101 (Montecito-Rincon Point). The proposed Projects are also located within an urbanized area according to the County's ERME Factor Maps, and falls within Category C, "Urbanization could be permitted only in appropriate instances, subject to project plan review and imposition of specific conditions to protect against hazards and to preserve the integrity of the land and environment" (ERME, 2009). However, most of the project components are located in an existing facility and do not feature significant visual resources as per the County's environmental thresholds (County of Santa Barbara, 2008), which apply to public, not private views. This facility is not publicly accessible and is screened from view with trees and other foliage. Project components located outside of this facility would also be screened from view with existing vegetation and new fencing. Therefore, impacts would be less than significant.

d) Have potential to conflict with the policies set forth in the Coastal Land Use Plan, the Comprehensive or any applicable community plan to protect the identified views?

No Impact. The proposed Projects would comply with all visual resource policies set forth in the Coastal Land Use Plan, Comprehensive Plan, and Montecito Community Plan. New structures as part of the proposed Projects would be built in conformance with the existing scale and character of the existing community, in accordance with Land Use Policy 4-4 (Santa Barbara County Coastal Land Use Plan, 2019), and new utilities included in the proposed Projects would be located underground in accordance with Land Use Policy 4-7 (Santa Barbara County Coastal Land Use Plan, 2019). The proposed Project is also not within the Beach Development (BD) and Exclusive Agriculture (A-1-X) zones, which have the most visual resource restrictions per the Comprehensive Plan (Santa Barbara County Coastal Land Use Plan, 2019). The proposed Projects would also have no impact on Montecito's existing visual/open space resource goals, which are primarily focused on protecting views of the Santa Ynez Mountain Range and the Public and Private Open Space (Montecito Community Plan, 1995). As the proposed Projects are located in an existing facility currently screened by non-native eucalyptus trees, views of these two

resources would not be affected. Therefore, as the proposed Projects would not conflict with the policies set forth in the Coastal Land Use Plan or the Montecito Community Plan, no impact would occur.

e) *Have the potential to create a significantly adverse aesthetic impact through obstruction of public views, incompatibility with surrounding uses, structures, or intensity of development, removal of significant amounts of vegetation, loss of important open space, substantial alteration of natural character, lack of adequate landscaping, or extensive grading visible from public areas?*

No Impact. The proposed Projects are located within an existing facility. No public views would be obstructed. Furthermore, no open space would be lost, no natural areas would undergo substantial alteration and a minimal amount of publicly visible trenching (e.g., new underground distribution piping) would be included as part of the proposed Projects. There would be no impact.

3.2 AGRICULTURAL RESOURCES

3.2.1 Setting

Qualifications for lands within Santa Barbara County to be designated as agricultural preserves are found in "Criteria for Agricultural Preserves", adopted by the Santa Barbara County Board of Supervisors. The land must either be in a Class I or II Soil Capability classification, as prescribed by the U.S. Soil Conservation Service, or qualify for an 80 to 100 rating in the Storie Index System to be designated prime land, in which case the minimum size of a preserve is 40 acres. Land also can qualify as prime if it fulfills one of the following:

- it supports livestock at a density of one animal per acre;
- is in orchard use that can return at least $200 per acre;
- or is devoted to other agricultural production that generally would return $200 per acre.

Farmland not meeting these qualifications is classified as non-prime, and the minimum size for an agricultural preserve is 100 acres. However, in certain instances, super prime land of at least 5 acres in a separate ownership may be combined with adjacent prime land to meet the 40-acre minimum requirements.

The proposed Projects are located in the unincorporated community of Montecito within a facility previously developed for wastewater purposes. According to the Montecito Community Plan and County of Santa Barbara Land Use and Zoning Map, the proposed Project are located within the Community Facility land use designation within the County's Public Utilities zone; it is not located within an area zoned or used for agricultural purposes. There is currently one parcel located within the Montecito Community Plan area designated for agricultural use. It is located approximately 1.5 miles east of the proposed Project site.

3.2.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURAL RESOURCES —Would the project:				
a) Conflict with adopted environmental plans and goals of the community where it is located?	☐	☐	☐	☒
b) Convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land?	☐	☐	☐	☒

Discussion of Impacts

a) Conflict with adopted environmental plans and goals of the community where it is located?

No Impact. The proposed Projects are not located within proximity to any land zoned or utilized for farmland or forest land. The proposed Project is within an urbanized area of the community of Montecito and would not result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest uses. The proposed Projects will reduce the demand for potable water in the vicinity, complying with existing environmental plans such as the Coastal Land Use Plan, Comprehensive Plan, and Montecito Community Plan, as well as the County of Santa Barbara's Energy and Climate Action Plan (ECAP). Therefore, as the Project would comply with all adopted environmental plans and goals of the community where it is located, no impact would occur.

b) Convert prime agricultural land to non-agricultural use to impair the agricultural productivity of prime agricultural land?

No Impact. The proposed Project site is designated by the California Natural Resources Agency as Urban and Built-Up Land. No prime agricultural land is located within the proposed Project site. Therefore, no prime agricultural would be converted to non-agricultural use. No impact would occur.

3.3 AIR QUALITY

3.3.1 Setting

The Project site is located along the Southern California coast in Montecito, an unincorporated community of Santa Barbara County. The Project area is located in the South-Central Coast Air Basin (SCCAB) and is under the jurisdiction of the Santa Barbara County Air Pollution Control District (SBCAPCD). The proposed Project components include the water treatment plant, storage tank, conveyance pipelines to connect the treatment system to the storage tank and the storage tank to the cemetery, an Essential Services Building, new 17-space parking area and five solar panel arrays. Most of the proposed Projects would be constructed within the existing District facility with the exception of the conveyance pipelines and storage tank which would be located off-site.

Regulatory oversight authority regarding air quality at the local, state, and federal levels rests with the SBCAPCD, California Air Resources Board (CARB), and United States Environmental Protection Agency (USEPA), respectively.

Ambient air quality is determined by comparing pollutant levels in ambient air samples to national and state standards. These standards are established by the USEPA and CARB at levels determined to be protective of public health and welfare, with an adequate margin of safety. California Ambient Air Quality Standards (CAAQS) were established in 1967, whereas National Ambient Air Quality Standards (NAAQS) were first established by the Federal Clean Air Act of 1970. California standards are generally more stringent than national standards.

Air quality standards specify the upper limits of pollutant concentrations, over defined durations, in ambient air, consistent with the management goal of preventing specific harmful effects. There are national and state standards for the “criteria pollutants” ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), airborne respirable particulate matter with an aerodynamic diameter of less than 10 microns (PM_{10}), fine particulate matter with an aerodynamic diameter of less than 2.5 microns ($PM_{2.5}$), sulfur dioxide (SO_2), and lead (Pb). Federal/National and State Ambient Air Quality Standards are presented in Table 5.

Table 5. National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [a,c]	National Standards [b,c]	
			Primary	Secondary
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	—	—
	8 Hour	0.07 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	Same as Primary
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	150 µg/m^3	Same as Primary
	Annual Mean	20 µg/m^3	—	
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard	35 µg/m^3	Same as Primary
	Annual Mean	12 µg/m^3	12.0 µg/m^3	15 µg/m^3

Pollutant	Averaging Time	California Standards [a,c]	National Standards [b,c]	
			Primary	Secondary
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	—
	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	—
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/m^3)	100 ppb (188 µg/m^3)	—
	Annual Mean	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm (655 µg/m^3)	75 ppb (196 µg/m^3)	—
	3 Hour	—	—	0.5 ppm (1,300 µg/m^3)
	24 Hour	0.04 ppm (105 µg/m^3)	0.14 ppm (365 µg/m^3) (for certain areas)	—
	Annual Mean	—	0.030 ppm (80 µg/m^3)	—
Lead (Pb)	30-Day Average	1.5 µg/m^3	—	—
	Calendar Quarter	—	1.5 µg/m^3 (for certain areas)	Same as Primary
	Rolling 3-Month	—	0.15 µg/m^3	
Visibility-Reducing Particles	8 Hour	10 mile visibility standard, extinction of 0.23 per kilometer	No National Standards	
Sulfates	24 Hour	25 µg/m^3		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)		

Notes:
a) California standards for O_3, CO (except Lake Tahoe), SO_2 (1 and 24 hour), NO_2, suspended particulate matter (PM_{10}, $PM_{2.5}$, and visibility-reducing particles) are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
b) National standards (other than O_3, PM, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard.
c) Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to these reference conditions; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
mg/m^3 = milligrams per cubic meter; µg/m^3 = micrograms per cubic meter; ppm = parts per million; ppb = parts per billion

Source: CARB, 2016.

The USEPA and CARB determine the air quality attainment status of designated areas by comparing local ambient air quality measurements from state or local ambient air monitoring stations with the CAAQS and NAAQS. These attainment designations are determined on a pollutant-by-pollutant basis. Consistent with federal requirements, an unclassifiable designation is treated as an attainment designation. Table 6 presents the federal and state attainment status for the SSCAB.

Table 6. Attainment Status of South-Central Coast Air Basin

Pollutant	State Designation	Federal Designation
Ozone (O_3)	Non-Attainment	Non-Attainment
Particulate Matter (PM_{10})	Non-Attainment	Unclassified
Particulate Matter ($PM_{2.5}$)	Unclassified/Attainment	Unclassified/Attainment
Carbon Monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen Dioxide (NO_2)	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO_2)	Attainment	Unclassified/Attainment
Lead (Pb)	Attainment	Unclassified/Attainment
Hydrogen Sulfide (H_2S)	Unclassified/Attainment	*
Sulfates	Attainment	*
Visibility Reducing Particles	Unclassified	*

Source: CARB, 2018
Notes: (*) = Not Applicable/ No Federal Standards

As shown in Table 6, the proposed Project area is designated as nonattainment for both federal and state standards for O_3 and state standard for PM_{10}. Because the SCCAB currently exceeds state and federal ambient air quality standards, the SBCAPCD is required to implement strategies to reduce pollutant levels to recognized acceptable standards.

The SBAPCD working in conjunction with the District Community Advisory Council and Santa Barbara County Association of Government, develop plans consistent with the California Clean Air Act and state/federal guidelines to move the SCCAB toward attainment. The most recent and applicable plan is the Final 2016 Ozone Plan (Ozone Plan). The Ozone Plan consists of feasible measures to reduce ozone precursor pollutants, such as, oxides of nitrogen (NOx) and reactive organic gases (ROG). The measures look to reduce these emissions from stationary, mobile, and marine sources. The Ozone Plan measures primarily focuses on stationary sources since CARB regulates the mobile sector, but it also is aiming to reduce emission from marine shipping as it accounts for a large part of the SCCAB inventory (SBCAPCD 2016).

3.3.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY —Will the proposal result in:				
a) The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect and stationary sources)?	☐	☐	☒	☐
b) The creation of objectionable smoke, ash or odors?	☐	☐	☒	☐
c) Extensive dust generation?	☐	☐	☒	☐

County Environmental Threshold

Chapter 5 of the Santa Barbara County Environmental Thresholds and Guidelines Manual (as revised in February 2018) addresses the subject of air quality. The thresholds provide that a proposed project will not have a significant impact on air quality if operation of the project will:

- emit (from all project sources, mobile and stationary), less than the daily trigger for offsets for any pollutant (currently 55 pounds per day for oxides of nitrogen (NO_x) and reactive organic compounds (ROC), and 80 pounds per day for PM_{10});
- emit less than 25 pounds per day of NOx or ROC from motor vehicle trips only;
- not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone);
- not exceed the Santa Barbara County Air Pollution Control District (SBCAPCD) health risk public notification thresholds adopted by the SBCAPCD Board; and
- be consistent with the adopted federal and state Air Quality Plans.

The County has not established thresholds for short-term impacts associated with construction activities, however, the County does require discussion of construction related PM_{10} for all projects that involve ground disturbance. The County's Grading Ordinance provides dust control measures to mitigate potential emissions of PM_{10}. Long-term/operational emissions thresholds have been established to address mobile emissions (i.e., motor vehicle emissions) and stationary emissions (stationary boilers, engines, and chemical and industrial processing operations that release pollutants).

Discussion of Impacts

a) *Violate any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect and stationary sources)?*

Less Than Significant Impact. Short-term construction impacts would be associated with construction of the tertiary treatment system components, an aboveground wastewater storage tank, two wastewater pipelines, the Essential Services Building, a 17-space parking area, and five solar panel arrays. Construction activities would have a duration of 9 to 12 months. Excavation and grading activities would be required for the recycled water area. Excavation cut and fill volumes would be approximately 1,550 cubic yards (CY) and 650 CY, respectively. Remaining soil would be exported offsite for disposal. Trenching would also be required during installation of the two pipelines with a total length of approximately 1,000 linear feet. The Project's total disturbed area would be approximately less than two acres. Emissions of ozone precursor emissions (ROG and NOx) during construction would result primarily from off-road equipment. Due to the limited number of off-road equipment, the short-term duration of construction activities, and the small area of disturbance, construction emissions would not be a significant source of ROG and NOx. As discussed previously, the SCCAB is in non-attainment for ozone and would need to implement reduction measures as required by the SBCAPCD to reduce construction-related emissions of ozone precursors. With regards to short-term fugitive dust emissions, the project would be subject to dust control measures outlined in the County's Grading Ordinance. During soil disturbing activities such, as excavation, grading and trenching, the proposed Projects would implement best management practices (BMPs) to control dust as required by County guidelines. The required measures would ensure that ozone precursor and fugitive dust emissions from construction activities would not result in a significant increase in short-term emissions. Therefore, Project construction would result in a less than significant impact.

Upon completion of construction, the number of employees onsite is not expected to change, therefore, the Project would not generate new vehicle emissions. Operations of the Project would include small pumps (<5 horsepower) for treatment system components. The pumps would be electric-powered and would not generate criteria pollutant emissions. This analysis included emissions from operations of the Essential Services Building, as well as, conservatively included emissions associated with the water treatment system component of the Project. Emissions for the water treatment system were based on a general light industrial land use. Emission sources for the Project include area sources (architectural coatings, consumer products, and landscaping) and energy sources (natural gas combustion). Emissions from area and energy sources are based on the size of the Project. Table 7 shows the Project's operational emissions compared to County thresholds.

Table 7. Project Long-Term Emissions

	ROG	NOx	PM_{10}
Source	**lb/day**		
Operations	1.21	0.22	0.017
Thresholds	55	55	80
Exceeds Threshold?	No	No	No

Emissions calculated using CalEEMod Version 2016.3.2
Daily emissions represent average daily emissions based on Project Site operations of 365 days annually.

As shown in Table 7, the Project's operational emissions would not exceed the County's daily thresholds for criteria pollutants, therefore, Project impacts would be less than significant.

b) Create objectionable smoke, ash or odors?

Less Than Significant Impact. Most Project components would be onsite or adjacent to the District's existing facility and located north of residential dwellings. Construction of the proposed Projects does not include any source of potentially objectionable odors that could affect a substantial number of people. There is a potential for odors to be created as a result of operating the water treatment plant. However, the proposed treatment system is a closed system. The treated water would have no odor. Based on this the Project would not generate additional smoke, ash, or odors and impacts would be less than significant.

c) Extensive dust generation?

Less Than Significant Impact. As discussed above in Impact a), the Project would include short-term construction and operations of treatment plant components and the Essential Services Building. During construction, dust control strategies would be implemented as required by the County. The Project's operational components are not expected to be a source of fugitive dust. Based on this, the Project would not generate extensive dust and impacts would be less than significant.

3.4 BIOLOGICAL RESOURCES

3.4.1 Setting

To support the analysis presented in Section 3.4, the proposed Project site and a 300 ft buffer (Biological Survey Area or BSA) were surveyed for the presence of special-status species and their habitats.

Existing Site Conditions

The BSA is situated on the Santa Barbara mesa, approximately 800 feet to the north of the Pacific Ocean. It is relatively flat at an average of approximately 40 feet above mean sea level. The lands within the BSA are completely developed with urban infrastructure including the Montecito Wastewater Treatment Plant (MWTP), the Santa Barbara Cemetery, the Music Academy of the West, residential development, railroad, and highway and roadways.

Baseline Data Collection Methodology

Stantec biologists conducted a literature search focused on the BSA and immediately surrounding areas prior to the field survey. The BSA is located within the USGS Santa Barbara, California, 7.5-minute topographic quadrangle. A search of the CDFW California Natural Diversity Database (CNDDB) was conducted for this quadrangle to determine which special-status plants, wildlife, and vegetation communities have been documented within the vicinity of the BSA (CDFW, 2019). Portions of the following five adjacent quadrangles (no quadrangles to the south due to the proximity to the Pacific Ocean) were also included in the 10-mile radius database search to capture potential occurrences of special-status species in the region surrounding the BSA:

- San Marcos Pass
- Little Pine Mountain
- Hildreth Peak
- Goleta
- Carpinteria

Additional data regarding the potential occurrence of special-status species and policies relating to these special-status natural resources were gathered from the following sources:

- State and federally listed endangered and threatened animals of California (CDFW, 2019b);
- Special Animals List (CDFW, 2019c);
- List of California Sensitive Natural Terrestrial Communities (CDFW, 2018d)
- Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2019); and
- Consortium of California Herbaria (CCH, 2019).

Habitat Assessment

To document the environmental conditions present within the BSA, Stantec conducted a habitat assessment and reconnaissance-level survey on December 12, 2019. The primary goal of this initial survey was to identify and assess habitat that may be capable of supporting special-status plant or wildlife species and determine the potential need for additional focused surveys for special-status resources. Biologists recorded all incidental plant and wildlife observations, but this assessment did not include focused, protocol-level surveys for rare plants or other special-status resources.

The BSA was investigated on foot by experienced field biologists walking meandering transects throughout the work area and within publicly accessible portions of the BSA at an average pace of approximately 1.5 kilometer/hour while visually scanning for wildlife and their sign and listening for songs and calls. Biologists halted approximately every 50 meters to listen for wildlife or as necessary to identify, record, or enumerate any observed species. Terrestrial insects and other invertebrates were searched for on flowers and leaves, under loose bark, and under stones and logs on the ground throughout the BSA. Randomly selected areas within appropriate micro habitats (e.g., leaf litter, woody debris piles, etc.) were hand raked or visually inspected to determine the presence/absence of gastropods, reptiles, small mammals, and amphibians. Species present were identified and recorded through direct visual observation, sound, or their sign (e.g., scat, tracks, etc.) and all potential refugia sites search were returned to their original state upon completion of inspection. Species identifications conform to the most up-to-date field guides and technical literature.

To the extent possible, the survey was conducted during a season and time of day when resident and overwintering birds would be expected to be present, small mammals would be active and detectable visually or by sign, and above-ground amphibian and reptile movement would generally be detectable. However, it should be noted that some wildlife species and/or individuals may have been difficult to detect due to their elusive nature, cryptic morphology, or nocturnal behavior. Surveys were conducted during daylight hours when temperatures were such that reptiles and other wildlife would be active (i.e., between 65-95° Fahrenheit).

Lists of special-status plant and wildlife species that have the potential to occur in the region (based on the database queries) are provided in Appendix B. It should be noted that Monarch butterfly (*Danaus plexippus*) is not included in the potential for occurrence tables presented in Appendix B. The CNDDB does not report any occurrences of this species within 10 miles of the BSA. Additionally, a report done for the nearby The Music Academy of the West, in 1999, determined that the ornamental eucalyptus tree groves on the property did not serve as viable habitat for Monarch butterfly autumnal or winter aggregations (Althouse and Meade).

Vegetation Communities and Observed Plant Species

Mapping of plant communities generally follow the classification system described in the second edition of A Manual of California Vegetation (Sawyer et al. 2009) with species' scientific and common names corresponding to those described in the second edition of The Jepson Manual (Baldwin et al. 2012). The Manual of California Vegetation is generally limited to communities that are native to or naturalized within

California; however, no native habitat occurs within the BSA. Therefore, the land cover types discussed below are descriptive in nature and are not specifically referenced in the Manual of California Vegetation.

Disturbed/Developed: This land cover type was mapped across the approximately 29.05 acres of the BSA that are developed, including built out areas such as the WWTP, paved roadways and paths, the railroad, the Santa Barbara Cemetery, and much of the landscaped areas solely featuring ornamental species. In general, these areas are unvegetated or contain ornamental planters, such as adjacent to buildings and within parking lots. These areas are periodically maintained for weed control, precluding any significant growth of non-ornamental species, but may be sparsely interspersed with ruderal pioneer plant species that readily colonize open disturbed soil. These include non-native grasses and forbs such as wild oat (*Avena fatua*), Bermuda grass (*Cynodon dactylon*), fennel (*Foeniculum vulgare*), bristly ox tongue (*Helminthotheca echioides*), and Russian thistle (*Salsola tragus*).

Ornamental Tree Groves: A total of approximately 5.44 acres of this land cover type occur throughout the BSA. To provide a visual break between the WWTP and adjacent residences, the Montecito Sanitary District maintains a tree grove of approximately 30 feet high to the south of the facility. Species occurring in this area are primarily non-native and are dominated by eucalyptus (Eucalyptus spp.) and pittosporum (*Pittosporum spp.).* Other non-native species that occur include acacias (*Acacia* spp.), olive (*Olea* sp.) and glossy privet (*Ligustrum lucidum*). A few native coast live oak trees (*Quercus agrifolia*) were also observed.

Many road margins throughout the BSA, particularly adjacent to U.S. Route 101, and much of the landscaping associated with the Music Academy of the West, to the southeast of the WWTP are occupied by tree groves, primarily comprised of eucalyptus and pittosporum. Many of these tree groves include trees that may exceed 80 feet tall, particularly eucalyptus.

A complete list of all plant species observed within the BSA is presented in Appendix B.

A summary of the vegetation and land cover types within the proposed Project site is presented in Table 8 below.

Table 8. Summary of Vegetation and Land Cover Types

Vegetation Community	Global Rank	State Rank	Acres within the proposed Project site
Disturbed/Developed	n/a	n/a	29.05
Ornamental Tree Groves	n/a	n/a	5.44

Jurisdictional Waters and Wetlands

A formal Jurisdictional Delineation was not performed as part of the reconnaissance level surveys within the BSA. The United States Fish and Wildlife Service National Wetlands Inventory (USFWS, 2019) does not list potentially jurisdictional features within the BSA and none were observed during the December 12, 2019 survey.

Common Wildlife

Common wildlife directly observed within the BSA included seven species of birds; no reptiles, mammals or amphibians were observed (a complete list of wildlife observed is presented in Appendix B).

Special-Status Wildlife

Special-status taxa include those listed as threatened or endangered under the federal or California Endangered Species Acts, taxa proposed for such listing, Species of Special Concern, and other taxa that have been identified by the USFWS, CDFW, or local jurisdictions as unique or rare and which have the potential to occur within the BSA.

The CNDDB was queried for occurrences of special-status wildlife taxa within the USGS topographical quadrangles in which the BSA occurs and the surrounding quadrangles. No special-status taxa were observed or assumed to be present within, or immediately adjacent to the BSA, based on the results of the CNDDB query and 2019 field surveys. A total of 35 taxa known to occur in the general region were reviewed and 8 taxa were determined to have a low or moderate potential to occur in the BSA based on existing recorded occurrences, known geographic range, and/or the presence of suitable habitat. Appendix B summarizes the special-status wildlife taxa known to regionally occur and their potential for occurrence in the BSA. A detailed list of all taxa present in the BSA is included in Appendix B of this document. Each of the taxa identified in the database reviews/searches were assessed for its potential to occur within the BSA based on the following criteria:

- **Present:** Taxa (or sign) were observed in the BSA or in the same watershed (aquatic taxa only) during the most recent surveys, or a population has been acknowledged by CDFW, USFWS, or local experts.
- **High:** Habitat (including soils) for the taxa occurs onsite and a known occurrence occurs within the BSA or adjacent areas (within 5 miles of the BSA) within the past 20 years; however, these taxa were not detected during the most recent surveys.
- **Moderate:** Habitat (including soils) for the taxa occurs onsite and a known regional record occurs within the database search, but not within 5 miles of the BSA or within the past 20 years; or a known occurrence occurs within 5 miles of the BSA and within the past 20 years and marginal or limited amounts of habitat occurs onsite; or the taxa's range includes the geographic area and suitable habitat exists.
- **Low:** Limited habitat for the taxa occurs within the BSA and no known occurrences were found within the database search and the taxa's range includes the geographic area.
- **Not Likely to Occur:** The environmental conditions associated with taxa presence do not occur within the BSA.

Appendix B presents a list of special-status wildlife, including federally- and state listed species, that are known to occur in the vicinity of the BSA. No special-status wildlife species were observed during the

reconnaissance-level surveys conducted by Stantec. Refer to Figures 3a and 3b for a graphical depiction of known records in relation to the proposed Project area.

Special-Status Plants

Record searches of the CNDDB, the CNPS Online Inventory, and the Consortium of California Herbaria (CCH) were performed for special-status plant taxa. Each of the taxa identified in the record searches was assessed for their potential to occur within the BSA based on the following criteria:

- **Present:** Taxa were observed within the BSA during recent botanical surveys or population has been acknowledged by CDFW, USFWS, or local experts.
- **High:** Both a documented recent record (within 10 years) exists of the taxa within the BSA or immediate vicinity (approximately 5 miles) and the environmental conditions (including soil type) associated with taxa presence occur within the BSA.
- **Moderate:** Both a documented recent record (within 10 years) exists of the taxa within the BSA or the immediate vicinity (approximately 5 miles) and the environmental conditions associated with taxa presence are marginal and/or limited within the BSA or the BSA is located within the known current distribution of the taxa and the environmental conditions (including soil type) associated with taxa presence occur within the BSA.
- **Low:** A historical record (over 10 years) exists of the taxa within the BSA or general vicinity (approximately 10 miles) and the environmental conditions (including soil type) associated with taxa presence are marginal and/or limited within the BSA.
- **Not Likely to Occur:** The environmental conditions associated with taxa presence do not occur within the BSA.

Appendix B presents a list of special-status plants, including federally- and state listed species and CRPR 1-4 species that are known to occur in the vicinity of the BSA. A detailed list of all taxa present in the BSA is included in Appendix B of this document. No special-status plant species were observed during the reconnaissance-level surveys conducted by Stantec. Refer to Figures 3a and 3c for a graphical depiction of known records in relation to the proposed Project area.

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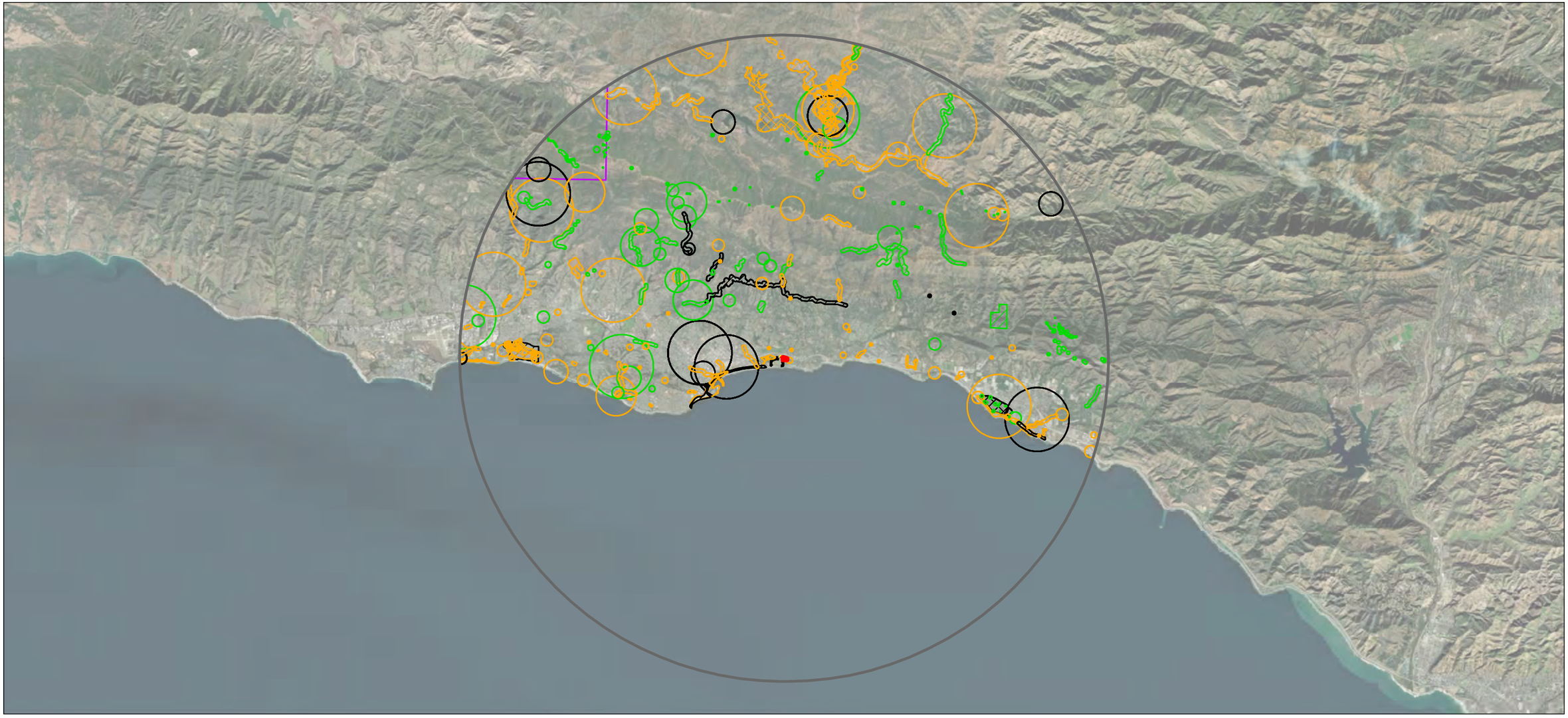

Project Location
10 Mile Radius

Symbology

Plant (80m)
Plant (specific)
Plant (non-specific)
Plant (circular)
Animal (80m)
Animal (specific)
Animal (non-specific)
Animal (circular)
Multiple (80m)
Multiple (specific)
Multiple (non-specific)
Multiple (circular)
Sensitive EO's (Commercial only)

Notes

1. Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
2. Data Sources: Existing and Proposed Features from Santa Barbara County Public Works Department, 2019. Aerial from USDA NAIP, 2016.
3. Background Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Stantec

Project Location
Santa Barbara, CA

Prepared by DL on 2019-12-16
TR by RB on 2019-12-16
IR by LM on 2019-12-16

Client/Project
185804581

Montecito Sanitary District
Title 22 Recycled Water Project

Figure No.
3a

Title
CNDDB 10 Mile Search

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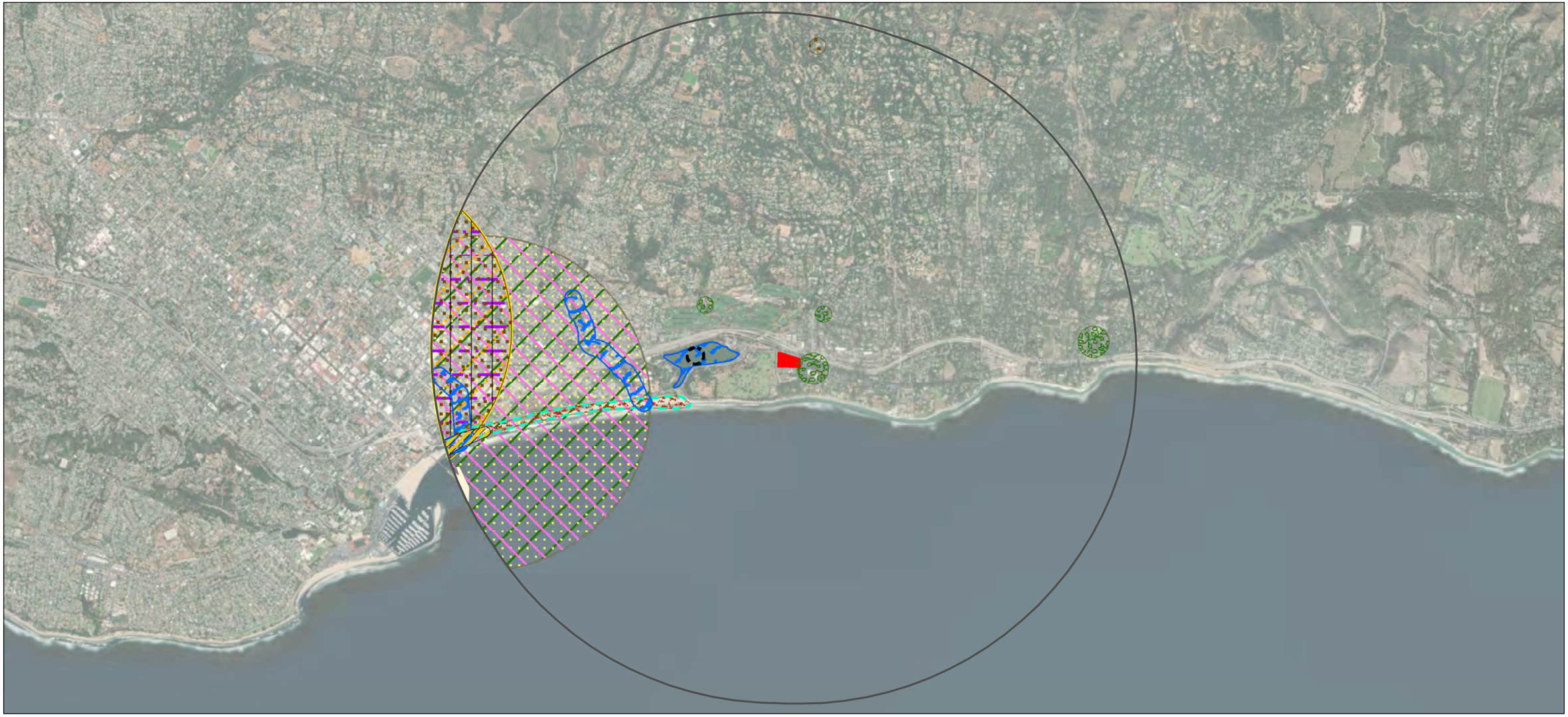

Project Location

2 Mile Search Radius

Animals

Anniella pulchra

Charadrius alexandrinus nivosus

Coelus globosus

Coturnicops noveboracensis

Danaus plexippus pop. 1

Emys marmorata

Eucyclogobius newberryi

Laterallus jamaicensis coturniculus

Pelecanus occidentalis californicus

Phrynosoma blainvillii

Rana draytonii

Riparia riparia

Salvadora hexalepis virgultea

Sternula antillarum browni

Taricha torosa

N

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1:38,000

Notes

1. Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
2. Data Sources: Existing and Proposed Features from Santa Barbara County Public Works Department, 2019. Aerial from USDA NAIP, 2016.
3. Background Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Stantec

Project Location
Santa Barbara, CA

Prepared by SET on 2019-12-16
TR by RB on 2019-12-16
IR by

Client/Project
185804581

Montecito Sanitary District
Title 22 Recycled Water Project

Figure No.
3b

Title
CNDDB 2 Mile Search - Animals

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Project Location

2 Mile Search Radius

Plants

Calochortus fimbriatus

Lonicera subspicata var. subspicata

Nasturtium gambelii

Quercus dumosa

Notes

1. Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
2. Data Sources: Existing and Proposed Features from Santa Barbara County Public Works Department, 2019. Aerial from USDA NAIP, 2016.
3. Background Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Stantec

Project Location
Santa Barbara, CA

Prepared by DL on 2019-12-16
TR by RB on 2019-12-16
IR by

Client/Project
185804581

Montecito Sanitary District
Title 22 Recycled Water Project

Figure No.
3c

Title
CNDDB 2 Mile Search - Plants

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3.4.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES — Would the project:				
a) Substantially reduce or eliminate species diversity or abundance?	☐	☒	☐	☐
b) Substantially reduce or eliminate quantity or quality of nesting areas?	☐	☒	☐	☐
c) Substantially limit reproductive capacity through losses of individuals or habitat?	☐	☒	☐	☐
d) Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources?	☐	☐	☐	☒
e) Substantially limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes)?	☐	☐	☐	☒
f) Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends?	☐	☐	☐	☒
g) How much of the resource in question both on and off the project site would be impacted (acreage and/or square footage)?	☐	☐	☐	☒
h) How does the area or species that would be impacted relate to the remaining populations off the project site (percentage of total area or species population, either quantitatively or qualitatively)?	☐	☐	☐	☒
i) Adversely indirectly affect wildlife (light, noise, barriers to movement, etc.)?	☐	☒	☐	☐
j) Remove the resource or cause an animal to abandon the area or a critical activity (e.g., nesting) in that area?	☐	☒	☐	☐
k) Fragment the area's resource?	☐	☐	☐	☒
l) Impact occur at a critical time in the life cycle of an important plant or animal (e.g., breeding, nesting, or flowering periods)?	☐	☒	☐	☐
m) Impact be temporary or permanent? If temporary, how long would the resource take to recover?	☐	☐	☒	☐
n) Impact be periodic, of short duration, but recur again and again?	☐	☐	☒	☐

Discussion of Impacts

a) Substantially reduce or eliminate species diversity or abundance?

Special-Status Plant Species

Less Than Significant with Mitigation Incorporated. Construction and operation of the proposed Projects are not expected to result in direct or indirect impacts to listed or other special-status plants; suitable habitat for listed and/or other special-status plant species does not occur within the proposed Project area. If any listed or other special-status plants are encountered during pre-construction surveys, they would be marked and avoided to the maximum extent possible. However, it is possible that some non-listed, special-status plants would be subject to project disturbance should they occur in disturbance areas.

If present, direct impacts to special-status plants include trampling or crushing from heavy equipment, vehicles, or foot traffic; alterations to the native seed bank due to soil compaction; and modifications to existing hydrological conditions. Indirect impacts could include the disruption of native seed banks through soil alterations, the accumulation of fugitive dust, increased erosion and sediment transport, and the colonization of non-native and invasive plant species. Excessive dust can decrease or limit plant survivorship by decreasing photosynthetic output, reducing transpiration, and adversely affecting reproductive success. Ground-disturbing activities that would occur during construction of the proposed Projects can result in the proliferation and spread of non-native invasive plants to new areas. Because noxious weeds can permanently degrade rare plant and animal habitats, their proliferation could adversely affect sensitive plant species if they are present.

Typically, impacts to a small number of nonstate or federally listed special-status plants (i.e., impacts to a few individuals), or impacts to a population where loss of a few occurrences would not adversely affect the range of the special-status plant species, are not typically considered significant under CEQA. However, if proposed Project activities result in the loss of more than 10 percent of the known individuals within the occurrence, or the special-status plant species has a CRPR of 1.B or list 2, these impacts would be considered significant.

Special-Status Wildlife

Special-Status Reptiles

Less Than Significant with Mitigation Incorporated. Although none were detected within the proposed Project area one special-status reptile, northern California legless lizard (*Anniella pulchra* [California Species of Special Concern]), was determined to have a moderate potential of occurrence. Construction activities associated with the proposed Projects could result in the direct loss of sensitive reptiles such as northern California legless lizard. Given the ecology of these species and their cryptic nature, it is likely that a few individuals may occur in or near the proposed Project site. Direct impacts could result from potential mechanical crushing during construction, fugitive dust, and general disturbance due to increased human activity. Project implementation may also result in permanent loss of habitat from the removal of trash and debris piles (occasionally present on-site, for short durations, during site maintenance events)

or trampling of soft friable soils required for burrowing. Indirect impacts could include compaction of soils and the introduction of exotic plant species.

Operational impacts include increased human presence, the spread of noxious weeds due to the use of new or improved access roads, and increased perch sites for avian predators, such as common raven. Inspection and maintenance of the Project could result in trampling or crushing of small invertebrates and reptiles by vehicular or foot traffic, alterations in topography and hydrology, increased erosion and sedimentation, and the introduction of non-native, invasive plants due to increased human presence.

Special-Status Birds

Less Than Significant with Mitigation Incorporated. Construction activities associated with the proposed Project could result in direct and indirect impacts to a variety of sensitive resident and migratory birds. Direct impacts to listed species are not anticipated due to the lack of suitable habitat within the proposed Project site. Limited suitable habitat is present for species such as grasshopper sparrow (*Ammodramus savannarum* [California Species of Special Concern]) and burrowing owl (*Athene cunicularia* [California Species of Special Concern and a Federal Bird of Conservation Concern]); both species have a low potential to occur within the proposed Project site. White -tailed kite (*Elanus leucurus*), a California Fully Protected Species, also has a low potential for occurrence which were identified during the field surveys.

Nesting birds are expected to occur in the proposed Project areas and may nest in the trees present within the proposed Project site. Direct impacts to special-status birds, should they occur, include ground-disturbing activities associated with construction, increased noise levels from heavy equipment, increased human presence, and exposure to fugitive dust. Construction during the breeding season could result in the displacement of breeding birds and the abandonment of active nests. Indirect impacts include human disturbance, the spread of noxious weeds, and disruption of breeding or foraging activity. Weed management could also affect nesting.

If the proposed Projects' construction were to occur during the avian nesting season (generally considered to be between February 15 and September 15; although some raptors species may nest as early as January) indirect impacts to nesting birds could occur; the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711) does not allow for take of migratory birds.

The MBTA makes it unlawful to possess, buy, sell, purchase, barter or "take" any migratory bird listed in Title 50 of CFR Part 10. "Take" is defined as possession or destruction of migratory birds, their nests, or eggs. Disturbances that cause nest abandonment or loss of reproductive effort or the loss of habitats upon which these birds depend may be a violation of the MBTA. The MBTA prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

Special Status Mammals

Less Than Significant with Mitigation Incorporated. Construction activities associated with the proposed Projects could result in direct and indirect impacts to special-status mammals; western red bat

(*Lasiurus blossevillii*), a California Species of Special Concern, is known to occur in the general region and has a low potential to occur within the proposed Project site. Direct impacts could result from potential mechanical crushing during construction, fugitive dust, and general disturbance due to increased human activity. Indirect impacts could include compaction of soils and the introduction of exotic plant species.

If construction and operation of the proposed Project were to impact special-status species, these impacts would be considered significant. Therefore, mitigation measures BIO-1 through BIO-4, which would require pre-construction clearance surveys prior to ground disturbance, relocation of wildlife found within proposed Project impact areas during pre-construction surveys, a biological monitor during site disturbing activities, implementation of environmental awareness training to educate proposed Project personnel regarding onsite plants and wildlife, implementation of site-wide best management practices (BMPs; i.e., restriction on open trenches), nesting bird surveys and avoidance measures for active nests. These measures would be implemented to mitigate these potentially significant impacts. Implementation of these mitigation measures would ensure that potential impacts to special-status plant and wildlife species are reduced to a less than significant level during the construction and operations phase of the proposed Projects.

Mitigation Measures

BIO-1: **Wildlife Pre-Construction Clearance Surveys and Biological Monitoring:** Prior to ground disturbance or vegetation clearing within the proposed Project site, a qualified biologist shall conduct pre-construction clearance surveys for wildlife (no more than 7 days prior to site disturbing activities) where suitable habitat is present and directly impacted by construction activities. The qualified biologist must be approved by the District prior to the commencement of surveys. Wildlife found within the proposed Project site or in areas potentially affected by the proposed Projects would be relocated to the nearest suitable habitat that would not be affected by the proposed Projects prior to the start of construction. Special-status species found within a proposed Project impact area shall be relocated by a qualified biologist to suitable habitat outside the impact area.

Nesting birds found within the proposed Project impact areas would be subject to buffer requirements and additional conditions as detailed below in mitigation measure BIO-4.

The qualified biologist shall be onsite during initial ground disturbing activities and periodically throughout the construction phase, as needed. The lead biologist(s) shall have the right to halt all activities that may be in violation of mitigation measures or that may impact special-status and/or common plants and wildlife. Work shall proceed only after hazards to special-status species are removed, the species are allowed to leave, or are removed (if allowed), and the species is no longer at risk. The qualified biologist(s) shall have a copy of all the compliance measures in their possession while work is being conducted onsite. Construction activity may also be monitored by biological monitors under the lead biologist's supervision to ensure compliance with mitigation measures.

If required during pre-construction clearance surveys or required monitoring efforts, the qualified biologist(s) will relocate common and special-status species that enter the proposed Project site; some special-status species may require specific permits prior to handling or have established protocols for relocation. Records of all detection, capture, and release shall be reported to CDFW.

BIO-2: **Environmental Awareness Training:** Prior to ground disturbance or vegetation clearing within the proposed Project site, the District shall ensure that proposed Project personnel have attended an environmental awareness and compliance training program. The training program shall present the environmental regulations and applicable permit conditions that the proposed Project team shall comply with. The training program shall include applicable measures established for the proposed Project to minimize impacts and avoid sensitive resources, habitats, and species. The training program will consist of a 15-20 minute presentation conducted by a qualified biological monitor on the start day of construction in either an office setting or during a tailgate meeting. Subsequent training events shall be scheduled to support the training of new personnel. Dated sign-in sheets for attendees at these meetings shall be maintained and submitted to the District.

BIO-3: **Implement Best Management Practices:** As part of Project approvals, the District shall require the implementation of the following BMPs during construction activities:

- Restrict non-essential equipment to the existing roadways, paved, disturbed, and ruderal areas to avoid disturbance to native vegetation.
- All excavation, steep-walled holes or trenches in excess of 6 inches in depth shall be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth dirt fill or wooden planks. Trenches would also be inspected for entrapped wildlife each morning prior to onset of construction activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they would be thoroughly inspected for entrapped wildlife. Any wildlife discovered would be allowed to escape before construction activities are allowed to resume or removed from the trench or hole by a qualified biologist holding the appropriate permits (if required).
- Minimize, when possible, mechanical disturbance of soils to reduce impact of habitat manipulation on small mammals, reptiles, and amphibians (e.g., hand tools versus heavy equipment).
- Removal or disturbance of vegetation shall be minimized to the greatest extent feasible.
- Installation and maintenance of appropriate erosion and sediment control measures as needed throughout the duration of work activities.
- Implementation of a 15 miles per hour (MPH) speed limit within all proposed Project areas.

BIO-4: **Nesting Bird Surveys and Avoidance Measures:** As part of Project approvals, the District shall require and document compliance with the MBTA during construction, as follows. If initial site disturbance is scheduled to begin during the avian nesting season (February 15 through September 15; January 1 through August 15 for raptors), breeding and nesting bird surveys shall be conducted by a qualified biologist no more than 3 days prior to the start of site disturbance. The qualified biologist must be approved by the District prior to the commencement of surveys. If construction activities carry over into a second nesting season(s), the surveys will need to be completed annually until the proposed Projects are complete. Surveys shall be conducted within 500 feet of all proposed Project activities.

If endangered or threatened species are observed, consultation with USFWS and/or CDFW is required. If breeding birds with active nests are found prior to or during construction, a qualified biological monitor shall establish a 300-foot buffer around the nest, and no activities would be allowed within the buffer(s) until the young have fledged from the nest or the nest fails; initial buffers for nesting raptors shall be 500 feet. The prescribed buffers for common species may be adjusted by the qualified biologist based on existing conditions around the nest, planned construction activities, tolerance of the species, and other pertinent factors; for example, buffers for common passerines, often found to be habituated to human activity, may be adjusted down to 25 - 50 feet depending on the disturbance tolerance of each specific species. Buffer adjustments for listed and/or other special-status species shall be done in coordination with the USFWS and CDFW as applicable. The qualified biologist shall conduct regular monitoring of the nest to determine success or failure and to ensure that proposed Project activities are not conducted within the buffer(s) until the nesting cycle is complete or the nest fails.

b) Substantially reduce or eliminate quantity or quality of nesting areas?

Less Than Significant with Mitigation Incorporated. The proposed Project site currently supports disturbed/developed habitat and ornamental tree groves that provide limited, low quality nesting habitat for avian species. Common and special-status avian species may utilize the eucalyptus (*Eucalyptus* sp.), acacias (*Acacia dealbata*), olive trees (*Olea* sp.), and glossy privets (*Ligustrum lucidum*), within areas mapped as ornamental tree groves, for nesting activities; these disturbed/developed areas support a variety of ornamental species that provided limited low-quality nesting habitat.

Direct impacts to the quantity or quality of potential nesting areas, should they occur, include ground-disturbing activities associated with construction, increased noise levels from heavy equipment, increased human presence, and exposure to fugitive dust. Construction during the breeding season could result in the displacement of breeding birds and the abandonment of active nests. Indirect impacts include human disturbance, the spread of noxious weeds, and disruption of breeding or foraging activity. Weed management could also affect nesting.

If construction and operation of the proposed Projects were to impact the quantity or quality of nesting areas, these impacts would be considered significant. Therefore, mitigation measures BIO-1 through BIO-4, which would require pre-construction clearance surveys prior to ground disturbance, a biological

monitor during site disturbing activities, implementation of environmental awareness training to educate proposed Project personnel regarding onsite wildlife, implementation of site-wide best management practices (BMPs), and nesting bird surveys and avoidance measures for active nests. These measures would be implemented to mitigate these potentially significant impacts. Implementation of these mitigation measures would ensure that potential impacts to the quantity or quality of nesting areas are reduced to a less than significant level during the construction and operations phase of the proposed Projects.

Mitigation Measures

BIO-1: Wildlife Pre-Construction Clearance Surveys and Biological Monitoring

BIO-2: Environmental Awareness Training

BIO-3: Implement Best Management Practices

BIO-4: Nesting Bird Surveys and Avoidance Measures

c) Substantially limit reproductive capacity through losses of individuals or habitat?

Less Than Significant with Mitigation Incorporated. The proposed Project site supports disturbed/developed areas and ornamental tree groves, neither of which provide substantial (if any) suitable breeding habitat for special status wildlife; other than limited nesting habitat as previously discussed above. Although not expected, should special status plants or wildlife occur within the proposed Project site, direct impacts could result from potential mechanical crushing during construction, fugitive dust, and general disturbance due to increased human activity. Project implementation may also result in permanent loss of habitat from the removal of trash and debris piles (occasionally present on-site, for short durations, during site maintenance events) or trampling of soft friable soils required for burrowing (wildlife only). Indirect impacts could include compaction of soils and the introduction of exotic plant species.

Operational impacts include increased human presence, the spread of noxious weeds due to the use of new or improved access roads, and increased perch sites for avian predators (wildlife only), such as common raven. Inspection and maintenance of the Project could result in trampling or crushing of small invertebrates and reptiles by vehicular or foot traffic, alterations in topography and hydrology, increased erosion and sedimentation, and the introduction of non-native, invasive plants due to increased human presence.

If construction and operation of the proposed Projects were to limit reproductive capacity through losses of individuals or habitat, these impacts would be considered significant. Therefore, mitigation measures BIO-1 through BIO-4, which would require pre-construction clearance surveys prior to ground disturbance, relocation of wildlife found within proposed Project impact areas during pre-construction surveys, a biological monitor during site disturbing activities, implementation of environmental awareness training to educate proposed Project personnel regarding onsite plants and wildlife, implementation of site-wide best management practices (BMPs; i.e., restriction on open trenches), nesting bird surveys and avoidance measures for active nests would be implemented to mitigate these potentially significant

impacts. Implementation of these mitigation measures would, reduce to less than significant levels, impacts from the proposed Projects on substantial limits to reproductive capacity, through losses of individuals or habitat, to special-status plant and wildlife species.

Mitigation Measures

BIO-1: Wildlife Pre-Construction Clearance Surveys and Biological Monitoring

BIO-2: Environmental Awareness Training

BIO-3: Implement Best Management Practices

BIO-4: Nesting Bird Surveys and Avoidance Measures

d) Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources?

No Impact. The proposed Project site supports disturbed/developed areas and ornamental tree groves, neither of which provide substantial (if any) foraging areas for wildlife. The proposed Project site is constrained on all sides by other developed areas (e.g., Highway 101, residential areas, cemetery, etc.) and does not provide on-site food sources or access to adjacent food sources. Because the proposed Project site does not provide foraging areas for wildlife, nor does it provide onsite food sources or access to adjacent food sources, no impact would occur.

e) Substantially limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes)?

No Impact. The proposed Project site is constrained on all sides by other developed areas (e.g., Highway 101, residential areas, cemetery, etc.) and does not support or promote wildlife movement across the site. The lack of native vegetation within and adjacent to the proposed Project site limits the possibility that the site occurs within native seed dispersal routes. Because the proposed Project site does not support or promote wildlife movement, nor does it function as a seed dispersal route, no impact would occur.

f) Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends?

No Impact. The entirety of the proposed Project site consists of ornamental tree groves or disturbed/developed areas, neither of which rely upon natural processes such as fires or flooding for persistence. Because the habitats/land cover types within proposed Project site do not depend on natural processes for persistence, no impact would occur.

g) How much of the resource in question both on and off the project site would be impacted (acreage and/or square footage)?

No Impact. The proposed Project site currently supports disturbed/developed habitat and ornamental tree groves comprised of non-native species such as eucalyptus, acacias, olive trees, and glossy privets.

The proposed Project site does not support any native plant communities; therefore, permanent and temporary impacts related to the proposed Projects would only occur non-native ornamental tree groves and disturbed/developed habitants. A breakdown of permanent and temporary impacts within these areas is presented below in Table 9.

Table 9. Summary of Vegetation and Land Cover Type Impacts

Vegetation Community	Global Rank	State Rank	Acres within the proposed Project site	Maximum Acres Impacted by the proposed Projects*	
				Permanent	Temporary
Ornamental Tree Grove	n/a	n/a	5.44	0.0.11	0.10
Disturbed/Developed	n/a	n/a	29.05	0.70	0.22
Totals			**34.49**	**0.81**	**0.32**

Note:
* Includes maximum impact, per habitat type, for all for all three alternatives.

h) How does the area or species that would be impacted relate to the remaining populations off the project site (percentage of total area or species population, either quantitatively or qualitatively)?

No impact. The proposed Project site currently supports disturbed/developed habitat and ornamental tree groves, neither of which provide substantial, if any, suitable habitat for special-status plant and wildlife species known to occur in the region. Given the availability of these habitat types surrounding the proposed Project site, and within the general region, there is abundance of ornamental tree groves and disturbed/developed areas that would provide similar habitat conditions to those present within the proposed Project site. Therefore, the proposed Project would not have an impact on the availability of these habitat types within the general region.

i) Adversely indirectly affect wildlife (light, noise, barriers to movement, etc.)?

Less Than Significant with Mitigation Incorporated. The proposed Project site is constrained on all sides by other developed areas (e.g., UPRR, Highway 101, residential areas, cemetery, etc.) and does not support or promote wildlife movement across the site. The proposed Projects would be constructed adjacent to existing wastewater facilities and would not result in an appreciable increase in noise that would indirectly affect wildlife, if present, in the area. No significant light sources are included as part of the proposed Projects.

Indirect impacts include human disturbance, the spread of noxious weeds, compaction of soils, and disruption of breeding or foraging activity. Weed management could also affect breeding/nesting activities. Should they be present, indirect impacts to wildlife would be significant absent mitigation. Therefore, mitigation measures BIO-1 through BIO-4, which would require pre-construction clearance surveys prior to ground disturbance, relocation of wildlife found within proposed Project impact areas during pre-construction surveys, a biological monitor during site disturbing activities, implementation of environmental awareness training to educate proposed Project personnel regarding onsite plants and

wildlife, implementation of site-wide best management practices (BMPs; i.e., restriction on open trenches), nesting bird surveys and avoidance measures for active nests would be implemented to mitigate these potentially significant impacts. Implementation of these mitigation measures would ensure that potential indirect impacts to and wildlife species are reduced to a less than significant levels during the construction and operations phase of the proposed Projects.

Mitigation Measures

BIO-1: Wildlife Pre-Construction Clearance Surveys and Biological Monitoring

BIO-2: Environmental Awareness Training

BIO-3: Implement Best Management Practices

BIO-4: Nesting Bird Surveys and Avoidance Measures

j) Remove the resource or cause an animal to abandon the area or a critical activity (e.g., nesting) in that area?

Less Than Significant with Mitigation Incorporated. The proposed Project site currently supports disturbed/developed habitat and ornamental tree groves that provide limited (if any), low quality habitat for special-status wildlife species; no listed species are expected to occur on or near the proposed Project site. Two special status-species, the northern California legless lizard and western red bat, as well as nesting birds have some potential to occur within the proposed Project site. If present, direct impacts to wildlife species could include ground-disturbing activities associated with construction, increased noise levels from heavy equipment, increased human presence, and exposure to fugitive dust. Construction during the nesting season could result in the displacement of breeding birds and the abandonment of active nests. Indirect impacts include human disturbance, the spread of noxious weeds, and disruption of breeding or foraging activity. Weed management could also affect nesting.

If construction and operation of the proposed Projects were to cause a special-status wildlife species to abandon the area or a critical activity (e.g., nesting), these impacts would be considered significant. Therefore, mitigation measures BIO-1 through BIO-4, which would require pre-construction clearance surveys prior to ground disturbance, a biological monitor during site disturbing activities, implementation of environmental awareness training to educate proposed Project personnel regarding onsite wildlife, implementation of site-wide best management practices (BMPs), and nesting bird surveys and avoidance measures for active nests would be implemented to mitigate these potentially significant impacts. Implementation of these mitigation measures would ensure that impacts from the proposed Project that would cause special-status wildlife species to abandon the area or a critical activity (e.g., nesting) are reduced to a less than significant levels during the construction and operations phase of the proposed Projects.

Mitigation Measures

BIO-1: Wildlife Pre-Construction Clearance Surveys and Biological Monitoring

BIO-2: Environmental Awareness Training

BIO-3: Implement Best Management Practices

BIO-4: Nesting Bird Surveys and Avoidance Measures

k) Fragment the area's resource?

No Impact. The proposed Project site is constrained on all sides by other developed areas (e.g., Highway 101, residential areas, cemetery, etc.) and does not support or provide for a significant habitat resource for special-status plants and wildlife. Because the proposed Project site does not support or provide for a significant habitat resource, no impact would occur

l) Impact occur at a critical time in the life cycle of an important plant or animal (e.g., breeding, nesting, or flowering periods)?

Less Than Significant with Mitigation Incorporated. The proposed Project site currently supports disturbed/developed habitat and ornamental tree groves that provide limited (if any), low quality habitat for special-status wildlife species; no listed species are expected to occur on or near the proposed Project site. Two special status-species, the northern California legless lizard and western red bat, as well as nesting birds have some potential to occur within the proposed Project site. If present, direct impacts could include ground-disturbing activities associated with construction, increased noise levels from heavy equipment, increased human presence, and exposure to fugitive dust. Construction during the nesting season could result in the displacement of breeding birds and the abandonment of active nests. Indirect impacts include human disturbance, the spread of noxious weeds, and disruption of breeding or foraging activity. Weed management could also affect nesting.

If present, direct impacts to special-status plants include trampling or crushing from heavy equipment, vehicles, or foot traffic; alterations to the native seed bank due to soil compaction; and modifications to existing hydrological conditions. Indirect impacts could include the disruption of native seed banks through soil alterations, the accumulation of fugitive dust, increased erosion and sediment transport, and the colonization of non-native and invasive plant species. Excessive dust can decrease or limit plant survivorship by decreasing photosynthetic output, reducing transpiration, and adversely affecting reproductive success. Ground-disturbing activities that would occur during construction of the proposed Projects can result in the proliferation and spread of non-native invasive plants to new areas. Because noxious weeds can permanently degrade rare plant and animal habitats, their proliferation could adversely affect sensitive plant species if they are present.

If construction and operation of the proposed Projects were to occur at a critical time in the life cycle of a special-status plant or wildlife species (e.g., breeding, nesting, or flowering periods), and impacts were to occur to a special-status species, these impacts would be considered significant. Therefore, mitigation measures BIO-1 through BIO-4, which would require pre-construction clearance surveys prior to ground disturbance, a biological monitor during site disturbing activities, implementation of environmental awareness training to educate proposed Project personnel regarding onsite wildlife, implementation of site-wide best management practices (BMPs), and nesting bird surveys and avoidance measures for

active nests, would be implemented to mitigate these potentially significant impacts. Implementation of these mitigation measures would ensure that potential impacts to a special-status species during a critical time in the life cycle of the species (e.g., breeding, nesting, or flowering periods) are reduced to a less than significant level during the construction and operations phase of the proposed Projects.

Mitigation Measures

BIO-1: Wildlife Pre-Construction Clearance Surveys and Biological Monitoring

BIO-2: Environmental Awareness Training

BIO-3: Implement Best Management Practices

BIO-4: Nesting Bird Surveys and Avoidance Measures

m) Impact be temporary or permanent? If temporary, how long would the resource take to recover?

Less Than Significant with Mitigation Incorporated. The proposed Project site currently supports disturbed/developed habitat and ornamental tree groves, neither of which provide substantial, if any, suitable habitat for special-status plant and wildlife species known to occur in the region. Given the availability of these habitat types surrounding the proposed Project site, and within the general region, there is abundance of ornamental tree groves and disturbed/developed areas that would provide similar habitat conditions to those present within the proposed Project site. As presented in Table 9 above, the proposed Project would result in both temporary and permanent impacts to disturbed/developed areas and ornamental tree groves; the proposed Projects would not impact native vegetation communities. Therefore, while the proposed Projects would have permanent or temporary impacts to disturbed/developed habitats and ornamental tree groves, impacts would be less than significant.

n) Impact be periodic, of short duration, but recur again and again?

Less Than Significant with Mitigation Incorporated. Construction of the proposed Projects are anticipated to occur over a 9 – 12-month period and does not include any proposals for recurring construction activities. Operation and maintenance of the proposed Projects would be similar to those already employed for the existing facilities in adjacent areas. The proposed Project site supports disturbed/developed areas and ornamental tree groves that do not support much, if any, suitable habitat for special-status plant and wildlife species. While indirect impacts to special-status species are possible, mitigation has been proposed to reduce impacts to these species to less than significant levels. Therefore, the one-time construction period for the proposed Projects would result in less than significant impacts.

3.5 CULTURAL RESOURCES

3.5.1 Setting

Archival records search for the project footprint and the surrounding ½-mile radius Study Area was conducted by Stantec Consulting Services, Inc. (Stantec) on August 22, 2019, at the Central Coast Information Center of the California Historical Resources Information System (CHRIS) at University of California, Santa Barbara. The records search was conducted to identify previous archaeological studies, including inventories, regional overviews, and excavations reports, and known cultural resources within a ½-mile radius of the project footprint that could potentially be affected by the proposed Projects. The archaeological field survey for this project was conducted on December 10, 2019 by Mitch Marken, Ph.D. of Stantec Consulting.

Through the records search and literature review, no recorded prehistoric resources were identified specifically within the project footprint; however, one large prehistoric resource was identified within the ½-mile Study Area in very close proximity to the project footprint. In addition, there are seven built environment resources that were previously documented within the ½-mile Study Area. The single prehistoric resource was previously documented by D. B. Rogers (1929) who observed that the site comprised a large shell midden with burials and was located near the western portion of the Santa Barbara Cemetery and southwest of the Clark Estate. No indications of archaeological resources were observed during the survey conducted by Stantec and Field survey revealed that the entire project footprint subsumed within the existing facility is heavily disturbed. Disturbance includes excavation for active treatment facilities and areas where soils were deposited.

Areas along the coast are often considered sensitive, or even highly sensitive for prehistoric archaeological deposits and associated human remains. These ecologically rich areas would have provided abundant and readily accessible resources for the aboriginal population that favored these areas as places for locating habitation and resource processing sites. Archaeological evidence of past human alteration or occupation of a landscape is subject to the same processes that affect the preservation, distribution, and visibility of geological deposits (Bettis 1992:119), and the nature and timing of landscape evolution ultimately determines whether archaeological remains will be buried, destroyed or redeposited (Kuehn 1993; Waters 1992).

The alluvial build-up of sandy loam soils throughout the project footprint, combined with the previously recorded large and complex prehistoric site adjacent to the proposed Projects, make this area potentially sensitive for buried prehistoric material. The location along the coast and nearby fresh water sources create prime locations for both stable, long-term habitation and seasonal processing sites. Therefore, the archaeological sensitivity for prehistoric archaeological resources is considered high for any excavation or ground disturbance in native or undisturbed soils.

With regards to historic-era archaeological resources, the review of historic documentation (i.e., the background records search) did not identify any historic resources either within or adjacent to the project footprint. As stated above, there are seven built environment resources that were previously documented

within ½-mile radius of the project footprint; however, no historic-era archaeological resources were observed during the field survey.

3.5.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Discussion of Impacts

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

No Impact. Based on the records search and literature review and the field survey, no historical resources were identified within the project footprint; therefore, the Project would not cause a substantial adverse change in the significance of a historical resource.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant with Mitigation Incorporated. A prehistoric archaeological site, CA-SBA-20, was previously documented within a ½ mile radius of the project footprint and contains a large shell midden with lithic and ground stone artifacts. Extent of the site is was not definitively determined. However, no indications of archaeological resources were noted during the field survey, and it is unlikely that intact deposits exist within the current project footprint, although it is not impossible. Furthermore, the proposed Project is located along the eastern portion of the current Santa Barbara Cemetery within areas that have been previously landscaped and moderately developed. In order to identify and provide mitigation of impacts as of yet undiscovered subsurface archaeological deposits, Mitigation Measures CUL-1 and CUL-2 would be implemented. These mitigation measures would reduce potential impacts to a less-than-significant level.

Mitigation Measures

CUL-1 During construction, outside of the existing MSD treatment property, earthwork and ground disturbing activities will be monitored by an archaeologist and Native American monitor. The monitors will attend the pre-construction meeting with the construction crew to provide Worker's Environmental Awareness Program (WEAP) training and coordinate requirements and procedures for the inadvertent discovery of cultural materials during construction.

CUL-2 Prior to any construction activities a qualified archaeologist shall conduct cultural resources specific Workers Environmental Awareness Program (WEAP) training for construction personnel regarding the types of cultural resources that may be encountered, how to identify them, measures to take to avoid them and procedures following the discovery. Discovery of Prehistoric or Historic Archaeological Materials. If deposits of prehistoric or historical archaeological materials are discovered during non-monitored Project activities, all work within 25 feet of the discovery shall be redirected and a qualified archaeologist contacted, if one is not present, to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. The Sanitary District shall also be notified. Project personnel shall not collect or move any archaeological materials. It is recommended that adverse effects to the finds be avoided by Project activities. If avoidance is not feasible, the archaeological deposits shall be evaluated to determine if they qualify as a historical resource or unique archaeological resource, or as historic property. If the deposits do not qualify, avoidance is not necessary. If the deposits do so qualify, adverse effects on the deposits must be avoided, or such effects must be mitigated. Mitigation may consist of, but is not limited to, recovery and analysis of the archaeological deposit; recording the resource; preparing a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Educational public outreach may also be appropriate. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results and provide recommendations for the treatment of the archaeological deposits discovered. The report shall be submitted to the Sanitary District and the Central Coast Information Center (CCIC).

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation Incorporated. The proposed Projects are located within Middle and Late Pleistocene marine and alluvial deposits (Minor et al. 2003) which may contain both marine and terrestrial fossils. As such, there is the potential that paleontological resources could be discovered during excavation, resulting in a potentially significant impact. In the event that paleontological resources are encountered, implementation of Mitigation Measure CUL-3 would reduce impacts to a less-than-significant level.

Mitigation Measure

CUL-3 Discovery of Paleontological Resources. If paleontological resources are encountered during Project subsurface construction, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any paleontological materials. Adverse effects to such deposits shall be avoided by Project activities. Paleontological resources are considered significant if they may provide new information regarding past life forms, paleoecology, stratigraphy, or geological formation processes. If found to be significant, and Project activities cannot avoid the paleontological resources, adverse effects to paleontological resources shall be mitigated. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the Sanitary District, and, if paleontological materials are recovered, a paleontological repository, such as the California Museum of Paleontology.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact. Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined whether or not the remains are subject to the coroner's authority. A prehistoric archaeological site, CA-SBA-20, was previously identified along the southwestern edge of the current Santa Barbara Cemetery and consists of a large shell midden with human burials. However, there is no indication that human remains are present within the current project footprint. A potentially significant impact could occur if previously undiscovered human remains were encountered during excavation. Considering the above, the Project would not be expected to disturb any human remains, including those interred outside of formal cemeteries and potential impacts would be less than significant.

3.6 ELECTROMAGNETIC FIELDS

3.6.1 Setting

Electromagnetic fields are composed of both electric fields and magnetic fields. Electric and magnetic fields are present wherever there is an electric current and voltage. Electric fields come from the amount of the charge, or voltage. They represent the forces that electric charges, which are either positive or negative, exert on each other. Electric fields are measured in volts per meter (V/m), or kilovolts per meter (kV/m). As electric charges move, they create additional forces on each other. These forces are carried through space by magnetic fields. Magnetic fields, therefore, result from the motion of an electric charge, or current. Magnetic fields are measured in milligauss (mG). Radiofrequency is the oscillation rate of an electromagnetic field, between 20 kHz and 300 GHz, the frequencies at which this oscillating current can radiate off a conductor as a radio wave. The radiation produced by these waves is called radiofrequency radiation (RFR).

Effects of RFR have been primarily linked to thermal responses as a result of exposure to RF sources of energy. In general, exposure of humans and animals have the potential to interact with body tissue such that water molecules become excited, causing friction and concomitant rises in body temperature, albeit slight in most instances. This effect is similar to that which is experienced within a microwave oven, where the water molecules within the food substance are excited to create heat, thus resulting in the warming of food. Other effects include RF burns, in which in the very near field, especially in the microwave frequencies, a person has the potential to receive a burn similar to a sunburn (County of Santa Barbara, 2008).

The FCC lists services that are generally required to perform an environmental evaluation for such electromagnetic exposure. These include: experimental radio service, radio frequency devices, multipoint distribution services, paging and radiotelephone service, cellular radiotelephone service, personal communications service, satellite communications, general wireless communications service, wireless communications service, radio broadcast services, experimental, auxiliary and special broadcast and other program distributional services, stations in the maritime service, private land mobile, paging operations, specialized mobile radio, amateur radio service, and local multipoint distribution service (FCC, 2019). The proposed Projects contain none of these services.

3.6.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ELECTROMAGNETIC FIELDS THRESHOLD — Would the project:				
a) Cause humans to be exposed to radiofrequency radiation (RFR) in excess of the IEEE-ANSI C95.1-1992 standard, through the siting of new projects next to RFR sources or through the siting of new RFR sources adjacent to sensitive receptors?	☐	☐	☐	☒

Discussion of Impacts

a) *Cause humans to be exposed to radiofrequency radiation (RFR) in excess of the IEEE-ANSI C95.1-1992 standard, through the siting of new projects next to RFR sources or through the siting of new RFR sources adjacent to sensitive receptors?*

No Impact. The proposed Projects would not cause humans to be exposed to RFR in excess of the 1992 standard. None of the proposed Project components require electromagnetic environmental evaluation per the FCC. Most project components would be located within an existing facility with no RFR sources, and no new RFR sources would be placed adjacent to sensitive receptors. There would be no impact.

3.7 ENERGY

3.7.1 Setting

Southern California Edison is the electrical service provider for Montecito. SCE maintains a number of distribution lines and substation facilities in the Santa Barbara area, which includes the nearest SCE Ortega Substation. SCE is required by the California Energy Commission to publish a power content label (CEC 2020) that describes the percentage mix of SCE's energy sources.

In 2017, SCE obtained power from the following sources

- Unspecified Sources of Power: 34 percent
- Renewable: 32 percent
- Natural Gas: 20 percent
- Large Hydroelectric: 8 percent
- Nuclear: 6 percent

SCE's renewable energy sources are further broken down as follows:

- Solar: 13 percent
- Wind: 10 percent
- Geothermal: 8 percent
- Eligible Hydroelectric: 1 percent

The proposed Projects would be powered by 644 solar panels to be constructed on the proposed carport structures, as discussed in greater detail above in Section 2.0, Project Description. If additional energy is required for the proposed Projects' operations, power would be supplied by SCE. In the event that a third source of back-up energy is required, diesel generators would power the proposed Projects.

3.7.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY — Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Discussion of Impacts

a) *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

No Impact. The proposed Projects would reduce potable water use by providing recycled water to the existing cemetery and would consume only the amount of energy required to perform that task during both construction and operation, typical in quantity to other similar projects. Operation of the proposed Projects would generate recycled water which would replace and substantially reduce the amount of potable water currently used for irrigation of the cemetery, allowing for potable water to be used for other, more efficient, consumption. Additionally, the proposed Projects would be primarily powered via solar panels, a renewable source of energy, further increasing the energy efficiency of the proposed Projects. As the proposed Projects would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation, no impact would occur.

b) *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

No Impact. The proposed Projects aim to reduce water usage by reusing water for irrigation purposes, increasing efficiency by replacing potable water use with Title 22 compliant recycled water. The County of Santa Barbara's Energy and Climate Action Plan (ECAP) is the current planning document guiding renewable energy and energy efficiency in the County of Santa Barbara. Goals found within this document include: "Maximize the reliability of local water resources and supplies through water use efficiency," (County of Santa Barbara, 2015) and "Promote the use of alternative energy for economic and environmental benefits, and facilitate opportunities for businesses that develops or market alternative energy technologies," (County of Santa Barbara, 2015) with a 2020 performance indicator of 200 non-residential renewable energy systems installed. As the proposed Projects would make water supplies for the cemetery more efficient and reliable, and utilize alternative energy technologies (solar panels), the proposed Projects would not conflict or obstruct a state or local plan for renewable energy or energy efficiency. There would be no impact.

3.8 GEOLOGY AND SOILS

3.8.1 Setting

The community of Montecito lies above the Montecito Groundwater Basin within Santa Barbara County. The Montecito Groundwater Basin is bounded on the north by the Santa Ynez Mountains and the Arroyo Parida fault, consolidated rock to the east, on the southeast by the Fernald fault, and on the northeast by a surface drainage divide of the Montecito and Carpinteria Groundwater Basins (Bulletin 118, 2004). The Santa Barbara cemetery (which includes a portion of the proposed Project) overlays both the Montecito Groundwater Basin and the Santa Barbara Groundwater Basin. The Santa Barbara Groundwater Basin is within the western portion of the Transverse Ranges and is considered part of the coastal plain. Mostly marine, the sedimentary rock comprising the Santa Barbara Groundwater Basin includes shale, mudstone, sandstone, and conglomerate (Paulinski and Nishikawa, 2018). The Rocky Nook and Lagoon faults to the north of the Santa Barbara Groundwater basin restrict the flow of groundwater between the Foothill and Montecito Groundwater Basins (Paulinski and Nishikawa, 2018).

According to the USGS: US Quaternary Faults System, the Mission Ridge Fault System (MRFS) resides within the Montecito area. The MRFS is an east striking system of generally moderately to steeply south-dipping reverse to reverse left sided oblique faults (Bryant, 2017). The Mission Ridge Fault System extends eastern into the Goleta Basin through the Santa Barbara Area north of the Santa Barbara Mission, and to the Arroyo Parida section north of Summerland. The MRFS is comprised of shallow subsurface folding developed on the reverse and thrust faults (Bryant, 2017). This fault has a slip rate between 0.2 and 1.0mm/yr. There are no historic earthquakes associated with this fault system. This fault system is located approximately 0.36 miles to the North of the proposed Project location.

During geologic history, most of the Santa Barbara County area was underwater. The sediments shed from the Santa Ynez mountains throughout history have contributed to what is now the consolidated, thick series of sandstones and shales (Safety and Public Services). The primary water-bearing, unconsolidated alluvial deposits, and soils, and the Casitas and Santa Barbara formations of the Montecito Groundwater basin allow for typical land uses such as agriculture and development. Soils found in the foothill area at the base of the Santa Ynez Mountains are more likely to be less suitable for farming as a result of the steeply sloping bedrock outcrops (Montecito Community Plan).

The Montecito area is included in the Goleta-Elder-Agueda association. This association expands from Carpinteria Valley, lower portion of Montecito, Santa Barbara, to Goleta Valley (Shipman, 1981). Due to the geographical characteristics of this area, the soils, in this association, are classified as nearly level to moderately sloping, well drained sandy loams, fine sandy loams, loams, and silty clay loams. The following soil types comprise this association:

- Agueda soils
- Ballard soils
- Botella variant soils
- Cortina soils
- Elder soils

- Goleta soils
- Metz soils
- Riverwash

This associate is made of approximately 40% Goleta soils, 20% Elder soils, and 15% Agueda (Shipman, 1981). The soils mentioned above make up the remainder of the association. The combination of these soils makes the area ideal for agricultural use.

3.8.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS — Would the project:				
a) Site or any part of the project be located on land having substantial geologic constraints, as determined by the Planning and Development Department of Public Works Department? Areas constrained by geology include parcels located near active or potentially active faults and property underlain by rock types associated with compressible/collapsible soils or susceptible to landslides or severe erosion.	☐	☐	☒	☐
b) Result in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to one vertical?	☐	☐	☐	☒
c) Propose construction of a cut slope over 15 feet in height as measured from the lowest grade?	☐	☐	☒	☐
d) Be located on slopes exceeding 20% grade?	☐	☐	☐	☒

Discussion of Impacts

a) Site or any part of the project be located on land having substantial geologic constraints, as determined by the Planning and Development Department of Public Works Department? Areas constrained by geology include parcels located near active or potentially active faults and property underlain by rock types associated with compressible/collapsible soils or susceptible to landslides or severe erosion.

Less Than Significant Impact. According to the Santa Barbara County's Department of Planning and Development, Seismic Safety and Safety Element Geologic Problems Index map (SBCDPD, 2019), the proposed Project location is within a moderate problem area for seismic activity. The District has an established Emergency Plan for earthquake events. Adaptations to the current emergency action plans are necessary to accommodate the corresponding personnel involved with the proposed Projects. The proposed Projects are not located on property underlain by rock types associated with compressible or collapsible soils or susceptible to landslides or severe erosion. Furthermore, the proposed Projects would

be constructed in accordance with California building codes including considerations for seismic design (e.g., new solar carport structures). Therefore, potential impacts would be less than significant.

b) Result in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to one vertical?

No Impact. The proposed Projects would not result in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to one vertical. Therefore, no impact would occur.

c) Propose construction of a cut slope over 15 feet in height as measured from the lowest grade?

Less Than Significant Impact. The proposed Projects do not propose the construction of any cut slopes over 15 feet in height as measured from the lowest grade. However, as minor grading and recontouring (less than 15 feet from the lowest grade) will be required for the recycled water treatment area, a less than significant impact would occur.

d) Be located on slopes exceeding 20% grade?

No Impact. The proposed Projects are within an existing facility, Channel Drive, and the Santa Barbara Cemetery. These areas are not located on slopes exceeding 20% grade, and no new slopes are proposed as part of the Project; therefore, no impact would occur.

3.9 GREENHOUSE GAS EMISSIONS

3.9.1 Setting

Climate Change and Greenhouse Gas Emissions

Greenhouse Gases (GHGs) are defined as any gas that absorbs infrared radiation in the atmosphere. Common GHGs include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), ozone (O_3), and aerosols. GHGs are emitted by both natural processes and human activities, and lead to the trapping and buildup of heat in the atmosphere near the earth's surface, commonly known as the "Greenhouse Effect." There is increasing evidence that GHGs and the Greenhouse Effect are leading to global warming and climate change (USEPA, 2015).

Climate change refers to any significant change in measures of climate (e.g., temperature or precipitation) lasting for an extended period of time (decades or longer). Climate change may result from natural processes, such as changes in the sun's intensity; natural processes within the climate system (such as changes in ocean circulation); human activities that change the atmosphere's composition (such as burning fossil fuels) and the land surface (such as urbanization). "The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the State from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems." (California Health & Safety Code, Division 25.5, Part 1).

In September 2006, the Global Warming Solutions Act of 2006 (AB 32) was signed into law by former Governor Arnold Schwarzenegger. AB 32 and subsequent Statutes establish a statewide GHG emission reduction target of require that statewide GHG emissions be reduced to 1990 levels by the year 2020 and 40 percent below 1990 levels by 2030. The law requires this reduction to be accomplished through a variety of measures, including an enforceable statewide cap on greenhouse gas emissions that has been phased-in since 2013. AB 32 directs California Air Resources Board (CARB) to develop and implement regulations to reduce statewide greenhouse gas emissions from stationary sources.

CARB adopted the AB 32 Scoping Plan on December 12, 2008. The Scoping Plan provides the outline for future actions to reduce California's GHG emissions and establishes a schedule for CARB and other state agencies to adopt implementing regulations and other initiatives to reduce GHG emissions.

One of the most significant measures called for in the Scoping Plan is the statewide cap on emissions from the largest sources of GHG emissions. The cap-and-trade regulation was approved by CARB on December 16, 2010, following public review and comment. This regulation calls for a phased program starting in 2012, which includes electricity producers, electricity imports, and large industrial facilities (those with greater than 25,000 metric tons carbon dioxide per year). Starting in 2015, distributors of transportation fuels, natural gas, and other fuels will be included in the cap-and-trade program. The plan was expected to be updated in 2016.

Facilities covered in the cap-and-trade program are not given a specific limit on their GHG emissions but must supply a sufficient number of allowances (each covering the equivalent of one metric of carbon dioxide equivalent [CO_2e]) to cover their annual emissions. Each year, the total number of allowances issued in the state drops, requiring covered facilities to find the most cost-effective and efficient approaches to reducing their emissions. Facilities without sufficient allowances to cover their annual emissions must acquire additional allowances or offsets. By the end of the program in 2020, there will be a reduction in GHG emissions sufficient to reach the same level of emissions as the state experienced in 1990, as required under AB 32. Originally slated to expire in 2020, Governor Jerry Brown signed legislation on July 25, 2017 to extend the cap and trade regulation until 2030.

The County adopted the Energy and Climate Action Plan (ECAP) in 2015. The ECAP consists of 53 reduction measures to reach a GHG reduction target of 15 percent below 2007 levels by 2020. The ECAP's reduction measures cover a variety of strategies, including, but not limited to reducing electric and natural gas usage in buildings and public infrastructure, reducing use of combustion vehicles and single occupancy trips, and improving water efficiency. In addition to reducing GHG emissions, these measures would help protect health and welfare, buildings and infrastructure and natural resources from the vulnerabilities of climate change.

County Environmental Threshold:

The County has established a Bright-Line numeric threshold of 1,000 metric tons carbon dioxide equivalents ($MTCO_2e$) for all industrial stationary-source projects. Annual GHG emissions that are equivalent to or exceed the threshold are determined to have a significant cumulative impact on global climate change unless mitigated.

3.9.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS — Would the Project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Discussion of Impacts

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. The proposed Project components include the recycled water treatment processes, storage tank, conveyance pipelines to connect the treatment system to the storage tank and the storage tank to the cemetery, an Essential Services Building, new 17-space parking, area and five solar panel structures. Short-term construction activities associated with the Project would require the operation of on-road vehicles and off-road equipment that would emit GHG emissions from engine exhaust. During operations, the Project would not generate new vehicle emissions as current District staff would operate and maintain the Project. Solar power would be the primary power source. Emissions for the Project were estimated using CalEEMod version 2016.3.2. This analysis included emissions from operations of the Essential Services Building, as well as conservatively included emissions associated with the water treatment system component of the Project. Emissions for the water treatment system were based on a general light industrial land use. Emission sources include area sources (landscaping), energy sources (electricity and natural gas consumption), waste generation, and water consumption and conveyance. Emissions from these sources are based on the size of the Project. As shown in Table 10, the Project's combined construction and operations emissions would not exceed the County's Bright-Line threshold.

Table 10. Project Greenhouse Gas Emissions

Source	GHG Emissions ($MTCO_2e$/yr)
Construction	464
Operations	178
Total	642

Emissions calculated using CalEEMod Version 2016.3.2
$MTCO_2e$=Metric tons carbon dioxide equivalents

A major component of the Project is to produce non-potable recycled water that would be used to irrigate a nearby cemetery, thus reducing the use of potable water. By using non-potable water for irrigation, potable water consumption as well as GHG emissions associated with supplying, treating, and distributing potable water would be reduced. Also, the Project would be primarily powered by solar power. Based on this and that the Project does not exceed the County's Bright-Line threshold, the Project is not expected to be a significant source of GHG emissions and impacts of the Project would be less than significant.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. Large industrial facilities (those with emissions greater than 25,000 metric tons CO_2 per year) are subject to compliance with AB 32's cap-and-trade program. Because the proposed Projects would emit less than 25,000 metric tons CO_2 per year, it is not subject to compliance with AB 32's cap-and-trade program. As discussed above, the Project would reduce potable water consumption and its associated GHG emissions, therefore making it consistent the ECAP's water efficiency strategies and overall reduction goals. Therefore, the proposed Projects would not conflict with

an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases and potential impacts would be less than significant.

3.10 HAZARDS AND HAZARDOUS MATERIALS

3.10.1 Setting

The proposed Projects are located within the County of Santa Barbara; therefore, the County of Santa Barbara Public Health Department has been designated by the State Secretary for Environmental Protection as the Certified Unified Program Agency (CUPA). The CUPA is responsible for managing hazardous materials hazardous waste programs within the County. The CUPA also administers hazardous waste-related permits and performs facility inspections and enforcement activities throughout the County.

3.10.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS — Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use compatibility plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Discussion of Impacts

a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Less Than Significant Impact. The proposed Projects are contained within the already established wastewater treatment plant facility and Santa Barbara Cemetery. As a wastewater treatment facility, the routine transport, use, and disposal of hazardous materials already occurs in accordance with applicable regulations to ensure the public and environment are protected. Safety plans, disposal, and emergency plans have been established for the District. Construction of the proposed Projects would involve the use of some hazardous materials, such as fuels and lubricants used for construction vehicles and equipment. The proposed Projects would not generate hazardous waste during construction of the proposed Projects (i.e., those governed pursuant to Title 40, Part 335 of the Code of Federal Regulations (CFR)]. Trucks and construction vehicles would be serviced at offsite facilities. Operation of the proposed Projects would entail the use of small amounts of various chemicals typically used during the wastewater treatment process such as, but not limited to sodium hypochlorite, sodium hydroxide, sulfuric acid, hydrochloric acid, and ferric chloride. All chemicals would be stored adjacent to the treatment system and in appropriate areas within the facility. Safety Data Sheets for all applicable materials present on the proposed Project site would be readily available to onsite personnel as required by the CUPA. Operation and maintenance of the proposed Projects are not expected to require large amounts of hazardous materials, or to generate hazardous waste.

With implementation of the District's existing procedures and compliance with regulations regarding the transportation, use, and disposal of hazardous materials, the proposed Projects are not anticipated to create a significant hazard to the public or the environment through these processes. Therefore, there would be a less than significant impact.

b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Less Than Significant Impact. Construction of the distribution pipelines connecting the treatment system to the storage tank, and storage tank to the cemetery property would occur within the existing public rights-of-way of Channel Drive. Disturbing any existing utility lines has the potential risk to result in the release of hazardous materials that could create a hazard to the public and environment. To minimize the potential risk, excavation of Channel Drive would not be allowed until all utility owners are notified, all subsurface structures identified, and all necessary permits have been obtained.

As described above, small amounts of various chemicals would be used during the treatment process. A release of any of these materials could create a hazard to the public and or environment. In addition, given that the proposed Projects would include demolition of existing long-standing structures that may contain asbestos and lead-based paint, workers and the public may be exposed to asbestos and lead via inhalation of demolition dust. This would require proper handling and disposal in accordance with regulatory requirements. The District has an established Emergency Plan in the event an accident occurs.

Furthermore, in California, potential asbestos exposure in construction is regulated when construction, alteration, repair, maintenance, renovation or demolition of structures, substrates, or portions thereof contain asbestos [8 CCR §1529 (a)(1)(C)]. Materials containing greater than one-tenth of one percent (>0.1%) asbestos by weight are regulated as asbestos-containing materials. Compliance with the existing rules and regulations would reduce the potential to create a significant hazard to the public and environment, therefore potential impacts would be less than significant.

c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Less Than Significant Impact. The existing facility and proposed Project components are located within one-quarter mile of the Music Academy of the West, an existing school. While the construction of the proposed Projects would involve the routine use of small amounts of potentially hazardous materials (such as gasoline or hydraulic fluids for machinery), such materials would be handled only when necessary by trained individuals. Management of these activities is being carried out on the existing facility and construction of the Project would not constitute a significant shift from ongoing baseline activities. Therefore, a less than significant impact would occur.

d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

No Impact. The land on which the Project would be built and operated is not identified on the list of hazardous material site pursuant to Government Code Section 65962.5, and therefore would not create a significant hazard to the public and or environment (DTSC, 2019).

e) *For a project located within an airport land use compatibility plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

No Impact. The proposed Projects are not located within an airport land use compatibility plan and is not located within two miles of a public airport or public use airport. Therefore, the Project would not result in a safety hazard or excessive noise for people residing or working in the project area, and no impact would occur.

f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Less Than Significant Impact. The District has established emergency response and evacuation plans for the existing facility, developed in accordance with County requirements, which would also apply to the proposed Projects (e.g., Montecito Sanitary District: Fire Prevention Program). Prior to construction, District personnel would cooperate with Montecito Fire Department and other emergency services in assessing emergency evacuation and response routes in the case of an emergency or wildfire. Once construction is complete, all evacuation and response plans would revert to their original procedures.

Therefore, the proposed Projects would have a less than significant impact with respect to interfering with an adopted emergency response plan or emergency evacuation plan.

g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

Less Than Significant Impact. The proposed Project is located within the developed facility, adjacent roads, and the Santa Barbara Cemetery, and is not located near or within any wildland areas. This facility is predominantly a cleared, gravel area with impervious surfaces and several buildings. Construction of the proposed Projects would involve routine construction activities in areas with low vegetation fuel load and low fire risk. Once construction is complete, all equipment and activities would be removed from the facility and adjacent properties. Due to its location in the previously developed facility, the proposed Projects would not exacerbate wildfire risks, and thereby expose people or structures, either directly or indirectly, to a significant rise of loss, injury or death involving wildland fires. Therefore, impacts would be less than significant.

3.11 GROUNDWATER, SURFACE, AND STORMWATER

3.11.1 Setting

Water supply to the community of Montecito and the Project site is provided by the MWD. In general, Montecito utilizes a combination of groundwater and surface water to meet its water supply needs. Lake Cachuma, Jameson Lake, Fox Creek, and Adler Creek supply Montecito's surface water via MWD. The community of Montecito's main groundwater source comes from the Montecito groundwater basin, but also utilizes Doulton Tunnel intrusion and water wells in hard rock or alluvial aquifers, north of the main basin, as sources as well. Approximately 10-15% of Montecito's water supply comes from groundwater (Montecito Water District 2019). MWD is in negotiations for a Water Supply Agreement with the City of Santa Barbara.

The Montecito Groundwater Basin is confined by the Santa Ynez mountains to the north, with consolidated rock material to the east, by the Fernald Fault on the southeast, and is bounded by the drainage divide of the Montecito and Carpinteria Groundwater basins to the northeast. Due to its location near the Pacific Ocean, the offshore Rincon Creek fault acts as a seawater intrusion barrier to this basin (DWR, 2004). The Santa Barbara cemetery (which includes a portion of the proposed Project) overlays both the Montecito Groundwater Basin and the Santa Barbara Groundwater Basin.

Montecito's stormwater drainage system is a combination of the berms, channels, creek, and culverts that discharge to several creeks that drain to the Pacific Ocean; there is no community storm water piping system. All stormwater runoff and flood hazards are evaluated by the Santa Barbara Flood Control District (SBFCD). According to the Federal Emergency Management Act (FEMA), the proposed Project location is within an area of minimal flood hazard with a higher elevation of the 0.2-percent annual chance flood, while other areas of Montecito are in Special Flood Hazard Areas.

Montecito Groundwater Basin Management Plan

The Montecito Water District developed a groundwater management plan for the groundwater contained within Montecito and portion of the Toro Canyon community. The purpose of the plan is to:

1. preserve and promote local control of groundwater management;
2. encourage cooperation among all basin users; and,
3. develop information and tools for effective basin management.

According to Section 9.4 of the Montecito Groundwater Basin Plan, groundwater contamination may occur as a result of numerous sources, but it generally stems from the misuse and improper disposal of liquid and solid wastes (MWD 1998). Groundwater contamination could also occur from the following wastewater or wastewater byproducts prior to treatment: organic matter, nitrates, inorganic salts, heavy metals, coliform and non-coliform bacteria, sludge, or non-hazardous wastes. The California Code of

Regulations (CCR) outlines specific criteria for water recycling projects to prevent and/or treat potential contaminants, as further described below.

Title 22 Water Recycling Criteria

With respect to potential impacts on water quality of local groundwater supplies, the proposed project was designed in accordance with CCR Title 22, Division 4, Chapter 3, Sections 60301 through 60355 governs the recycling of water (also known as "Title 22 Criteria"). The Title 22 Criteria is an important component of General Order WQ 2016-0068-DDW (General Order; SWRCB 2016). Specific requirements for the production, storage, and distribution of recycled water are established by the California State Water Resources Control Board Division of Drinking Water (DDW). The proposed Projects would also be governed by the Regional Water Quality Control Board (RWQCB) Central Coast Region 3. The proposed treatment system would produce recycled water that is defined as "disinfected tertiary treated recycled water". The Title 22 criteria outline the uses that are approved for disinfected tertiary treated recycled water. Cemeteries are an acceptable irrigation area within the criteria. The proposed Project included the selection of appropriate equipment capable of treating the water to meet and/or exceed Title 22 standards. For example, median concentration of total coliform bacteria must not exceed the parameters listed below. Coliform bacteria can indicate the presence of pathogenic (disease-causing) microorganisms that may be transmitted in human feces. Diseases such as typhoid fever, hepatitis, diarrhea, and dysentery can result from sewage contamination of water supplies.

In order to be considered disinfected tertiary treated recycled water, the process must oxidize, coagulate, filter, and disinfect the water.[2] For spray irrigation and/or unrestricted recreational and landscape impoundments, the median concentration of total coliform bacteria must not exceed the following:

- 2.2 most probably number (MPN) total coliform bacteria per 100 milliliter (mL) sample based on the bacteriological results of the last seven days for which analyses have been completed;
- 23 MPN total coliform bacteria per 100 mL sample of effluent in more than one sample within any 30-day period;
- 240 MPN total coliform bacteria per 100 mL sample of effluent at any time.

In addition to the requirements listed above, the Title 22 Criteria also state that the process must incorporate a certain level of redundancy/reliability to ensure that the treatment process is uninterrupted such as backup equipment and alarms, which was also incorporated into the design of the proposed Project. The Title 22 requirements for landscape irrigation consider the Basin Plan objectives for groundwater quality as detailed above.

[2]Oxidation relates to a process typically found in a wastewater treatment where the organic material in the wastewater is stabilized and the secondary effluent contains dissolved oxygen. Coagulation is the process where chemicals are added to the wastewater to form flocs which settle to the bottom of clarifiers and are removed as a

Water Quality Control Plan for the Central Coast Basin

The proposed Project was also designed in accordance with the water quality objective outlined in Table 3-2 of the "Water Quality Control Plan for the Central Coast Basin" (RWQCB 2019). This includes water quality criteria for various elements such as aluminum, arsenic, copper, lead, mercury, zinc, among others. While Table 3-2 refers to "Agricultural Water Use", these elements and criteria are also applicable to irrigation uses such as the proposed Project. The applicable design criteria and technologies that have been incorporated into the proposed Project meet the water quality objectives above include ultrafiltration, reverse osmosis, and sodium hypochlorite for disinfection (refer to Section 2.2 of the Final IS/MND for a description of these technologies).

General Order WA 2016-0068-DDW

The General Order WA 2016-0068-DDW (General Order) outlines the requirements for recycled water programs, including the testing analysis and reporting of water quality. The Title 22 Criteria, as described above, is an important component of the General Order (SWRCB 2016). As part of the regulatory permitting process, the District developed a Title 22 Engineering Report for the proposed Project which was submitted to the SWRCB Department of Drinking Water (DDW) for review and approval. Once the proposed Project is in the final design phase, the DDW will conduct final review and approval to ensure the proposed Project meets the applicable State requirements for water quality.

These regulatory processes (e.g., Montecito Groundwater Basin Plan, Water Quality Control Plan for the Central Coast Basin, and Title 22 Criteria) are in place to ensure that required treatment standards are being met, thereby reducing the potential for adverse water quality impacts.

NPDES

Construction projects resulting in the disturbance of 1.0 acre or more require compliance with the NPDES Construction General Permit 2009-0009-DWQ (General Permit for Discharges of Storm Water Associated with Construction Activity). Under NPDES, run-off from development must be captured and filtered to remove pollutants prior to discharging the run-off into storm drains. This Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer (QSD). The majority of the proposed Project components will be located within existing disturbed areas; less than one acre of new land would be disturbed including impervious surfaces of Channel Drive and grassy areas of Santa Barbara Cemetery. As such, construction of the proposed Projects would not require an NPDES permit, nor would it trigger the need for a Stormwater Pollution Prevention Plan (SWPPP).

In addition to compliance with the Construction General Permit, the District has an existing NPDES permit for their wastewater treatment facility effluent outfall into the Pacific Ocean. Per the District's existing NPDES Permit (No. CA0047899), concentrate generated from the treatment system would be blended with secondary treatment water and discharged into the existing District's discharge point No. 001 under the existing Permit. Under these authorizations, the District is permitted to discharge up to 1.5 million gallons per day of dry weather average monthly rate of treated wastewater. From discharge point No.

001, concentrate would pass through an existing 16-inch diameter outfall pipe that terminates 1,500 feet offshore in a water depth of 35 feet in the Pacific Ocean.

County of Santa Barbara Grading Code

The County's Grading Code specifies that a grading permit is required for activities which involve grading, excavation or fill, unless certain exceptions are met (County of Santa Barbara 2019). The Code also includes additional requirements for an Erosion and Sediment Control Plan and Erosion Control Permit, as applicable. This includes a schedule of the timing for project activities as well as measures to effectively minimize soil erosion, sedimentation, and non-stormwater construction related discharges.

Salt and Nutrient Management Plan

Salinity is measured by the total dissolved solids (TDS) and the electrical conductivity. As stated in the Water Quality Control Policy for Recycled Water, the most effective way to address salt and nutrient loading is typically through the development of regional or sub-regional salt and nutrient management plans, rather than imposing requirements solely on individual recycled water project or other individual sources or salts and nutrients (SWRCB 2019). The Montecito Water District, through the Montecito Groundwater Sustainability Agency, manages the Montecito Groundwater Basin. There is currently no salt and nutrient plan for the Montecito Basin, however, should a plan be developed by the Montecito Groundwater Sustainability Agency in the future, the District would provide information to inform this plan upon request.

3.11.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. GROUNDWATER, SURFACE, AND STORMWATER — Would the project:				
a) Contribute to the overuse of groundwater in an alluvial basin or other aquifer?	☐	☐	☒	☐
b) Be located within an urbanized area of the county and the project construction of redevelopment individually or as a part of a larger common plan of development or sale would disturb one or more acres of land?	☐	☐	☒	☐
c) Increase the amount of impervious surfaces on a site by 25% or more?	☐	☐	☒	☐
d) Result in channelization of relocation of natural drainage channel?	☐	☐	☐	☒
e) Result in removal or reduction of riparian vegetation or other vegetation (excluding non-native vegetation removed for restoration projects) from the buffer zone of any streams, creeks, or wetlands?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. GROUNDWATER, SURFACE, AND STORMWATER — Would the project:				
f) Be an industrial facility that falls under one or more categories of industrial activity regulated under the NPDES Phase I industrial storm water regulations (facilities with effluent limitation; manufacturing; mineral, metal, oil and gas, hazardous waste, treatment or disposal facilities; landfills; recycling facilities; steam electric plants; transportation facilities; treatment works; and light industrial activity?	☐	☐	☒	☐
g) Discharge pollutants that exceed the water quality standards set forth in the applicable NPDES permit, the Regional Water Quality Control Board's (RWQCB) Basin Plan or otherwise impairs the beneficial uses of a receiving waterbody?	☐	☐	☒	☐
h) Result in discharge of pollutants into an "impaired" waterbody that has been designated as such by the State Water Resources Control Board?	☐	☐	☐	☒
i) Result in a discharge of pollutants of concern to a receiving water body, as identified in by the RWQCB?	☐	☐	☒	☐

Discussion of Impacts

a) Contribute to the overuse of groundwater in an alluvial basin or other aquifer?

Less Than Significant Impact. The proposed Projects are the addition of a Title 22 compliant recycled water treatment system to an existing wastewater treatment facility. Construction of the proposed Projects would require water for industry-standard construction activities, such as dust suppression, concrete, or minor cleaning and washing. Construction of the Project would be temporary and of short duration, with water provided by the Montecito Water District under its existing permitted allotments. While a small portion of the water utilized for the proposed Projects could be sourced from groundwater, this minor amount of water would not contribute to the overuse of groundwater in the aquifer, as it would be sourced by an existing purveyor under its existing allotments and in minor amounts. Additionally, the primary goal of the proposed Projects is to replace the use of potable water (which could be sourced from groundwater) with recycled water for irrigation of the adjacent Santa Barbara Cemetery. The proposed Projects would not contribute to the overuse of groundwater in an alluvial basin or other aquifer, as the Projects would reduce groundwater demand and would not utilize groundwater during operation. Therefore, no impact is anticipated.

b) Be located within an urbanized area of the county and the project construction of redevelopment individually or as a part of a larger common plan of development or sale would disturb one or more acres of land?

Less Than Significant Impact. The proposed Projects are in the community of Montecito which is in an urbanized area within the unincorporated portion of Santa Barbara County. The majority of the proposed Project components will be located within existing disturbed areas. As stated in Section 1.2, while the combined temporary and permanent disturbance of the three proposed Projects is approximately 1.50 acres total, all three projects would not be constructed simultaneously; each project would disturb less than one acre of land including impervious surfaces of Channel Drive and grassy areas of Santa Barbara Cemetery. Therefore, a less than significant impact would occur.

c) Increase the amount of impervious surfaces on a site by 25% or more?

Less Than Significant Impact. As noted above, most of the proposed Project components are located in an already developed facility. New impervious surfaces would include the following;

- approximately 1,600 square feet would be added during construction for placement of a concrete slab underneath the 75,000-gallon storage tank adjacent to the Santa Barbara Cemetery;
- approximately 1,500 square feet would be covered with impervious surfaces to accommodate the new recycled water treatment area; and,
- approximately 14,155 square feet would need to be surfaced with concrete and asphalt to accommodate for the new Essential Services Building and the adjacent parking area.

This would be approximately 17,255 square feet of impervious surfaces in total, which equates to 6.1% of the total site area (approximately 281,598 square feet). Therefore, the propose Project would not increase the amount of impervious surfaces by 25% or more and a less than significant impact would occur.

d) Result in channelization or relocation of natural drainage channels?

No Impact. There are no natural drainage channels within the proposed Project footprint and surrounding areas. The Project would not result in the channelization or relocation of natural drainage channels. Therefore, no impact would occur.

e) Result in removal or reduction of riparian vegetation or other vegetation (excluding non-native vegetation removed for restoration projects) from the buffer zone of any streams, creeks, or wetlands?

No Impact. The Proposed Projects are not located near any streams, creeks, or wetlands. The Project would not result in the removal or reduction of riparian vegetation or other vegetation from the buffer zone of any streams, creeks, or wetlands. Therefore, no impact would occur.

f) Be an industrial facility that falls under one or more categories of industrial activity regulated under the NPDES Phase I industrial storm water regulations (facilities with effluent limitation; manufacturing; mineral, metal, oil and gas, hazardous waste, treatment or disposal facilities; landfills; recycling facilities; steam electric plants; transportation facilities; treatment works; and light industrial activity?

Less Than Significant Impact. While the design flow of the existing facility is above 1 MGD and would remain above 1 MGD with construction of the proposed Projects (per the list of facilities covered by an NPDES general permit for stormwater discharges associated with industrial activities), the proposed Projects do not involve discharge of stormwater flow off the site; stormwater flow across the site is, and would continue to be, blocked by a wall on the north side of the facility between the WWTP and the railroad. Furthermore, any stormwater flowing through the site is captured and sent through the wastewater treatment process. Therefore, a less than significant impact would occur.

g) Discharge pollutants that exceed the water quality standards set forth in the applicable NPDES permit, the Regional Water Quality Control Board's (RWQCB) Basin Plan or otherwise impairs the beneficial uses of a receiving waterbody?

Less Than Significant Impact. While the proposed Projects would result in the addition of brine into the wastewater stream entering the outfall discharge point into the Pacific Ocean, this is not anticipated to result in any exceedance of the existing NPDES permit limits, and no modifications to the existing NPDES permit would be required. As described in Section 3.11.1 above, the proposed Project has been designed in accordance with the following regulatory processes: the water objectives outlined in the Water Quality Control Plan for the Central Coast Basin, the Montecito Groundwater Basin Management Plan, as well as the Title 22 Criteria (State of California Code of Regulations). Once the proposed Project is at the final design phase, the DDW will conduct final review and approval to ensure the proposed Project meets the applicable state requirements for water quality. In addition, due to the minor subsurface excavation required for installation of the 75,000-gallon storage tank and distribution pipelines, a grading permit would be obtained from the County. This would provide additional measures to effectively minimize soil erosion, sedimentation, and non-stormwater construction related discharges. Last, during operations and in accordance with the District's permit requirements, the District would conduct regular monitoring to ensure no exceedance of water quality standards would occur because of the proposed Project. These regulatory processes described above would ensure that required treatment standards are being met, thereby reducing the potential for adverse water quality impacts associated with the proposed Project to a less than significant level.

h) Result in discharge of pollutants into an "impaired" waterbody that has been designated as such by the State Water Resources Control Board?

No Impact. According to the SWRCB, the nearest impaired waterbody is Montecito Creek. This creek is located approximately 1.04 miles to the west of the proposed Projects. Due to its distance from Montecito Creek, the proposed Projects would not result in discharge of pollutants into an "impaired" waterbody that

has been designated as such by the State Water Resources Control Board. Therefore, no impact would occur.

i) Result in a discharge of pollutants of concern to a receiving water body, as identified in by the RWQCB?

Less Than Significant Impact. During construction, the Project would implement all appropriate erosion control measures, as outlined in the Grading Permit from the County. No other discharges to a receiving water body would occur during construction. Operation of the Project would result in the discharge of brine via the existing outfall, under the existing NPDES permit. As construction and operation would not result in discharges of pollutants of concern, a less than significant impact would occur.

3.12 LAND USE AND PLANNING

3.12.1 Setting

The majority of the proposed Projects are located within the already developed existing facility. Additionally, a parcel to the north of the cemetery, will include the proposed 75,000-gallon tank located adjacent to an existing cell phone tower.

The existing facility of the proposed Projects has a land use designation of UT, Public Utility (an area designation for the facilities and service of a public utility or a public service entity). Its zoning is PU, Public Works Utilities and Private Services Facilities. The Santa Barbara Cemetery has a land use designation of Cemetery, with a zoning of 20-R-1, reserved for single family housing with a minimum lot size of 20,000 square feet. The existing facility and the Santa Barbara Cemetery are located within the unincorporated community of Montecito and are subject to the County of Santa Barbara's land use and zoning ordinances. The Santa Barbara cemetery currently operates under a Conditional Use Permit issued by the County of Santa Barbara.

The 75,000-gallon tank would be located on a parcel within the incorporated City of Santa Barbara with a current land use designation of Recreational / Open Space and a zoning designation of R-1, Coastal Overlay. As the R-1 zone allows for "Improvements and additions of 500 square feet or less to existing Public Works Facilities including, but not limited to, sewer lift stations, pump stations, water wells, pressure reducing stations, generator enclosures, minor improvements to existing water storage reservoirs and other miscellaneous structures incidental to or improving the existing use," (Santa Barbara Municipal Code, Section 28.15.030 Uses Permitted, 2019) the proposed Project component located on this parcel is a permitted use under the City of Santa Barbara's existing zoning.

In general, the proposed Projects are located near the UPPR to the north, a cemetery to the west, residential facilities to the south, and educational facilities to the east.

3.12.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING — Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Discussion of Impacts

a) *Physically divide an established community?*

No Impact. Temporary construction activities would be limited to the area of Channel Drive and would not permanently divide the community. Access to the Santa Barbara Cemetery would be limited to that of East Cabrillo Drive during the pipeline construction and installation and road conditions would revert to original conditions once construction is complete. Therefore, no impact would occur.

b) *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

No Impact. The proposed Projects would be compatible with the goals, applicable land use designation, and zoning set forth in the Montecito Community Plan and Santa Barbara County code. Within the Montecito Community Plan, Goal LUG-M-1 states: “Comprehensively plan for, and maintain, an ultimate community buildout that is based on the conservation of limited resources” (Montecito Community Plan, 1995). This goal is compatible with the proposed Projects’ use of recycled water for the cemetery irrigation. The proposed Projects do not conflict with any established land use plan set forth in the Montecito Community plan. The current zoning allows for the proposed Projects and no additional land use permit would be required. Therefore, no impact would occur.

3.13 MINERAL RESOURCES

3.13.1 Setting

In accordance with the Open Space and Conservation Element, the County is required to permit present operations and future exploration for the extraction of mineral resources. To comply with the requirements, the state's Surface Mining and Reclamation Act of 1975 (SMARA) was enacted for the purpose of establishing mineral resource management policies within the general plan by local agencies.

The State Geologist mapped the San Luis Obispo-Santa Barbara area for aggregate resources, which includes rock, sand, and gravel. The San Luis Obispo-Santa Barbara region is classified by the availability of Portland Cement Concrete (PCC) – grade aggregate resources. There are currently four main regionally significant Mineral Resource Zone (MRZ) categories designated by the State Geologist of varying significance. These categories are MRZ-1 through MRZ-4 and are defined as follows:

- **MRZ-1:** Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** Areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood of their presence exists.
- **MRZ-3:** Areas containing mineral deposits, the significance of which cannot be evaluated from available data.
- **MRZ-4:** Areas of no known mineral occurrences where geologic information does not rule out either the presence or absence of significant mineral resources.

The proposed Project area is designated as MRZ-3 (Miller, 1989).

3.13.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Discussion of Impacts

a) *Result in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist that would be of value to the region and the residents of the state?*

No Impact. Although areas in the San Luis Obispo-Santa Barbara region are classified as an MRZ-2, the community of Montecito is mapped as an MRZ-3. The proposed Projects would be located within the already existing facility and Santa Barbara Cemetery. Due to its classification as an MRZ-3, the proposed Projects would not result in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist that would be of value to the region and the residents of the state. Therefore, no impact would occur.

b) *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

No Impact. As mentioned previously, the proposed Project location is not within an MRZ-2 and construction would occur on the existing facility and Santa Barbara Cemetery. Community Plans do not contain any delineated sites. This area is designated for Public Utilities and Works by the Montecito Community Plan. The proposed Projects are not located on a delineated site; therefore, it would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, no impact would occur.

3.14 NOISE

3.14.1 Setting

Definition of Noise

Noise is generally defined as unwanted sound that annoys or disturbs people or noise-sensitive biological resources (such as nesting birds) and potentially causes an adverse psychological or physiological effect on human health.

Sound is mechanical energy (vibration) transmitted by pressure waves over a medium such as air or water. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient (existing) sound level. Although the decibel (dB) scale is a logarithmic scale and is used to quantify sound intensity, it does not accurately describe how sound intensity is perceived by human hearing. The human ear is not equally sensitive to all frequencies in the entire spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive in a process called A-weighting, written as dBA and referred to as A-weighted decibels. Table 11 defines sound measurements and other terminology used in this section and Table 12 summarizes typical A-weighted sound levels for different noise sources.

In general, human sound perception is such that a change in sound level of 1 dB cannot typically be perceived by the human ear, a change of 3 dB is barely noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level (based on position to the sound level). Audible changes in the existing ambient or background noise levels are considered potentially significant.

Different types of measurements are used to characterize the time-varying nature of sound. These measurements include the equivalent sound level (Leq), the minimum and maximum sound levels (Lmin and Lmax, respectively), percentile-exceeded sound levels (Lxx, shown as specific percentages such as L10 or L20), the day-night sound level (Ldn), and the community noise equivalent level (CNEL). Ldn and CNEL values differ by less than 1 dB. As a matter of practice, Ldn and CNEL values are considered to be equivalent and are treated as such in this assessment.

For a point source, such as a stationary compressor or construction equipment, sound attenuates at a rate of 6 dB per doubling of distance. For a line source, such as free flowing traffic on a freeway, sound attenuates at a rate of 3 dB per doubling of distance (FHWA 2011). Atmospheric conditions, including wind, temperature, and humidity, can change how sound propagates over distance and can affect the level of sound received at a given location. The degree to which the ground surface absorbs acoustical energy also affects sound propagation. Sound that travels over an acoustically absorptive surface such as grass attenuates at a greater rate than sound that travels over a hard surface such as pavement. The increased attenuation is typically in the range of 1-2 dB per doubling of distance. Barriers such as

buildings and topography that block the line of sight between a source and receiver also increase the attenuation of sound over distance.

Table 11. Definition of Sound Measurement

Sound Measurements	Definition
Decibel (dB)	A measure of sound on a logarithmic scale that indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals.
A-Weighted Decibel (dBA)	An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
C-Weighted Decibel (dBC)	The sound pressure level in decibels as measured using the C-weighting filter network. The C-weighting is very close to an unweighted or flat response. C-weighting is only used in special cases when low-frequency noise is of particular importance.
Maximum Sound Level (Lmax)	The maximum sound level measured during a specified period of time.
Minimum Sound Level (Lmin)	The minimum sound level measured during a specified period of time.
Equivalent Sound Level (Leq)	The equivalent steady state sound level equal to acoustical energy averaged over time.
Percentile-Exceeded Sound Level (Lxx)	L10 is the sound level exceeded 10% of the time. L90 is the sound level exceeded 90% of the time. L90 is often considered to be representative of the background noise level in a given area.
Day-Night Level (Ldn)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10:00 PM to 7:00 AM.
Community Noise Equivalent Level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period with 5 dB added to the A-weighted sound levels occurring during the period from 7:00 p.m. to 10:00 p.m. and 10 dB added to the A-weighted sound levels occurring during the period from 10:00 PM to 7:00 AM.
Peak Particle Velocity (Peak Velocity or PPV)	A measurement of ground vibration defined as the maximum speed (measured in inches per second) at which a particle in the ground is moving relative to its inactive state. PPV is usually expressed in inches per second.
Frequency: Hertz (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure.

Source: Stantec 2014

Table 12. Typical A-Weighted Sound Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet flyover at 1,000 feet	-110	Rock band
Gas lawnmower at 3 feet	-100	Food blender at 3 feet
Diesel truck at 50 feet at 50 MPH	-90	Garbage disposal at 3 feet
Noisy urban area, daytime	-80	Vacuum cleaner at 10 feet
Gas lawnmower, 100 feet	-70	Normal speech at 3 feet
Commercial area	-60	Large business office
Heavy traffic at 300 feet	-50	Dishwasher in next room
Quiet urban daytime	-40	Theater, large conference room (background)
Quiet urban nighttime	-30	Library
Quiet suburban nighttime	-20	Bedroom at night, concert hall (background)
Quiet rural nighttime	-10	Broadcast/recording studio

Notes:
dBA = A-weighted decibels
MPH = miles per hour

Decibel Addition

Since decibels are logarithmic units, sound pressure levels cannot be added or subtracted through ordinary arithmetic. On the dB scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when two identical sources are each producing sound of the same loudness, their combined sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one source produces a sound pressure level of 70 dBA, two identical sources would not produce 140 dBA but would combine to produce 73 dBA. The cumulative sound level of any number of sources can be determined using decibel addition.

Vibration

Operation of heavy construction equipment, particularly pile driving and other impact devices such as pavement breakers, create seismic waves that radiate along the surface of the earth and downward into the earth. These surface waves can be felt as ground vibration. Vibration from operation of this equipment can result in effects ranging from annoyance of people to damage of structures. Varying geology and

distance results in different vibration levels that contain different frequencies and displacements. In all cases, vibration amplitudes decrease with increasing distance.

Perceptible ground borne vibration is generally limited to areas within a few hundred feet of construction activities. As seismic waves travel outward from a vibration source, they excite the particles of rock and soil through which they pass and cause them to oscillate. The actual distance that these particles move is usually only a few ten-thousandths to a few thousandths of an inch. The rate or velocity (in inches per second) at which these particles move is the commonly accepted descriptor of the vibration amplitude, referred to as peak particle velocity (PPV).

Table 13 summarizes typical vibration levels generated by construction equipment (DOT 2006).

Table 13. Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 feet
Pile driver (impact)	0.644 to 1.518
Pile drive (sonic/vibratory)	0.170 to 0.734
Vibratory roller	0.210
Hoe ram	0.089
Large bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003

Notes:
PPV = peak particle velocity
Source: Federal Transit Administration 2006

Vibration amplitude attenuates over distance and is a complex function of how energy is imparted into the ground and the soil conditions through which the vibration is traveling. The following equation can be used to estimate the vibration level at a given distance for typical soil conditions (DOT 2006). PPVref is the reference PPV from Table 12.

$$PPV = PPVref \times (25/Distance)\ 1.5$$

Table 14 summarizes guideline vibration annoyance potential criteria suggested by California Department of Transportation (Caltrans) (Caltrans 2004).

Table 14. Guideline Vibration Annoyance Potential Criteria

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Notes:
Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.
in/sec = inches per second
PPV = peak particle velocity
Source: Caltrans 2004

Table 15 summarizes guideline vibration damage potential criteria suggested by Caltrans (Caltrans 2004).

Table 15. Guideline Vibration Damage Potential Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structure	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Notes:
Transient sources create a single isolated vibration event such as blasting or drop balls. Continuous or frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.
in/sec = inches per second
PPV = peak particle velocity
Source: Caltrans 2004

County Guidelines

The County's Environmental Thresholds and Guidelines Manual identify 65 dBA CNEL as the maximum exterior noise exposure compatible with noise-sensitive uses unless noise mitigation features are included in project design. Noise-sensitive uses proposed in areas where this level is exceeded should be designed so that interior noise levels attributable to exterior sources do not exceed 45 dBA CNEL when doors and windows are closed (County of Santa Barbara, 2008). While the County of Santa Barbara's Noise Ordinance does not include specific requirements and/or restrictions for construction-related noise, the County of Santa Barbara's Montecito Community Plan states in their Municipal Code that noise sources associated with construction-related activities are typically exempt provided the activities occur between the hours of 7:30 a.m. and 4:30 p.m., Monday through Friday (County of Santa Barbara, 1995).

The existing noise contours specified in the Noise Element of the County of Santa Barbara General Plan indicates that the existing ambient noise in the Project vicinity is between 60-64 dBA (County of Santa Barbara, 2009). The northern portion of the facility is bordered by UPRR, while U.S. Highway 101, which is the predominant existing noise source within the Project vicinity, runs adjacent to the UPRR to the north. In addition, there is daily vehicle traffic on the adjacent roadway (Channel Drive and Monte Cristo Lane). The nearest sensitive receptors to the Project site are residential areas, with the closest sensitive receptor (a residence) located approximately 100 feet to the south of the facility.

3.14.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE — Would the project result in:				
a) Generation of noise levels in excess of 65 dB(A) CNEL and would affect sensitive receptors?	☐	☐	☒	☐
b) Generation of excessive noise in outdoor living areas that are subject to noise levels in excess of 65 dB(A).	☐	☐	☒	☐
c) The substantial increase of the ambient noise levels for noise-sensitive receptors adjoining areas?	☐	☐	☒	☐
d) Noise from grading and construction activity proposed within 1,600 feet of sensitive receptors, including schools, residential development, commercial lodging facilities, hospitals, or care facilities?	☐	☐	☒	☐

Discussion of Impacts

a) Generation of noise levels in excess of 65 dB(A) CNEL and would affect sensitive receptors?

Less Than Significant Impact. The proposed Projects consist of the construction of a Title 22 compliant recycled water treatment system at an existing facility, as well as construction of a storage tank,

associated pipelines, the Essential Services Building, 17-space parking area and solar panel structures. The proposed Projects are located adjacent to residential development (approximately 100 feet to the closest residence). Most grading activities, which would be the highest construction-related noise, would be conducted at the proposed storage tank site which is over 650 feet from the nearest sensitive receptors. Some grading would also be conducted within the existing treatment facility. Much of the remaining construction inside the treatment facility would be limited and largely completed with hand tools and limited heavy equipment support. Furthermore, construction of the proposed Projects do not involve substantial vibration sources such as pile driving. Noise generated from construction activities would be temporary and limited through adherence to the County's approved work hours (7:30 a.m. and 4:30 p.m., Monday through Friday).

With respect to operations, noise modelling was conducted for the 18 electric-powered, motor driven pumps associated with the proposed Project treatment process and water storage tank area. The modelling considered the attenuation of noise over distance to the nearest sensitive receptor (i.e., 100 feet from the treatment system to the nearest residence). Estimated noise levels conservatively assumed that all pumps would operate simultaneously for 24 hours per day. It was further assumed that daytime and nighttime ambient noise levels are 62 and 52 respectively. Assuming these ambient noise levels equates to an ambient 62 dBA CNEL, which is in the middle of the estimated 60-64 dBA CNEL range presented in the County's Noise Element. Based on the results of the noise modelling included as Appendix C, the proposed Projects would result in an estimated 62.3 dBA CNEL at the nearest residence during operations. The proposed Projects are estimated to increase ambient noise by 0.3 dBA CNEL and cumulative noise levels (baseline + proposed Projects) would be below the 65 dBA CNEL threshold. Therefore, impacts from both construction and operations would be less than significant.

b) Generation of excessive noise in outdoor living areas that are subject to noise levels in excess of 65 dB(A)?

Less Than Significant Impact. The nearest sensitive receptor to the proposed Projects are a residence located approximately 100 feet away from the recycled water treatment area shown on Figure 2. This distance was measured from the edge of the residence's property line (exterior) to the edge of the treatment area. Once the proposed new public access by Channel Drive is provided, construction activities will be subsided along Monte Cristo Lane. As stated in response "a" above, construction activities may temporarily increase noise levels in excess of 65 dB(A); however, these impacts would be temporary and limited through adherence to the County's approved work hours (7:30 a.m. and 4:30 p.m., Monday through Friday). Therefore, a less than significant impact would occur.

c) The substantial increase of the ambient noise levels for noise-sensitive receptors in adjoining areas?

Less Than Significant Impact. The closest sensitive receptor is a residence located approximately 100 feet from the proposed Project treatment area. While there are other sensitive receptors nearby (e.g., school), this analysis was completed for the nearest sensitive receptor as it has the potential to be the most impacted. As discussed in response "a" above, the increase in ambient noise levels associated with

Project operations would be below threshold and project-related construction activities would be limited to the County's approved work hours. Therefore, a less than significant impact would occur.

d) *Noise from grading and construction activities proposed within 1,600-feet of sensitive receptors including schools, residential development, commercial lodging facilities, hospitals, or care facilities?*

Less Than Significant Impact. The proposed Projects are located within 1,600-feet of two sensitive receptors: residential development and a school. While grading and clearing activities would be required for the installation of a 75,000-gallon tank and solar panel structures, these project components are located even further away from the closest sensitive receptors (residence and school). In addition, construction activities would be conducted consistent with the County of Santa Barbara's Montecito Community Plan regulations regarding hours of construction (7:30am and 4:30pm, Monday through Friday). Operations of the proposed Projects may at times include similar construction-related noise sources; however, these would be at a much smaller scale and limited to general maintenance activities. As such, a less than significant impact would occur.

3.15 POPULATION AND HOUSING

3.15.1 Setting

According to the 2018 United States Census, Santa Barbara County includes approximately 446,527 residents (United States Census Bureau, 2018). Of this population, the community of Montecito housed approximately 8,965 residents in 2010 (United States Census Bureau, 2010). Approximately 43.9% of the population is comprised of individuals over the age of 35, with 21% of the population over the age of 64. According the to the Montecito Community Plan, 57.6% of household are that of married couple families (Montecito Community Plan, 1995)

3.15.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING — Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion of Impacts

a) *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

No Impact. The proposed Projects would allow for non-potable recycled water to be used for irrigation purposes of the nearby cemetery. No new homes or businesses would result from the proposed Projects. Personnel required to complete the proposed Projects are anticipated to be from the region and would therefore not substantially increase the population growth directly through construction. Therefore, the proposed Projects would have no impact on population growth in the Montecito community.

b) *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

No Impact. As the proposed Projects are an addition to an already developed non-residential site, it would not displace any existing people or housing, necessitating the construction of replacement housing elsewhere. Therefore, there would be no impact.

3.16 PUBLIC SERVICES

3.16.1 Setting

Fire Protection

The proposed Projects are located within the Montecito Fire Protection District Local Responsibility Area (LRA). Parcels immediately to the north and west of the proposed Projects are located within the City of Santa Barbara's LRA.

Police Protection

The proposed Projects are located within County Service Area 32 of the County of Santa Barbara. This Service Area includes unincorporated areas of the County, including the unincorporated community of Montecito. The Santa Barbara County Sheriff's Office provides police service to this Service Area, including the proposed Projects. Additionally, Parcels immediately to the north and west of the proposed Projects are located within the City of Santa Barbara's police jurisdiction.

Parks

The nearest parks/open spaces to the proposed Projects are the Andree Clark Bird Refuge, East Beach Park, and Butterfly Beach. Refer to Table 16 below for their approximate distances from the proposed Projects.

Table 16. Parks

Park	Approximate Distance	Nearest Project Component
Andree Clark Bird Refuge	~1,200 feet west	Storage Tank
East Beach Park	~3,200 feet west-southwest	Underground piping and solar panels
Butterfly Beach	~1000 feet south	Solar panels and wastewater treatment system

Schools

The nearest school to the proposed Projects is the Music Academy of the West, located adjacent to the proposed Projects to the east and southeast. Refer to Table 17 for their approximate distances from the proposed Projects.

Table 17. Schools

School	Enrollment	Approximate Distance	Nearest Project Component
Music Academy of the West	140	Approximately 650 feet to the east	Water filtration system

3.16.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES — Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☒	☐
b) Generate enough students to require an additional classroom, this assumes 29 students per classroom of elementary/junior high students, and 28 students per classroom for high school students?	☐	☐	☐	☒

Discussion of Impacts

a) *Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impact, in order to maintain acceptable service ratios for any of the public services:*

i) Fire protection?

Less Than Significant Impact. The proposed Projects involve additional wastewater treatment, Essential Services Building, parking lot area, and solar panel structures at an existing facility as well as some adjacent new storage and distribution pipelines. Construction of the proposed Projects may necessitate traffic control in certain locations, which could temporarily affect routes used by the local fire department to respond to emergencies. However, the Project does not include any activities or materials that would substantially increase the need for fire protection services beyond those that already exist. Therefore, potential impacts associated with fire protection services would be less than significant.

ii) Police protection?

Less Than Significant Impact. No new or substantially altered police facilities would be required to serve the proposed Projects. Construction activities could result in temporary traffic congestion along some local streets, which could temporarily affect routes used by the Sheriff's Department for patrol and to respond to emergencies if an emergency were to occur during construction material movement. However, the Project does not include any activities or materials that would substantially increase the need for police protection services beyond those that already exist. Therefore, potential impacts associated with police protection services would be less than significant.

iii) Schools?

No Impact. The proposed Projects are limited to a recycled water project that does not include a component that is related to or increases demand for school facilities. The proposed Projects would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities such as schools. The local population numbers would not increase due to the proposed Projects, as workers would be hired locally and operations staff would not substantially increase. There would be no need for construction of new school facilities. Therefore, no impacts would occur.

iv) Parks

No Impact. The proposed Projects would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities such as parks. There would be no increase in local population numbers due to the proposed Projects that would increase the demand for public services such as parks. Therefore, no impacts would occur.

v) Other Public Facilities

Less Than Significant Impact. Other public facilities include public libraries, public hospitals and medical centers, and community centers. The proposed Project swould not result in a substantial increase in population during or after construction that would increase the demand for other public facilities and potential impacts would be less than significant.

b) Generate enough students to require an additional classroom, this assumes 29 students per classroom of elementary/junior high students, and 28 students per classroom for high school students?

No Impact. The proposed Projects are limited to a recycled water project and does not involve a land use that would generate students or increase demand for school services. There would be no impact.

3.17 QUALITY OF LIFE

3.17.1 Setting

The community of Montecito is located in the unincorporated portion of Santa Barbara County. Characterized by agriculture, mineral extraction, recreation, low-density residential, and use of public or quasi-public nature, the community of Montecito allows for rural and urban development areas. Urban areas in Montecito allow for the development of commercial activities and small-sized residential homes. Residential homes in Montecito are mostly comprised of elderly and/or married coupled homes. Montecito's relatively older, married households allows for a more stable population. Community plans and facilities have been established to accommodate this and future populations (Montecito Community Plan, 1995).

The Montecito Architectural Guidelines and Development Standards are guidelines developed to ensure that every development would consider the community context and have compatible relationships with neighboring properties and community design goals. To assess the impact of new developments and modifications of current structures have on neighboring properties, and the Montecito community as a whole, the following goals were considered as part of this analysis:

1. To preserve, protect, and enhance the existing semi-rural environment of Montecito.
2. To enhance the quality of the built environment by encouraging high standards in architectural and landscape design.
3. To ensure neighborhood compatibility of all projects.
4. To respect public views of the hillsides and the ocean and to be considerate of private views.
5. To ensure that architecture and landscaping respect the privacy of immediate neighbors.
6. To ensure that grading and development are appropriate to the site and that long-term visible scarring of the landscape is avoided where possible.
7. To maintain the semi-rural character of the roads and lanes.
8. To preserve and protect native and biologically and aesthetically valuable nonnative vegetation or to ensure adequate and appropriate replacement for vegetation loss.

3.17.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. QUALITY OF LIFE — Would the project:				
a) Result in…				
i) Loss of privacy?	☐	☐	☒	☐
ii) Neighborhood incompatibility?	☐	☐	☐	☒
iii) Nuisance noise levels (not exceeding noise thresholds)?	☐	☐	☒	☐
iv) Increase traffic in quiet neighborhoods (not exceeding traffic thresholds)?	☐	☐	☒	☐
v) Loss of sunlight/solar access?	☐	☐	☐	☒

Discussion of Impacts

a) Result in…

i) Loss of Privacy?

Less Than Significant Impact. The proposed Projects include additional wastewater treatment, a new Essential Services Building, and parking lot at the existing facility as well as the addition of a 75,000-gallon recycled water storage tank and distribution pipelines. The storage tank would be situated on an adjacent piece of property owned by the Santa Barbara Cemetery, located to the north of the cemetery. In order to install this tank and the necessary distribution pipelines, temporary construction would occur within the District's facility and along Channel Drive. The temporary construction may cause loss of privacy to those visiting the Santa Barbara Cemetery as well as nearby residences but would cease once construction is completed. In addition, no trees will be removed as a result of the proposed Projects; any existing tree/vegetation screening between the facility site and adjacent properties would be maintained. Therefore, potential impacts would be less than significant.

ii) Neighborhood incompatibility?

No Impact. The proposed Projects are located in an already established facility and Santa Barbara Cemetery. The land use designation for these areas are both Community Facilities with adjacent residential properties. In using recycled water for irrigation purposes of the Santa Barbara Cemetery, the proposed Projects are consistent with the goals set forth in the Montecito Community plan which indicate a "Comprehensively plan for, and maintain, an ultimate community buildout that is based on the conservation of limited resources" (Goal LUG-M-1, Montecito Community Plan, 1995). Due to the location

and land uses of the surrounding area, the proposed Projects would not result in neighborhood incompatibility. Therefore, no impact would occur.

iii) Nuisance noise levels (not exceeding noise thresholds)?

Less Than Significant Impact. As discussed in Section 3.13 (Noise), the proposed Projects are located adjacent to residential development and a school, both of which are considered sensitive receptors; however, project-related noise levels during operations were modelled to be under the 65 dBA CNEL threshold. Noise generated during the construction phase would be temporary and limited through adherence to the County's approved work hours (7:30 a.m. and 4:30 p.m., Monday through Friday). Therefore, there would be a less than significant impact.

iv) Increase traffic in quiet neighborhoods (not exceeding traffic thresholds)?

Less Than Significant Impact. Project construction is limited to the areas of Channel Drive, the existing facility, and Santa Barbara Cemetery. Due to the limited scale and temporary nature of the construction, proposed Project construction would not substantially increase traffic. Additionally, proposed Project operation would not result in an increase in vehicle trips beyond those that already occur in support of existing facility operations. The Proposed Projects would not increase traffic in quiet neighborhoods and would have a less than significant impact.

v) Loss of sunlight/solar access?

No Impact. One aspect of the proposed Projects is the installation of five solar panel structures. These solar panels are intended to supply energy to the existing facility and its treatment processes. As well, the 5,504-square foot, single-story Essential Services Building would be installed to the north of the solar panel structures. These structures would only result in the loss of sunlight or solar access to the adjacent parking lot areas which do not rely on sunlight or solar access. Similarly, the 75,000-gallon storage tank to be installed on property north of the Santa Barbara Cemetery would result in the loss of sunlight/solar access; however, the adjacent properties of US Highway 101 and the Santa Barbara Cemetery do not rely on sunlight/solar access. There would be no impact.

3.18 RECREATION

3.18.1 Setting

As an unincorporated community of Santa Barbara County, Montecito has established itself to be a semi-rural residential area. Montecito does not have a department devoted exclusively to recreation and parks. All recreation and park related activities and areas are under the jurisdiction of Santa Barbara County. However, given its location between the mountains and the Pacific Ocean, Montecito offers land designated for recreation and open space. The closest recreational space in the Community of Montecito is Butterfly Beach, located 440 meters south east of the proposed Project location.

The proposed Projects do not fall within any areas designated by a General Plan as recreational or open space.

3.18.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION — Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion of Impacts

a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

Less Than Significant Impact. The proposed Projects would utilize a small population of 8-10 local construction personnel to complete the required tasks. The proposed Projects are limited to a recycled water project at existing developed areas and does not include a component that would result in population growth or increase demand for recreational facilities. The proposed Projects are not anticipated to increase the use of existing neighborhood, regional parks, and other recreational facilities that substantial deterioration of the facility would be accelerated. Therefore, the Projects would have a less than significant impact.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed Projects are limited to a recycled water project at existing developed areas and does not include recreational facilities or require the construction or expansion of recreational facilities. There would be no impact.

3.19 TRANSPORTATION

3.19.1 Setting

The existing regional and local roadway network in the County is a hierarchical system of highways and local streets developed to provide regional traffic movement and local access. The following provides a description of the functional classification of the facilities within the proposed Project area. Traffic impacts associated with the proposed Project are primarily related to temporary construction activities. This traffic assessment focuses on short-term traffic impacts associated with changes in traffic volumes and the increase in proposed project-related traffic during construction and operation of the facility. Traffic impacts during construction are quantified, as construction would result in approximately 3,004 total trips for trucks and construction employee vehicles. Construction of the proposed Project is expected to be completed in approximately 9-12 months. The onsite workforce would consist of laborers, skilled trades, supervisory, support, and construction management personnel.

The impact analysis qualitatively discusses the potential impacts from project operation on roadway operations, alternative transportation, emergency access, and safety hazards along the primary proposed Projects' access routes. Vehicle trips generated during construction were estimated using the construction information (construction schedule and duration, and number of truck and worker trips) described in Section 2.0, Project Description.

All materials for project construction would be delivered by truck via Channel Drive by way of Cabrillo Boulevard. On most days of the year, vehicle volumes on Cabrillo between Milpas Street and Los Patos Way average around 4,500 per day. During summer peak travel times, average daily traffic counts are observed between 8,000 and 12,000 (City of Santa Barbara Draft Bicycle Master Plan, 2016). The nearest signalized intersections, Cabrillo Boulevard and Niños Drive, and Cabrillo Boulevard and US 101, operate at LOS A and LOS C & B (morning & afternoon), respectively. The intersection of Cabrillo Boulevard and Channel Drive within the City of Santa Barbara is not signalized. Additionally, the 2020 peak for the intersection of Cabrillo Boulevard and US 101 has an AM peak of 1,382 vehicles and a PM peak of 1,740 vehicles (SC 101 HOV Project – City of Santa Barbara Summary, 2016).

The impacts of project-generated traffic were assessed against County thresholds, which defines a significant traffic impact as occurring when the addition of project traffic to an intersection increases the volume to capacity (V/C) ratio by the value provided below or sends at least 5, 10 or 15 trips to at LOS F, E or D, creates an unsafe situation due to a driveway, new traffic signal, or existing traffic signal, adds traffic to a roadway with existing design features that would create an unsafe situation, or utilize a substantial portion of an intersection that would degrade as part of the proposed Projects (County of Santa Barbara Thresholds of Significance, 2008). Refer to Table 18. Currently, signalized intersections in the City of Santa Barbara are considered impacted if they exceed the City's LOS goal of C, which carries a Volume to Capacity Ratio of .80 (City of Santa Barbara Circulation Element, 1997).

Table 18. Volume to Capacity Ratios

Level of Service (including Project)	Increase in V/C Greater Than
A	0.20
B	0.15
C	0.10
	Or The Addition Of:
D	15 Trips
E	10 Trips
F	5 Trips

According to the County of Santa Barbara, a traffic study will generally be required if the thresholds of significance identified above are likely to be exceeded. In almost all cases where trip generation during the peak hour is expected to exceed 50 vehicles, a traffic study will be required (County of Santa Barbara Thresholds of Significance, 2008).

Roadway Classifications

The existing regional and local roadway network in the County is a hierarchical system of highways and local streets developed to provide regional traffic movement and local access. The following provides a description of the functional classification of the facilities within the project area. The Montecito Community Plan divides the street network of Montecito into two roadway classifications.

Primary roadways

Primary roadways serve mainly as principal access routes to major shopping areas, employment and community centers, etc., and often carry a large percentage of through traffic.

Secondary roadways

Secondary roadways are two-lane roads designed to provide principal access to residential areas or to connect streets of higher classifications to permit adequate traffic circulation. Channel Drive meets the definition of a secondary roadway.

Railway

The Union Pacific Railroad (UPPR) borders the existing facility to the north. It is separated from the existing roadway network in the immediately vicinity, such as the Cabrillo Drive/Hot Springs Road by an underpass. Thus, railway traffic is not a factor for project related impacts.

Freeway

US 101 runs parallel just to the north of the UPPR tracks. This section of US 101 is prone to congestion, and Caltrans is proposing to widen US 101 as necessary to provide a part-time, continuous access HOV lane in each direction extending from 0.22 mile south of the Bailard Ave Overcrossing in the City of Carpinteria to Sycamore Creek in the City of Santa Barbara. As with the railway tracks, the freeway, as a controlled access highway, is separated from the local roadway network via overpasses and underpasses.

3.19.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION — Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☒	☐	☐
e) Add traffic to an intersection therefore increasing the volume to capacity ratio?	☐	☒	☐	☐
f) Need access to a major road or arterial road that would require a driveway creating an unsafe situation or a new traffic signal or major revisions to an existing traffic signal?	☐	☐	☐	☒
g) Add traffic to a roadway that has design features (e.g. narrow width, road side ditches, sharp curves, poor sight distance, inadequate pavement structure) or receives use which would be incompatible with substantial increases in traffic that will become potential safety problems?	☐	☐	☒	☐
h) Utilize a substantial portion of an intersection(s) capacity where the intersection is currently operating at acceptable levels of service but with cumulative traffic would degrade to or approach level of service D (15 trips)?	☐	☒	☐	☐

Discussion of Impacts

a) *Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Less Than Significant Impact. The equipment required to construct the proposed Projects are considered a negligible increase for a temporary duration, with approximately 3,004 trips total over a period of 9 to 12 months compared to Cabrillo Boulevard's existing traffic volume of up to 12,000 daily vehicular trips in the peak summer season. During the peak of construction, approximately 58 total trips (42 workers and 16 haul trucks) would be required. This represents a worst case increase of 0.04% to the local system during construction. The County Thresholds of Significance for Traffic Impacts includes the Level of Service analysis for 68 separate intersections within the County. None of these intersections include Cabrillo Boulevard. As no LOS has been determined by the County, the existing LOS is conservatively estimated at C, where the V/C change of greater than 10% (0.10) would be potentially significant. As the V/C change as a result of the proposed Project is estimated to be 0.04% (0.00004), a Less Than Significant Impact would result from construction related vehicle trips.

Due to the proposed new access from Channel Drive and the discontinued access from Monte Cristo Lane, project-related traffic during operations would be the same as the existing facility operations. As Project-related traffic is lower than thresholds of significance, proposed Project construction and operations would not conflict with any applicable plan that measures the effectiveness of the circulation system in the City of Santa Barbara or the County of Santa Barbara. Construction-related vehicles would only temporarily affect the performance of the local circulation system during the construction phase. Because the proposed Projects are not adjacent to a roadway with alternative modes of transport (bike and pedestrian travel) the proposed Projects would not increase hazards or create barriers for pedestrians or bicyclists, nor would it interfere with bus routes or turnouts. Accordingly, the proposed Projects would not conflict with adopted policies supporting alternative transportation, and no impacts would occur. The proposed Projects would not generate demand for public transit, nor does it include transit facilities. Therefore, the proposed Projects would not conflict with policies or standards related to alternative transportation modes, and the impact would be less than significant during the construction phase and operations phase.

b) *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?*

Less Than Significant Impact. Currently, the County of Santa Barbara does not have impact thresholds for vehicle miles travelled (VMT) but plans to adopt new provisions based off CEQA Guidelines section 15064.3, subdivision (b)(1) by July 1, 2020, which states that "projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact." (CEQA Guidelines, 2019). The nearest transit stop is served by Santa Barbara MTD Route 14 at Channel and Cemetery, approximately 0.2 miles to the west. The proposed Projects involve the construction, operation and maintenance of a Title 22 compliant tertiary wastewater treatment system within an existing facility of the Montecito Sanitary District. The proposed Projects would not change roadway capacity or lead to an increase in VMT during Project

operations and would not permanently induce additional travel to the site. Any additional miles traveled by the number construction vehicles associated with the project would cease upon the proposed Project's construction. The Projects would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). As a result, the potential impacts are considered to be less than significant.

c) *Substantially increase hazards to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Less Than Significant Impact. The proposed Projects are comprised of a water treatment facility, a new Essential Services Building, parking lot area, solar panels, a 75,000-gallon storage tank and associated underground piping. The proposed Projects would not substantially increase hazards due to a design feature or incompatible uses, as the majority of proposed Project components would not be located underneath a public right-of-way and would not introduce an incompatible use to the existing circulation network. After the installation of pipelines beneath and beside Channel Drive, the road would be returned to its current state. There would be no change to the roadway's geometric design or current mix of traffic uses during Project operations. Therefore, there would be a less than significant impact.

d) *Result in inadequate emergency access?*

Less Than Significant Impact with Mitigation Incorporated. The proposed Projects are located within an existing facility. The associated pipelines connecting the new 75,000-gallon tank and the cemetery's irrigation system may require construction activities to occur within the public right-of-way within Channel Drive. In order to achieve construction within Channel Drive, portions of the roadway would need to be closed for worker safety and to allow for adequate construction workspace. However, while construction would temporarily close portions of Channel Drive, the District would maintain at least one open lane for emergency access at all times. However, the necessary lane closures would require the implementation of Mitigation Measure TRA-1 (Traffic Management Plan). Implementation of MM TRA-1 would serve to reduce potential impacts on emergency access to a less than significant level by ensuring that adequate access was preserved during construction. Therefore, with implementation of MM TRA-1 impacts on emergency access to be less than significant.

Mitigation Measures

TRA-1: Traffic Management Plan:

The Applicant shall prepare a Traffic Management Plan prior to construction. The traffic management plan shall be submitted to the County for review and approval prior to the issuance of any construction permits. The traffic management plan shall be implemented during construction related activities. The traffic management plan shall include strategies for minimizing impacts to traffic, effectively managing traffic flow and reducing the number of trips accessing the proposed Project site during the peak hours of 7 AM to 9 AM and 4 PM to 6 PM. These strategies shall include, but not be limited to the following:

- Require parking within designated areas on the proposed Project site and prohibit parking along the shoulders of adjacent roadways.

- Provide for emergency vehicle movement through the proposed Project site at all times during construction, operation, and decommissioning.
- Provide approved offsite parking for workers with shuttle services to transport them onsite when and if onsite parking becomes restricted or unfeasible.
- Facilitate materials delivery during off-peak traffic hours and comply with regulations governing oversized loads.
- Encourage vanpool and carpool for construction employees commuting to the proposed Project site.
- Flaggers shall be posted at each end of the lane closure, who shall be responsible for directing traffic.
- Notification to neighborhoods located immediately adjacent to the project area regarding the planned Project construction schedule and a point of contact for project-related inquiries and/or concerns.

e) Add traffic to an intersection therefore increasing the volume to capacity ratio?

Less Than Significant Impact with Mitigation Incorporated. Construction traffic would be limited in duration and would follow the strategies outlined in Mitigation Measure TRA-1. Project operations would require no additional trips. Traffic added to intersections as part of this proposed Projects would be limited to construction activities and would result in a temporary 0.2% increase in traffic. As discussed above, the Incorporation of mitigation measure TRA-1 would reduce any construction impacts to be less than significant.

Mitigation Measures

TRA-1: Traffic Management Plan

f) Need access to a major road or arterial road that would require a driveway creating an unsafe situation or a new traffic signal or major revisions to an existing traffic signal?

No Impact. The proposed Projects would not require new driveways that would create an unsafe situation or a new traffic signal. The proposed Project would include the one public accessible driveway for the new Essential Services Building. The existing maintenance driveway off Channel Drive will remain for employee access only. Construction traffic would be limited in duration and feature traffic control measures. Project operations would require no additional trips. No major revision to an existing traffic signal is included as part of the proposed Projects. Therefore, there would be no impact.

g) Add traffic to a roadway that has design features (e.g. narrow width, road side ditches, sharp curves, poor sight distance, inadequate pavement structure) or receives use which would be incompatible with substantial increases in traffic that will become potential safety problems?

Less Than Significant Impact. Roadways in the proposed Project vicinity are generally straight with good sight distance, so visibility and access are currently acceptable. While the maneuvering of slow-moving construction trucks and equipment along Channel Drive could slow traffic flow, this would occur on a temporary basis (approximately 9-12 months) and the proposed Projects require no new roadway improvements other than the previously approved roadway alignments and driveway approaches. Therefore, the impact would be less than significant.

h) Utilize a substantial portion of an intersection(s) capacity where the intersection is currently operating at acceptable levels of service but with cumulative traffic would degrade to or approach level of service D (15 trips)?

Less Than Significant Impact with Mitigation Incorporated. The proposed Projects would not utilize a substantial portion of any roadway intersection. Construction traffic would be limited in duration, covering a period of 9 – 12 months, and would involve approximately 650 construction related trips over this timeframe with a workforce of 8 – 12 people, far below the existing capacities of the nearest signalized intersections.

As described above, the nearest signalized intersections have a level of service A (Cabrillo Boulevard and Niños Drive) and a level of service C/B (Cabrillo Boulevard and US 101, depending on the time of day). Additionally, the 2020 peak for the intersection of Cabrillo Boulevard and US 101 has an AM peak of 1,382 vehicles and a PM peak of 1,740 vehicles (SC 101 HOV Project – City of Santa Barbara Summary, 2016). Construction of the proposed Projects would not involve an increase of 15 trips per day for these intersections. Additionally, incorporation of mitigation measure TRA-1 would reduce any construction impacts to be less than significant.

Mitigation Measures

TRA-1: Traffic Management Plan

3.20 TRIBAL CULTURAL RESOURCES

3.20.1 Setting

The Legislature added new requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52) that took effect July 1, 2015. AB 52 requires consultation with California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project.

To date, no tribes have requested notification from the District (Lead Agency) for prior CEQA-related projects, and no requests for notification specific to the proposed Projects have been made.

3.20.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES — Would the project: 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 defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) 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 defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Discussion of Impacts

a) 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 defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

Less Than Significant Impact with Mitigation. The area is considered sensitive for buried Native American and tribal cultural resources based on the records search and determination that the area is archaeologically sensitive. The Project footprint, however, is highly disturbed and within an active wastewater treatment facility and it is considered unlikely that human remains, or intact Native American sites would be encountered. Due to the sensitivity of the area, however, tribal cultural resources in the form of prehistoric archaeological sites may be impacted. If prehistoric remains or human remains determined to be of Native American origin are encountered the District would notify the appropriate Native American ancestor and request consultation regarding treatment of such finds. Mitigation measure TCR-1 would reduce the impacts on tribal cultural resources to less than significant.

Mitigation Measures

TCR-1: Native American Consultation

The District shall consult with the appropriate Native American tribal representative if potentially significant prehistoric or ethnographic Native American archaeological materials are inadvertently discovered during project construction. Working with the tribal representative the District will develop a mitigation and disposition plan.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact with Mitigation. See response above. Therefore, a less than significant impact with mitigation would occur.

3.21 UTILITIES AND SERVICE SYSTEMS

3.21.1 Setting

Wastewater

The proposed Projects, located within the Montecito Sanitary District, consists of the construction and operation of a Title 22 compliant tertiary recycled water irrigation system. Tertiary recycled water goes through a higher level of processing and is suitable for applications with public exposure, such as irrigation of recreational facilities. While the Project may generate small amounts of wastewater (through construction activities such as dust suppression or portable toilet usage), operation of the Project would result in a net decrease in wastewater and would reduce overall potable water demand within the Montecito Sanitary District and Montecito Water District.

Energy

Energy for the proposed Projects would be supplied by the installation of five solar panel structures within the existing facility, detailed above in Section 2.3.5. If this power supply is interrupted, SCE would provide back-up power via an existing on-site connection which services the larger existing wastewater treatment facility. If power loss occurs from both primary sources, i.e., solar and SCE, existing diesel-powered generators (for the larger existing wastewater treatment plant) could be used as an emergency back-up power source. The proposed Projects are anticipated to use 215,350 Kilowatt hours per year.

Solid Waste

Solid waste within the County of Santa Barbara is managed by the County of Santa Barbara Department of Public Works, Resource Recovery & Waste Management Division. The proposed Project site is serviced by the Tajiguas Landfill, which disposes of trash from the communities of Goleta, Santa Barbara, Buellton, and Solvang. The department also operates four transfer stations (South Coast, Santa Ynez, New Cuyama, and Ventucopa), and two recycling stations (South Coast, Santa Ynez). Additionally, the department monitors eight closed landfills within the County (Ballard Canyon/Chalk Hill, Foothill, Santa Maria Airport, Santa Ynez Airport, Lompoc, New Cuyama, Ventucopa, and Cathedral Oaks). (SBRRWMD, 2020)

The Tajiguas Landfill is the only active landfill within the County, and is located at 14470 Calle Real, approximately 32 miles west of the Project site. The landfill has a maximum permitted throughout of 1,500 tons per day, and a remaining capacity of 4,336,335 cubic yards (out of an original 23,300,000 permitted cubic yards). The landfill is projected to cease operation in 2036 (CalRecycle, 2020).

Water

Potable water service to the Project site is provided by the Montecito Water District. The water district has a service area of approximately 15.4 square miles, containing the communities of Montecito and

Summerland. The water district services approximately 14,000 persons via approximately 4,600 service connections, and produces approximately 4,000 acre-feet of water per year. (MWD, 2020)

Stormwater Drainage Systems

The proposed Projects do not include the installation of any stormwater drainage systems and would not directly connect to any existing drainage or flood control infrastructure.

Natural Gas Facilities

The Project would not utilize any natural gas, and as a result, no new or expanded natural gas facilities or infrastructure are needed to serve the Projects.

Telecommunications Facilities

The Project would not utilize any telecommunications facilities, and as a result, no new or expanded telecommunications facilities or infrastructure are needed to serve the Project.

Other than the facilities proposed for the Project (and described above), no additional new facilities would be needed to construct, operate, or maintain the Project. No existing utilities would need to be relocated to allow for the construction or operation of the proposed Projects.

3.21.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☒	☐	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Create more than 350 tons of construction and demolition debris?	☐	☐	☒	☐
f) Generate 5% or more of the expected annual increase in waste generation thereby using a significant portion of the remaining landfill?	☐	☐	☒	☐

Discussion of Impacts

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact with Mitigation Incorporated. Discussed above, the proposed Projects would not require or result in the relocation or construction of new or expanded water, stormwater drainage, natural gas, or telecommunications facilities. The Project is the construction of new wastewater treatment processes and electric power facilities, via the new treatment plant, conveyance piping, holding tanks, and solar panels.

Construction of the solar panel structures and distribution pipelines would occur in the previously disturbed areas of the facility and Channel Drive. The 75,000-gallon storage tank construction would occur on disturbed land requiring grading. The construction areas generally contain ornamental planters, ornamental tree groves, or unvegetated areas. Construction activities would avoid ornamental tree areas and would only require minimal vegetation clearing. As described throughout this document, construction would result in potentially significant impacts to the following issue areas. However, as discussed in each issue area, the Project would implement the associated mitigation measures to prevent significant environmental effects, as described below in Table 19.

Table 199. Mitigation Measures

Issue Area	Mitigation Measures
Biological Resources	• MM BIO-1: Wildlife Pre-Construction Clearance Surveys and Biological Monitoring. • MM BIO-2: Environmental Awareness Training • MM BIO-3: Implement Best Management Practices • MM BIO-4: Nesting Bird Surveys and Avoidance Measures
Cultural Resources	• MM CUL-1: Cultural Resources Monitoring • MM CUL-2: Discovery of Prehistoric or Historic Archaeological Materials • MM CUL-3: Discovery of Paleontological Resources
Transportation	• MM TRA-1: Traffic Management Plan
Tribal Cultural Resources	• MM TCR-1: Native American Consultation

Implementation of these mitigation measures would serve to reduce potentially significant impacts to a less than significant level. No additional mitigation measures would be required to prevent significant environmental effects.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact. Construction of the proposed Projects would require a minor amount of water for standard construction activities such as dust suppression and cleaning. Operation of the proposed Projects would not utilize any potable water supplies. Operation would result in a net increase in available potable water supplies by providing recycled water for irrigation thereby minimizing the use of potable water for the Santa Barbara Cemetery. By using recycled treated water, a higher volume of potable water would be available for distribution throughout the community and no additional water would be consumed as a result of the proposed Projects. This net increase in potable water supplies would ensure that the Project and reasonably foreseeable future development would have sufficient water supplies during normal, dry, and multiple dry years. There would be no impact.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The Project Applicant is the wastewater treatment provider which serves the Project. The Project itself would provide additional treatment capacity for the local wastewater treatment provider. Due to the nature of the Project as a wastewater treatment facility, no additional demand or generation of wastewater would occur during construction or operation. Therefore, no impact would occur.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. The Project would be constructed in compliance with all applicable federal, State, and local management and reduction statues and regulations related to solid waste, including the California Green Building Standards Code. This code, which was adopted by the County of Santa Barbara in 2011, requires all non-residential projects to divert at least 65 percent of all construction wastes from entering landfills.

Construction of the proposed Projects would generate solid waste primarily from construction of the new pipelines, the storage tanks, and the five solar panel structures. The primary waste generated from these activities would be waste concrete and rubble generated from the excavations. Other solid wastes generated would include:

- Construction wastes including timber, steel and metal scraps, pipe and electrical cuttings, nonhazardous equipment parts, Styrofoam, and other materials used to transport and package construction materials
- Packaging materials including wood, paper, and plastic
- Domestic wastes such as cans, cups, paper bags, plastic wrappers, and cigarettes.

- Universal wastes such as batteries, paints, or bulbs.
- Scrap metals, rubber, plastic, glass, or masonry products

As discussed above, the Project would be served by the Tajiguas Landfill, with a remaining capacity of 4,336,335 cubic yards (out of an original 23,300,000 permitted cubic yards). The landfill is projected to cease operation in 2036. Construction of the Project would be temporary, of short duration, and require a small workforce. None of these factors would lead to the generation of large quantities of solid waste which would necessitate disposal in the landfill.

Operation of the Project would not result in the generation of substantial amounts of solid waste. The primary waste product of the Project is concentrated brine resulting from the treatment process. The brine will be discharged out the existing Montecito Sanitary District outfall under the existing NPDES permit and would not be disposed of in a landfill. The treatment process would require the periodic application of small amounts of chemicals, which would result in empty chemical containers, or larger chemical totes. It is anticipated that these containers would be returned to the manufacturer for refilling or recycled where possible.

While the project would generate minor amounts of waste, the proposed Projects would not generate large quantities of solid waste which could otherwise exceed State or local standards, in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, a less than significant impact would occur.

e) Create more than 350 tons of construction and demolition debris?

Less Than Significant Impact. As discussed above, construction of the proposed Projects would generate construction and demolition debris primarily from construction of the new pipelines, the storage tanks, and the five solar panel structures. The primary waste generated from these activities would be waste concrete and rubble generated from the excavations. CalRecycle does not consider naturally occurring clean soil and rock construction debris as solid waste (CalRecycle 2018). Other construction and demolition debris generated would include:

- Construction wastes such as timber, steel and metal scraps, pipe and electrical cuttings, nonhazardous equipment parts, Styrofoam, and other materials used to transport and package construction materials;
- Packaging materials including wood, paper, and plastic;
- Domestic wastes such as cans, cups, paper bags, plastic wrappers, and cigarettes;
- Universal wastes such as batteries, paints, or bulbs; and,
- Scrap metals, rubber, plastic, glass, or masonry products.

The following calculations are an approximation of the waste generated during construction and demolition:

- During construction and installation of the pipelines, approximately 3,545 ft^3 of asphalt would be disturbed during this process. The density of asphalt is approximately 45 lbs/ft^3. Approximately 79 tons of debris would be produced during this phase of the construction

- During the demolition, construction, and installation of the solar panels over the existing carport structures, approximately 6,588 ft^2 of aluminum sheet roofing would be disturbed. The weight of aluminum is 7.45 lb/ft^2. As the aluminum roofing is sheet material, volume is not calculated. Approximately 0.69 tons would be generated during this construction phase.

- During demolition of the existing front office, board room, and breakroom, approximately 3,170 square feet would be demolished. According to Chapter 19 of the County's Environmental Thresholds and Guidelines Manual (revised 2018), a general guideline of 100 lbs. per square foot should be used as a calculation for determining demolition waste volumes. Based on this criteria, approximately 158.5 tons of demolition waste would be generated during this phase of the proposed Projects.

- During construction of the new Essential Services Building and other facilities, approximately 6,585 square feet would be created, through a combination of the new 1,500-square foot treatment system and the new 5,085 square foot Essential Services Building. According to the County's Environmental Thresholds and Guidelines Manual, as described above, a general guidelines of 25 lbs. per square foot should be used as a calculation for determining construction waste volumes. Based on this criteria, approximately 82.31 tons of construction waste would be generated during this phase of the proposed Projects.

The combination of construction debris produced during the pipeline and solar panel installation; demolition of the existing front office, boardroom, and breakroom; and operations of the new Essential Services Building would produce approximately 320.5 tons of debris. Various other materials such as cut vegetation from grading, packaging materials, and various construction waste would also contribute to the total generated waste, assumed to generate no more than an additional five tons of waste during construction. Therefore, the proposed Projects are considered to have the potential to generate approximately 325.5 tons of construction and demolition debris, prior to any landfill diversions.

The County of Santa Barbara has a number of policies in place to promote the recycling and reuse of construction waste. In 2011, the County adopted the California Green Building Standards which require all construction waste generated from any construction project to be recycled at a minimum of 65 percent. Construction and operation of the Project would need to be compliant with all applicable federal, State, and local management and reduction statutes and regulations related to solid waste.

The current California Green Building Standards Code requires non-residential projects to divert at least 65 percent of all construction wastes from entering landfills. A 65 percent reduction in waste would reduce the waste from construction of the proposed Projects to approximately 112 tons, below the 350-ton threshold of significance. Additionally, the Applicant (and their contractors) are financially incentivized to take all opportunities to recycle wastes associated with the proposed Projects and expected waste reduction percentages are likely to be much greater than the 65 percent regulatory requirement.

While the Project would generate waste, it would not generate more than 350 tons of construction and demolition debris during construction; therefore, a less than significant impact would occur.

f) Generate 5% or more of the expected annual increase in waste generation thereby using a significant portion of the remaining landfill?

Less Than Significant Impact. As described in the Santa Barbara County Environmental Thresholds and Guidelines Manual, the numerical value associated with a five percent increase is 196 tons per year. These thresholds also describe the conversion rates multiplied by a project's total square footage to estimate the annual generation rate of the waste stream for a specific project.

- Once the Essential Services Building has been constructed, it would occupy approximately 5,085 square feet. As further detailed in Section 2.2.3, Essential Services Building, this space will provide additional office and resources to the District's staff. The County's Environmental Thresholds and Guidelines Manual estimates the annual generation rate of waste for an office at the square footage multiplied by 0.0013. Based on this calculation, it is estimated this new structure will produce approximately 7.16 tons of waste per year.
- Once the new treatment facility has been constructed, it would occupy approximately 1,500 square feet. The County's Environmental Thresholds and Guidelines Manual estimates the annual generation rate of waste for Utility projects is based on the square footage multiplied by a factor of 0.0026. Therefore, it is estimated that the new treatment facility would generate approximately 3.9 tons of waste per year.

Based on the calculations above, the proposed Projects would generate approximately 11.06 tons of waste per year. Therefore, the proposed Projects would not generate 5% or more of the expected annual increase in waste generation, where the numerical value associated with a 5% increase is 196 tons per year, thereby using a significant portion of the remaining landfill capacity. As such, a less than significant impact would occur.

3.22 WILDFIRE

3.22.1 Setting

The proposed Projects are located on the already developed facility site. The site is mapped by the California Department of Forestry and Fire Protection (CALFIRE) as a Local Responsible Area (LRA). Although Montecito is classified as a community, it operates and maintains its own fire department, Montecito Fire Department. The proposed Project site is in the unincorporated sub-rural area and is not classified as a Very High Fire Hazard Severity Zone (VHFHSZ). According to CalFIRE, the proposed Project site is classified as a Non-VHFHSZ. The Project site is not within a State Responsibility Area (SRA) or VHFHSZ. The nearest SRA and VHFHSZ is located approximate 1-mile North of the proposed location and is separated by the UPRR and U.S. Highway 101.

As a part of the Santa Barbara Coastal Land Use Plan, the community of Montecito is located at the base of the Santa Ynez mountains. Various areas of Montecito are mapped through FEMA as Floodway and Special Flood Hazard areas (FEMA 2018). Specifically, Montecito Creek and Oak Creek serve as drainage pathways for the Santa Ynez Mountains runoff and debris flow following storm events. As seen during the 2018 Montecito debris and mudslide flows, mud, boulders (of various sizes), and other forms of debris flowed into the community. The existing project facility was not affected during this debris flow event, however, its infrastructure throughout the community became congested with excess debris.

3.22.2 Impact Analysis

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE — If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) 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?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) 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?	☐	☐	☒	☐

Discussion of Impacts

a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

Less Than Significant Impact. Construction of the proposed Projects are contained within the already developed facility site which has established emergency response and evacuation plans in the Montecito Sanitary District: Fire Prevention Program. The proposed Project components and activities do include new operations that would interfere with existing baseline emergency response risks, such as personnel to be accounted for and additional components during the treatment process. However, new adaptations to current MSD Emergency Response Contingency Plan and Fire Prevention Program are necessary to account for the corresponding personnel involved with the proposed Projects. Although altered, emergency access will be maintained for the duration of the Project. The temporary construction activities involved in the distribution pipeline would be isolated to Channel Drive in which the appropriate personnel would cooperate with Montecito Fire Department and other emergency services in assessing emergency evacuation and response routes in case of an emergency or wildfire. Once construction is complete, all evacuation and response plans would revert to their original procedures. Due to the temporary construction, the proposed Projects would not substantially impair an adopted emergency response plan or emergency evacuation plan. Therefore, impacts would be less than significant.

b) *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?*

Less Than Significant Impact. Construction of the proposed Projects would involve various earthmoving equipment. The introduction of this equipment may result in overheating, or possibly ignition, however the location of the proposed Projects are not within a VHFHSZ. If discovered by equipment operator or Project personnel, small ignitions can be quickly suppressed. The proposed Projects are located within the existing developed facility, adjacent roads, and the Santa Barbara Cemetery. This facility is predominantly a cleared, gravel area with impervious surfaces and several buildings. Once construction is complete, all equipment and activities would be removed from the facility and adjacent properties, however constructed infrastructure would remain. Due to its location in the unincorporated non-VHFHSZ of Montecito, the proposed Project would not exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, impacts would be less than significant.

c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

Less Than Significant Impact. The proposed Projects are contained within the existing District facility, subsurface below Channel Drive, subsurface below Santa Barbara Cemetery, and above ground on property adjacent to Santa Barbara Cemetery. According to code 4908.3 Clearance of Brush, Vegetative Growth and Combustible Material from Parcels, “All parcels declared a fire hazard shall be cleared of combustible material to the satisfaction of the fire code official” (California Building Standards

Commission, 2016). Due to its location in a Non-VHFHSZ, no additional vegetation clearing is required by the County, nor the Montecito Fire Protection District. Modifications to existing infrastructure would be required to accommodate the proposed treatment system in the case of emergency situations, including but not limited to emergency release, fires, or chemical spills. However, due to the small scale and subsurface pipelines, the proposed Projects would not require the installation or maintenance of associated infrastructure (such as roads, fuels breaks, emergency water sources, power lines, other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Therefore, a less than significant impact is anticipated.

d) 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?

Less Than Significant Impact. As a part of the Santa Barbara Coastal Plan, the community of Montecito is located south of the Santa Ynez Mountains. According to FEMA Flood Map Service Center, portions of Montecito are mapped as various flood zones. As a result of the 2017 Thomas Fire followed by heavy rainfall in 2018, Montecito experienced severe mudslides and debris flow from the Santa Ynez Mountains. The Montecito Sanitary District facility was not affected by these debris flows, however, their infrastructure throughout Montecito became saturated with excess debris and mud. The proposed Projects are located in the established facility which is mapped as an Area of Minimal Flood Hazard zone according to FEMA. Due to its location and what the Projects entail, the proposed Projects would not expose people or structures to significant risks, including downslope or downstream flood or landslides, as a result of runoff, post-fire slope instability or drainage changes. Therefore, impacts would be less than significant.

3.23 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation Incorporated. Subject to Mitigation Measures BIO-1 through BIO-4, the proposed Projects would not have a substantial impact on special status species, stream habitat, and wildlife dispersal and migration. The proposed Projects do not include a component with the potential to otherwise degrade the quality of the environment or eliminate important examples of the major periods of California history or prehistory. Consequently, the proposed Projects' Mandatory Finding of Significance relative to degrading the quality of the environment would be less than significant with mitigation incorporated.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant with Mitigation Incorporated. The proposed Projects are limited to the construction, operation and maintenance of a Title 22 compliant tertiary wastewater treatment system to

help irrigate the Santa Barbara cemetery property. The proposed Project treatment system would use recycled water and replaces the use of potable water for irrigation. The majority of the proposed Project's treatment system would be contained wholly within the existing Montecito Sanitary District facility, which is adjacent to the cemetery. The Projects are consistent with the existing land use, would not result in population growth, nor would it result in a substantial demand for new utility and service systems or long-term increase in air emissions, noise, or traffic.

Construction of the Projects would primarily result in potential impacts to biological resources, noise, quality of life, and transportation. Subject to Mitigation Measures BIO-1 through BIO-4 and TRA-1, potential impacts of the Project would be substantially avoided or offset and would therefore not have impacts that are cumulatively considerable. The City of Santa Barbara lists a pending project, Pedestrian and Bicycle Improvements and Union Pacific Railroad Bridge Project, near the proposed Projects' vicinity. As funding is not yet identified for this pending project, and a construction timeframe has yet to be established, the proposed Projects are not anticipated to affect this pending project. Furthermore, the proposed Projects would not conflict with the goals, policies, and objectives found within the Montecito Community Plan, Santa Barbara Comprehensive Plan, or the General Plan of any municipality within the County of Santa Barbara. Proposed Project effects would be entirely contained within the existing facility, underneath Channel Drive at a length not to exceed 900 linear feet, and on a parcel north of the Santa Barbara cemetery where a 75,000-gallon tank would be installed. Consequently, the Project's Mandatory Finding of Significance relative to incremental effects of a project would be less than significant with mitigation incorporated.

The cumulative impacts analysis provided here is consistent with Section 15130(a) of the CEQA Guidelines in which the analysis of cumulative effects of a project is based on two determinations: Is the combined impact of this project and other projects significant? Is the project's incremental effect cumulatively considerable, causing the combined impact of the projects evaluated to become significant? The cumulative impact must be analyzed only if the combined impact is significant and the project's incremental effect is found to be cumulatively considerable (CEQA Guidelines 15130(a)(2) and (3)).

c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Less than Significant Impact. Adherence to the County of Santa Barbara's Montecito Community Plan Municipal Code, which would require construction activities to occur during specific timeframes and weekdays, the proposed Projects would not result in an environmental effect which would cause substantial adverse effects on human beings. The Project would have less than significant impacts relative to adverse effects on humans, either directly or indirectly with mitigation incorporated.

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4.0 PROPOSED FINDING

ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:
I find that the proposed Development Plan Projects COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

I find that although the proposed Development Plan Projects could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared. Attached Mitigation Measures and Monitoring Program. ☒

I find that the proposed Development Plan Projects MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ☐

I find that the proposed Development Plan Projects MAY have a significant effect on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed Development Plan Projects could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, nothing further is required. ☐

Signature _____ Date _____

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5.0 LIST OF PREPARERS

The following individuals prepared or participated in this IS.

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APPENDIX A

CalEEMod Results

MSD-Title 22 Recycled Water Project & Essential Services Building

Santa Barbara County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.08	1000sqft	0.12	5,085.00	0
General Light Industry	37.33	1000sqft	0.86	37,327.67	0
Other Non-Asphalt Surfaces	2.66	1000sqft	0.06	2,658.00	0
Parking Lot	6.41	1000sqft	0.15	6,412.00	0
City Park	0.33	Acre	0.33	14,370.44	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	513	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 Emission Factor based on SCE's 2018 Sustainability Report

Land Use - Project Specific Information

Energy Use -

Construction Phase - ESB-Essential Services Building, City Park=Landscaping Area

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	21,206.00	2,721.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	63,619.00	8,163.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	261.00
tblConstructionPhase	NumDays	200.00	236.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	4.00	261.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	2.00	5.00
tblGrading	AcresOfGrading	0.00	0.86
tblGrading	AcresOfGrading	2.50	0.50
tblGrading	MaterialExported	0.00	1,136.33
tblGrading	MaterialImported	0.00	233.00
tblLandUse	LandUseSquareFeet	5,080.00	5,085.00
tblLandUse	LandUseSquareFeet	37,330.00	37,327.67
tblLandUse	LandUseSquareFeet	2,660.00	2,658.00
tblLandUse	LandUseSquareFeet	6,410.00	6,412.00
tblLandUse	LandUseSquareFeet	14,374.80	14,370.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	7.00
tblOffRoadEquipment	UsageHours	8.00	1.00

tblOffRoadEquipment	UsageHours	6.00	1.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	513
tblTripsAndVMT	HaulingTripNumber	171.00	182.00
tblTripsAndVMT	HaulingTripNumber	0.00	42.00
tblTripsAndVMT	HaulingTripNumber	18.00	34.00
tblTripsAndVMT	VendorTripNumber	11.00	6.00
tblTripsAndVMT	VendorTripNumber	11.00	5.00
tblTripsAndVMT	WorkerTripNumber	27.00	16.00
tblTripsAndVMT	WorkerTripNumber	27.00	12.00
tblTripsAndVMT	WorkerTripNumber	5.00	2.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblVehicleTrips	WD_TR	11.03	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2123	2.0894	1.8237	3.0800e-003	0.0833	0.1167	0.2000	0.0386	0.1086	0.1471	0.0000	273.2462	273.2462	0.0673	0.0000	274.9293
2021	0.1988	1.2965	1.2368	2.1200e-003	0.0603	0.0687	0.1290	0.0272	0.0640	0.0912	0.0000	188.0231	188.0231	0.0452	0.0000	189.1528
Maximum	**0.2123**	**2.0894**	**1.8237**	**3.0800e-003**	**0.0833**	**0.1167**	**0.2000**	**0.0386**	**0.1086**	**0.1471**	**0.0000**	**273.2462**	**273.2462**	**0.0673**	**0.0000**	**274.9293**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.2123	2.0894	1.8237	3.0800e-003	0.0833	0.1167	0.2000	0.0386	0.1086	0.1471	0.0000	273.2459	273.2459	0.0673	0.0000	274.9290
2021	0.1988	1.2965	1.2368	2.1200e-003	0.0603	0.0687	0.1290	0.0272	0.0640	0.0912	0.0000	188.0229	188.0229	0.0452	0.0000	189.1526
Maximum	**0.2123**	**2.0894**	**1.8237**	**3.0800e-003**	**0.0833**	**0.1167**	**0.2000**	**0.0386**	**0.1086**	**0.1471**	**0.0000**	**273.2459**	**273.2459**	**0.0673**	**0.0000**	**274.9290**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2020	8-31-2020	0.9801	0.9801
2	9-1-2020	11-30-2020	0.9723	0.9723
3	12-1-2020	2-28-2021	0.9040	0.9040
4	3-1-2021	5-31-2021	0.9334	0.9334
		Highest	0.9801	0.9801

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2159	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.3000e-004	9.3000e-004	0.0000	0.0000	9.9000e-004
Energy	4.4600e-003	0.0405	0.0340	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003	0.0000	134.5834	134.5834	5.9600e-003	1.8700e-003	135.2887
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	10.5991	0.0000	10.5991	0.5256	0.0000	23.7386
Water						0.0000	0.0000		0.0000	0.0000	3.3737	12.7770	16.1507	0.0123	7.4900e-003	18.6899
Total	**0.2203**	**0.0405**	**0.0345**	**2.4000e-004**	**0.0000**	**3.0800e-003**	**3.0800e-003**	**0.0000**	**3.0800e-003**	**3.0800e-003**	**13.9728**	**147.3613**	**161.3341**	**0.5439**	**9.3600e-003**	**177.7181**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2159	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.3000e-004	9.3000e-004	0.0000	0.0000	9.9000e-004
Energy	4.4600e-003	0.0405	0.0340	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003	0.0000	134.5834	134.5834	5.9600e-003	1.8700e-003	135.2887
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	10.5991	0.0000	10.5991	0.5256	0.0000	23.7386
Water						0.0000	0.0000		0.0000	0.0000	3.3737	12.7770	16.1507	0.0123	7.4900e-003	18.6899
Total	**0.2203**	**0.0405**	**0.0345**	**2.4000e-004**	**0.0000**	**3.0800e-003**	**3.0800e-003**	**0.0000**	**3.0800e-003**	**3.0800e-003**	**13.9728**	**147.3613**	**161.3341**	**0.5439**	**9.3600e-003**	**177.7181**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	ESB-Site Preparation	Site Preparation	6/1/2020	6/5/2020	5	5	
2	Water System-Grading	Grading	6/1/2020	5/31/2021	5	261	
3	Water System-Building Construction	Building Construction	6/1/2020	5/31/2021	5	261	
4	ESB-Building Construction	Building Construction	6/6/2020	5/3/2021	5	236	
5	ESB-Paving	Paving	5/4/2021	5/10/2021	5	5	
6	ESB-Architectural Coating	Architectural Coating	5/11/2021	5/17/2021	5	5	
7	ESB-Demolition of Existing Building	Demolition	5/18/2021	5/31/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.21

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 8,163; Non-Residential Outdoor: 2,721; Striped Parking Area: 544

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Water System-Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Water System-Grading	Rubber Tired Dozers	1	1.00	247	0.40
Water System-Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Water System-Building Construction	Cranes	1	4.00	231	0.29
Water System-Building Construction	Forklifts	2	6.00	89	0.20
Water System-Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
ESB-Site Preparation	Graders	1	8.00	187	0.41
ESB-Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
ESB-Building Construction	Cranes	1	4.00	231	0.29
ESB-Building Construction	Forklifts	2	6.00	89	0.20
ESB-Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
ESB-Paving	Cement and Mortar Mixers	4	6.00	9	0.56
ESB-Paving	Pavers	1	7.00	130	0.42
ESB-Paving	Rollers	1	7.00	80	0.38
ESB-Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
ESB-Architectural Coating	Air Compressors	1	6.00	78	0.48
ESB-Demolition of Existing Building	Concrete/Industrial Saws	1	8.00	81	0.73
ESB-Demolition of Existing Building	Rubber Tired Dozers	1	1.00	247	0.40
ESB-Demolition of Existing Building	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Water System-Grading	4	10.00	0.00	182.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Water System-Building Construction	5	16.00	6.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
ESB-Site Preparation	2	5.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
ESB-Building Construction	5	12.00	5.00	42.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
ESB-Paving	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
ESB-Architectural Coating	1	2.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
ESB-Demolition of Existing Building	4	10.00	0.00	34.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 ESB-Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0211	0.0102	2.0000e-005		8.4000e-004	8.4000e-004		7.7000e-004	7.7000e-004	0.0000	2.1398	2.1398	6.9000e-004	0.0000	2.1571
Total	**1.7100e-003**	**0.0211**	**0.0102**	**2.0000e-005**	**2.7000e-004**	**8.4000e-004**	**1.1100e-003**	**3.0000e-005**	**7.7000e-004**	**8.0000e-004**	**0.0000**	**2.1398**	**2.1398**	**6.9000e-004**	**0.0000**	**2.1571**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.0000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0631	0.0631	0.0000	0.0000	0.0631
Total	**4.0000e-005**	**3.0000e-005**	**3.0000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0631**	**0.0631**	**0.0000**	**0.0000**	**0.0631**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0211	0.0102	2.0000e-005		8.4000e-004	8.4000e-004		7.7000e-004	7.7000e-004	0.0000	2.1398	2.1398	6.9000e-004	0.0000	2.1571
Total	**1.7100e-003**	**0.0211**	**0.0102**	**2.0000e-005**	**2.7000e-004**	**8.4000e-004**	**1.1100e-003**	**3.0000e-005**	**7.7000e-004**	**8.0000e-004**	**0.0000**	**2.1398**	**2.1398**	**6.9000e-004**	**0.0000**	**2.1571**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.0000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0631	0.0631	0.0000	0.0000	0.0631
Total	**4.0000e-005**	**3.0000e-005**	**3.0000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0631**	**0.0631**	**0.0000**	**0.0000**	**0.0631**

3.3 Water System-Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0585	0.0000	0.0585	0.0319	0.0000	0.0319	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0668	0.6062	0.5869	9.2000e-004		0.0360	0.0360		0.0343	0.0343	0.0000	80.1381	80.1381	0.0152	0.0000	80.5169
Total	**0.0668**	**0.6062**	**0.5869**	**9.2000e-004**	**0.0585**	**0.0360**	**0.0945**	**0.0319**	**0.0343**	**0.0663**	**0.0000**	**80.1381**	**80.1381**	**0.0152**	**0.0000**	**80.5169**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4000e-004	0.0164	4.7800e-003	4.0000e-005	1.4000e-003	7.0000e-005	1.4600e-003	3.7000e-004	6.0000e-005	4.3000e-004	0.0000	4.2025	4.2025	3.9000e-004	0.0000	4.2122
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4700e-003	2.0900e-003	0.0183	4.0000e-005	4.7600e-003	3.0000e-005	4.7900e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	3.8842	3.8842	1.3000e-004	0.0000	3.8875
Total	**2.9100e-003**	**0.0185**	**0.0231**	**8.0000e-005**	**6.1600e-003**	**1.0000e-004**	**6.2500e-003**	**1.6300e-003**	**9.0000e-005**	**1.7200e-003**	**0.0000**	**8.0867**	**8.0867**	**5.2000e-004**	**0.0000**	**8.0997**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0585	0.0000	0.0585	0.0319	0.0000	0.0319	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0668	0.6062	0.5869	9.2000e-004		0.0360	0.0360		0.0343	0.0343	0.0000	80.1380	80.1380	0.0152	0.0000	80.5168
Total	**0.0668**	**0.6062**	**0.5869**	**9.2000e-004**	**0.0585**	**0.0360**	**0.0945**	**0.0319**	**0.0343**	**0.0663**	**0.0000**	**80.1380**	**80.1380**	**0.0152**	**0.0000**	**80.5168**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4000e-004	0.0164	4.7800e-003	4.0000e-005	1.4000e-003	7.0000e-005	1.4600e-003	3.7000e-004	6.0000e-005	4.3000e-004	0.0000	4.2025	4.2025	3.9000e-004	0.0000	4.2122
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4700e-003	2.0900e-003	0.0183	4.0000e-005	4.7600e-003	3.0000e-005	4.7900e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	3.8842	3.8842	1.3000e-004	0.0000	3.8875
Total	**2.9100e-003**	**0.0185**	**0.0231**	**8.0000e-005**	**6.1600e-003**	**1.0000e-004**	**6.2500e-003**	**1.6300e-003**	**9.0000e-005**	**1.7200e-003**	**0.0000**	**8.0867**	**8.0867**	**5.2000e-004**	**0.0000**	**8.0997**

3.3 Water System-Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0408	0.0000	0.0408	0.0222	0.0000	0.0222	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0426	0.3880	0.4050	6.4000e-004		0.0218	0.0218		0.0208	0.0208	0.0000	55.6900	55.6900	0.0104	0.0000	55.9495
Total	**0.0426**	**0.3880**	**0.4050**	**6.4000e-004**	**0.0408**	**0.0218**	**0.0626**	**0.0222**	**0.0208**	**0.0430**	**0.0000**	**55.6900**	**55.6900**	**0.0104**	**0.0000**	**55.9495**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	0.0105	3.1800e-003	3.0000e-005	1.3300e-003	4.0000e-005	1.3700e-003	3.4000e-004	4.0000e-005	3.8000e-004	0.0000	2.8834	2.8834	2.8000e-004	0.0000	2.8903
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	1.2900e-003	0.0115	3.0000e-005	3.3000e-003	2.0000e-005	3.3300e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.6071	2.6071	8.0000e-005	0.0000	2.6091
Total	**1.8800e-003**	**0.0118**	**0.0147**	**6.0000e-005**	**4.6300e-003**	**6.0000e-005**	**4.7000e-003**	**1.2200e-003**	**6.0000e-005**	**1.2800e-003**	**0.0000**	**5.4905**	**5.4905**	**3.6000e-004**	**0.0000**	**5.4995**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0408	0.0000	0.0408	0.0222	0.0000	0.0222	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0426	0.3880	0.4050	6.4000e-004		0.0218	0.0218		0.0208	0.0208	0.0000	55.6899	55.6899	0.0104	0.0000	55.9494
Total	**0.0426**	**0.3880**	**0.4050**	**6.4000e-004**	**0.0408**	**0.0218**	**0.0626**	**0.0222**	**0.0208**	**0.0430**	**0.0000**	**55.6899**	**55.6899**	**0.0104**	**0.0000**	**55.9494**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	0.0105	3.1800e-003	3.0000e-005	1.3300e-003	4.0000e-005	1.3700e-003	3.4000e-004	4.0000e-005	3.8000e-004	0.0000	2.8834	2.8834	2.8000e-004	0.0000	2.8903
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	1.2900e-003	0.0115	3.0000e-005	3.3000e-003	2.0000e-005	3.3300e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.6071	2.6071	8.0000e-005	0.0000	2.6091
Total	**1.8800e-003**	**0.0118**	**0.0147**	**6.0000e-005**	**4.6300e-003**	**6.0000e-005**	**4.7000e-003**	**1.2200e-003**	**6.0000e-005**	**1.2800e-003**	**0.0000**	**5.4905**	**5.4905**	**3.6000e-004**	**0.0000**	**5.4995**

3.4 Water System-Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0664	0.6816	0.5688	8.8000e-004		0.0402	0.0402		0.0370	0.0370	0.0000	77.0466	77.0466	0.0249	0.0000	77.6695
Total	**0.0664**	**0.6816**	**0.5688**	**8.8000e-004**		**0.0402**	**0.0402**		**0.0370**	**0.0370**	**0.0000**	**77.0466**	**77.0466**	**0.0249**	**0.0000**	**77.6695**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8500e-003	0.0513	0.0179	1.1000e-004	2.6900e-003	2.8000e-004	2.9600e-003	7.8000e-004	2.6000e-004	1.0400e-003	0.0000	10.7762	10.7762	8.1000e-004	0.0000	10.7966
Worker	3.9600e-003	3.3400e-003	0.0292	7.0000e-005	7.6100e-003	5.0000e-005	7.6600e-003	2.0200e-003	5.0000e-005	2.0700e-003	0.0000	6.2147	6.2147	2.1000e-004	0.0000	6.2200
Total	**5.8100e-003**	**0.0546**	**0.0471**	**1.8000e-004**	**0.0103**	**3.3000e-004**	**0.0106**	**2.8000e-003**	**3.1000e-004**	**3.1100e-003**	**0.0000**	**16.9909**	**16.9909**	**1.0200e-003**	**0.0000**	**17.0166**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0664	0.6816	0.5688	8.8000e-004		0.0402	0.0402		0.0370	0.0370	0.0000	77.0465	77.0465	0.0249	0.0000	77.6694
Total	**0.0664**	**0.6816**	**0.5688**	**8.8000e-004**		**0.0402**	**0.0402**		**0.0370**	**0.0370**	**0.0000**	**77.0465**	**77.0465**	**0.0249**	**0.0000**	**77.6694**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8500e-003	0.0513	0.0179	1.1000e-004	2.6900e-003	2.8000e-004	2.9600e-003	7.8000e-004	2.6000e-004	1.0400e-003	0.0000	10.7762	10.7762	8.1000e-004	0.0000	10.7966
Worker	3.9600e-003	3.3400e-003	0.0292	7.0000e-005	7.6100e-003	5.0000e-005	7.6600e-003	2.0200e-003	5.0000e-005	2.0700e-003	0.0000	6.2147	6.2147	2.1000e-004	0.0000	6.2200
Total	**5.8100e-003**	**0.0546**	**0.0471**	**1.8000e-004**	**0.0103**	**3.3000e-004**	**0.0106**	**2.8000e-003**	**3.1000e-004**	**3.1100e-003**	**0.0000**	**16.9909**	**16.9909**	**1.0200e-003**	**0.0000**	**17.0166**

3.4 Water System-Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0415	0.4272	0.3886	6.1000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	53.5439	53.5439	0.0173	0.0000	53.9768
Total	**0.0415**	**0.4272**	**0.3886**	**6.1000e-004**		**0.0239**	**0.0239**		**0.0220**	**0.0220**	**0.0000**	**53.5439**	**53.5439**	**0.0173**	**0.0000**	**53.9768**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0700e-003	0.0327	0.0111	8.0000e-005	1.8700e-003	1.0000e-004	1.9600e-003	5.4000e-004	9.0000e-005	6.3000e-004	0.0000	7.4258	7.4258	5.7000e-004	0.0000	7.4399
Worker	2.5500e-003	2.0700e-003	0.0184	5.0000e-005	5.2900e-003	3.0000e-005	5.3200e-003	1.4000e-003	3.0000e-005	1.4400e-003	0.0000	4.1714	4.1714	1.3000e-004	0.0000	4.1746
Total	**3.6200e-003**	**0.0347**	**0.0295**	**1.3000e-004**	**7.1600e-003**	**1.3000e-004**	**7.2800e-003**	**1.9400e-003**	**1.2000e-004**	**2.0700e-003**	**0.0000**	**11.5971**	**11.5971**	**7.0000e-004**	**0.0000**	**11.6145**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0415	0.4272	0.3886	6.1000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	53.5438	53.5438	0.0173	0.0000	53.9768
Total	**0.0415**	**0.4272**	**0.3886**	**6.1000e-004**		**0.0239**	**0.0239**		**0.0220**	**0.0220**	**0.0000**	**53.5438**	**53.5438**	**0.0173**	**0.0000**	**53.9768**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0700e-003	0.0327	0.0111	8.0000e-005	1.8700e-003	1.0000e-004	1.9600e-003	5.4000e-004	9.0000e-005	6.3000e-004	0.0000	7.4258	7.4258	5.7000e-004	0.0000	7.4399
Worker	2.5500e-003	2.0700e-003	0.0184	5.0000e-005	5.2900e-003	3.0000e-005	5.3200e-003	1.4000e-003	3.0000e-005	1.4400e-003	0.0000	4.1714	4.1714	1.3000e-004	0.0000	4.1746
Total	**3.6200e-003**	**0.0347**	**0.0295**	**1.3000e-004**	**7.1600e-003**	**1.3000e-004**	**7.2800e-003**	**1.9400e-003**	**1.2000e-004**	**2.0700e-003**	**0.0000**	**11.5971**	**11.5971**	**7.0000e-004**	**0.0000**	**11.6145**

3.5 ESB-Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0642	0.6595	0.5504	8.5000e-004		0.0389	0.0389		0.0358	0.0358	0.0000	74.5451	74.5451	0.0241	0.0000	75.1478
Total	**0.0642**	**0.6595**	**0.5504**	**8.5000e-004**		**0.0389**	**0.0389**		**0.0358**	**0.0358**	**0.0000**	**74.5451**	**74.5451**	**0.0241**	**0.0000**	**75.1478**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.1000e-004	4.0600e-003	1.1800e-003	1.0000e-005	3.3000e-004	2.0000e-005	3.4000e-004	9.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0377	1.0377	1.0000e-004	0.0000	1.0401
Vendor	1.5000e-003	0.0413	0.0144	9.0000e-005	2.1700e-003	2.2000e-004	2.3900e-003	6.2000e-004	2.1000e-004	8.4000e-004	0.0000	8.6886	8.6886	6.6000e-004	0.0000	8.7050
Worker	2.8700e-003	2.4200e-003	0.0212	5.0000e-005	5.5200e-003	4.0000e-005	5.5600e-003	1.4700e-003	3.0000e-005	1.5000e-003	0.0000	4.5097	4.5097	1.5000e-004	0.0000	4.5135
Total	**4.4800e-003**	**0.0478**	**0.0368**	**1.5000e-004**	**8.0200e-003**	**2.8000e-004**	**8.2900e-003**	**2.1800e-003**	**2.6000e-004**	**2.4400e-003**	**0.0000**	**14.2360**	**14.2360**	**9.1000e-004**	**0.0000**	**14.2587**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0642	0.6595	0.5504	8.5000e-004		0.0389	0.0389		0.0358	0.0358	0.0000	74.5450	74.5450	0.0241	0.0000	75.1477
Total	**0.0642**	**0.6595**	**0.5504**	**8.5000e-004**		**0.0389**	**0.0389**		**0.0358**	**0.0358**	**0.0000**	**74.5450**	**74.5450**	**0.0241**	**0.0000**	**75.1477**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.1000e-004	4.0600e-003	1.1800e-003	1.0000e-005	3.3000e-004	2.0000e-005	3.4000e-004	9.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0377	1.0377	1.0000e-004	0.0000	1.0401
Vendor	1.5000e-003	0.0413	0.0144	9.0000e-005	2.1700e-003	2.2000e-004	2.3900e-003	6.2000e-004	2.1000e-004	8.4000e-004	0.0000	8.6886	8.6886	6.6000e-004	0.0000	8.7050
Worker	2.8700e-003	2.4200e-003	0.0212	5.0000e-005	5.5200e-003	4.0000e-005	5.5600e-003	1.4700e-003	3.0000e-005	1.5000e-003	0.0000	4.5097	4.5097	1.5000e-004	0.0000	4.5135
Total	**4.4800e-003**	**0.0478**	**0.0368**	**1.5000e-004**	**8.0200e-003**	**2.8000e-004**	**8.2900e-003**	**2.1800e-003**	**2.6000e-004**	**2.4400e-003**	**0.0000**	**14.2360**	**14.2360**	**9.1000e-004**	**0.0000**	**14.2587**

3.5 ESB-Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0337	0.3474	0.3160	5.0000e-004		0.0195	0.0195		0.0179	0.0179	0.0000	43.5357	43.5357	0.0141	0.0000	43.8877
Total	**0.0337**	**0.3474**	**0.3160**	**5.0000e-004**		**0.0195**	**0.0195**		**0.0179**	**0.0179**	**0.0000**	**43.5357**	**43.5357**	**0.0141**	**0.0000**	**43.8877**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	2.1800e-003	6.6000e-004	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.5983	0.5983	6.0000e-005	0.0000	0.5998
Vendor	7.2000e-004	0.0221	7.5100e-003	5.0000e-005	1.2600e-003	7.0000e-005	1.3300e-003	3.6000e-004	6.0000e-005	4.3000e-004	0.0000	5.0315	5.0315	3.8000e-004	0.0000	5.0411
Worker	1.5500e-003	1.2600e-003	0.0112	3.0000e-005	3.2200e-003	2.0000e-005	3.2400e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.5438	2.5438	8.0000e-005	0.0000	2.5457
Total	**2.3300e-003**	**0.0256**	**0.0194**	**9.0000e-005**	**4.7800e-003**	**1.0000e-004**	**4.8800e-003**	**1.3000e-003**	**9.0000e-005**	**1.4000e-003**	**0.0000**	**8.1736**	**8.1736**	**5.2000e-004**	**0.0000**	**8.1866**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0337	0.3474	0.3160	5.0000e-004		0.0195	0.0195		0.0179	0.0179	0.0000	43.5356	43.5356	0.0141	0.0000	43.8877
Total	**0.0337**	**0.3474**	**0.3160**	**5.0000e-004**		**0.0195**	**0.0195**		**0.0179**	**0.0179**	**0.0000**	**43.5356**	**43.5356**	**0.0141**	**0.0000**	**43.8877**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	2.1800e-003	6.6000e-004	1.0000e-005	3.0000e-004	1.0000e-005	3.1000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.5983	0.5983	6.0000e-005	0.0000	0.5998
Vendor	7.2000e-004	0.0221	7.5100e-003	5.0000e-005	1.2600e-003	7.0000e-005	1.3300e-003	3.6000e-004	6.0000e-005	4.3000e-004	0.0000	5.0315	5.0315	3.8000e-004	0.0000	5.0411
Worker	1.5500e-003	1.2600e-003	0.0112	3.0000e-005	3.2200e-003	2.0000e-005	3.2400e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.5438	2.5438	8.0000e-005	0.0000	2.5457
Total	**2.3300e-003**	**0.0256**	**0.0194**	**9.0000e-005**	**4.7800e-003**	**1.0000e-004**	**4.8800e-003**	**1.3000e-003**	**9.0000e-005**	**1.4000e-003**	**0.0000**	**8.1736**	**8.1736**	**5.2000e-004**	**0.0000**	**8.1866**

3.6 ESB-Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8000e-003	0.0168	0.0177	3.0000e-005		8.8000e-004	8.8000e-004		8.2000e-004	8.2000e-004	0.0000	2.3481	2.3481	6.8000e-004	0.0000	2.3652
Paving	2.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0000e-003**	**0.0168**	**0.0177**	**3.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.3481**	**2.3481**	**6.8000e-004**	**0.0000**	**2.3652**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.1000e-004	9.7000e-004	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2193	0.2193	1.0000e-005	0.0000	0.2195
Total	**1.3000e-004**	**1.1000e-004**	**9.7000e-004**	**0.0000**	**2.8000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2193**	**0.2193**	**1.0000e-005**	**0.0000**	**0.2195**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8000e-003	0.0168	0.0177	3.0000e-005		8.8000e-004	8.8000e-004		8.2000e-004	8.2000e-004	0.0000	2.3481	2.3481	6.8000e-004	0.0000	2.3652
Paving	2.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.0000e-003**	**0.0168**	**0.0177**	**3.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.3481**	**2.3481**	**6.8000e-004**	**0.0000**	**2.3652**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.1000e-004	9.7000e-004	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2193	0.2193	1.0000e-005	0.0000	0.2195
Total	**1.3000e-004**	**1.1000e-004**	**9.7000e-004**	**0.0000**	**2.8000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2193**	**0.2193**	**1.0000e-005**	**0.0000**	**0.2195**

3.7 ESB-Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0662					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.0668**	**3.8200e-003**	**4.5400e-003**	**1.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.1000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0244	0.0244	0.0000	0.0000	0.0244
Total	**1.0000e-005**	**1.0000e-005**	**1.1000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0244**	**0.0244**	**0.0000**	**0.0000**	**0.0244**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0662					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.0668**	**3.8200e-003**	**4.5400e-003**	**1.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.1000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0244	0.0244	0.0000	0.0000	0.0244
Total	**1.0000e-005**	**1.0000e-005**	**1.1000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0244**	**0.0244**	**0.0000**	**0.0000**	**0.0244**

3.8 ESB-Demolition of Existing Building - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0200e-003	0.0000	2.0200e-003	3.1000e-004	0.0000	3.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9800e-003	0.0363	0.0379	6.0000e-005		2.0400e-003	2.0400e-003		1.9400e-003	1.9400e-003	0.0000	5.2047	5.2047	9.7000e-004	0.0000	5.2289
Total	**3.9800e-003**	**0.0363**	**0.0379**	**6.0000e-005**	**2.0200e-003**	**2.0400e-003**	**4.0600e-003**	**3.1000e-004**	**1.9400e-003**	**2.2500e-003**	**0.0000**	**5.2047**	**5.2047**	**9.7000e-004**	**0.0000**	**5.2289**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	4.7800e-003	1.4500e-003	1.0000e-005	2.9000e-004	2.0000e-005	3.1000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.3139	1.3139	1.3000e-004	0.0000	1.3171
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.0700e-003	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2437	0.2437	1.0000e-005	0.0000	0.2438
Total	**2.8000e-004**	**4.9000e-003**	**2.5200e-003**	**1.0000e-005**	**6.0000e-004**	**2.0000e-005**	**6.2000e-004**	**1.6000e-004**	**2.0000e-005**	**1.8000e-004**	**0.0000**	**1.5576**	**1.5576**	**1.4000e-004**	**0.0000**	**1.5609**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0200e-003	0.0000	2.0200e-003	3.1000e-004	0.0000	3.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9800e-003	0.0363	0.0379	6.0000e-005		2.0400e-003	2.0400e-003		1.9400e-003	1.9400e-003	0.0000	5.2047	5.2047	9.7000e-004	0.0000	5.2289
Total	**3.9800e-003**	**0.0363**	**0.0379**	**6.0000e-005**	**2.0200e-003**	**2.0400e-003**	**4.0600e-003**	**3.1000e-004**	**1.9400e-003**	**2.2500e-003**	**0.0000**	**5.2047**	**5.2047**	**9.7000e-004**	**0.0000**	**5.2289**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	4.7800e-003	1.4500e-003	1.0000e-005	2.9000e-004	2.0000e-005	3.1000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.3139	1.3139	1.3000e-004	0.0000	1.3171
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.0700e-003	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2437	0.2437	1.0000e-005	0.0000	0.2438
Total	**2.8000e-004**	**4.9000e-003**	**2.5200e-003**	**1.0000e-005**	**6.0000e-004**	**2.0000e-005**	**6.2000e-004**	**1.6000e-004**	**2.0000e-005**	**1.8000e-004**	**0.0000**	**1.5576**	**1.5576**	**1.4000e-004**	**0.0000**	**1.5609**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Light Industry	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	6.60	5.50	6.40	33.00	48.00	19.00	66	28	6
General Light Industry	6.60	5.50	6.40	59.00	28.00	13.00	92	5	3
General Office Building	6.60	5.50	6.40	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.558685	0.029655	0.204806	0.126479	0.022344	0.005812	0.017312	0.018953	0.002773	0.002377	0.007053	0.002677	0.001077
General Light Industry	0.558685	0.029655	0.204806	0.126479	0.022344	0.005812	0.017312	0.018953	0.002773	0.002377	0.007053	0.002677	0.001077
General Office Building	0.558685	0.029655	0.204806	0.126479	0.022344	0.005812	0.017312	0.018953	0.002773	0.002377	0.007053	0.002677	0.001077
Other Non-Asphalt Surfaces	0.558685	0.029655	0.204806	0.126479	0.022344	0.005812	0.017312	0.018953	0.002773	0.002377	0.007053	0.002677	0.001077
Parking Lot	0.558685	0.029655	0.204806	0.126479	0.022344	0.005812	0.017312	0.018953	0.002773	0.002377	0.007053	0.002677	0.001077

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	90.4715	90.4715	5.1100e-003	1.0600e-003	90.9147
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	90.4715	90.4715	5.1100e-003	1.0600e-003	90.9147
NaturalGas Mitigated	4.4600e-003	0.0405	0.0340	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003	0.0000	44.1119	44.1119	8.5000e-004	8.1000e-004	44.3740
NaturalGas Unmitigated	4.4600e-003	0.0405	0.0340	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003	0.0000	44.1119	44.1119	8.5000e-004	8.1000e-004	44.3740

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Light Industry	780148	4.2100e-003	0.0382	0.0321	2.3000e-004		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	41.6317	41.6317	8.0000e-004	7.6000e-004	41.8791
General Office Building	46476.9	2.5000e-004	2.2800e-003	1.9100e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4802	2.4802	5.0000e-005	5.0000e-005	2.4949
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.4600e-003**	**0.0405**	**0.0340**	**2.4000e-004**		**3.0800e-003**	**3.0800e-003**		**3.0800e-003**	**3.0800e-003**	**0.0000**	**44.1119**	**44.1119**	**8.5000e-004**	**8.1000e-004**	**44.3740**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Light Industry	780148	4.2100e-003	0.0382	0.0321	2.3000e-004		2.9100e-003	2.9100e-003		2.9100e-003	2.9100e-003	0.0000	41.6317	41.6317	8.0000e-004	7.6000e-004	41.8791
General Office Building	46476.9	2.5000e-004	2.2800e-003	1.9100e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4802	2.4802	5.0000e-005	5.0000e-005	2.4949
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.4600e-003**	**0.0405**	**0.0340**	**2.4000e-004**		**3.0800e-003**	**3.0800e-003**		**3.0800e-003**	**3.0800e-003**	**0.0000**	**44.1119**	**44.1119**	**8.5000e-004**	**8.1000e-004**	**44.3740**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	315419	73.3957	4.1500e-003	8.6000e-004	73.7553
General Office Building	71139.1	16.5536	9.4000e-004	1.9000e-004	16.6347
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	2244.2	0.5222	3.0000e-005	1.0000e-005	0.5248
Total		**90.4715**	**5.1200e-003**	**1.0600e-003**	**90.9147**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Light Industry	315419	73.3957	4.1500e-003	8.6000e-004	73.7553
General Office Building	71139.1	16.5536	9.4000e-004	1.9000e-004	16.6347
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	2244.2	0.5222	3.0000e-005	1.0000e-005	0.5248
Total		**90.4715**	**5.1200e-003**	**1.0600e-003**	**90.9147**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2159	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.3000e-004	9.3000e-004	0.0000	0.0000	9.9000e-004
Unmitigated	0.2159	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.3000e-004	9.3000e-004	0.0000	0.0000	9.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0495					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1664					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.3000e-004	9.3000e-004	0.0000	0.0000	9.9000e-004
Total	**0.2159**	**0.0000**	**4.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**9.3000e-004**	**9.3000e-004**	**0.0000**	**0.0000**	**9.9000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0495					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1664					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.3000e-004	9.3000e-004	0.0000	0.0000	9.9000e-004
Total	**0.2159**	**0.0000**	**4.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**9.3000e-004**	**9.3000e-004**	**0.0000**	**0.0000**	**9.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.1507	0.0123	7.4900e-003	18.6899
Unmitigated	16.1507	0.0123	7.4900e-003	18.6899

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.393189	0.3202	2.0000e-005	0.0000	0.3218
General Light Industry	8.63256 / 0	13.9235	0.0111	6.7700e-003	16.2188
General Office Building	0.902887 / 0.553383	1.9070	1.1900e-003	7.1000e-004	2.1492
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**16.1507**	**0.0123**	**7.4800e-003**	**18.6899**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.393189	0.3202	2.0000e-005	0.0000	0.3218
General Light Industry	8.63256 / 0	13.9235	0.0111	6.7700e-003	16.2188
General Office Building	0.902887 / 0.553383	1.9070	1.1900e-003	7.1000e-004	2.1492
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**16.1507**	**0.0123**	**7.4800e-003**	**18.6899**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.5991	0.5256	0.0000	23.7386
Unmitigated	10.5991	0.5256	0.0000	23.7386

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.03	6.2300e-003	3.1000e-004	0.0000	0.0140
General Light Industry	46.29	9.6127	0.4767	0.0000	21.5294
General Office Building	4.72	0.9802	0.0486	0.0000	2.1953
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**10.5991**	**0.5256**	**0.0000**	**23.7386**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.03	6.2300e-003	3.1000e-004	0.0000	0.0140
General Light Industry	46.29	9.6127	0.4767	0.0000	21.5294
General Office Building	4.72	0.9802	0.0486	0.0000	2.1953
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**10.5991**	**0.5256**	**0.0000**	**23.7386**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX B

Biological Resources

TABLE 1: PLANT SPECIES OBSERVED

Scientific Name	Common Name
Olea sp.	olive
Cupressus sp	cypress
Acacia dealbata	silver wattle
Acacia koa	acacia koa
Agapanthus africanus	lily of the Nile
Amaranthus albus	tumbleweed
Arecacaeae sp.	palm
Campsis radicans	trumpet vine
Delairea odorata	cape ivy
Erigeron bonariensis	flax-leaved horseweed
Eucalyptus spp.	eucalyptus
Foeniculum vulgare	fennel
Geranium sp.	geranium
Hedera helix	English ivy
Heteromeles arbutifolia	toyon
Hordeum sp.	barley
Ligustrum lucidum	glossy privet
Magnolia grandiflora	southern magnolia
Malva parviflora	cheeseweed
Myoporum sp.	myoporum
Nerium oleander	oleander
Nicotiana glauca	tree tobacco
Opuntia sp.	prickly pear
Pittosporum sp.	pittosporum
Plantago sp.	plantain
Polypogon monspeliensis	annual beard grass
Pyrus calleryana	Callery pear
Quercus agrifolia	coast live oak
Ricinus communis	castor bean
Rosa sp.	rose
Salsola tragus	Russian thistle
Salvia longistyla	Mexican sage
Stipa miliacea	smilo grass
Strelitzia reginae	bird of paradise
Trifolium fucatum	sour clover
Vinca major	vinca

TABLE 2: WILDLIFE SPECIES OBSERVED

Scientific Name	Common Name
Haemorhous mexicanus	house finch
Melospiza melodia	song sparrow
Streptopelia decaocto	Eurasian collared dove
Sturnella neglecta	western meadowlark
Thryomanes bewickii	Bewick's wren
Zenaida macroura	mourning dove
Zonotrichia albicollis	White-throated sparrow

Potential for Occurrence: Special Status Plants

Species	Status	Habitat and Distribution	Blooming Period	Potential to Occur
Astragalus didymocarpus var. *milesianus* Mile's milk-vetch	1B.2	Coastal scrub (clay); 20-90 m.	Mar-Jun	**Not Likely to Occur** Suitable habitat does not occur within the BSA. The nearest recorded occurrence is approximately 6.7 miles to the northeast of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.
Atriplex coulteri Coulter's saltbush	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grasslands. Often found on alkaline or clay substrates; 3-460 m.	Mar-Oct	**Not Likely to Occur** Suitable habitat does not occur within the BSA. The nearest recorded occurrence is approximately 4.0 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.
Atriplex serenana var. *davidsonii* Davidson's saltscale	1B.2	Coastal bluff scrub and coastal scrub; alkaline; 10-200 m.	Apr-Oct	**Not Likely to Occur** Suitable habitat does not occur within the BSA. The nearest recorded occurrence is approximately 5.1 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.
Calochortus fimbriatus late-flowered mariposa-lily	1B.3	Chaparral, cismontane woodland, and riparian woodland; often serpentinite; 275-1905 m.	Jun-Aug	**Not Likely to Occur** Suitable habitat does not occur within the BSA and the BSA is well outside this species' known elevation range. The nearest recorded occurrence is approximately 1.9 miles to the north of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago. The most recent recorded occurrence is approximately 9.0 miles to the northwest of the BSA and was recorded in 2015.

Species	Status	Habitat and Distribution	Blooming Period	Potential to Occur
Calochortus palmeri var. *palmeri* Palmer's mariposa-lily	1B.2	Chaparral, lower montane coniferous forest, and meadows and seeps; mesic; 710-2390 m.	Apr-Jul	**Not Likely to Occur** Suitable habitat does not occur within the BSA and the BSA is well outside this species' known elevation range. The nearest recorded occurrence is approximately 5.9 miles to the northeast of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.
Calystegia sepium ssp. *binghamiae* Santa Barbara morning-glory	1A	Marshes and swamps (coastal).	Aug	**Not Likely to Occur** Suitable habitat does not occur within the BSA. The nearest recorded occurrence is approximately 2.2 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.
Centromadia parryi ssp. *australis* southern tarplant	1B.2	Marshes and swamps (margins), valley and foothill grasslands (vernally mesic), and vernal pools; 0-480 m.	May-Nov	**Not Likely to Occur** Suitable habitat does not occur within the BSA. The nearest recorded occurrence is approximately 7.4 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.
Chloropyron maritimum ssp. *maritimum* salt marsh bird's-beak	1B.2, FE, SE	Coastal dunes, marshes and swamps (coastal salt); 0-30 m.	May-Oct (Nov)	**Not Likely to Occur** Suitable habitat does not occur within the BSA. The nearest recorded occurrence is approximately 7.2 miles to the east-southeast of the BSA.

Species	Status	Habitat and Distribution	Blooming Period	Potential to Occur
Delphinium umbraculorum umbrella larkspur	1B.3	Chaparral and cismontane woodland; 400-1600 m.	Apr-Jun	**Not Likely to Occur** Suitable habitat does not occur within the BSA. The nearest recorded occurrence is approximately 5.6 miles to the northwest of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago. The most recent recorded occurrence is approximately 7.3 miles to the north-northwest of the BSA and was recorded in 2011.
Fritillaria ojaiensis Ojai fritillary	1B.2	Broadleafed upland forest (mesic), chaparral, cismontane woodland, and lower montane coniferous forest; rocky substrate; 225-998 m.	Feb-May	**Not Likely to Occur** Suitable habitat does not occur within the BSA and the BSA is well outside this species' known elevation range. The nearest recorded occurrence is approximately 5.2 miles to the northeast of the BSA.
Horkelia cuneata var. *puberula* mesa horkelia	1B.1	Chaparral (maritime), cismontane woodland, coastal scrub; sandy or gravelly substrate; 70-810 m.	Feb-Jul (Sep)	**Not Likely to Occur** Suitable habitat does not occur within the BSA and the BSA is well outside this species' known elevation range. The nearest recorded occurrence is approximately 2.7 miles to the north of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago. The most recent recorded occurrence is approximately 8.7 miles to the northwest of the BSA and was recorded in 2011.

Species	Status	Habitat and Distribution	Blooming Period	Potential to Occur
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	1B.1	Marshes and swamps (coastal salt), playas, and vernal pools; 1-1220 m.	Feb-Jun	**Not Likely to Occur** Suitable habitat does not occur within the BSA. The nearest recorded occurrence is approximately 7.0 miles to the east-southeast of the BSA.
Layia heterotricha pale-yellow layia	1B.1	Cismontane woodland, coastal scrub, pinyon and juniper woodland, and valley and foothill grassland; alkaline or clay substrate; 300-1705 m.	Mar-Jun	**Not Likely to Occur** Suitable habitat does not occur within the BSA and the BSA is well outside this species' known elevation range. The nearest recorded occurrence is approximately 8.7 miles to the northwest of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.
Lonicera subspicata var. *subspicata* Santa Barbara honeysuckle	1B.2	Chaparral, cismontane woodland, and coastal scrub; 10-1000 m.	May-Aug (Dec-Feb)	**Not Likely to Occur** Suitable habitat does not occur within the BSA. The nearest recorded occurrence is approximately 1.9 miles to the north of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago. The most recent recorded occurrence is approximately 7.7 miles to the northwest of the BSA and was recorded in 2016.
Monardella hypoleuca ssp. *hypoleuca* white-veined monardella	1B.3	Chaparral and cismontane woodland; 50-1525 m.	(Apr) May-Aug (Sep-Dec)	**Not Likely to Occur** Suitable habitat does not occur within the BSA and the BSA is outside this species' known elevation range. The nearest recorded occurrence is approximately 2.6 miles to the north of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.

Species	Status	Habitat and Distribution	Blooming Period	Potential to Occur
Nasturtium gambelii Gambel's water cress	1B.1, FE, ST	Marshes and swamps (freshwater or brackish); 5-330 m.	Apr-Oct	**Not Likely to Occur** Suitable habitat does not occur within the BSA. The nearest recorded occurrence is approximately 1.6 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.
Quercus dumosa Nuttall's scrub oak	1B.1	Closed-cone coniferous forest, chaparral, and coastal scrub; sandy and clay loam substrates; 15-400 m.	Feb-Apr (May-Aug)	**Not Likely to Occur** Suitable habitat does not occur within the BSA. The nearest recorded occurrence is approximately 1.6 miles to the north of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago. The most recent recorded occurrence is approximately 3.4 miles to the northwest of the BSA and was recorded in 2015.
Scrophularia atrata black-flowered figwort	1B.2	Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, and riparian scrub; 10-500 m.	Mar-Jul	**Not Likely to Occur** Suitable habitat does not occur within the BSA. The nearest recorded occurrence is approximately 2.8 miles to the northwest of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.

Species	Status	Habitat and Distribution	Blooming Period	Potential to Occur
Thelypteris puberula var. *sonorensis* Sonoran maiden fern	2B.2	Meadows, seeps, and streams; 50-610 m.	Jan-Sep	**Not Likely to Occur** Suitable habitat does not occur within the BSA and the BSA is outside this species' known elevation range. The nearest recorded occurrence is approximately 3.8 miles to the northeast of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago. The most recent recorded occurrence is approximately 4.5 miles to the northeast of the BSA and was recorded in 2011.
Thermopsis macrophylla Santa Ynez false lupine	1B.3	Chaparral; sandy, granitic, and disturbed areas; 425-1400 m.	Apr-Jun	**Not Likely to Occur** Suitable habitat does not occur within the BSA and the BSA is well outside this species' known elevation range. The nearest recorded occurrence is approximately 6.1 miles to the northwest of the BSA; however, it should be noted that this occurrence was recorded well over 10 years ago.

Status Codes

US Fish and Wildlife Service (Fed.) Designations:

FE: Federally listed, endangered

California Department of Fish and Wildlife (Calif.) Designations:

SE: State listed, endangered

ST: State listed, threatened

California Rare Plant Rank (CRPR) Designation:

1A: Plants presumed extinct in California

1B: Plants rare, threatened, or endangered in California, and elsewhere

2B: Plants presumed extinct in California, but more common elsewhere

.1: Seriously threatened in California (high degree/immediacy of threat)

.2: Fairly threatened in California (moderate degree/immediacy of threat)

.3: Not very threatened in California (low degree/immediacy of threat or no current threats known)

Potential for Occurrence: Special Status Wildlife

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	**Common Name**				
FISH					
Eucyclogobius newberryi	tidewater goby	FE, SSC	Occupy cool (16-25 °C) brackish water in lagoons created by coastal streams. Favorable habitat includes shallow open water with emergent vegetation. Aquatic vegetation is important for protection and feeding, while open water is important to breeding.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 0.3 miles to the northwest of the BSA.	**Not Likely to Occur**
Oncorhynchus mykiss irideus pop. 10	steelhead - Southern California Distinct Population Segment (DPS)	FE	Inhabits seasonally accessible rivers and streams. Requires sufficient flows in their natal streams to be able to return from oceans and lakes to spawn. Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerance to warmer water and more variable conditions.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 2.3 miles to the west- southwest of the BSA.	**Not Likely to Occur**
AMPHIBIANS					
Anaxyrus californicus	arroyo toad	FE, SSC	Found in coastal and desert drainages in central and southern California, and Baja California, Mexico. Found in low gradient, medium-to-large streams and rivers with intermittent and perennial flow. Require slow-moving streams that are composed of sandy soils with sandy streamside terraces.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.3 miles to the northeast of the BSA.	**Not Likely to Occur**
Rana boylii	foothill yellow-legged frog	SC, SSC	Inhabits partially shaded, perennial streams and rivers with rocky substrate at low to moderate elevations. Often found in or near riffles and on open, sunny stream banks.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.5 miles to the northeast of the BSA.	**Not Likely to Occur**

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	**Common Name**				
Rana draytonii	California red-legged frog	FT, SSC	Inhabits sheltered backwaters of ponds, marshes, springs, streams, and reservoirs. Optimal habitat includes deep pools with dense stands of overhanging willows and an intermixed fringe of cattails.	No suitable habitat occurs within the BSA. The nearest and most recent recorded occurrence is approximately 1.7 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago. The most recent recorded occurrence is approximately 6.4 miles to the east of the BSA; this occurrence was recorded in 2008.	**Not Likely to Occur**
Taricha torosa	Coast Range newt	SSC	Burrow in or use soil, fallen logs, or debris for cover. Occupy upland habitats when not breeding. During reproduction, migration occurs to intermittent streams, rivers, lakes, and ponds to lay eggs in shallow water attached to submerged rocks or twigs.	Limited, isolated, marginally suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 1.7 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago. The most recent recorded occurrence is approximately 3.6 miles to the northwest of the BSA; this occurrence was recorded in 2015.	**Low**
REPTILES					
Anniella pulchra	northern California legless lizard	SSC	Inhabit a range of habitats including coastal dune, valley-foothill, chaparral and coastal scrub. Prefer loose soil and are not found in areas with high clay soils.	Marginally suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 1.7 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago. The most recent recorded occurrence is approximately 5.8 miles to the west of the BSA; this occurrence was recorded in 2012.	**Moderate**

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	**Common Name**				
Aspidoscelis tigris stejnegeri	coastal whiptail	SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 8.7 miles to the north-northwest of the BSA.	**Not Likely to Occur**
Emys marmorata	western pond turtle	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 0.5 miles to the northwest of the BSA.	**Not Likely to Occur**
Phrynosoma blainvillii	coast horned lizard	SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 1.7 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago.	**Not Likely to Occur**
Salvadora hexalepis virgultea	coast patch-nosed snake	SSC	Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains. Burrows into loose soil. Occurs in California from the northern Carrizo Plains in San Luis Obispo County, south through the coastal zone, south and west of the deserts, into coastal northern Baja California.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 1.7 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago.	**Not Likely to Occur**

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	**Common Name**				
Thamnophis hammondii	two-striped gartersnake	SSC	Distributed from southeastern slope of the Diablo Range and the Salinas Valley south along the South Coast and Transverse ranges to the Mexican border, and on Santa Catalina Island. Associated with permanent or semi-permanent bodies of water in a variety of habitats. Requires nocturnal retreats, such as small mammal burrows.	No suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 3.9 miles to the northwest of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago. The most recent recorded occurrence is approximately 4.4 miles to the northwest of the BSA; this occurrence was recorded in 2013.	**Not Likely to Occur**
BIRDS					
Accipiter cooperii	Cooper's hawk	WL	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river floodplains; also, live oaks.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 4.0 miles to the northwest of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago. The most recent recorded occurrence is approximately 8.4 miles to the west of the BSA; this occurrence was recorded in 2009.	**Not Likely to Occur (nesting or foraging)**
Agelaius tricolor	tricolored blackbird	SC, SSC, BCC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate and foraging area with insect prey within a few km of the colony.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 8.4 miles to the west of the BSA; however, this occurrence was recorded well over 20 years ago. The most recent recorded occurrence is approximately 9.7 miles to the west of the BSA and was recorded in 2014.	**Not Likely to Occur (nesting or foraging)**

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	**Common Name**				
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	WL	Resident in southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 8.2 miles to the northwest of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago.	**Not Likely to Occur (nesting or foraging)**
Ammodramus savannarum	grasshopper sparrow	SSC	Grassland, hayfields, and prairies. Breeds in dry fields and prairies, especially those with tall grass and weeds with a few scattered shrubs.	Limited marginally suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.7 miles to the northwest of the BSA.	**Low (nesting and foraging)**
Artemisiospiza belli belli	Bell's sage sparrow	WL, BCC	Breeds in semi-open habitats with 1-2 m high shrubs. Also found in young stands of chaparral that have begun to grow back from recent fires.	No suitable nesting or foraging habitat occurs within the BSA. The nearest occurrence is approximately 8.2 miles to the northwest of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago.	**Not Likely to Occur (nesting or foraging)**
Athene cunicularia	burrowing owl	SSC, BCC	Prefer habitats within deserts, grasslands, and shrub-steppe, and utilize well-drained, level to gently sloping areas characterized by sparse vegetation and bare ground. Prefer short grass for nesting.	Limited marginally suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 8.2 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago.	**Low (nesting and foraging)**
Charadrius alexandrinus nivosus	western snowy plover	FT, SSC, BCC	Nest beside or near tidal waters. Breeding generally occurs above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 0.6 miles to the west of the BSA.	**Not Likely to Occur (nesting or foraging)** **Low (as a transient)**

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	**Common Name**				
Coturnicops noveboracensis	yellow rail	SSC, BCC	Typically found in marshes dominated by sedges, true grasses, and rushes, where this is little or no standing water and where the substrate remains saturated throughout the summer. Also found in damp fields and meadows, on the floodplains of rivers and streams, in the herbaceous vegetation of bogs, and at the drier margins of estuarine and salt marshes.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 0.8 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago.	**Not Likely to Occur (nesting or foraging)** **Low (as a transient)**
Elanus leucurus	white-tailed kite	FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Limited marginally suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.2 miles to the west-northwest of the BSA.	**Low (nesting and foraging)**
Empidonax traillii extimus	southern willow flycatcher	FE, SE	Require moist microclimatic and vegetative conditions and breed only in dense riparian vegetation near surface water or saturated soils. Patches of riparian habitat commonly used during migration.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.4 miles to the north-northeast of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago.	**Not Likely to Occur (nesting or foraging)**
Falco mexicanus	prairie falcon	WL, BCC	Occur in wide-open habitats, including sagebrush, desert, prairie, agricultural fields, and alpine meadows up to approximately 11,000 feet elevation. They nest on ledges on sheer rocky cliffs.	Limited marginally suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 7.9 miles to the northwest of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago.	**Low (nesting and foraging)**

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	**Common Name**				
Laterallus jamaicensis coturniculus	California black rail	FP, BCC	Utilize fresh, brackish, and pickleweed-dominated salt marshes. Prefer tidal salt marshes with a heavy canopy. Require little annual and/or daily fluctuations in water levels.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 0.8 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago.	**Not Likely to Occur (nesting or foraging)** **Low (as a transient)**
Passerculus sandwichensis beldingi	Belding's savannah sparrow	SE	Prefer to build nests on or near the ground, concealed from above, within habitats dominated by dense pickleweed. Primary habitat is the upper marsh zone that is flooded infrequently by the tide.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.2 miles to the east-southeast of the BSA.	**Not Likely to Occur (nesting or foraging)**
Pelecanus occidentalis californicus	California brown pelican	FP (delisted federally and state)	Nest on offshore islands that are free of mammalian predators and human disturbance. Uses breakwaters, jetties, sand spits, and offshore sand bars as daily loafing and nocturnal roost areas.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 2.0 miles to the west-southwest of the BSA.	**Not Likely to Occur (nesting or foraging)** **Low (as a transient)**
Phalacrocorax auratus	double-crested cormorant	WL	Found in almost any aquatic habitat such as coasts, bays, lakes, and rivers. Nests in trees near or over water, on sea cliffs, or on ground on islands.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 9.9 miles to the west of the BSA.	**Not Likely to Occur (nesting or foraging)**
Rallus obsoletus levipes	light-footed Ridgway's rail	FE, SE, FP	Utilizes southern California coastal salt marshes, lagoons, and their maritime environs. Nests in the lower littoral zone of coastal salt marshes. Require shallow water and mudflats for foraging.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.2 miles to the east-southeast of the BSA.	**Not Likely to Occur (nesting or foraging)**
Riparia riparia	bank swallow	ST	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 0.8 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago.	**Not Likely to Occur (nesting or foraging)**

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	**Common Name**				
Sternula antillarum browni	California least tern	FP	Live along the coast and nest on open beaches kept free of vegetation by the tide.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 1.8 miles to the west-southwest of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago.	**Not Likely to Occur (nesting or foraging)** **Low (as a transient)**
Vireo bellii pusillus	least Bell's vireo	FE, SE	Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, *Baccharis*, mesquite.	No suitable nesting or foraging habitat occurs within the BSA. The nearest recorded occurrence is approximately 6.1 miles to the north of the BSA.	**Not Likely to Occur (nesting or foraging)**
MAMMALS					
Corynorhinus townsendii	Townend's big-eared bat	SSC	Associated with areas containing caves for roosting. Found in dry upland areas and mesic coniferous and deciduous forests.	No suitable roosting or foraging habitat occur within the BSA. The nearest recorded occurrence is approximately 4.8 miles to the west-northwest of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago.	**Not Likely to Occur**
Eumops perotis californicus	western mastiff bat	SSC	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	No suitable roosting or foraging habitat occur within the BSA. The nearest and most recent recorded occurrence is approximately 7.7 miles to the west of the BSA.	**Not Likely to Occur**
Lasiurus blossevillii	western red bat	SSC	Roosts primarily in trees. Roost sites often are in edge habitats adjacent to streams, fields, or urban areas.	Limited marginally suitable habitat occurs within the BSA. The nearest recorded occurrence is approximately 7.8 miles to the west of the BSA.	**Low**

Taxa		Status	Habitat Type	Comments	Occurrence Potential
Scientific Name	**Common Name**				
Nyctinomops macrotis	big free-tailed bat	SSC	Typically found in desert and arid grassland areas where rocky outcrops, canyons, or cliffs provide roosts.	No suitable roosting or foraging habitat occur within the BSA. The nearest recorded occurrence is approximately 2.2 miles to the west of the BSA; however, it should be noted that this occurrence was recorded well over 20 years ago.	**Not Likely to Occur**

Federal Rankings:
FE = Federally Endangered
FT = Federally Threatened
BCC = USFWS Bird of Conservation Concern

State Rankings:
SE= State Endangered
ST = State Threatened
SC = State Candidate for Listing
FP = Fully Protected
WL = CDFW Watch List
SSC = Species of Special Concern

APPENDIX C

Noise Modelling Results

Montecito Sanitary District Recycled Water to Serve the Cemetery
Stationary Noise Sources Associated with Project Operation

Pilot Project Noise Sources - Treatment Footprint				**Estimated Noise Level (Leq dBA)**						
Component	**Value**	**Units**	**RPM**	**3 feet**	**6 feet**	**12 feet**	**24 feet**	**48 feet**	**96 feet**	**192 feet**
SCE Feed pump at SCE to EQ Tank	0.75	HP	3450	68.9	61.4	53.9	46.4	38.9	31.4	23.9
SCE feed pump adjacent to tank to UF skid	0.5	HP	3450	68.7	61.2	53.7	46.2	38.7	31.2	23.7
UF Feed Pump on skid	1	HP	2850	69.0	61.5	54.0	46.5	39.0	31.5	24.0
UF Backwash pump on skid	0.57	HP	2850	68.8	61.3	53.8	46.3	38.8	31.3	23.8
RO feed pump on skid	5	HP	2920	69.7	62.2	54.7	47.2	39.7	32.2	24.7
RO product pump on skid	1	HP	2920	69.0	61.5	54.0	46.5	39.0	31.5	24.0
Blending pump (send water to RW storage tank)	1	HP	3450	69.0	61.5	54.0	46.5	39.0	31.5	24.0
RW Distribution Pump	5	HP	3450	69.7	62.2	54.7	47.2	39.7	32.2	24.7

Full Cemetery Project Noise Sources - Treatment Footprint				**Estimated Noise Level (Leq dBA)**					
Component	**Value**	**Units**	**RPM**	**3 feet**	**6 feet**	**12 feet**	**24 feet**	**48 feet**	**96 feet**
SCE Feed pump at SCE to EQ Tank	5	HP	3450	69.7	62.2	54.7	47.2	39.7	32.2
SCE feed pump adjacent to tank to UF skid	3	HP	3450	69.5	62.0	54.5	47.0	39.5	32.0
UF Feed Pump on skid	5	HP	1750	72.7	65.2	57.7	50.2	42.7	35.2
UF air blower on skid	12	HP	1750	73.1	65.6	58.1	50.6	43.1	35.6
UF Backwash pump on skid	3	HP	3450	69.5	62.0	54.5	47.0	39.5	32.0
RO feed pump on skid	25	HP	1750	73.4	65.9	58.4	50.9	43.4	35.9
RO product pump on skid	5	HP	1750	72.7	65.2	57.7	50.2	42.7	35.2
Blending pump (send water to RW storage tank)	5	HP	1750	72.7	65.2	57.7	50.2	42.7	35.2
RW Distribution Pump	25	HP	1750	73.4	65.9	58.4	50.9	43.4	35.9

Full Cemetery Project Noise Sources - Water Storage Tank Area				**Estimated Noise Level (Leq dBA)**								
Component	**Value**	**Units**	**RPM**	**3 feet**	**6 feet**	**12 feet**	**24 feet**	**48 feet**	**96 feet**	**192 feet**	**384 feet**	**768 feet**
RW Pump to Cemetery Irrigation System	25	HP	1750	73.4	65.9	58.4	50.9	43.4	35.9	28.4	20.9	13.4

Combined Project Operation Noise Levels	
Total Leq (dBA) at Receptor During Operation	44.5
Assumed Daytime Ambient:	62.0
Assumed Nighttime Ambient Noise Level:	52.0
Number of Daytime Hours Operating	12.0
Number of Evening Hours Operating	3.0
Number of Nighttime Hours Operating	9.0
Estimated CNEL	62.3

Notes:
Estimated noise levels conservatively assume an equipment use factor of 1 and all equipment operates simultaneously 24 hours per day
Sound levels at 3 feet estimated using horsepower and motor rotations per minute pursuant with Unified Facilities Criteria, Noise and Vibration Control 3-450-01, Department of Defense, 2003

Assumes 6 dB attenuation with doubling of distance (point source) and 1.5 dB attenuation with doubling of distance due to predominantly soft ground site

Assumes 62 dB daytime and 52 dB evening/nighttime ambient noise levels which equates to an approximate 62 dB ambient CNEL. The County of Santa Barbara Noise Element estimates the project site is within a 60-64 dB ambient CNEL

APPENDIX D

Title 22 Engineering Report (Pilot Phase)

Title 22 Engineering Report

for the Production, Distribution and Use of Recycled Water

Montecito Sanitary District

January 2020

Jon Turner, PE
Principal Engineer

Prepared by Phoenix Civil Engineering, Inc.

MONTECITO SANITARY DISTRICT

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Section 1 – Background and Introduction

The Montecito Sanitary District is an Independent Special District that collects and treats wastewater from the unincorporated community of Montecito, CA. Located in southern Santa Barbara County and adjacent (south of) the City of Santa Barbara, the community is primarily residential with a small commercial center. No industrial users are located within the wastewater collection system. The District's mission is to protect public health and safety and to preserve the natural environment through the collection, treatment and disposal of wastewater in the most cost-effective way possible. Potable water service is provided by the Montecito Water District, a separate independent Special District in the community.

The Montecito Sanitary District (MSD) was voted into existence in 1947, by the residents of Montecito to provide for the collection, treatment and disposal of wastewater. In 1961, the District constructed a secondary level treatment plant capable of processing 750,000 gallons per day, including an ocean outfall (located 1,500 feet offshore) and a trunk sewer system. Twenty years later, voters approved $3.1 million in revenue bonds to incorporate new technology, increase the treatment plant's capacity to 1.5 million gallons per day, implement more stringent testing procedures and provide emergency power. The District provides service to approximately 9,000 people through 3,106 service connections. It maintains approximately 77 miles of sewer pipelines and five pumping stations. The District's collection system is predominantly vitrified clay pipe (VCP) with polyvinyl chloride pipe (PVC) in the areas where sewer service was provided after 1981. The District has rehabilitated approximately 26 miles of VCP pipelines with a cured in place liner. The MSD service area is shown on Figure 1.

In an effort to continue their mission statement and recognizing the impact of the changing climate (drought), increased landscaping use and limited groundwater supplies within the District boundary, as well as reducing the amount of discharge to the ocean, MSD has decided to pursue implementation of a Title 22 compliant recycled water treatment pilot system at their facility located at 1042 Monte Cristo Lane. The intent of the District is to install the pilot treatment project and irrigate approximately 1 to 2 acres of the adjacent Santa Barbara Cemetery property with the product water from the treatment system. The goal of MSD is to recognize the benefits and maintenance strategies of the pilot project treatment technology and then design and construct a full-scale treatment process to expand the Title 22 compliant irrigation system to cover the irrigation needs of the entire Santa Barbara Cemetery property (approximately 55.63 acres). This expanded area is referred to in this report as the Full Cemetery project. The District intends to utilize the same treatment technology concept (ultrafiltration, reverse osmosis, and sodium hypochlorite) for the Full Cemetery project as is included in the Pilot project. As part of the pilot project and the Full Cemetery project, the District also intends to use the Title 22 compliant water for onsite irrigation and will also use the recycled water in their collection system piping for jetting purposes. The onsite irrigation system will be severed from the potable system and modified similar to the cemetery property (separation, backflow prevention, etc.). The recycled water will be transported by the District hydrojetting truck to various locations in the collection system. The water will be used to clean the interior of the collection system piping. The truck will be leak free and signed in accordance with the Title 22 regulations.

Because a full design has not been initiated yet and is required for the Full Cemetery project, this report focuses on the Pilot project, but outlines what steps are needed for the Full Cemetery project. An

update to the Engineering Report would be needed once the design is completed for the Full Cemetery project.

The Producer of the recycled water is the Montecito Sanitary District, a wastewater Special District within the community of Montecito, California. The Distributor of the recycled water on this project is either the Montecito Sanitary District or the Montecito Water District. The User on the project is the Santa Barbara Cemetery. The definitions are explained in Section 2.3.

Section 2 – Proposed Projects

2.1 General

Pilot Project

The Producer staff has expended considerable effort researching different Title 22 recycled water treatment technologies, attending conferences and contacting other agencies/municipalities to discuss and review their successes and insights into treatment systems. The Producer also conducted research into the options for utilizing the recycled water product water. It was decided that landscape irrigation is the preferred use of the recycled water. After much research, the Producer elected to pursue a contract with IDE to purchase a pilot system incorporating ultrafiltration filters, reverse osmosis membranes and sodium hypochlorite disinfection. Ultrafiltration (UF) is a type of membrane filtration in which hydrostatic pressure forces a liquid against a semipermeable membrane. UF is commonly employed to remove colloids, proteins, bacteria, pyrogens, and macromolecules from water. UF is often used as a pretreatment for reverse osmosis (RO) systems to prevent biofouling (APEC Water, 2019). RO is a membrane separation water purification process in which feed water flows along the membrane surface under pressure. Filtrate water permeates the membrane and is collected, while the concentrated water, containing dissolved and undissolved material that does not flow through the membrane, is discharged from the system. Sodium hypochlorite is a common disinfection product that is used by the water and wastewater industries.

The pilot treatment plant will be located within the boundaries of the Producer wastewater treatment plant. The existing plant is a secondary level treatment facility as described in Section 1. The pilot plant will be located in the middle section of the plant adjacent to the aeration basins and the aerobic digesters. The existing Producer treatment plant facility can be seen on Figure 2. The water source for the pilot project is the existing treatment plant secondary clarifier effluent. The design of the treatment system was performed by the manufacturers of the products and packaged specifically for the Producer and the constituents in the wastewater. Figures 3 through 5 show the layout of the UF/RO system that will be part of the pilot phase of the project. The construction of the treatment system will be performed in the manufacturing facility and shipped to the Producer site. Installation will be a combination of a local contractor, Producer staff and manufacturing representatives. Recycled water distribution piping to the cemetery property will be installed by a local contractor and inspected by the Producer staff. Disconnection of the existing cemetery irrigation piping will be performed by cemetery staff under the supervision of the Distributor's trained staff. It is understood that for the pilot treatment phase, there are only three existing connections to the distribution area that will require modification to be separated from the rest of the cemetery irrigation system. The User and Distributor's potable water

systems will be protected through the installation of a reverse pressure principle backflow prevention device.

RO concentrate water will be returned to the wastewater treatment plant to be processed. The disinfection of the product water will take place in the recycled water aboveground coated steel storage tank at the WWTP. Located within the Producer treatment plant boundary and monitored by certified wastewater treatment plant staff, this approach was deemed to be the safest and best option prior to distributing the product water to the cemetery. Title 22 regulation compliant signage will be attached to the storage tank. Once the water meets the regulations for its intended use, a pump system will send the treated recycled water through a pipeline that will be connected to the cemetery parcel. The cemetery parcel is approximately 60 feet west of the Producer parcel. The pipeline is intended to be 4 inches in diameter. It will be buried for its alignment and will cross Channel Drive (the road that separates the treatment plant from the cemetery. Within Channel Drive, the pipeline will be located within a casing pipe (12 or 14 inches in diameter) to allow for future expansion of the carrier pipeline diameter once the Full Cemetery project is initiated and additional water quantity is needed by the User. Once on the cemetery parcel, two high density polyethylene storage tanks (approximately 5,000 gallons each) will contain the recycled water until the cemetery irrigation system distributes it. These tanks will be aboveground located adjacent to the pilot project irrigation area and signage will be installed on the tanks in accordance with the Title 22 regulations. The existing hose bibs on the user property would be exempt from conversion to quick couplers in accordance with State Health and Safety Code Section 8118. The required signs will be posted onsite to notify the public that recycled water is in use in accordance with Title 22 Regulations. Figure 6 is a photograph log of the Pilot Phase irrigation area.

In addition to the disinfection residual of the recycled water in the recycled water storage tank at the treatment plant, the Producer will also monitor turbidity of the product water and test for total coliform bacteria to confirm that the recycled water meets Title 22 standards. Additional constituents will be monitored for process control purposes. During the pilot project, the Producer trained staff will obtain 4-hour grab samples during the work shift (7a – 4p) to monitor for the required constituents. During the non-working hours, the recycled water onsite storage tank will be isolated from the treatment supply and the produced recycled water will be returned to the headworks.

Alarms will be provided on the pilot project that will monitor the conditions stated in Section 2.6. The alarms will be independent of the existing WWTP alarm system and will alarm locally. The alarms will be monitored by the certified Producer WWTP staff during their regular work hours. During the Pilot project, recycled water will be produced overnight, but it will have an overflow pipe connected to the storage tank so when the tank is full, the recycled water will be discharged back to the wastewater treatment plant process. Even though recycled water is being made overnight, it will only be distributed during the Producer working hours to allow the certified WWTP staff to verify it is in compliance with the treatment regulations prior to distribution. During the pilot project phase, assistance from the manufacturer of the treatment units will be provided, but the alarms will be directed to the responsible Producer staff. Repairs to the treatment system and internal Producer piping and storage tanks will be performed by Producer staff. Pipeline repairs to the distribution system located outside of the Producer parcel but prior to the User storage tanks will be performed by the Distributor. Pipeline repairs to the User distribution system on their property is the responsibility of the User. A contractual arrangement

between the Distributor and User will be established to codify a set of enforceable rules and regulations. The rules and regulations will include a compliance program to be used to protect the public health and prevent cross connections. The Distributor and User governing Boards will adopt resolutions outlining the rules and regulations.

As mentioned previously, the Producer of the recycled water is the Montecito Sanitary District an independent Special District within the community of Montecito, California. The Distributor of the recycled water on this project is either the Montecito Sanitary District or the Montecito Water District. The User in the pilot project is the Santa Barbara Cemetery. The Producer Board of Directors intends to adopt a resolution regarding the production, treatment and distribution of the recycled water to the cemetery. Contractual agreements will be finalized between the cemetery and the two Special Districts.

Full Cemetery Project

For the Full Cemetery Project, the Producer, Distributor and User remain the same. Depending on the outcome of the pilot testing program, the Producer will decide whether or not to design and construct a larger treatment system to serve the entire User parcel. A larger UF/RO unit will be required as will larger permanent storage tanks for the recycled water. When the piping is installed across Channel Drive to the cemetery, a larger diameter pipeline sleeve will be installed to accommodate a larger diameter pipeline to the cemetery for the recycled water. The pilot phase pipeline will be removed. The pipeline from the treatment system (within the Producer plant boundary) will be replaced with a larger diameter pipeline. A complete design will be required for Full Cemetery outlining the improvements.

Complete disconnection of the irrigation system from the potable water irrigation system at the User parcel will be required. Figure 7 shows the location of the existing hose bibs on the parcel as well as the backflow preventer assemblies that would require modification to prevent cross contamination. The irrigation hose bibs would be exempt from conversion to quick couplers in accordance with State Health and Safety Code Section 8118. The required signs will be posted onsite to notify the public that recycled water is in use in accordance with State Regulations. The storage tanks located on the User parcel as part of the Pilot Phase will be removed and a permanent tank (aboveground or partially buried) will be constructed. Title 22 compliant signage will be attached to the storage tank. The cost for design and construction is yet to be determined for the Full Cemetery improvements.

Like the pilot project, the certified Producer staff will be notified when the alarms are activated. The contacted person will be the Producer plant operator or their designee with the authority and training to take prompt corrective action.

2.2 Rules and Regulations

Pilot Project and Full Cemetery Project

Proposed Uses

It is envisioned that a portion of the secondary clarifier effluent from the existing Producer wastewater treatment plant will be tertiary treated, disinfected and made available for irrigation purposes at the Pilot irrigation area as well as the Full Cemetery project area. As the irrigation areas expand with the Full Cemetery project, the discharge effluent to the ocean through the outfall will decrease. The uses

will occur within the boundaries of the User parcel. It is not envisioned that the recycled water will be distributed outside of the User parcel. The Title 22 Approved Use Areas list is included in the Appendix. Cemeteries are on that list.

The Title 22 compliant water that is produced will be stored in a storage tank located on the wastewater treatment plant site. When production is such that the tank is full, the UF/RO treatment system will continue to produce water; however, the water from the tank will overflow into the piping that is directed to a nearby drain. That drain will transport the water back to the headworks of the plant.

Title 22 Water Recycling Criteria

The State of California Code of Regulations (CCR), Title 22, Division 4, Chapter 3, Sections 60301 through 60355 governs the recycling of water. This section of the CCR is typically referred to as the Title 22 Criteria. Specific requirements for the production, storage, and distribution of recycled water are established by the California State Water Resources Control Board Division of Drinking Water (DDW). This project will also be governed by the RWQCB Central Coast Region 3. The proposed UF/RO treatment system will produce recycled water that is defined as, "disinfected tertiary treated recycled water". The criteria outline the uses that are approved for disinfected tertiary treated recycled water. Cemeteries are an acceptable irrigation area within the criteria. Applicable excerpts from the regulations are included in the Appendix. The Pilot and Full Cemetery projects will be in compliance with the regulations.

The requirements for disinfected tertiary recycled water are the highest of all the allowable recycled water identified in the Title 22 Criteria. In order to be considered disinfected tertiary recycled water, the process must oxidize, coagulate, filter and disinfect the water. Oxidation relates to a process typically found in a wastewater treatment where the organic material in the wastewater is stabilized and the secondary effluent contains dissolved oxygen. Coagulation is the process where chemicals are added to the wastewater to form flocs which settle to the bottom of clarifiers and are removed as a separate waste product prior to discharge. Filtration relates to processing the water through a Department of Drinking Water (DDW) approved filtration system

The disinfection step in the process of achieving disinfected tertiary recycled water involves inactivation or removal of polio virus in wastewater. For spray irrigation and/or unrestricted recreational and landscape impoundments the median concentration of total coliform bacteria must not exceed the following:

A. 2.2 most probably number (MPN) total coliform bacteria per 100 milliliter (mL) sample based on the bacteriological results of the last seven days for which analyses have been completed;
B. 23 MPN total coliform bacteria per 100 mL sample of effluent in more than one sample within any 30 day period;
C. 240 MPN total coliform bacteria per 100 mL sample of effluent at any time.

In addition to the requirements listed above, the Title 22 Criteria also state that the process must incorporate a certain level of redundancy/reliability to ensure that the treatment process is uninterrupted. Backup equipment and alarms are some of the requirements outlined. If standby power is not provided, then alternative disposal options must be employed to prevent the effluent from entering the distribution network. In order for the product water to be distributed to the User, it

requires testing and approval by the Producer trained treatment plant staff as well as a pump to push the water to the User storage tank.

Recycled Water Use Area Requirements

The requirements for using recycled water in approved reuse areas are listed in Article 4 of the Title 22 Criteria which relates to the spray disposal, setbacks, impoundment and signage. The requirements are included in the Appendix. The Pilot and Full Cemetery projects will be in compliance with these requirements.

Potable Water System Requirements

In areas where the potential exists for the potable water system to be influenced by the proposed recycled water system, the California Code of Regulations (CCR) Title 17, Group 4, Article 2 requires certain protection devices to be employed. Those regulations are:

A. An air-gap separation shall be at least double the diameter of the supply pipe, measured vertically from the flood rim of the receiving vessel to the supply pipe. The air-gap separation shall be located as close as practical to the user's connection and all piping between the user's connection and the receiving tank shall be entirely visible unless otherwise approved in writing by the City and health agency.
B. A double check valve assembly shall conform to AWWA standards and shall be located as close as practical to the user's connection and shall be installed above grade, if possible, in a manner where it is readily accessible for testing and maintenance.
C. A reduced pressure principle backflow prevention device shall conform to AWWA standards and shall be located as close as practical to the user's connection and shall be installed a minimum of twelve inches above grade and not more than thirty-six inches above grade from the bottom of the device and with a minimum of twelve inches side clearance.

Full Cemetery Project

The Full Cemetery project will expand recycled water irrigation to include the entire cemetery parcel. At the time of the Full Cemetery project, a design of the recycled water irrigation system within the User parcel will be required. The installation of physical disconnections between the potable water system and the irrigation system will be made as part of the construction improvements. A formal cross connection test of the system will be required as well as installation of the approved signage at the existing hose bibs will be required. Signage around the site will be required designating the irrigation with recycled water taking place.

2.3 Producer, Distributor, User

Pilot Project and Full Cemetery Project

The Producer of the recycled water is the Montecito Sanitary District an Independent Special District serving the community of Montecito, California. As a Special District, the agency is responsible for the wastewater collection within the mostly residential community. The staff of the Montecito Sanitary District are trained and certified by the State of California in the collection and treatment of wastewater.

The Distributor of the recycled water on this project is yet to be formally determined, but will be either the Montecito Sanitary District or the Montecito Water District. At the writing of this report, it is unclear if the Montecito Water District will participate in the project. Montecito Sanitary District is ready and prepared to function as the Distributor on both phases of the project. The Distributor will be responsible for distributing the recycled water to the User. The Distributor will also be responsible for the training, monitoring and reporting associated with the User's parcel, staff and recycled water system.

The User in the pilot project is the Santa Barbara Cemetery. The cemetery is located approximately 60 feet west of the Montecito Sanitary District (across Channel Drive). The cemetery is currently irrigated with potable water from the Montecito Water District system. The pilot project will remove connectivity of the potable irrigation system on approximately one to two acres of the cemetery parcel to allow for the irrigation of the area with recycled water from the Producer. The User's staff will be responsible for the daily irrigation use of the recycled water. They will be trained in the correct use of the recycled water by the Distributor's staff who are certified in the use and distribution of recycled water.

2.4 Raw Wastewater

Pilot Project and Full Cemetery Project

The source of the recycled water is the Producer's wastewater treatment plant secondary clarifier effluent. The chemical makeup of the treated wastewater is as follows:

Table 1: Existing Wastewater Treatment Plant Secondary Clarifier Effluent Characteristics

Description	Value	Description	Value
Average Dry Weather Flow (mgd)	0.480	pH (range)	7.7
Maximum Day Flow (mgd)	0.561	Total Suspended Solids (TSS) (mg/L)	8.4
Alkalinity (mg/L)	130	Total Dissolved Solids (TDS) (mg/L)	1750
Boron (mg/L)	0.80	Total Chlorine Residual (mg/L)	0
Chloride (mg/L)	570	Sulfate	291
Nitrate-Nitrogen	28 mg/L		

Table Notes:

1. Average dry weather flow is from the period of May through October 2018. Maximum day dry weather flow occurred in October 2018.
2. Constituents within the table are from the irrigation suitability study performed by Montecito Sanitary District 2017.
3. Secondary Clarifier Effluent is the intake water for the proposed UF/RO treatment train.

The source water will remain the same for both the pilot and Full Cemetery projects (secondary clarifier effluent). As the community is already built out and the land use is not changing, it is not envisioned that the chemical constituent makeup of the treated wastewater will change drastically. It will remain in compliance with the NPDES permit requirements for the ocean outfall (disposal method). As stated

previously, there are no industrial users located within the community of Montecito and the community does not accept wastewater from outside sources.

The Producer has a fats, oils and grease (FOG) source control program and Ordinance that they routinely manage, enforce and educate their customers about.

2.5 Treatment Processes

Pilot Project and Full Cemetery Project

The Pilot project is utilizing UF and RO along with sodium hypochlorite disinfection for the production of Title 22 compliant recycled water, as seen in Figures 3 through 5, showing the UF and RO system layouts. Both units are located on modular skids for transportation and convenience. The pilot process is as follows:

- The secondary clarifier effluent (influent water) is pumped to a feed water tank where the UF draws water from.
- It is pressurized with a booster pump and the water is processed through a disc filter.
- After the disc filter, the water is filtered through the ultrafiltration step.
- One UF membrane unit is located on the skid (Hydracap Max 60).
- A backwash system is included on the skid.
- The filtered water is then sent from the UF product water tank and forwarded to the RO treatment skid.
- Once the RO system has further refined the water, the RO permeate water is sent to a small holding tank to blend with the ultrafiltration water then pumped to the aboveground coated steel tank prior to distribution.
- A clean in place tank is also present on the UF skid for backwashing.
- Sodium Hypochlorite for disinfection is added to the permeate tank (either the small blending tank or the aboveground steel tank). The Producer will be batching the recycled water prior to distribution. That allows for compliance testing for verification purposes.
- Drain lines from the tanks lead to a common discharge point where it is returned to the existing treatment plant headworks and processed.

Full Cemetery treatment layout will be similar in design; however, it is going to require a new treatment system with larger capacity.

Secondary Clarifier Effluent Wastewater Characteristics

The existing wastewater treatment plant produces an effluent in compliance with a secondary treatment level quality. The secondary clarifier effluent will be intercepted and be the source of water for the Title 22 irrigation treatment system. The secondary clarifier effluent is very similar to the final treatment plant effluent. Data for the final treatment plant effluent is provided in the tables below. The existing treatment plant final effluent characteristics are as shown in Table 2. Table 3 is also data from the existing treatment plant effluent.

Table 2: Producer Wastewater Treatment Plant Final Effluent Monthly Average Characteristics

Month	BOD_5 (mg/L)	TSS (mg/L)	Total Coliform (MPN/100ml)			pH	Turbidity (NTU)
			Avg	Median	Max		
July 2018	3.1	6.3	3.2	2.0	11.0	6.93	3.54
August 2018	3.0	4.0	2.1	2.0	4.5	7.05	1.95
September 2018	3.6	4.7	47.9	2.0	540.0	7.03	2.86
October 2018	4.0	7.8	3.5	4.5	7.8	6.96	4.03
November 2018	2.9	5.6	8.5	2.0	79.0	6.97	2.69
December 2018	2.9	5.0	2.5	2.0	4.5	6.95	2.38
January 2019	2.6	4.0	2.0	<1.8	4.0	6.95	2.55
February 2019	1.9	3.7	1.9	1.8	2.0	6.99	2.66
March 2019	3.1	6.5	2.6	2.0	4.5	7.07	2.88
April 2019	2.8	5.8	2.6	2.0	11.0	6.98	3.25
May 2019	3.6	6.3	4.3	<1.8	33.0	7.00	4.07
June 2019	3.9	10.0	3.0	4.5	13.0	6.95	4.82
July 2019	1.9	3.4	<1.8	<1.8	<1.8	6.97	1.29

Table 3: Existing Wastewater Treatment Plant Final Effluent Characteristics

Description	Maximum (mg/L)	Description	Maximum (mg/L)
$CBOD_5$	6.0	Sulfate	277
TSS	16.3	Total Chlorine Residual	5.198
Ammonia as N	0.1	TDS	1710
Nitrate-Nitrogen	33	Turbidity (NTU)	10.6
Boron	0.90	pH (range)	6.54-7.41
Alkalinity (Bicarbonate as $CaCO_3$	100	Total Coliform 7 day median (MPN/100 mL)	4.5
Chloride	588	Oil and Grease	5.72

2.6 Plant Reliability Features

In this section of the report, the plant reliability features proposed to comply with Sections 60333 - 60355 of the Water Recycling Criteria are described in detail. The discussion of each reliability feature

indicates under what conditions it will be actuated. The section also describes that when alarms are used to indicate system failure, where the alarm will be received, how the notification location is staffed, and who will be notified. The report also states the hours that the plant will be staffed.

The Producer wastewater facility is staffed Monday through Sunday from 7 am to 3:30 pm. After hours monitoring is handled by the standby operator. Standby operations are rotated weekly between operators. The existing treatment plant has an automatic transfer switch and an emergency generator for times when the power is interrupted. The existing emergency generator powers all the electrical needs of the entire wastewater treatment plant property. The proposed Title 22 treatment system will be connected to that emergency generator system.

Pilot Project

As this is a pilot treatment project, the reliability features are not a strong consideration. There are no redundant treatment processes incorporated into the pilot project. The User is aware of the lack of redundancy in the treatment process for the pilot study so they will have a potable water source connection to their storage tank with an approved air gap in the instances when the pilot system is taken offline for maintenance or repairs or if the treatment level is interrupted and requires adjustment by the Producer prior to distribution. The air gap will be twice the diameter of the supply pipe to the tank.

Emergency Generator

In the event of a power failure, the pilot project will be powered by the existing WWTP emergency generator. The power requirements for the pilot project are small and the existing emergency generator is capable of handling the minor increased load.

Process Alarms

The UF system will have the following alarms: Low level sodium hypochlorite tank, low level CIP tank, low level backwash tank, out of time range, low level coagulant, emergency stop, thermal overload, max inlet pressure, air pressure switch leakage, blocked disc filter, UF blocked, minimum inlet pressure. The RO system has a separate set of alarms that will come with the unit: low suction pressure, high feed pressure, high permeate pressure, low permeate pressure, low level in the permeate tank, low feed water tank level, high and low feed rates, hydrochloric acid low level, sodium hydroxide low level, pH level.

Full Cemetery Project

Emergency Generator

It is anticipated that the existing generator will be capable of handling the increased loading, but will need to be analyzed as part of the Full Cemetery Project design.

Process Alarms

The Full Cemetery UF/RO treatment system alarm devices will monitor the following functions as required by Title 22 Water Recycling Criteria:

A. Loss of normal power
B. High Pressure

C. Low Pressure
D. Failure of the filtration process as detected by the effluent turbidity meter
E. Failure of the sodium hypochlorite disinfection process as detected by the chlorine residual monitor
F. Failure of the wastewater treatment plant process to maintain a <2NTU reading
G. Low chlorine residual that would affect the required contact time (CT).

A summary of the existing wastewater treatment plant alarms and proposed treatment system alarms is shown in Table 4. Redundancy will be provided with multiple filters and booster pumps to distribute the water.

In the event of an alarm, the Producer certified operator on call is notified. The operator then responds to determine the alarm issue and correct the process.

Table 4 Summary of Existing Treatment Plant Alarms

Alarm Condition	Alarm Condition
Influent Common Alarm	Digester Building Trouble
Influent High Water level	RAS/WAS Trouble
Influent Grinder Trouble	Low Chlorine Chamber Residual
Influent High/Low Flow	High Chlorine Chamber Residual
Effluent High Flow	Chlorine Controller High Output
Generator Online	Effluent High Chlorine Residual
Generator Trouble	Bisulfite Controller High Output
Power Failure	Aeration Basin Low Air Pressure
Plant Water Low Pressure	Plant Low Air Pressure

2.7 Supplemental Water Supply

Pilot Project

Supplemental water for the irrigation system will be supplied through an approved air gap to the two temporary 5,000 gallon storage tanks at the cemetery. The potable water supplemental pipeline will be installed and connected to the existing potable water irrigation system by the User's staff. The purpose of the supplemental water supply would be to continue the irrigation of the Pilot Phase irrigation area during times when the treatment system is offline for maintenance or repairs. The User does not irrigate daily so some flexibility in the irrigation times and the storage requirements are inherent. The source of the supplemental potable water will be the User's existing potable water service from Montecito Water District. They are already supplying the User parcel with potable water and will continue to supply potable water to the User for drinking and other potable water uses on the User parcel. The quality and quantity of the potable water is in accordance with the State of California potable water regulations. As the User is an existing customer of the Montecito Water District, they have an existing potable water account and the water is available from the Montecito Water District.

The User site has an existing backflow preventer at each connection to the irrigation system. The Pilot project irrigation site would be disconnected from the potable water system at two locations to prevent cross connection control. The supplemental water supply pipeline would have an air gap at the tank in accordance with the recycled water regulations (gap is twice the diameter of the supply pipeline).

Full Cemetery Project

Supplemental water for the irrigation system on the User parcel will be supplied through an approved air gap to the permanent storage tank at the cemetery. That pipeline will be installed and connected to the existing potable water system by the User's staff or the contractor installing the permanent storage tank. The purpose for providing supplemental potable water would be similar to the Pilot Phase project. The source, quantity, quality would be the same in this phase as in the Pilot Phase.

Source cross connection control would be different in this phase. As this phase will irrigate the entire User parcel with recycled water, the existing irrigation system piping will be used to distribute the recycled water to all the existing irrigation sites on the parcel. As such, the potable water system will require a backflow prevention device on its connection to the Montecito Water District system. Potable water pipelines within the User parcel to serve potable water needs will require physical separation from the irrigation system through the removal of existing backflow preventers that were used for the irrigation system when it was using potable water. The signage for the User parcel will be expanded to cover the existing irrigation system areas.

2.8 Monitoring and Reporting

This section of the report describes the planned monitoring and reporting program, including all monitoring required by the Water Recycling Criteria, and includes the frequency and location of sampling. Where continuous analysis and recording equipment is used, the method and frequency of calibration will be stated. All analyses shall be performed by the Producer's ELAP Accredited laboratory. The Producer will be responsible for the production and testing of the UF/RO product water. All of the treatment equipment will be located on the Producers treatment plant property.

Pilot Project

The Producer will be dosing and testing for disinfection residual and contact time, as well as turbidity and total coliform at the onsite recycled water storage tank location prior to discharge offsite to the Distributor/User system in accordance with the State of California regulations. The certified treatment plant operators will take a sample of the product water from the onsite storage tank, add a reagent, use a spectrophotometer to measure the chlorine residual, then calculate the needed sodium hypochlorite dose. The contact time would be calculated by the certified treatment plant operators. During the Pilot project phase, the Producer will be batching the recycled water in the onsite storage tank where it will be tested by the certified plant operators to determine compliance with the Title 22 regulations. Once determined to be in compliance the recycled water will be distributed to the User.

The distribution of the compliant water will only be during the operating hours of the Producer (7 am to 3:30 pm). If the product water is found to be non-compliant, it will not be sent to the User, but returned to the headworks.

Full Cemetery Project

The proposed Full Cemetery treatment system will have continuous monitoring of the treatment system influent and treated effluent through the use of a turbidity meter and recorder. The operator will check the recycled water treatment system daily upon arrival at the treatment plant site. The constituent sampling and testing will be performed for the treatment system as identified in the Water Recycling Criteria parameters. Compliance testing will occur at the piping downstream of the recycled water storage tank for total coliform, BOD, and TSS. The compliance sampling will be performed anytime the system is operated and discharge is sent to the distribution system. The compliance sampling will not occur when the system is discharging to the treatment plant headworks.

2.9 Contingency Plan

Pilot Project

During the Pilot project phase, the Producer certified treatment plant operators will be monitoring and testing the chlorine residual in the product water tank. The pilot plant is equipped with alarms for the treatment parameters noted. If the Producer staff determine that the product water is not in compliance with the regulated constituents, it will be drained to the existing headworks at the plant. Non-compliant water will not be delivered to the User.

Full Cemetery Project

The contingency plan will be consistent with Section 60323 (c) of the Water Recycling Criteria which requires the engineering report contain a contingency plan designed to prevent inadequately treated wastewater from being delivered to the User. The contingency plan will include: A list of conditions which would require an immediate diversion to take place; A description of the diversion procedures; A description of the diversion area including capacity, holding time and return capabilities; A description of plans for activation of supplemental supplies (if applicable); A plan for the disposal or treatment of any inadequately treated effluent; A description of failsafe features in the event of a power failure. In addition, the contingency plan will outline the methods for notifying the recycled water user(s), the Regional Board, the State and local health departments, and other agencies as appropriate, of any treatment failures that could result in the delivery of inadequately treated recycled water to the use area.
As part of the proposed treatment system, a contingency plan to prevent recycled water from being distributed that is in violation of the permit constituent parameters will include the following:

- Online turbidity meter will continuously monitor the treated effluent to ensure it is within the parameters of the 2 NTU requirements. If the turbidity meter notes an exceedance, the treated effluent will be discharged through the automatic three way valve and returned to the treatment plant headworks.
- Upon backwashing of the filter, an automated three way valve will be discharging the backwash directly to an onsite drain to be directed to the headworks or clarifiers for processing through the plant.
- Compliance testing of the stored recycled water will ensure that the water meets the Water Recycling Criteria and effluent constituent parameters. The testing will occur prior to the distribution of the recycled water to the distribution system. Testing will be performed only at

the beginning of every day that the water will be distributed. When the recycled water is being produced and not being distributed (returned to headworks), compliance testing will not need to occur.

- Online disinfection residual monitoring of the recycled water to verify that the contact time is being achieved. If the disinfection is out of compliance an alarm will alert the operator that the system needs to be calibrated. If the disinfection contact time is not corrected, the system will shut down requiring operator attention.
- Because Producer is entirely in control of the recycled water production, if the turbidity meter recordings indicate an exceedance, the onsite storage tanks can be discharged to the headworks for processing through the treatment plant.

As part of the proposed operation sequence, in the event of a power failure at the existing wastewater treatment plant, the treatment system will shut down and require a manual restart from the operations staff. The UF/RO system will be connected to the emergency power system that is in place at the Producer treatment plant.

Section 3 – Transmission and Distribution Systems

Pilot Project

Due to the proximity of the Producer and User, the transmission pipeline will be relatively short. The Distance from the treatment facilities to the User storage tank will be less than 1,500 feet. As stated previously, a small diameter pipeline (between 2 and 4 inches) will be installed from the Producer storage tank and pump system to the User storage tank located on the northeast side of the User site. The compliant irrigation recycled water will be pumped to the User tank for irrigation by the User. The User has two existing backflow prevention devices at the meter location from Montecito Water District off of Channel Drive (east side of parcel). One of the backflow prevention devices (BFPs) is identified on Figure 6 as the Potable Water BFP. After the backflow preventer there is a tee that branches off to a dedicated potable water line which is installed directly to the office. There is a second BFP near the office structure. The other part of the tee serves the irrigation system. After the backflow preventer of the southern meter there is a tee with a branch for a dedicated line to serve the shop near the bluff; the other part of the tee goes to the irrigation system. All the hose bibs are connected to the irrigation system side.

Onsite conversion of the irrigation system by the User will have to occur during both phases of this project. The pilot project only has 6 existing hose bibs that will require disconnection from the potable water system. The irrigation system is separated from the potable water system with backflow preventers. The irrigation system piping serving the Pilot project irrigation area will be separated completely from the remainder of the irrigation system by cutting the pipes. A supplemental potable water pipeline will be needed to the storage tank. Figure 10 shows the location of the existing piping that will have to be disconnected.

Full Cemetery Project

The distribution pipeline from the Producer to the User will have to be increased in diameter when the Full Cemetery project construction takes place. The Full Cemetery project will require pipeline modifications to the existing irrigation system to separate it completely from the potable water system.

Physical pipeline removals will be performed so the two systems are not connected. Recycled water will be distributed in the existing User onsite irrigation piping system. No distribution piping modifications are envisioned. The existing hose bibs will remain on the recycled water system along with the remainder of the irrigation devices (spray heads, etc.). Signage will be installed notifying the public that recycled water is being used in the irrigation and hose bib systems.

Section 4 – Use Areas

4.1 Irrigation

Pilot Project

Figure 8 shows the proposed irrigation area for the Pilot Phase. It is approximately 1 acre in size and is located in the northeast corner of the User parcel. The existing area is covered in turf. The area will be irrigated from two 5,000 gallon above ground temporary HDPE storage tanks. The User will have an onsite booster pump to increase the flow and pressure through the irrigation system heads.

In addition, the Producer intends to irrigate landscape areas onsite at the WWTP. The areas will be irrigated through conversion of the existing irrigation system to operate on the recycled water storage tank supply. The irrigation system pressure will be boosted through a dedicated pump. The existing irrigation connection will be disconnected from the potable water supplied irrigation system. Supplemental water would be supplied through an air gap at the storage tank.

For the wastewater collection system piping cleaning, the District trained staff will fill the District hydrojetting truck tank. The truck will be used to clean the pipe interior. Staff will ensure that no spillage will be confined to the interior of the manhole interiors and not outside of the collection system. The hydrojetting truck will have signage applied that states the water is nonpotable in accordance with the Title 22 regulations. Additionally, the truck will be leak free.

Full Cemetery Project

Figure 9 shows the proposed irrigation area for the Full Cemetery project. The User parcel is the only recipient of the recycled water from the Producer. It is not envisioned that this will change at the time of the writing and approval of this Engineering Report. The area to be irrigated will be restricted to the turf and landscape covered areas within the User parcel. The Full Cemetery project will contain a permanent above ground or buried storage tank and booster pump station to provide adequate flow and pressure to the different irrigation zones throughout the User parcel.

4.2 Impoundments (Not Applicable)

The proposed project does not include any impoundment areas.

4.3 Cooling (Not Applicable)

The proposed project does not include any cooling uses.

4.4 Groundwater Recharge (Not Applicable)

The proposed project does not include any groundwater recharge.

4.5 Dual Plumbed Areas (Not Applicable)

The proposed project does not include any dual plumbed areas.

4.6 Other Industrial Uses (Not Applicable)

The proposed project does not include any industrial uses.

4.7 Use Area Design

Pilot Project and Full Cemetery Project

The irrigation will be spread uniformly across the use area without ponding. Automatic spray irrigation is proposed as part of both phases of the project. The irrigation use areas will be landscaped and not include any edible food crops. As the irrigation areas are open spaces public access to the area will occur. Irrigation will occur when the public is not present (early mornings pre 8 am or over the night (8 pm to 8 am). No drinking fountains or eating areas are included in the use areas to be irrigated.

4.8 Use Area Inspections and Monitoring

Pilot Project

The Distributor will perform site inspection of the Use area as part of the Pilot Phase to determine any cross connections. Monitoring of the irrigation system will be performed by the User staff on a routine basis.

As part of the project, the District will utilize the recycled water onsite in existing landscaped areas. Those areas will be monitored by District trained staff to verify compliance with the Title 22 regulations regarding the function of the irrigation system.

Full Cemetery Project

The County of Santa Barbara local health officers and the Montecito Water District maintain programs for the control of cross-connections by water customers within the customer's premises. The programs may include facility inspections. In addition to the County or Montecito Water District periodic inspections, the Distributor will conduct annual inspections of the User facilities to monitor compliance with the California Water Recycling Criteria. Inspection procedures are to be described in the Distributor Rules and Regulations for Recycled Water Use which will be adopted by the Distributor Board prior to the startup of the Pilot Phase. The inspection of the User area will be conducted throughout the year to ensure compliance by the Distributor and User staff. The Distributor Inspection staff is responsible for the monitoring and reporting of any situation that violates the rules and regulations established by the Distributor in accordance with the Water Recycling Criteria.

4.9 Employee Training

Pilot Project

For the Pilot project, treatment plant operators will be trained in accordance with the current regulatory requirements of the State of California. The Producer staff responsible for the proposed pilot project have State of California Wastewater Operator Certifications Grade III or higher. They will be responsible

for the operation of the Producer onsite irrigation system. The User staff are cemetery landscape workers that will be trained on the use of recycled water in accordance with the State of California Recycled Water Guidelines by the Distributor staff who are certified in the use of recycled water.

The wastewater collections system operators will also receive training for the use of recycled water for the collection pipeline system cleaning.

Full Cemetery Project

The User will have to designate a Site Supervisor. The designated Site Supervisor must attend a training program coordinated by the Distributor. The training will occur every two years with the designated Site Supervisor or at any time that the Site Supervisor position is changed at the specific location. The Site Supervisor will be responsible for training all personnel involved with the use area on site recycled water system so compliance with the Distributor Rules and Regulations is achieved. At a minimum, the Distributor training program will convey the following information:

A. Recycled water is non-potable and must never be used for human consumption.
B. Regulations prohibit ponding, windblown spray and runoff of recycled water. Any situation that causes these conditions must be corrected immediately.
C. Cross connections and the Title 22 regulations applicable to the Distributor system.
D. Working with non-potable recycled water is safe if specific procedures and appropriate regulations are followed. The procedures regarding distribution of the recycled water will be detailed.
E. California State law prohibits any connection between the recycled water and the potable water systems.

The Distributor training program will also instruct Use area onsite personnel in the approved procedures for reporting unauthorized discharges, identifying and correcting cross connections, and modifying the system in the event or an earthquake or other disaster.

Figures

Figure 1 – MSD Wastewater Service Area

Figure 2 – MSD Wastewater Treatment Plant Site

Figure 3 – Proposed UF/RO System Layout

Figure 4 – Ultrafiltration System Process and Instrument Diagram

Figure 5 – Proposed UF/RO System Piping Layout

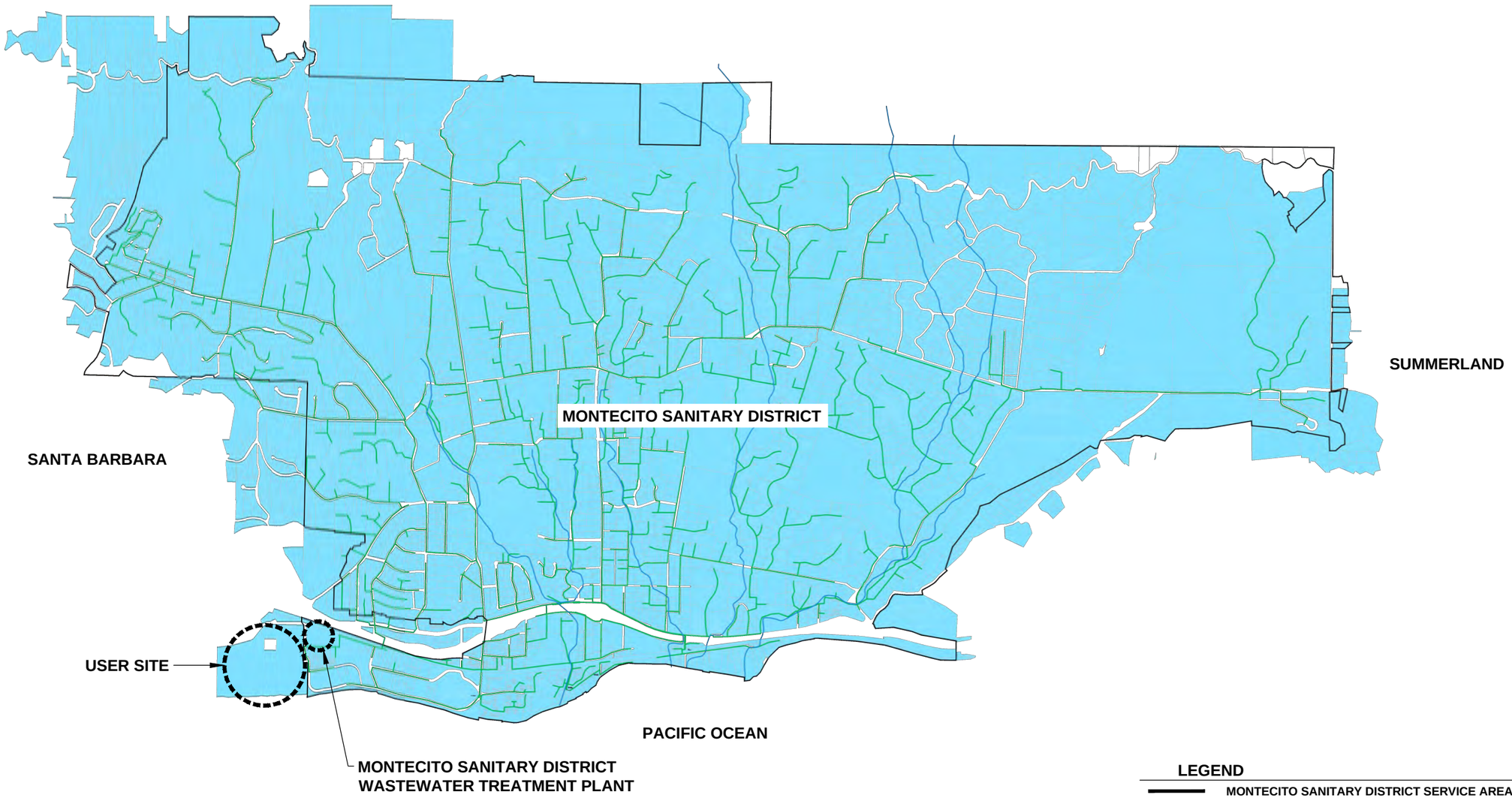
Figure 6 – Pilot Project User Area Photo Log

Figure 7 – User Area Existing Hose Bib Locations

Figure 8 – Pilot Project Irrigation Area

Figure 9 – Full Cemetery Irrigation Area (Santa Barbara Cemetery)

Figure 10 – Cemetery Irrigation System Disconnection Points



LEGEND

- MONTECITO SANITARY DISTRICT SERVICE AREA
- PARCELS WITHIN AND ABUTTING THE MONTECITO SANITARY DISTRICT SERVICE AREA

MONTECITO SANITARY DISTRICT WASTEWATER TREATMENT PLAN SERVICE AREA

1

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MONTECITO SANITARY DISTRICT

PROPOSED RECYCLED WATER PILOT PROJECT TO SERVE CEMETERY

FIGURE 1

DWG: P:\Projects\MMSD17-31 On Call 2017\CAD\Title 22 Report Cemetery\Source Drawings\Cemetery Figures.dwg USER: rcs
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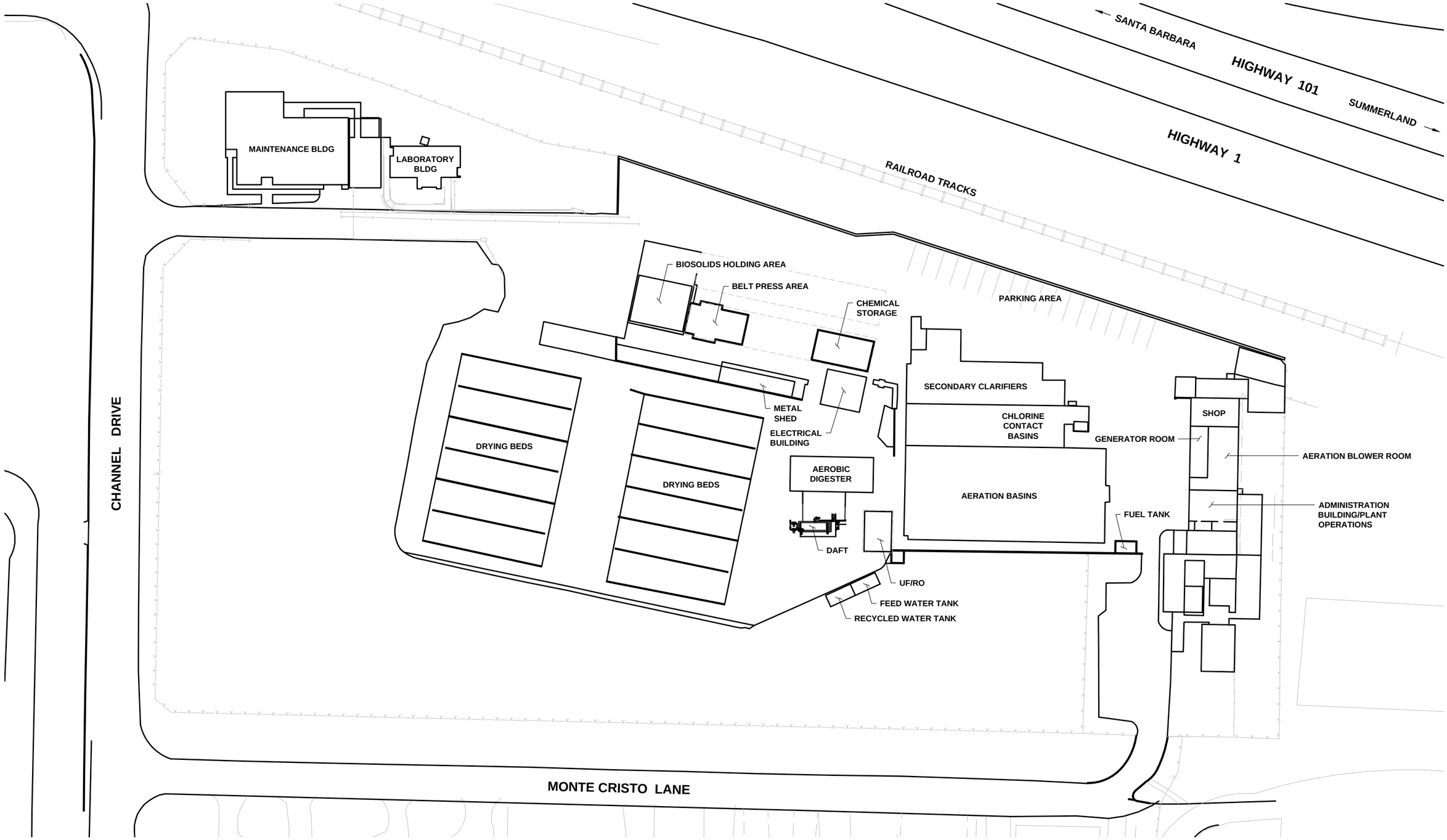

MONTECITO SANITARY DISTRICT WASTEWATER TREATMENT PLANT SITE

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MONTECITO SANITARY DISTRICT

PROPOSED RECYCLED WATER PILOT PROJECT TO SERVE CEMETERY

FIGURE 2

DWG: C:\Users\asmith\appdata\local\temp\AcPublish_9280\Cemetery Figures.dwg USER: ASmith
DATE: Aug 07, 2019 12:05pm XREFS: so3200topo-cleaned 17003 20180802 a-sp esb floor plan PC-EXH-BDR - MSD CEMETERY

Symbol	MODIFICATION	Date	Name
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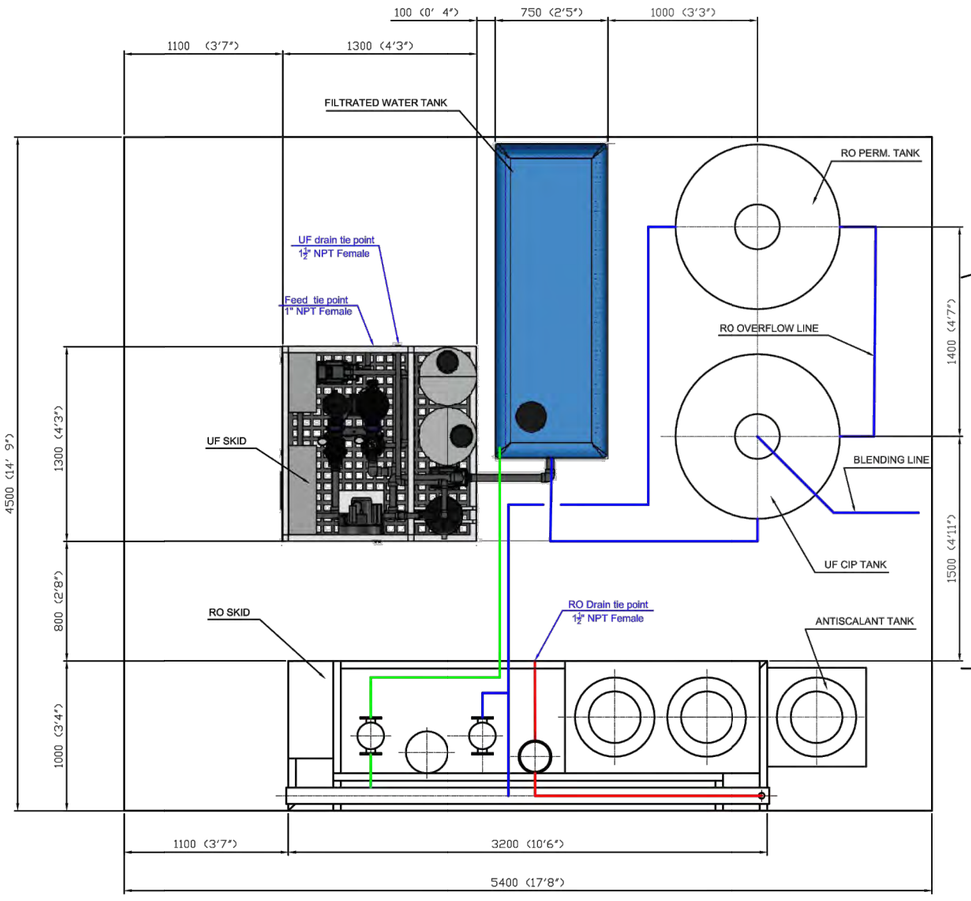
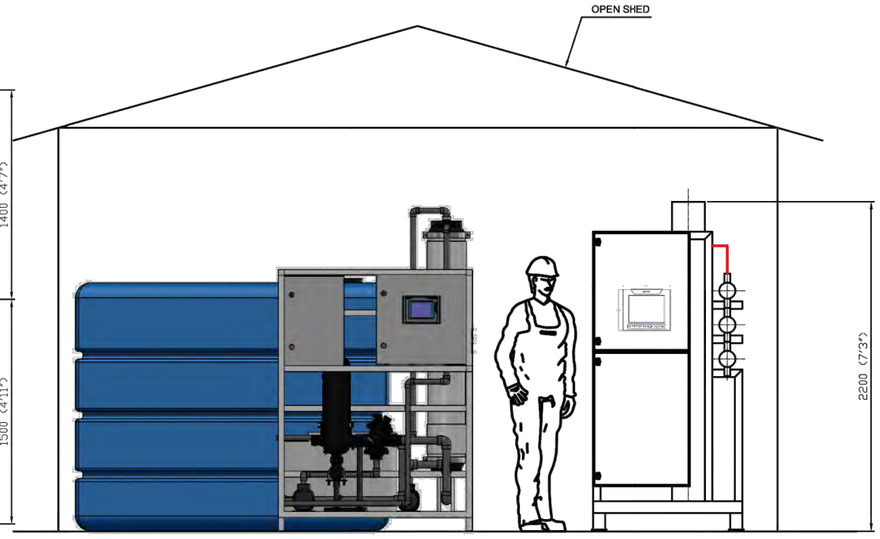


TOP VIEW



SIDE VIEW

	NAME	DATE
DRAWN		
DESIGNED	VITALY	11.12.18
CHECKED	VITALY	11.12.18
APPROVED	HADAR	11.12.18
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CLIENT DWG No.		Sheet of
AREA		REV. 3

IDE Technologies

PROJECT: MONTECITO

DWG TITLE: PULSE FLOW RO

DWG TYPE: LAYOUT

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PROPOSED UF/RO SYSTEM LAYOUT

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PROPOSED RECYCLED WATER PILOT PROJECT TO SERVE CEMETERY

FIGURE 3

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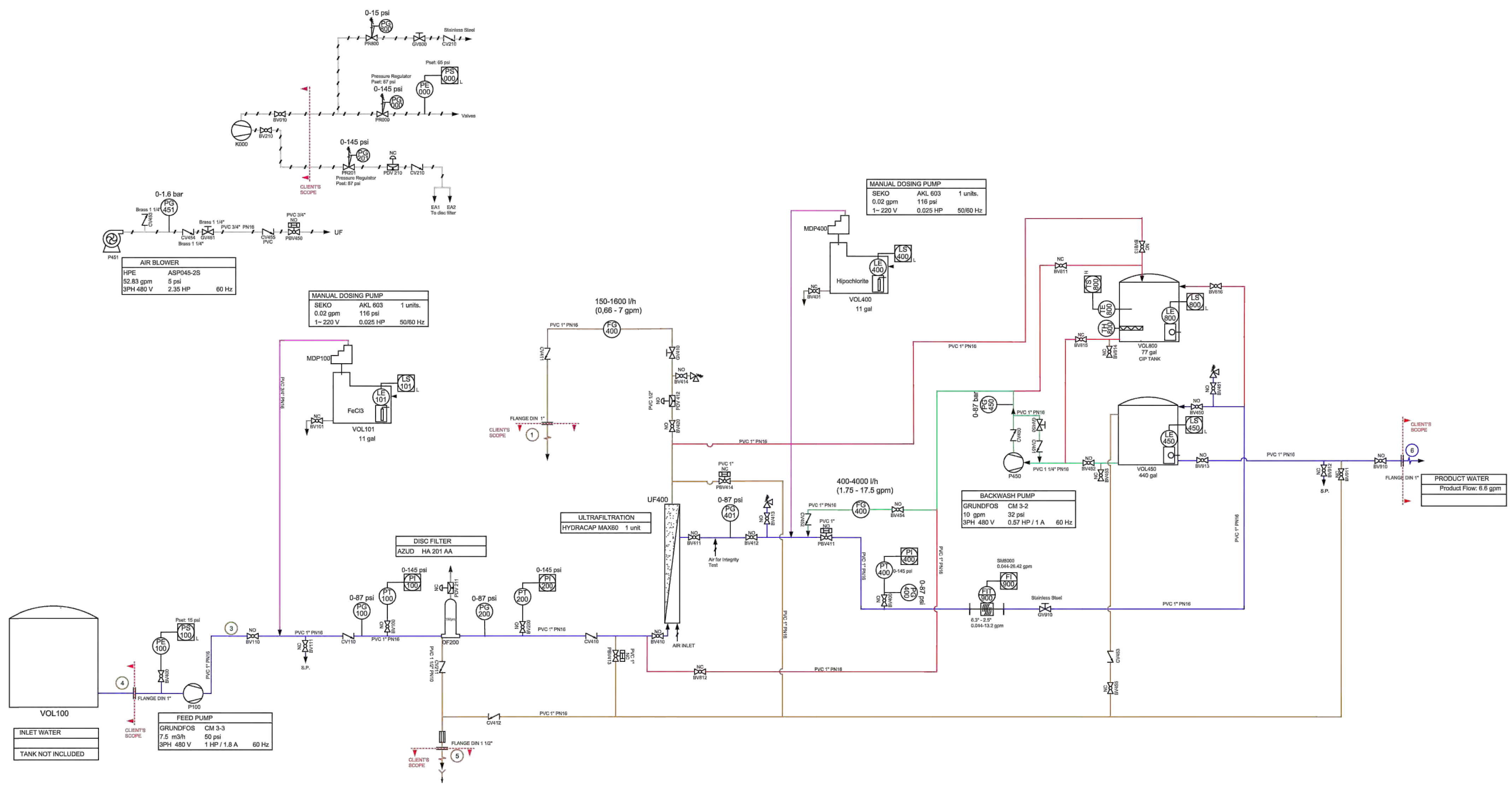
DATE: Aug 07, 2019 12:25pm JAMES: ss3300dpi-color.ctb floor plan PC-EXH-BDR - MSD CEMETERY



Simbología de líneas

Main line		Cleaning	
Drainage		Dosing line	
CIP loop		Air pressure	
Electric line			
Neumatic line			

Conexiones de la planta

1 Cross FLow	4 Inlet Water
2 Recirculation	5 Drainage
3 Propulsion Feed Pump	6 Treated Water Outlet

Valves, accesories and instrumentation

- Ball valve
- Check valve
- Pneumatic ball valve
- Gate valve
- Butterfly valve
- Needle valve
- Pneumatic Diaphragm Valve
- Motorized ball valve
- S.P. Sampling valve
- Electrovalve
- Air pressure valve
- Liquid view
- Rotameter
- Heater
- Pump
- PG Manometer
- PI / PT Pressure transmitter
- LS Low level switch
- LS High level switch
- PS Low pressure switch
- PS High pressure switch
- FI / FIT Magnetic inductive flow meters
- FI / FT Paddlewheel Flow meter
- PHE Redox sensor
- PS Termostat

Project : AZUD WATERTECH RW DU1.5		Project nº : 18225 V04
Client : IDE		Scale : – –
Plan : P&ID_RWD1U	Format : ISO A2	Nº plan : 01 Vs: 06
Drawn by : OUL		AZUD
Date : 07/02/2019		
Review by : GMM		
Date : 12/02/2019		SISTEMA AZUD, S.A.
Approved by : GMM		
Date : 14/03/2019		

ULTRAFILTRATION SYSTEM PROCESS AND INSTRUMENT DIAGRAM

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MONTECITO SANITARY DISTRICT

PROPOSED RECYCLED WATER PILOT PROJECT TO SERVE CEMETERY

FIGURE 4

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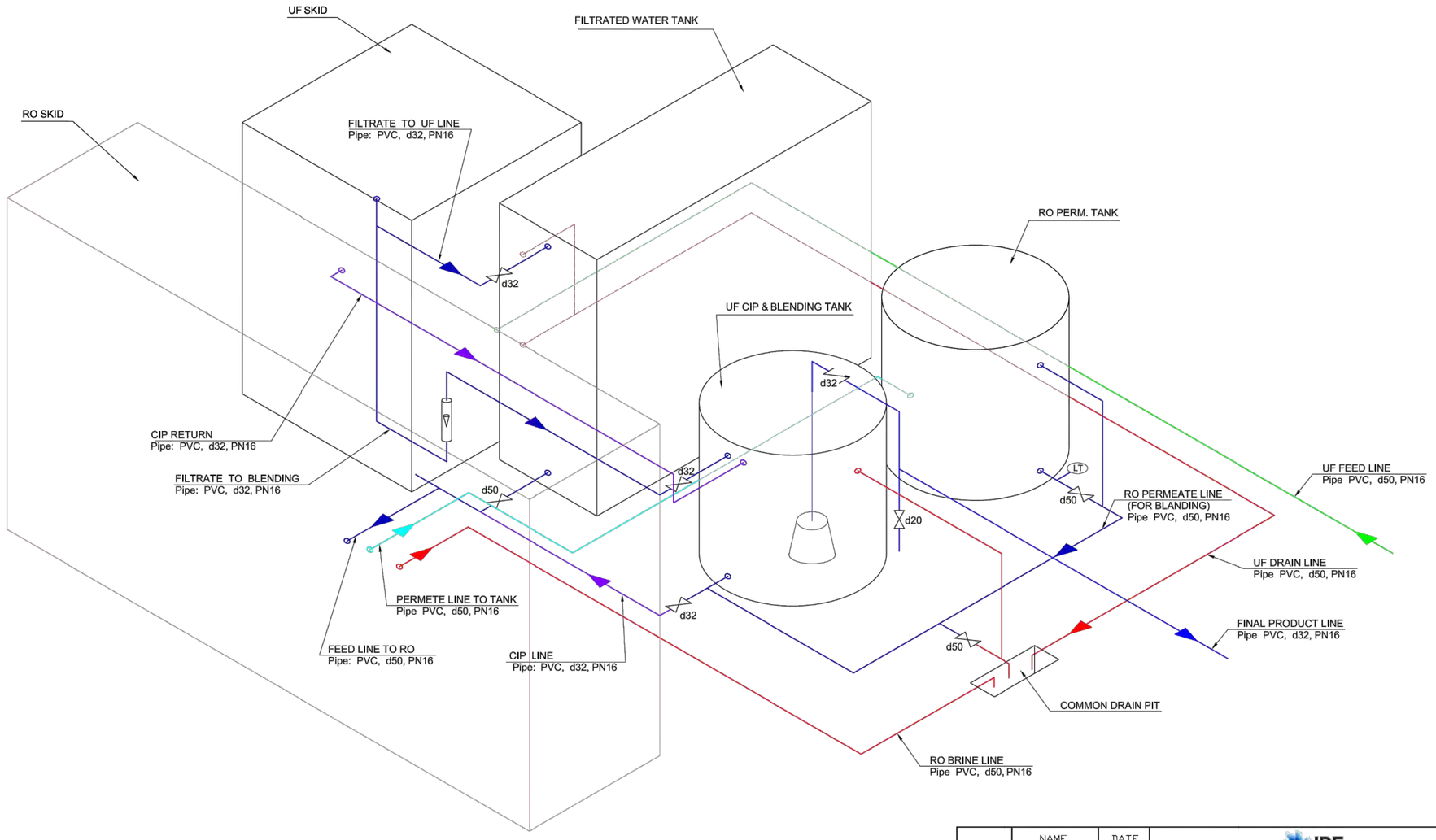

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DRAWN		
DESIGNED	VITALY	04.06.19
CHECKED	GAL	04.06.19
APPROVED		04.06.19
IDE DWG No.	PFRO-MONTECITO	
CLIENT DWG No.		Sheet of
AREA		REV. 0

IDE Technologies

PROJECT: MONTECITO

DWG TITLE: PULSE FLOW RO

DWG TYPE: Piping Layout

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PROPOSED UF/RO SYSTEM PIPING LAYOUT

5
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PROPOSED RECYCLED WATER PILOT PROJECT TO SERVE CEMETERY

FIGURE 5

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DATE: Aug 07, 2019 12:29pm SHEETS: sc0200ope-deleted 17002.20190802 2-up 4th floor plan PC-EXH-BDR - MSD CEMETERY

Montecito Sanitary District

Title 22 Engineering Report

Existing User Pilot Project Distribution Area

Overview of Pilot Project Irrigation Area – East Side Looking South

Pilot Project Irrigation Area – East Side Looking East Toward Producer Facility

Montecito Sanitary District

Title 22 Engineering Report

Existing User Pilot Project Distribution Area

Northeast Corner of the Pilot Project Irrigation Area

North Side of Pilot Project Irrigation Area Looking North

Montecito Sanitary District

Title 22 Engineering Report

Existing User Pilot Project Distribution Area

Overview of the Pilot Project Irrigation Area Looking West

Existing Potable Water Backflow Preventer Behind Shrub

Montecito Sanitary District

Title 22 Engineering Report

Existing User Pilot Project Distribution Area

Irrigation Backflow Preventer

LEGEND

● EXISTING HOSE BIBB

USER AREA EXISTING HOSE BIBB LOCATIONS

7
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MONTECITO SANITARY DISTRICT

MONTECITO SANITARY DISTRICT

PROPOSED RECYCLED WATER PILOT PROJECT TO SERVE CEMETERY

FIGURE 7

DWG: C:\Users\asmith\appdata\local\temp\AcPublish_9280\Cemetery Figures.dwg USER: ASmith
DATE: Aug 07, 2019 12:05pm XREFS: so3200topo-cleaned 17003 20180802 a-sp esb floor plan PC-EXH-BDR - MSD CEMETERY

PILOT PROJECT IRRIGATION AREA

SCALE: 1" = 100'

8
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MONTECITO SANITARY DISTRICT

MONTECITO SANITARY DISTRICT

PROPOSED RECYCLED WATER PILOT PROJECT TO SERVE CEMETERY

FIGURE 8

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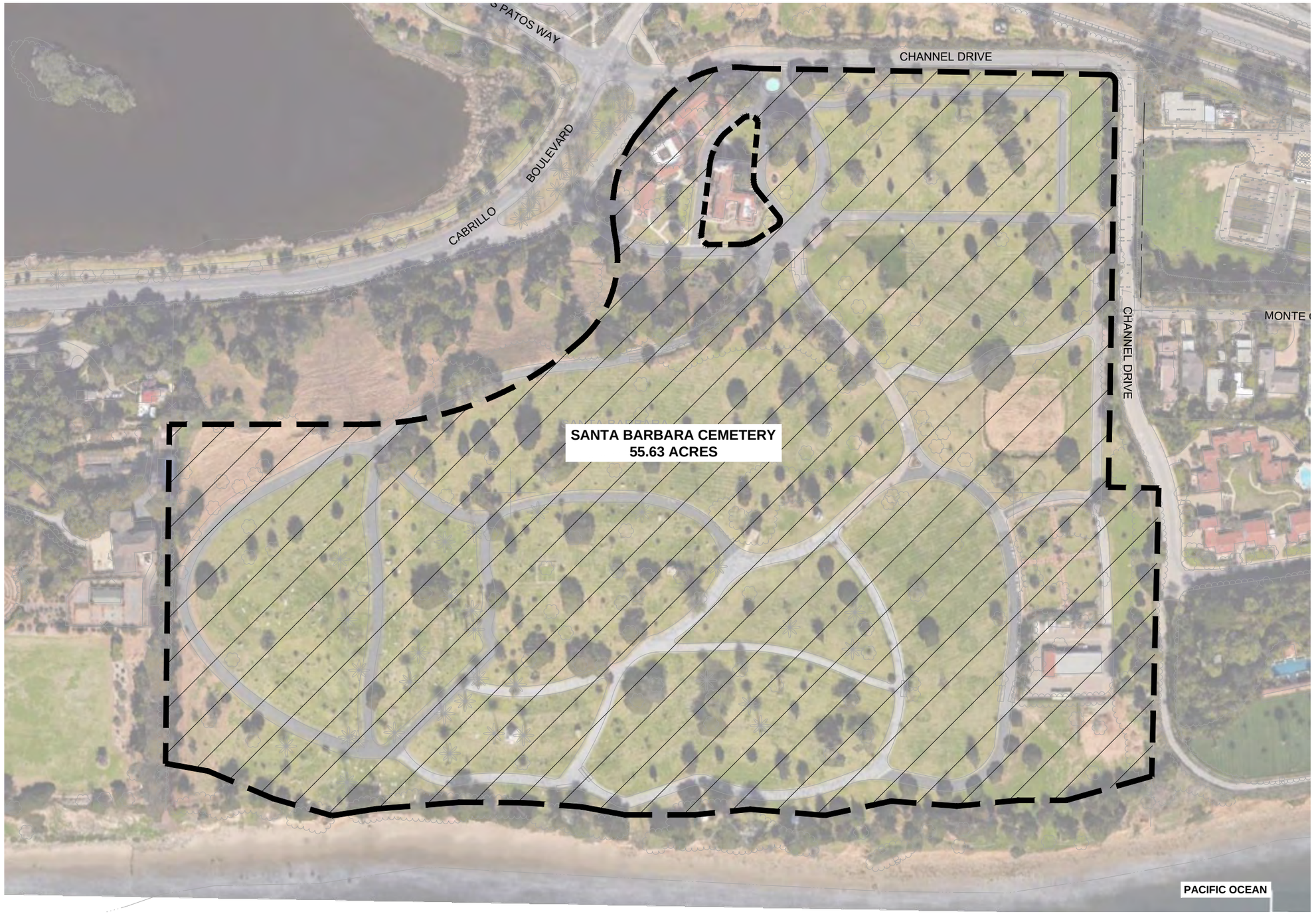

FULL CEMETERY IRRIGATION AREA (SANTA BARBARA CEMETERY)

SCALE: 1" = 100'

9
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MONTECITO SANITARY DISTRICT

MONTECITO SANITARY DISTRICT

PROPOSED RECYCLED WATER PILOT PROJECT TO SERVE CEMETERY

FIGURE 9

DWG: C:\Users\asmith\appdata\local\temp\AcPublish_9280\Cemetery Figures.dwg USER: ASmith
DATE: Aug 07, 2019 12:05pm XREFS: so3200topo-cleaned 17003 20180802 a-sp esb floor plan PC-EXH-BDR - MSD CEMETERY

PROPOSED CEMETERY IRRIGATION DISCONNECTION LOCATIONS

SCALE: 1" = 30'

(PILOT PROJECT)

10
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MONTECITO SANITARY DISTRICT

MONTECITO SANITARY DISTRICT

PROPOSED RECYCLED WATER PILOT PROJECT TO SERVE CEMETERY

FIGURE 10

DWG: P:\Projects\MMSD17-31 On Call 2017\CAD\Title 22 Report Cemetery\Source Drawings\Cemetery Figures.dwg USER: ASmith
DATE: Sep 13, 2019 9:42am XREFS: so3200topo-cleaned 17003 20180802 a-sp esb floor plan PC-EXH-BDR - MSD CEMETERY

Appendix

Recycled Water Regulation Excerpts

Recycled Water Regulation Excerpts

Title 22 Approved Irrigation Use Areas

A. Food crops, including all edible root crops, where the recycled water comes into contact with the edible portion of the crop,
B. Parks and playgrounds,
C. School yards,
D. Residential landscaping,
E. Unrestricted access golf courses, and
F. Any other irrigation use not specified in this section and not prohibited by other sections of the California Code of Regulations.
G. Cemeteries,
H. Freeway landscaping,
I. Ornamental nursery stock and sod farms where access by the general public is not restricted,
J. Pasture for animals producing milk for human consumption,
K. Flushing toilets and urinals,
L. Priming drain traps,
M. Industrial process water that may come into contact with workers,
N. Structural fire fighting,
O. Decorative fountains,
P. Commercial laundries,
Q. Consolidation of backfill around potable water pipelines,
R. Artificial snow making for commercial outdoor use, and
S. Commercial car washes, including hand washes if the recycled water is not heated, where the general public is excluded from the washing process.

Recycled Water Use Area Requirements

A. No irrigation with disinfected tertiary recycled water shall take place within 50 feet of any domestic water supply well unless all of the following conditions have been met:
    a. A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface.
    b. The well contains an annular seal that extends from the surface into the aquitard.
    c. The well is housed to prevent any recycled water spray from coming into contact with the wellhead facilities.
    d. The ground surface immediately around the wellhead is contoured to allow surface water to drain away from the well.
    e. The owner of the well approves of the elimination of the buffer zone requirement.
B. No impoundment of disinfected tertiary recycled water shall occur within 100 feet of any domestic water supply well.
C. No irrigation with, or impoundment of, disinfected secondary-2.2 or disinfected secondary-23 recycled water shall take place within 100 feet of any domestic water supply well.

D. No irrigation with, or impoundment of, undisinfected secondary recycled water shall take place within 150 feet of any domestic water supply well.

E. Any use of recycled water shall comply with the following:

F. Any irrigation runoff shall be confined to the recycled water use area, unless the runoff does not pose a public health threat and is authorized by the regulatory agency.

    a. Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities.
    b. Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff.

G. No spray irrigation of any recycled water, other than disinfected tertiary recycled water, shall take place within 100 feet of a residence or a place where public exposure could be similar to that of a park, playground, or school yard.

H. All use areas where recycled water is used that are accessible to the public shall be posted with signs that are visible to the public, in a size no less than 4 inches high by 8 inches wide, that include the following wording : "RECYCLED WATER - DO NOT DRINK". Each sign shall display an international symbol similar to that shown in Figure 60310-A of the CCR. The Department may accept alternative signage and wording, or an educational program, provided the applicant demonstrates to the Department that the alternative approach will assure an equivalent degree of public notification.

I. Except as allowed under section 7604 of Title 17, California Code of Regulations, no physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water.

J. The portions of the recycled water piping system that are in areas subject to access by the general public shall not include any hose bibs. Only quick couplers that differ from those used on the potable water system shall be used on the portions of the recycled water piping system in areas subject to public access.

References

State Water Resources Control Board, Regulations Related to Recycled Water, October 2018.

Title 22 and 17 California Code of Regulations, State Board, Division of Drinking Water, Recycled Water Regulations, July 2015.

Guidelines for the Preparation of an Engineering Report for the Production, Distribution and Use of Recycled Water, March 2001.